APPENDIX A

PHASE I AND II ENVIRONMENTAL SITE ASSESSMENTS

Report
Phase I Environmental Site Assessment
Sims Ford Ranch
116 West Ferry Street
Sedro-Woolley, Washington

April 19, 2001

For
Vern Sims

File No. 6838-002-00-5150B

GeoEngineers

GeoEngineers

April 19, 2001

Sims Ford Ranch
116 West Ferry Street
Sedro-Woolley, Washington 98284

Attention: Vern Sims

We are pleased to submit three copies of our report entitled "Phase I Environmental Site Assessment, Sims Ford Ranch, 116 West Ferry Street, Skagit County, Washington." Our environmental site assessment services were completed in general accordance with our confirming agreement dated April 10, 2001, which you authorized on April 16, 2001.

We appreciate the opportunity to provide these services for Vern Sims. Please call if you have any questions regarding this report.

Yours very truly,

GeoEngineers, Inc.

J. Robert Gordon, P.E.
Principal

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TABLE OF CONTENTS

Page No.

EXECUTIVE SUMMARY 1

INTRODUCTION 1

SCOPE OF SERVICES 2

GENERAL SITE CHARACTERISTICS 3
- LOCATION, DESCRIPTION AND ENVIRONMENTAL SETTING 3

TABLE 1 – SITE INFORMATION 3

SITE CONDITIONS 4
- SITE RECONNAISSANCE 4
  - Dealership Building and Main Lot 4
  - Small Lot 5
- ADJACENT PROPERTIES 5
  - Dealership Building and Main Lot 5
  - Small Lot 6
- POLE AND PAD-MOUNTED TRANSFORMERS 6
- RADON GAS 6

HISTORICAL CONDITIONS 7
- GENERAL 7
- INTERVIEWS 7
  - Mr. Dan Sims 7
  - Mr. Vern Sims 8
  - Ms. Brit Pfaff 8
  - Ms. Gail Colburn 9
  - Ms. Sally Perkins 9
  - Mr. Dean Klinger 9
- AERIAL PHOTOGRAPHS 10
- DIRECTORIES 10
- MAPS 10

ENVIRONMENTAL RECORDS REVIEW 10
- GENERAL 10
- EPA LISTS 10
- ECOLOGY AND HEALTH DEPARTMENT LISTS 11
- ENVIRONMENTAL RECORDS REVIEW 12
  - Transformer Removal 13
  - Site Hazard Assessment 13

CONCLUSIONS 13

LIMITATIONS 14

TABLE OF CONTENTS CONTINUED

FIGURES	Page No.
Vicinity Map and Listed Sites	1
Site Plan	2

APPENDICES	Page No.
APPENDIX A REFERENCES	A-1
PUBLISHED REFERENCES	A-1
PERSONAL COMMUNICATIONS	A-1
OTHER REFERENCES	A-1
APPENDIX B PHASE I ESA STATEMENT OF QUALIFICATIONS	B-1

REPORT
PHASE I ENVIRONMENTAL SITE ASSESSMENT
SIMS FORD RANCH
116 WEST FERRY STREET
SEDRO-WOOLLEY, WASHINGTON
FOR
VERN SIMS

EXECUTIVE SUMMARY

GeoEngineers, Inc. (GEI) completed a Phase I environmental site assessment (ESA) of a developed site located at 116 West Ferry Street in Sedro-Woolley, Washington. Based on the results of our study, the site has been operated as an automobile dealership since 1949. Typical new and used petroleum, solvent and paint products are used and stored within the building on a concrete slab-on-grade at the site. However, we observed "good housekeeping practices" at the site. The site is listed by the EPA as a small quantity generator. Two on-site underground storage tanks (USTs) are listed with Washington State Department of Ecology. We understand that these USTs were emptied and abandoned in place in the 1960s. Underground hydraulic hoists are located within the automotive servicing areas of the building. The results of our Phase I did not identify any releases of hazardous products from the site, however, the abandoned USTs and the underground hoists represent potential sources of subsurface contamination should a release have occurred.

Single family residences and commercial properties surround the site. Seven sites were identified on the regulatory databases within the search radii used for our research, one of which is the site itself. Some of these sites are within two blocks of the site. The results of our research indicate that most of these sites have had remedial actions, but we have inadequate data to conclude whether this site has likely been impacted from off-site sources. However, the existing owner would not be held financially liable to remediate any contamination from off-site sources.

INTRODUCTION

This report presents the results of our Phase I ESA for a developed site with an automotive dealership/service facility located at 116 West Ferry Street, and a small lot to the south, in Sedro-Woolley, Washington. The location of the site and listed sites are shown in the Vicinity Map, Figure 1. The Site Plan, Figure 2, indicates the approximate boundaries of the site and surrounding properties.

This Phase I ESA was requested by Vern Sims as part of his "due diligence" while evaluating sale of the site. Appendix A contains a listing of the documentation sources, reports and references used during this Phase I ESA study. Appendix B presents GEI's qualifications.

SCOPE OF SERVICES

The purpose of the Phase I ESA study is to identify recognized environmental conditions[1] (RECs) in connection with the site. Our scope of services is in general accordance with American Society for Testing Materials (ASTM) Standard E1527-00 for Phase I ESAs. Our specific scope of services is as follows:

1. Review reports and/or other relevant documents pertaining to environmental conditions at the subject site or nearby sites, as available within the time frame requested.
2. Review federal, state and local environmental databases for listings of known or suspected environmental problems at the site or nearby properties within the search distances specified by ASTM.
3. Review locally available regulatory agency files regarding listed sites of potential environmental concern relative to the subject site.
4. Interview key personnel that you identified with specific knowledge of past and present site use. Interview others familiar with past and present uses of the site and its vicinity, as available.
5. Interview a representative of the local fire department, health department and/or the Washington State Department of Ecology (Ecology) regarding the history of the subject site and surrounding properties relative to the likely presence of hazardous substances, as appropriate.
6. Review historical aerial photographs, fire insurance maps, city directories, chain-of-title reports and tax assessor records, and city business directories, as available and appropriate, to identify past development history on and adjacent to the site relative to the possible use, generation, storage, release or disposal of hazardous substances. Attempt to identify uses of the site from the present to the time that records show no apparent development of the site, or to 1940, whichever is earlier.
7. Review current United States Geological Survey (USGS) topographic maps to identify the physiographic setting of the site.
8. Identify the source(s) of potable water for the site and current or previous heating and sewage disposal system(s) used at the site.
9. Provide a statement on the local geologic, soil and ground water conditions based on our general experience and sources such as geologic maps and soil surveys.
10. Conduct a visual reconnaissance of the site and adjacent properties to identify any visible evidence of RECs.

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[1] Recognized Environmental Conditions are defined in ASTM E-1527-00 as "the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, ground water or surface water of the property. The term includes hazardous substances or petroleum products even under conditions in compliance with laws. The term is not intended to include *de minimis* conditions that generally do not present a material risk of harm to public health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies."

11. Provide a written summary of the Phase I ESA results and identified RECs along with our opinion regarding the potential for contamination at the site.

We will not evaluate for the presence of radon gas, which is typically not of concern in the Puget Sound Lowland geologic environment and not included in Phase I ESA scope unless specifically requested. Our scope of services does not include an environmental compliance audit, an evaluation for the presence of lead-based paint, polychlorinated biphenyls (PCBs) in light ballasts, radon, lead in drinking water, asbestos-containing building materials (ACBMs) or urea-formaldehyde insulation in on-site structures. It also does not include chemical testing of soil or ground water. If requested, we can provide additional information regarding these services.

GENERAL SITE CHARACTERISTICS
LOCATION, DESCRIPTION AND ENVIRONMENTAL SETTING

General site information, property use and environmental setting of the site area are summarized in Table 1 below. Refer to Figure 1 for a vicinity map and Figure 2 for the approximate geometry of the site.

TABLE 1 – SITE INFORMATION

Topographic Map	U.S. Geological Survey, 7.5 Minute North Sedro-Woolley, Washington, topographic quadrangle dated 1981.
Quarter/Quarter, Section, Township and Range	NW ¼ of Section 24, Township 35 North, Range 4 East, Willamette Meridian.
Site Address	116 West Ferry Street, Sedro-Woolley in Skagit County.
Site Legal Description	We were provided with legal descriptions, some of which were illegible and therefore not included herein.
Site Existing Use	The main portion of the site is developed with a car dealership building and paved parking areas; the south portion of the site is a paved parking lot.
Geologic Setting	The site is located on relatively flat lowland in an area that was glaciated 10,000 years ago.
Nearest Surface Water Bodies	Brickyard Creek is located approximately 2,300 feet to the northwest and flows to the southwest. Skagit River is located approximately 7,000 feet to the south and flows to the west.
Approximate Surface Elevation	Approximate elevation 55 feet based on the USGS topographic map. The site and vicinity are relatively flat.
Soil and Geologic Conditions	A geologic map of the area (see Appendix A) indicates that the site is located in an area underlain by Older Alluvium. This geologic unit primarily consists of silts, clays and fine sands.
Depth to Ground Water, Flow Direction	We have no site-specific information for depth to groundwater. Groundwater was not encountered to a depth of 10-feet during a

	geotechnical study completed approximately ¾ mile east of the subject site. Groundwater flow generally mimics topography, which is generally to the south.

Our knowledge of the physiographic setting, geology and ground water occurrence in the site vicinity is based on our review of the maps listed above, our experience at the site and site vicinity on other projects.

SITE CONDITIONS

SITE RECONNAISSANCE

We performed our site reconnaissance on April 14, 2001. The main lot and dealership building is located north of West Ferry Street. An additional paved parking lot is part of the subject site and is located south of West Ferry Street, directly south of the main lot. We understand the site boundaries to be as shown in Figure 2. The site vicinity is flat, with an overall gentle slope downward to the south. The City of Sedro-Woolley provides stormwater and sanitary sewer services. Public Utilities Department No. 1 of Skagit County provides potable water. The water supply comes from reservoirs. Stormwater catch basins are located in the Ferry Street right-of-way (ROW) and within the main lot.

Dealership Building and Main Lot

Dan Sims of Sims Ford Ranch accompanied us during a physical walkthrough of dealership building. The building houses a showroom, sales offices, service bays, a paint storage room and painting room, and car washing room. The original dealership building was built in approximately 1949. Three additions to the building were constructed from the early to mid 1960's. We observed the following conditions:

- The building is heated with natural gas.
- The entire building has a concrete slab-on-grade.
- Two abandoned and plugged floor drains are located in the service bay.
- One operational floor drain is located in the car wash room. Biodegradable soap is used to wash the cars. The floor drain is connected to a catch basin located in the main lot, which drains to the City storm sewer system.
- An approximately 500-gallon used oil aboveground storage tank (AST) is located near the southeast exterior corner of the building. Used oil is pumped directly through hoses from the drip-barrel in the service bay to the AST. An overflow level indicator has been installed inside of the AST. The level indicator is hooked up to a visual and sound alarm system, located in the service bay. The pump system automatically shuts off when the alarm system is activated. We did not observe staining of the asphalt surrounding the AST. The AST appeared to be in good condition.
- Paint cans are stored in a closed, ventilated room. We observed good housekeeping in the room.

- Waste paint barrels are located near the paint storage room. We did not observe evidence of spills near the waste barrels.
- A plastic, approximately 200-gallon used antifreeze AST is located near the car wash room. We did not observe spills near the AST.
- We observed concrete patches in the service bay floor where the old exhaust ventilation ports were located. Modern ceiling mounted exhaust ports are now installed in the same area.
- Five underground and seven above ground hydraulic hoists are located in the service bays. We understand that the underground hoists are serviced regularly and have not had a known release. The aboveground hydraulic fluid reservoirs to the aboveground hoists appeared to be in good condition.
- The main lot is paved with asphalt. The storm eves on the building are connected to the main lot catch basins. The pavement surfaces are sloped towards the catch basins.
- A scrap metal enclosure and a trash dumpster are located north of the building.
- Empty 55-gallon drums are stored on their side on the north side of the building.
- The area around the building is paved with asphalt concrete paving.
- We did not observe evidence of past or present use, generation, disposal or release of hazardous substances on the subject property during our reconnaissance, except for typical vehicle maintenance and painting products, and "de minimus" petroleum staining on the asphalt pavement.

Small Lot

- The small lot is paved with asphalt.
- Chain link fencing surrounds the southern area of the small lot, where additional vehicles and promotional materials are stored.
- We did not observe evidence of past or present use, generation, disposal or release of hazardous substances on the subject property during our reconnaissance, except for "de minimus" petroleum staining on the asphalt pavement.

ADJACENT PROPERTIES

We observed the adjacent properties to the subject site on April 14, 2001, during our site reconnaissance from the subject site. The specific conditions with respect to the main lot and small lot are described below:

Dealership Building and Main Lot

- A Burlington Northern Railroad track (and likely right-of-way) is located immediately north of the subject site and Skagit Industrial Park is located further north. Skagit Industrial Park has a leasing office address of Building T, 500 Metcalf Street. Skagit Industrial Park is zoned for light industrial use. Facilities located within the industrial park include and are not limited to a boat manufacturer, a glass company, a sign company, a woodworking company, a modular home company, and a commercial light pole manufacturer.

- A Burlington Northern Railroad track is located immediately east of the subject site and Van Sweden True Value Hardware, at 100 West Ferry Street, is located further east. True Value is a hardware retail store.
- West Ferry Street is located to the south.
- Valley Auto Supply NAPA, at 220 West Ferry Street, is located to the west. NAPA is an automotive parts retail store. A Chevron service station is located on the other side of the NAPA store.

Small Lot

- Ferry Street is located to the north.
- A Burlington Northern Railroad track is located to the east.
- Puget Sound Energy (Formerly Puget Sound Power and Light) company's Rita Street Substation is located to the south. The facility is a power substation.
- Rita Street and single family residences are located to the west.

We did not observe conditions that would pose a significant REC to the subject site from immediately adjacent properties, with the exception that the Skagit Industrial Park is a former steel manufacturer. This site is addressed later in this report.

POLE AND PAD-MOUNTED TRANSFORMERS

Four pole-mounted transformers were observed along the Ferry Street ROW. One pad-mounted transformer was observed within the power substation enclosure, south of the small lot. The specific locations, transformer identification numbers (ID) and pole ID's are listed below:

Location	Transformer ID	Pole ID
Southwest corner of main lot	M 3079-TRANS	455251/165857
Southeast area of main lot	P-18-1-DA, N-34-64-DX, N-34-63-DX	455249/165891

We could not gain access to the pad-mounted transformer. The transformer structure and concrete pad appeared to be in good condition. We did not observe stressed vegetation or stained soil/concrete around the pole and pad mounted transformers.

RADON GAS

We have previously contacted the Washington State Department of Health (DOH) regarding the potential for radon gas in Western Washington. According to DOH, the potential for radon gas in the Puget Sound region is very low. It is estimated that only one percent of houses in the Puget Sound region have radon gas concentrations exceeding 4 picocuries per liter (pCi/L). The national average for radon gas concentrations in building structures is 4 pCi/L. According to DOH, radon gas is typically not a problem in larger buildings that have forced air or better ventilation.

We also have previously contacted EPA's Radiation Protection Program. EPA representatives concur with the opinion of DOH regarding the radon gas potential in the Puget Sound region. Additionally, EPA suggested that radon gas concentrations in the Puget Sound region are low for the following reasons: (1) a low uranium content in soils (radon gas is a decay product of uranium 238), and (2) moist soil conditions (moisture inhibits radon movement).

Based on our conversations with personnel from the EPA and DOH, it is our opinion that the potential for radon gas at concentrations in excess of 4 pCi/L at the site is low.

HISTORICAL CONDITIONS

GENERAL

Our information with respect to site history was gathered by interviewing individuals familiar with the site and its past uses, reviewing recent and historical aerial photographs for the site and vicinity, and reviewing directories for the site and vicinity.

INTERVIEWS

We interviewed individuals with current and historical knowledge of the site and adjacent properties. Relevant discussion is provided below.

Mr. Dan Sims

We interviewed Mr. Dan Sims, General Manager of Sims Ford Ranch on April 14, 2001. Mr. Sims has worked at the Ford Ranch since 1972. The Sims have owned the site since approximately 1965. Mr. Sims indicated that his father, Vern Sims, purchased the site from Sig Berglund. The original car dealership building was built for Sig Berglund in approximately 1949. Two single-family residences and a feed store were located on the site prior to initial building construction. Three additions to the building were constructed through the early to mid 1960's. Sims Ford Ranch purchased the feed store in the early 1970's. The houses and feed store were demolished in connection with the phases of site improvements. Septic systems that had serviced the houses and feed store were decommissioned during site improvements. Mr. Sims had no knowledge of historic USTs in connection with the houses or the feed store.

Waste paint and used motor oil are generated on site from painting and oil changing operations. The Ford Ranch has been assigned an EPA identification number WAD027487560 and submits annual small generator reports. The small generator reports are used to indicate the destination of wastes that are generated on site. Mr. Sims indicated that paint waste is not stored on site for more than 30 days. Safety Clean, a recycling company, removes the waste paint and used oil from the site. The used motor oil is stored in an AST. The AST is serviced by an overfill protection alarm system and is filled with a self-contained pump system. The paint waste is stored in sealed containers prior to being picked up by Safety Clean. The used antifreeze, though not a regulated material, is also picked up by Safety Clean.

Five underground and seven above ground hydraulic hoists are located within the service bay. The hydraulic hoists are checked and maintained on a regular basis. Mr. Smith indicated that there are no oil-water separators on site. Fluid spills are wiped dry. There are two abandoned floor drains and one operational floor drain within the main building. The abandoned floor drains were decommissioned and plugged in approximately 1975. The operational floor drain is located in the car washing room and is connected to a catch basin in the main exterior lot. Biodegradable soap is used to wash the cars.

The Sedro-Woolley Fire Department performs safety inspections of the dealership building in connection with hazardous materials storage and site safety. Mr. Sims indicated that the Ford Ranch receives favorable reviews during the inspections.

We discussed the potential for environmental impacts from off-site sources. Skagit Steel Ironworks (Skagit Manufacturing) was formerly to the north, where Skagit Industrial Park is currently located. Skagit Steel was a foundry—heavy equipment components were cast in molds. Heavy logging machinery was produced on that site before World War II (WW II). Artillery shell casings were produced on site during WW II. The facility continued to produce logging machinery after WW-II. The facility closed during the late 1970s. Mr. Sims indicated that some environmental site cleanup has occurred since the facility closed. He was not aware of the extent and nature of the cleanup. To the best of his knowledge, Mr. Sims indicated that there were no environmental concerns associated with the subject site or surrounding properties.

Mr. Vern Sims

Mr. Vern Sims began working at the site very shortly after it opened and purchased the facility in 1967. He was the manager at the time. He recalls that the facility originally had a 200-gallon heating oil UST and a 100 to 200 gallon gasoline UST. Both tanks were single wall steel construction. The heating oil tank was located on the east side of the building approximately 40 feet in front of the entrance door to the showroom. The dispenser for the gasoline UST was in front of the garage door on the south side. Mr. Sims recalls that the USTs were pumped free of product, rinsed with water and backfilled with pea gravel some time in the 1960s. As was the practice at the time, no chemical testing or subsurface evaluation was performed.

Ms. Brit Pfaff

We contacted Brit Pfaff of the Skagit County Health Department on April 16, 2001, for information relating to environmental conditions in connection with the former Skagit Steel site. Ms. Pfaff indicated that Ecology had responded to an inquiry concerning potential contamination at the site. The site occupants were known as Skagit Manufacturing prior to the Ecology notification. The facility was apparently bankrupt and owned by a bank when Ecology performed a site hazard assessment (SHA) at the site. Ms. Pfaff indicated that soil or groundwater contamination was encountered during the SHA.

Brit Pfaff contacted us on April 17, 2001, to provide information concerning potential contamination related to Skagit Petroleum, located at 700 Borseth Street. A fuel bulk plant is located at the site. Ms. Pfaff indicated that the site facility has been a bulk plant since 1927. A SHA was completed by Ecology for the site. The site has been issued a Rank 3. Ms. Pfaff indicated that extensive remedial excavations were completed on site following the SHA. Adjacent properties located to the south, east and west currently have groundwater contamination. The overall groundwater flow in the vicinity is to the south, towards the Skagit River. Contaminated soils were encountered around a sewer line during the remedial excavations. The contaminated soils were left in place to prevent disturbance of the sewer line during excavations. Ms. Pfaff indicated that remedial actions are currently being performed by Skagit Petroleum and that the site is paved with leak protection.

Ms. Gail Colburn

We contacted Gail Colburn, Aquatic Units Supervisor, Toxics Cleanup Program, of Ecology, on April 17, 2001. Ms. Colburn performed sediment sampling from a drainage ditch located on the northwest corner of the Skagit Manufacturing site in 1992. Total petroleum hydrocarbon (TPH) and metals analysis of the sediment samples indicated contaminant levels above Ecology cleanup levels. The site was given a Rank 3 status (1=greatest assessed risk to human health and environment; 5=lowest). Ms. Colburn indicated that transformers containing PCBs were decommissioned and removed from the site. To the best of her knowledge, no further actions had been taken by Ecology following the initial SHA. No further documented cleanups or investigations have occurred since the SHA was completed.

Ms. Sally Perkins

We contacted Ms. Sally Perkins in the records department at the Ecology (Northwest Regional Office), on April 17, 2001. The site SHA report is dated 1992. The transformers were removed during 1994. Ms. Perkins indicated that no records are available for the site after 1994.

Mr. Dean Klinger

We interviewed Mr. Dean Klinger, Fire Chief for the Sedro-Woolley Fire Department, on April 17, 2001. Mr. Klinger is familiar with the site through routine site inspections performed by the fire department. Mr. Klinger indicated that he was not aware of any USTs or ASTs on the site or adjoining properties, other than the used oil AST located on the site. Herb's Chevron station, located west of but not adjacent to the subject site, has had their fuel USTs replaced within the last ten years. Ecology oversaw the UST replacement. Mr. Klinger indicated that the nearest ASTs were located at the Skagit Petroleum bulk plant, located west of but not adjacent to the subject site. To the best of his knowledge, Mr. Klinger indicated that there were no environmental concerns associated with the subject site or surrounding properties.

AERIAL PHOTOGRAPHS

We contacted a private aerial photograph provider, the Skagit County mapping department, and Sedro-Woolley assessor's office to check for availability of aerial photographs pre-dating 1949. The intent of our inquiry was to observe site conditions prior to development. The private provider and municipal agencies indicated that they would likely not possess aerial photographs for the project vicinity pre-dating 1949. We viewed an aerial photograph of the subject site dated 1984 during our site visit. The aerial photograph showed site conditions similar to present day conditions, with the former feed store located at the eastern area of the main lot.

DIRECTORIES

We reviewed the Bellingham Cole directories, Skagit County Section for Sedro-Woolley, dated 1990-1991, 1995-1996 and 2000-2001 at the Bellingham City Library. The 1990-91 directory lists the subject site at 116 Ferry Street being owned by Vern Sims Ford Ranch, and several other businesses to the east and west of the site, this industrial area begins at 101 Ferry Street through 222 Ferry Street and the intermixes residential and commercial listings for the duration of Ferry Street listing. The 1995/96 and 2000/2001 directories show that Ferry Street is a separate listing and that 116 West Ferry Street is Vern Sims Ford Ranch revised address.

MAPS

The site is not listed in the Sanborn Fire Insurance Map and the Kroll Atlas. The site is shown in the 1996 Metsker map for Skagit County, but does not include property owners on parcels.

ENVIRONMENTAL RECORDS REVIEW

GENERAL

We reviewed pertinent regulatory lists and databases for current or previous facilities listed at addresses located within the ASTM-specified distances from the subject site. Seven sites were identified within the respective search radii, including the site itself. The following is a summary of the lists reviewed and their contents.

EPA LISTS

- Environmental Protection Agency's (EPA's) National Priorities List (NPL) list dated April 17, 2001. This list includes sites that have been officially designated as priority cleanup sites. No listed NPL sites are located within a 1-mile radius of the site.
- EPA's Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) list dated March 16, 2001. This list includes sites where hazardous substances are known or suspected to have been released and where assessment and remediation under EPA's CERCLA program may be in progress. No listed CERCLIS sites are within a 1/2-mile radius of the subject site.

- EPA's Resource Conservation and Recovery Act (RCRA), CORRACTS and Treatment, Storage and Disposal (TSD) Facilities notification system dated November 30, 2000. This list identifies facilities that are classified by the EPA as hazardous waste generators, transporters and/or handlers, or as TSD facilities. A facility appearing on this list does not imply that releases of hazardous materials have occurred at the facility.
  1. Vern Sims Ford located at 116 West Ferry Street, Sedro-Woolley; (the subject site) is listed as having RCRA conditionally exempt generators, likely related to use of petroleum products in the maintenance and operations (e.g., storage of oil for servicing equipment). No listed RCRA TSD facilities or CORRACTS sites are located within 1 mile of the subject site.
- EPA's Emergency Response Notification System (ERNS) database dated January 1, 1996, through April 1, 2001. The ERNS database contains a listing of releases of oil and hazardous substances reported to various federal agencies since October 1990. The site is not listed in the ERNS database.

ECOLOGY AND HEALTH DEPARTMENT LISTS

- Ecology's Toxics Cleanup Program Confirmed & Suspected Contaminated Sites (C&SCS) List dated November 30, 2000. The C&SCS list identifies potential contaminated sites for which Ecology has conducted an initial investigation. If the investigation showed that further action is needed, the site appears on this list. The sties are rated by the state, with a scale of 1=greatest assessed risk to human health and the environment, 5=lowest assessed risk. Four listed sites are within a 1/2-mile radius of the subject site.
  2. Chevron USA, Inc. located at 124 Ferry Street, Sedro-Woolley. Confirmed contaminates are petroleum products, affecting ground water and soil. The site is ranked as independent remedial action with the final independent remedial action report received.
  3. Osprey Boat Company (formerly Skagit Manufacturing) located at 500 Metcalf Street, Sedro-Woolley. Confirmed contaminants include metals, priority pollutants and petroleum products affecting surface water and sediments, and polychlorinated biphenyls that have been remediated from the soil. The site is ranked as independent remedial action with the final independent remedial action report received and is rated "3."
  4. Skagit Petroleum Company located at 700 Borseth Street, Sedro-Woolley. Confirmed contaminants include petroleum products and non-halogenated solvents affecting ground water and soil, and suspected contaminants metals, priority pollutants affecting ground water and soil. The site is awaiting site hazard assessment and is not rated.
  5. Snelson Companies, Inc. located at 601 West State Street, Sedro-Woolley. Confirmed contaminants include metals, priority pollutants affecting ground water, and suspected contaminant non-halogenated solvents affecting ground water. Petroleum products have been remediated from the soil. The site is ranked independent remedial action taken with independent site assessment or interim remedial action report received.

- Ecology's Model Toxics Control Act (MTCA) Site Registers current through February 28, 2001. The Site Register also identifies potential contaminated sites recently brought to the attention of Ecology. Two listed sites are within a 1-mile radius of the subject site.
  3. Osprey Boat Company (formerly Skagit Manufacturing) located at 500 Metcalf Street, Sedro-Woolley. The site is listed as independent remedial action with the final independent remedial action report received and is ranked "3," as mentioned above.
  4. Skagit Petroleum Company located at 700 Borseth Street, Sedro-Woolley. The site is a new site added to the ranked list as of February 29, 2001 and therefore awaiting site hazard assessment and is ranked "5," as mentioned above.
- Ecology's Leaking Underground Storage Tank (LUST) list dated March 1, 2001, of leaking USTs reported to Ecology. Five leaking UST sites were found within a 1/2-mile radius of the subject site.
  2. Chevron USA, Inc. located at 124 Ferry Street, Sedro-Woolley. The status of the site is listed as cleaned up as of May 19, 2000, with the affected media being soil and ground water, as mentioned above.
  5. Snelson Companies, Inc. located at 601 West State Street, Sedro-Woolley. The status of the site is cleanup started as of January 1, 1999, and the affected media being groundwater and soil, as mentioned above.
  6. Fred Nelson Chevrolet located at 221 Woodworth Street, Sedro-Woolley. The status of the site is reported cleaned up as of June 1, 1995, and the affected media being soil.
  7. Herb's Chevron / Herb's Muffler and Tune-Up Center located at 224 (West) Ferry Street, Sedro-Woolley. The status of the site is cleanup started as of January 11, 1996, and the affected media is groundwater and soil.
- Ecology's Registered Underground Storage Tank (UST) Site list dated March 1, 2001, of USTs registered with Ecology. One UST listing is located on the subject site.
  1. Vern Sims Ford, Inc. at 116 West Ferry Street, Sedro-Woolley has two steel-unprotected underground storage tanks that have been closed in place. The tank size is not specified, and contained leaded gasoline and heating fuel and they are listed as exempt.
- MTCA Landfill Database of Skagit County Landfills updated March 1, 2001, and "The Northwest Environmental Compliance Report Quick Reference Guide" dated December 1997; "Landfills in Washington" (source unknown, received by GEI 3/96); "Area Landfills" from *Associated General Contractors of Washington Water Quality Manual* dated 1990. "Solid Waste Landfills of Record" and "Closed Landfills of Record," provided by the Skagit County Health Department. No landfills are located within a 1/2-mile radius of the site.

ENVIRONMENTAL RECORDS REVIEW

We reviewed documentation related to the transformer removal and SHA performed at the Skagit Steel site. The activities are discussed below.

Transformer Removal

Sea-Land Development corporation received a proposal for services from InterMountain West, Inc. of Wilsonville, Oregon to remove a transformer from the Skagit Manufacturing site in 1994. A follow-up letter from Sea-Land Development Corporation dated June 27, 2000, was forwarded to the Ecology Central Files department. The letter was attached to information regarding transformer removal at the Skagit Manufacturing site in 1994. Due to time constraints, we were not able to review the full transformer removal report at the Bellevue office of Ecology. However, the Ecology list information states that a final independent remedial action report has been received suggesting that a cleanup occurred.

Site Hazard Assessment

The SHA report is undated. The Skagit Manufacturing site was 37-acres in size. The site was utilized for heavy manufacturing and a foundry since 1902. A lumber company also operated on the site in the 1920s and 1930s and then was destroyed by fire. Operation of the foundry ceased in 1990. The last active use of the foundry was in 1990, although the site was used a limited time in 1991. Cleanup efforts on the site had been sporadic and directed to specific manufacturing residual wastes rather than cleaning up or assessing the whole site.

Listed compounds exceeding MTCA Level B cleanup levels are Arsenic, Chromium, Diesel, Gasoline, Lead, Cadmium, and Copper. Contaminants exceeding cleanup levels were limited to the machine shop/paint shop area located in the northeastern quarter of the site. The remainder of the site had contaminants at concentrations below cleanup levels with the exception of the foundry loading dock. A waste pile of metal at the foundry loading dock yielded soil samples that exceeded cleanup levels for copper and lead. The location of the loading dock was not described in the report. Groundwater samples from the northeast area of the site indicated contamination above cleanup levels. Groundwater samples from the southern and northwestern portions of the site indicated contamination below cleanup levels. The depth to groundwater was reported at 14 feet.

CONCLUSIONS

We have performed a Phase I ESA for the subject site shown in Figure 2 in Sedro-Woolley, Washington in general accordance with the scope and limitations of ASTM E 1527-00. Based on our recent site reconnaissance and review of information gathered for this study, site land use has been limited to an automotive dealership since 1949, with single family residences and a feed store on portions of the site prior to current development. Petroleum, paint and other products associated with maintenance of vehicles are stored in the building at the site. However, the building has a concrete floor slab, was very clean with "good housekeeping" practices. This assessment did not reveal any evidence of recognized environmental conditions in connection with the subject site with the exception of the following:

- Pole mounted transformers along Ferry Street. Pole mounted transformers represent a potential source of contamination. No evidence of dielectric fluid releases was observed below the transformers.
- Two abandoned USTs are located at the site. The USTs were small heating oil (diesel) and gasoline USTs that were apparently pumped, cleaned and abandoned in-place in the 1960s. It was not standard of practice to do any environmental testing prior to abandoning USTs at that time so no information regarding tank integrity is available.
- Several underground hoists are located in some of the service bays. We understand that they are serviced regularly and no known losses of fluid have occurred. We have no evidence that any of these facilities had a release of petroleum products, however, it must be understood that these are potential sources of subsurface contamination.

The adjacent sites are commercial and residential. Seven sites were listed within the search radii in the regulatory lists, including the site itself. Some of the sites are within two blocks of the site. Many of the sites have had cleanup activities, although we were not able to research all the files. The ground water flow direction is assumed to be to the south with a relatively shallow gradient. Most of the sites are cross or downgradient. Osprey Boat Company (formerly Skagit Manufacturing), is located upgradient from the subject site. The data reviewed does not provide sufficient information to provide conclusions regarding the likelihood of contamination to this site from off-site sources. Regardless, the Model Toxics Control Act (MTCA) exempts the subject site owner from classification as an "owner/operator" should contamination migrate to this property from off-site sources (RCW 70.105D.020(12)(iii)). Therefore, the owner of this property should not have any fiscal or cleanup responsibility for any impacts from the adjacent sites.

Further evaluation of potential subsurface contamination from on-site or off-site sources would require subsurface exploration and chemical analytical testing of soil and ground water.

LIMITATIONS

This Phase I ESA has been prepared for use by Vern Sims, subject to the scope in our confirming agreement dated April 10, 2001. The report may be made available to regulatory agencies. This report is not intended for use by others, and the information contained herein is not applicable to other sites. If another lending agency or other parties intend to place reliance on this report, we require that those parties indicate in writing their acknowledgement that the scope of services provided, and the general conditions under which the services were rendered, are understood and accepted by them. This is to provide our firm with reasonable protection against open-end litigation by third parties with which there would otherwise be no contractual limits to their actions.

GeoEngineers makes no warranties or guarantees regarding the accuracy or completeness of information provided or compiled by others. The information presented in this report is based on the above-described research and the described site visits. GeoEngineers has relied upon information provided by others in our description of historical conditions and in our review of regulatory databases and files. The available data do not provide definitive information with regard to all past uses, operations or incidents at the site or adjacent properties.

No ESA can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this practice is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with a property. There is always a potential that areas with contamination that were not identified during this Phase I ESA exist at the site or in the study area. Further evaluation of such potential would require additional research, subsurface exploration, sampling and/or testing.

GeoEngineers has performed this Phase I ESA of the subject site in general accordance with the scope and limitations of our confirming agreement dated April 10, 2001, and ASTM E 1527-00, Standard of Practice for Phase I ESAs. Within the limitations of scope, schedule and budget, our services have been executed in accordance with the generally accepted environmental science practices for Phase I ESAs in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

We appreciate this opportunity to be of service to Vern Sims. Please call if you have questions regarding this report.

Respectfully submitted,

GeoEngineers, Inc.

Ronald M. Bek
Staff Geologist

J. Robert Gordon, P.E.
Principal

RMB:JRG:ads
Document ID: 683800200ESA.doc

APPENDIX A

REFERENCES

PUBLISHED REFERENCES

- EPA's NPL list dated March 14, 2001.
- EPA's CERCLIS dated March 16, 2001.
- EPA's RCRA notification system dated August 8, 2000.
- EPA's ERNS list current through March 18, 2001.
- Ecology's Leaking UST sites list dated March 1, 2001.
- Ecology's Registered UST list dated March 1, 2001.
- Ecology's Toxics Cleanup Program C&SCS List dated November 30, 2000.
- Ecology's MTCA Site Registers current through February 28, 2001.
- MTCA Landfill Database of Skagit County Landfills updated March 1, 2001.
- "Solid Waste Landfills of Record" and "Closed Landfills of Record," provided by the Skagit County Health Department, undated.
- "The Northwest Environmental Compliance Report Quick Reference Guide" dated April 1993; "Landfills in Washington" (source unknown, received by GEI 3/96); "Area Landfills" from *Associated General Contractors of Washington Water Quality Manual* dated 1990.
- Totem Atlas Guide of Island, Skagit, Whatcom and San Juan Counties.
- U.S. Geologic Survey Topographic Quadrangle Map, 7.5 minute series, "Sedro-Woolley North, Washington," dated 1954, photorevised 1972.
- "Geologic Map of Western Skagit County, Washington" by Don Easterbrook dated 1976.
- "Special Report: Radon in Washington," Washington State Department of Health dated June 1994.

PERSONAL COMMUNICATIONS

- Telephone interview with Mr. Dan Sims, co-owner of the subject site, by Mr. Ronald M. Bek of GeoEngineers on April 14, 2001.
- Telephone interview with Ms. Brit Pfaff with Skagit County Health Department, by Mr. Ronald M. Bek of GeoEngineers on April 16, 2001.
- Telephone interview with Ms. Gail Colburn with Washington State Department of Ecology, Northwest Regional Office, by Mr. Ronald M. Bek of GeoEngineers on April 17, 2001.
- Telephone interview with Ms. Sally Perkins with Washington State Department of Ecology, Northwest Regional Office, by Mr. Ronald M. Bek of GeoEngineers on April 17, 2001.
- Telephone interview with Mr. Dean Kliner, Sedro-Woolley Fire Marshall, by Mr. Ronald M. Bek of GeoEngineers on April 17, 2001.
- Telephone interview with Mr. Vern Sims, co-owner of the subject site, by Mr. Ronald M. Bek of GeoEngineers on April 19, 2001.

OTHER REFERENCES

- Aerial photograph provided by Skagit County dated 1961, 1975, 1986 and 1995.
- Cole directories for Skagit County dated 1985, 1992-93 and 2000-01.
- Sanborn Fire Insurance Map of Sedro-Woolley, Washington dated 1932 and 1941 with 1964 updates.
- Kroll Atlas of Sedro-Woolley dated 1997.
- Metsker Map for Skagit County dated 1983.

APPENDIX B

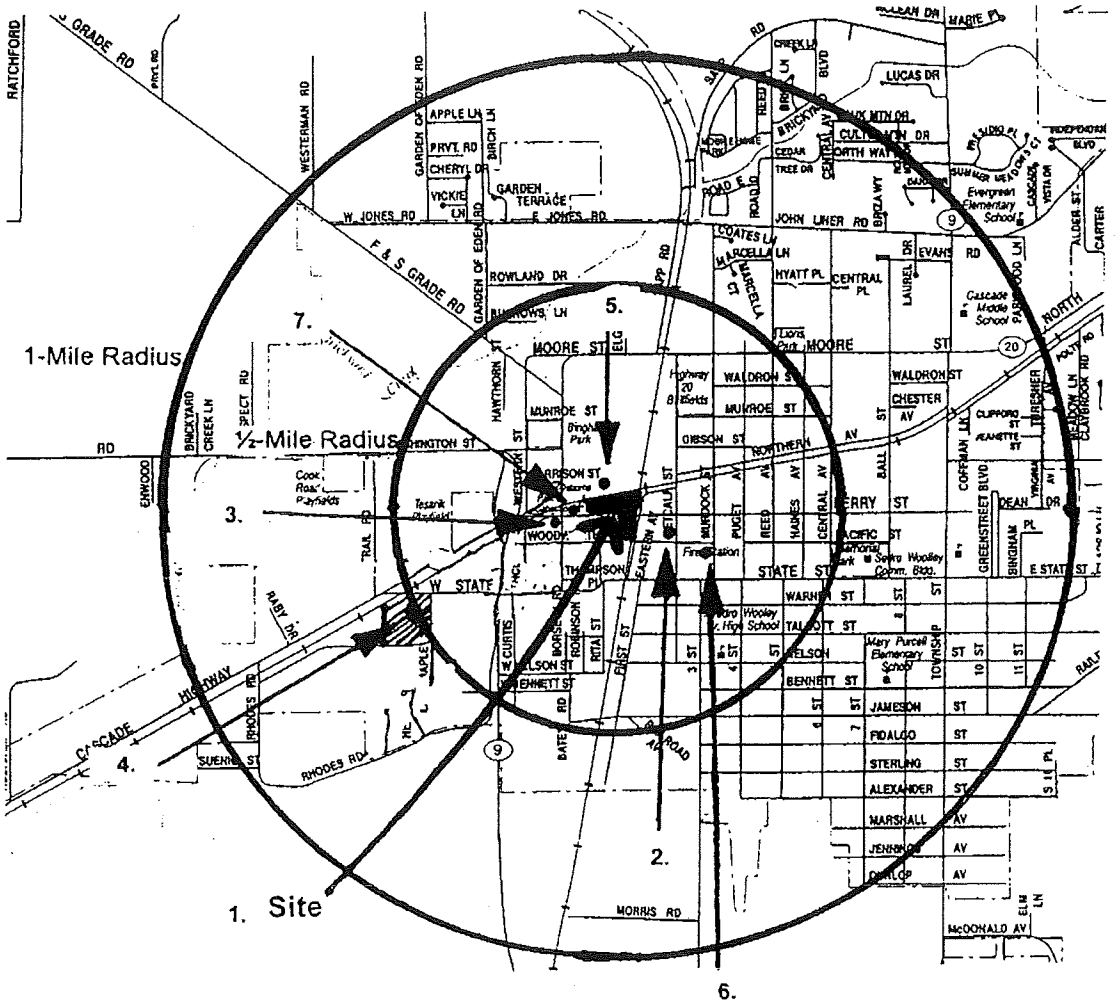
PHASE I ESA STATEMENT OF QUALIFICATIONS

GeoEngineers has researched and assessed possible subsurface contamination for more than 2,000 projects located in the states of Washington, Oregon, Idaho, California and Alaska. We are very experienced with the interpretation of environmental information with regard to potential liabilities associated with property ownership or transfer. We have been involved with property assessments at sites ranging from small commercial properties with no apparent environmental problems to large industrial properties with complex histories. We also conduct specific subsurface exploration programs during Phase II ESAs, develop remedial plans for contaminated properties, and monitor and document remedial activities.

Internal guidelines for conducting Phase I ESAs have been developed by our firm. The primary objectives of the guidelines are to respond to client needs, standardize our technical approach, facilitate completion of the projects, and maintain high levels of quality and cost control. The guidelines incorporate procedures and data resources into a comprehensive document used by all technical staff responsible for performing these types of projects. The guidelines were developed after a thorough review of applicable regulations, standards and practices generally employed in the consulting industry for Phase I ESAs. Our standard procedures for conducting Phase I ESAs are, at a minimum, in conformance with the scope and limitations of ASTM Standard E 1527-00, Standard Practice for Phase I ESAs.

GeoEngineers has field and office staff who are specifically trained in performing ESAs. Historical research and agency database searches are accomplished by staff specialists, who are experienced with the wide range of documents and databases available for evaluation of historical land use and identification of sites with known or suspected environmental concerns. The site reconnaissance is completed by an experienced member of our staff with proven capabilities in identifying visual evidence of the possible use, generation, storage, release or disposal of hazardous substances.

J. Robert Gordon, Principal, had primary responsibility for this Phase I ESA project. Mr. Gordon has over 20 years of consulting experience and has been project manager and/or principal-in-charge on over 250 site assessment/contamination remediation projects in Washington over the last 12 years. Mr. Gordon helped prepare our original in-house Phase I ESA procedures manual and has teamed with an attorney to provide an "Environmental Law and Science" seminar addressing ESAs, the Model Toxics Control Act, and site characterization and cleanup considerations. Additional information regarding corporate or personal qualifications can be provided if desirable.



Listed Sites:

1. Vern Sims Ford located at 116 West Ferry Street.
2. Chevron USA, Inc. located at 124 Ferry Street.
3. Skagit Petroleum Company located at 700 Borseth Street.
4. Snelson Companies, Inc. located at 601 West State Street.
5. Osprey Boat Company (formerly Skagit Manufacturing) located at 500 Metcalf Street.
6. Fred Nelson Cheverolet located at 221 Woodworth Street.
7. Herb's Chevron / Herb's Muffler and Tune-Up Center located at 224 Ferry Street.

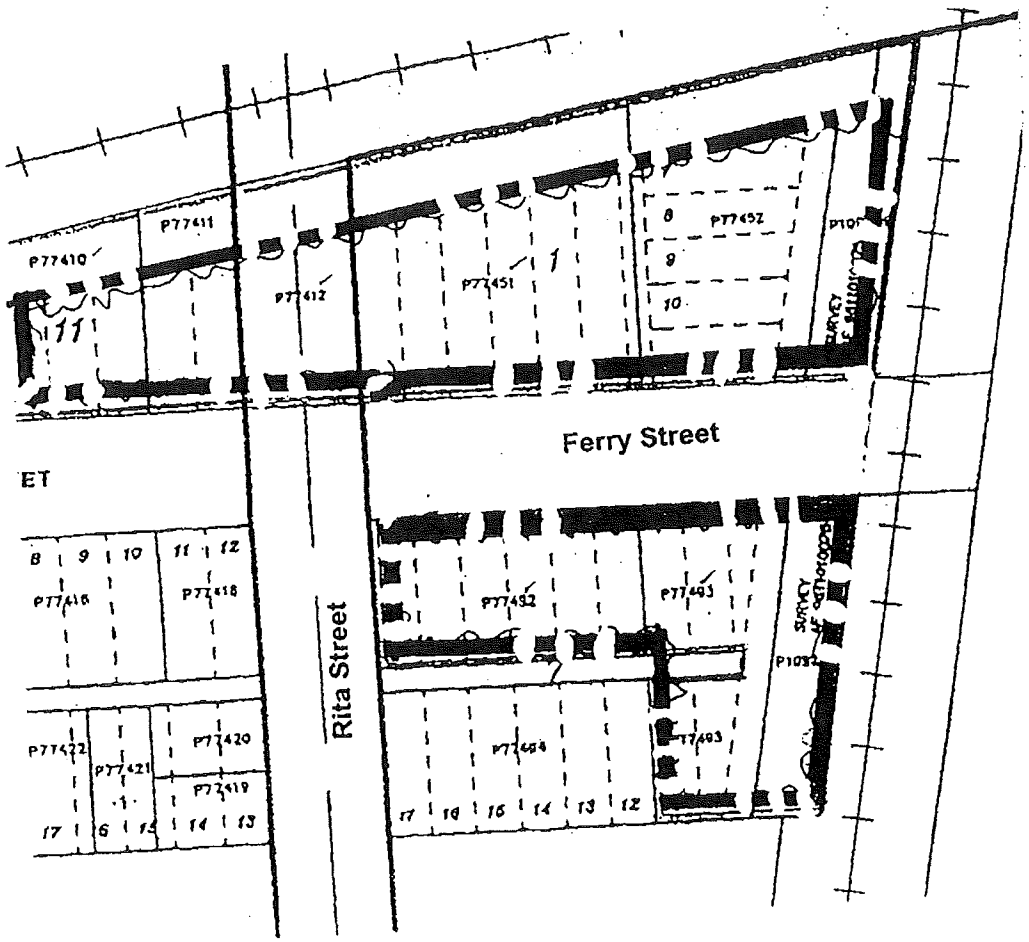
Reference: Totem Atlas of Northwestern Washington, this is an authorized copy of a page from the Totem Atlas of Island, Skagit, Whatcom and San Juan Counties, a copyrighted publication. - A.W. Tanner

GeoEngineers

VICINITY MAP AND LISTED SITES

FIGURE 1

#6838-002-00-5150B RMB:mlp 04/13/01



Reference Undated Site Plan Provided by Vern Sims Ford Ranch on April 16, 2001.

GeoEngineers	SITE PLAN
	FIGURE 2

#6838-002-00-5150B RMB:mlp 04/13/01

PHASE I ENVIRONMENTAL SITE ASSESSMENT
NORTH CASCADE FORD
116 WEST FERRY STREET
SEDRO-WOOLLEY, WASHINGTON

prepared for:

Mr. Travis Coulter
North Cascade Ford Inc.
116 West Ferry Street
Sedro-Woolley, Washington 98284

July 15, 2011

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SEDRO-WOOLLEY, WASHINGTON

Prepared for:

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July 15, 2011

Harold Cashman
Project Manager

Tegan Conner
QA/QC Reviewer

TABLE OF CONTENTS

Page

1.0 SUMMARY 1
2.0 INTRODUCTION 3
2.1 PURPOSE 3
2.2 DETAILED SCOPE OF SERVICES 3
2.3 SIGNIFICANT ASSUMPTIONS 4
2.4 LIMITATIONS AND EXCEPTIONS 4
2.5 SPECIAL TERMS AND CONDITIONS 4
2.6 USER RELIANCE 5
3.0 SITE DESCRIPTION 6
3.1 LOCATION AND LEGAL DESCRIPTION 6
3.2 SITE AND VICINITY GENERAL CHARACTERISTICS 8
3.3 CURRENT USE OF THE PROPERTY 9
3.4 DESCRIPTION OF STRUCTURES, ROADS, AND OTHER IMPROVEMENTS ONSITE 10
3.5 CURRENT USE OF THE ADJOINING PROPERTIES 10
4.0 USER PROVIDED INFORMATION 11
4.1 TITLE RECORDS 11
4.2 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS 11
4.3 SPECIALIZED KNOWLEDGE 11
4.4 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES 11
4.5 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION 11
4.6 REASON FOR PERFORMING PHASE I ESA 12
5.0 RECORDS REVIEW 13
5.1 STANDARD ENVIRONMENTAL RECORDS SOURCES 13
5.2 ADDITIONAL ENVIRONMENTAL RECORD SOURCES 15
5.3 PHYSICAL SETTING SOURCES 17
5.4 HISTORICAL SETTING SOURCES 17
5.5 HISTORICAL USE INFORMATION ON THE PROPERTY 18
5.5.1 SANBORN MAPS 18
5.5.2 KROLL ATLAS 19
5.5.3 METSKER ATLAS 19
5.5.4 CITY DIRECTORIES 20
5.5.5 AERIAL PHOTOGRAPHS 20
5.5.6 HISTORIC TOPOGRAPHIC MAPS 21
5.5.7 TITLE DOCUMENTS 22
5.6 HISTORICAL USE INFORMATION ON ADJOINING PROPERTIES 22
6.0 SITE RECONNAISSANCE 23
6.1 METHODOLOGY AND LIMITING CONDITIONS 23
6.2 GENERAL SITE SETTING 23
7.0 INTERVIEWS 25
7.1 INTERVIEW WITH OWNER 25
7.2 INTERVIEW WITH SITE MANAGER 25
7.3 INTERVIEWS WITH OCCUPANTS 25
7.4 INTERVIEWS WITH LOCAL GOVERNMENT OFFICIALS 26
7.5 INTERVIEW WITH OTHERS 26
8.0 FINDINGS 27
9.0 OPINION 29
10.0 CONCLUSIONS 29
11.0 DEVIATIONS 30
12.0 ADDITIONAL SERVICES 30
13.0 REFERENCES 31
14.0 ENVIRONMENTAL PROFESSIONAL STATEMENT 32
15.0 QUALIFICATIONS 33

LIST OF FIGURES

Figure 1. Site Location Map

Figure 2. Subject Property Site Map

LIST OF PHOTOGRAPHS

Photograph 1. A view to the east from the western edge of the subject property located north of West Ferry Street.

Photograph 2. A view of the two vent pipes located on the southeastern side of the main building. These may indicate the presence of one or more tanks.

Photograph 3. An interior view of the maintenance bay in the main building. The three underground hydraulic lifts are visible in the foreground.

Photograph 4. An interior view of the maintenance bay in the main building.

Photograph 5. A view of the paint storage room in the main building.

Photograph 6. A view of various chemicals stored for the auto detailing area of the main building.

Photograph 7. A view of some waste storage drums for the auto detailing area of the main building.

Photograph 8. A view of oil storage tanks in the "Quick Lane" in the main building.

Photograph 9. A view of the waste oil storage tank in the wash bay of the main building. Note the absorbent pads and stains around the tank.

Photograph 10. A view of waste and product storage in the wash bay, adjacent to the waste oil storage tank.

Photograph 11. A view of drums storing clean oil.

Photograph 12. A view outside of the wash bay. An oily sheen was observed on the puddles on the right side of the photograph.

LIST OF APPENDICES

Appendix A - User Provided Information

Appendix B - Regulatory Profile

Appendix C - Historical Use Information

Appendix D - Interview Documentation

Appendix E - Resumes of Environmental Professionals

1.0 SUMMARY

This report presents the results of a Phase I Environmental Site Assessment (ESA) conducted by Whatcom Environmental Services (Whatcom Environmental) on behalf of North Cascade Ford Inc. (Client). The North Cascade Ford property is approximately 3.4 acres in area and consists of eight parcels. This Phase I ESA was conducted in general accordance with the ASTM Designation: E 1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM, 2005). The ESA involved a visual inspection of the subject and adjacent properties, interviews with key personnel, a survey of relevant government and regulatory files, and preparation of this report.

A goal of the Phase I ESA process is to identify *recognized environmental conditions*. The term recognized environmental conditions means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property (ASTM, 2005). The term includes hazardous substances or petroleum products even under conditions in compliance with laws.

This Phase I ESA has revealed evidence of recognized environmental conditions associated with the subject property.

- Historical underground storage tanks are located on parcel P77451. It is unknown if they were all closed in place and/or removed, or what the condition of the tanks or soils was at the time of closure.
- A historical gasoline station was located on parcel P77410.
- An automobile shop with an oil house was historically located in the same location on the subject property as the current automobile dealership.
- A 10,000 gallon above-ground oil tank was historically located on parcel P77451.

- Coal was stored on parcel P109239 as part of historical railroad and transport operations.

- Due to the proximity of several contaminated sites in the immediate area, it is possible that the subject property may be affected by migrating contamination.

2.0 INTRODUCTION

2.1 PURPOSE

The purpose of this Phase I ESA was to identify recognized environmental conditions in connection with the subject property, and to permit the Client to satisfy requirements of all appropriate inquiry into the previous ownership and uses of the property, consistent with good commercial and customary practice. The term "recognized environmental conditions" is defined in Section 2.5. The purpose of the ESA process is to provide a commercially prudent and reasonable inquiry to identify recognized environmental conditions in connection with a property. By conducting this ESA, the Client has undertaken all appropriate inquiry into the previous ownership and uses of the subject property consistent with good commercial or customary practice in an effort to minimize liability under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

2.2 DETAILED SCOPE OF SERVICES

The ESA of the subject property was conducted in general accordance with procedures set forth in the American Society for Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process, ASTM Designation E 1527-05.*

The ESA process consists of four components: (1) an electronic review of records pertaining to environmental conditions onsite and at adjacent properties, (2) site reconnaissance by an environmental professional, (3) interviews with the current owner(s) and occupant(s) of the property and local government officials, and (4) preparation of an ESA report which documents all steps taken during the assessment.

2.3 SIGNIFICANT ASSUMPTIONS

Significant assumptions associated with the findings of this Phase I ESA include the understanding that all information provided by the Client and all individuals interviewed is true and correct.

The methodology used to conduct the site visit and complete the Phase I ESA generally followed common industry practices. A Phase I ESA is based on visual inspection and review of available historical records, and assessment is primarily confined to surface structures or features. The findings and conclusions presented in this report are based on reasonably ascertainable information compiled by Whatcom Environmental during the Phase I ESA. The ESA focuses on potential sources of hazardous substances, petroleum substances, and petroleum hydrocarbons that could be considered a liability due to their possible presence on-site in significant concentrations (e.g., above acceptable limits set by Federal and State government) or due to the potential for contamination migration through exposure pathways (e.g., groundwater) from off-site locations. Hazardous substances naturally occurring in plants, soil, and rocks (e.g., trace metals and naturally occurring asbestos) are not typically considered in a Phase I ESA.

2.4 LIMITATIONS AND EXCEPTIONS

The Whatcom Environmental staff that conducted the ESA meet the requirements of an environmental professional as outlined in ASTM E 1527-05. No Phase I ESA can wholly eliminate uncertainty regarding the potential for recognized environmental conditions in connection with a property. Performance of this ESA by Whatcom Environmental is intended to reduce, but not eliminate, uncertainty regarding the potential for recognized environmental conditions in connection with the subject property. No warranty, express or implied, is given regarding the presence of hidden or unidentified sources of contamination of the subject property. In addition, no warranty, express or implied is given regarding geotechnical or geologic hazards. This ESA did not include delineation of wetlands.

2.5 SPECIAL TERMS AND CONDITIONS

This Phase I ESA was conducted in general accordance with the ASTM Designation: E 1527-05, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM, 2005).

The term *recognized environmental conditions* means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into the ground, groundwater, or surface water of the property. The term is not intended to include de minimis conditions that generally do not present a threat to human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies (ASTM, 2005).

The term *petroleum products* means crude oil or any fraction thereof including gasoline, kerosene, diesel oil, jet fuels, fuel oil, natural gas, natural gas liquids, liquefied natural gas, and synthetic gas.

A substance is defined as a *hazardous substance* pursuant to section 101 (14) of the Federal cleanup law 42 U.S.C., Sec. 9601(14) as interpreted by EPA and the courts. A hazardous substance means any liquid, solid, gas, or sludge that exhibits any of the hazardous physical, chemical, or biological properties described in Washington Administrative Code (WAC) 173-303-090 or 173-303-100 (Dangerous Waste Regulations).

2.6 USER RELIANCE

Whatcom Environmental prepares a report for the Client's exclusive use for a particular project and in accordance with generally accepted practices at the time of investigation. The report must be used in its entirety. This Phase I ESA report was prepared for exclusive use by North Cascade Ford Inc. and its authorized agents, and may not be used, relied upon, or assigned to a third party without written consent from Whatcom Environmental. This report is not intended for use by others and the information contained herein is not applicable to other sites.

3.0 SITE DESCRIPTION

The ESA was conducted for the light industrial property located at 116 West Ferry Street in the City of Sedro-Woolley, Washington. The site location is shown on Figure 1.

3.1 LOCATION AND LEGAL DESCRIPTION

The subject property is located at 116 West Ferry Street, approximately 1.2 mile north of the Skagit River, in Sedro-Woolley, Washington (Figure 1). The property is comprised of eight parcels and is located in the north half of the southwest quarter of Section 24 in Township 35 North, Range 4 East. The subject property encompasses approximately 3.4 acres. The subject property is zoned Central Business District by the City of Sedro-Woolley. Figure 2 shows the subject property outline and adjacent parcels. The property Tax Parcel Numbers and legal descriptions are as follows:

- P77410 - TAX 92; WEST TO WOOLLEY, VAC NORTHERN AVE N OF SD LOTS & 3 4 & 5, BLK 11
- P77411 - TAX 93;WEST TO WOOLLEY LOT 7 BLK 11 THAT PTN OF BLK 11 DESC AS FOL BAAP 301.5' E OF SW COR OF BLK 11 TH E ALG THE N LI OF FERRY ST 60' TH N TO THE S LI OF THE SEATTLE & NORTHERN RLY R/W TH SW'LY ALG SD RLY LI TO A PT DUE N OF POB TH S TO POB
- P77412 - WEST TO WOOLLEY BLK 11 TAX 94 BEG 361 1/2' E OF SW COR OF BLK 11 WEST ADD TH E ALG N LINE OF FERRY ST 85' TH N TO R/W OF S & N RLY TH SW'LY ALG R/W TO A PT DUE N OF POB TH S TO POB
- P77451 - TOWN OF WOOLLEY PTN VAC NORTHERN AVE & ALLEY ADJ & LTS 1TO 6 BLK 1
- P77452 - TOWN OF WOOLLEY LOT 11 BLK 1 PTN VAC NORTHERN AVE. & EASTERN AVE ADJACENT TO & LOTS 7 TO 11 P77452 -

TOWN OF WOOLLEY LOT 11 BLK 1 PTN VAC NORTHERN AVE. & EASTERN AVE ADJACENT TO & LOTS 7 TO 11

- P77492 - TOWN OF WOOLLEY LOTS 1 TO 6 BLK 7
- P77493 - TOWN OF WOOLLEY W1/2 VAC EASTERN AVE ADJ & LTS 7 TO 11 BLK 7
- P109239 - TWO PARCEL OF LAND SITUATED IN THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 24, TOWNSHIP 35 NORTH, RANGE 4, DESCRIBED AS FOLLOWS: PARCEL 1: BEGINNING AT THE INTERSECTION OF THE NORTH LINE OF FERRY STREET WITH THE CENTERLINE OF 40.0 FOOT WIDE EASTERN AVENUE, VACATED BY THE CITY COUNCIL OF THE CITY OF SEDRO WOOLLEY BY RESOLUTION #101, DULY PASSES AND ADOPTED ON OCTOBER 27, 1930; THENCE NORTHERLY ALONG THE CENTERLINE OF VACATED EASTERN AVENUE 170.0 FEET, MORE OR LESS, TO THE SOUTHERLY LINE OF NORTHERN AVENUE, ACCORDING TO THE OFFICIAL PLAT OF SEDRO WOOLLEY, AS FILED IN THE COUNTY AUDITOR'S OFFICE IN SKAGIT COUNTY; THENCE EASTERLY ALONG SAID SOUTHERLY LINE OF NORTHERN AVENUE 20.3 FEET TO THE EASTERLY LINE OF SAID VACATED EASTERN AVENUE, ALSO BEING ON TH WESTERLY LINE OF BURLINGTON NORTHERN RAILROAD COMPANY'S (FORMERLY NORTHERN PACIFIC RAILWAY COMPANY) 100.0 FOOT WIDE RIGHT OF WAY, BEING A PORTION OF THE SAME PROPERTY AS DESCRIBED IN WARRANTY DEED FROM PHILIP A WOOLLEY AND KATE WOOLLEY DATED APRIL 18, 1890, AND FILED FOR RECORD APRIL 25, 1890 IN VOLUME 10 OF DEEDS, PAGE 450 OF THE RECORDS OF SAID COUNTY; THENCE NORTHERN ALONG SAID WESTERLY RIGHT OF WAY LINE 42.39 FEET TO THE NORTHERLY LINE OF SAID NORTHERN AVENUE, AND BEING 50.0 FEET SOUTHERLY, AS MEASURED AT RIGHT ANGLES FROM BURLINGTON NORTHERN RAILROAD COMPANY'S (FORMERLY GREAT NORTHERN RAILWAY COMPANY) MAIN TRACK CENTERLINE OF THE BURLINGTON TO CONCRETE, WASHINGTON BRANCH LINE, AS ORIGINALLY LOCATED AND CONSTRUCTED; THENCE EASTERLY ALONG SAID NORTHN LINE OF NORTHERN AVENUE 26.49 FEET TO A POINT BEING 25.0 FEET WESTERLY, AS

MEASURED AT RIGHT ANGLES FROM THE CENTERLINE OF SAID RAILROAD COMPANY'S 100.0 FOOT WIDE RIGHT OF WAY; THENCE SOUTHERLY ALONG A LINE DRAWN PARALLEL WITH THE CENTERLINE OF SAID 100.0 FOOT WIDE RIGHT OF WAY 220.0 FEET, MORE OR LESS, TO THE SAID NORTH LINE OF FERRY STREET; THENCE WESTERLY ALONG SAID NORTH LINE OF FERRY STREET 45.69 FEET TO THE POINT OF BEGINNING; ALSO TOGETHER WITH "PARCEL 2": BEGINNING AT THE INTERSECTION OF THE NORTH LINE OF WOODWORTH STREET WITH THE CENTERLINE OF 40.0 FOOT WIDE EASTERN AVENUE, VACATED BY THE CITY COUNCIL OF THE CITY OF SEDRO WOOLLEY BY RESOLUTION #101 DULY PASSED AND ADOPTED ON OCTOBER 27, 1930; THENCE NORTHERLY ALONG THE CENTERLINE OF VACATED EASTERN AVENUE 219.3 FEET MORE OR LESS, TO THE SOUTH LINE OF 80.0 FOOT WIDE FERRY STREET; THENCE EASTERLY ALONG SAID SOUTH LINE OF FERRY STREET 45.69 FEET TO A POINT BEING 25.0 FEET WESTERLY, AS MEASURED AT RIGHT ANGLES FROM THE CENTERLINE OF BURLINGTON NORTHERN RAILROAD COMPANY'S (FORMERLY NORTHERN PACIFIC RAILWAY COMPANY) 100.0 FOOT WIDE RIGHT OF WAY, BEING A PORTION OF THE SAME PROPERTY AS DESCRIBED IN WARRANTY DEED FROM PHILLIP A WOOLLEY AND KATE WOOLLEY DATED APRIL 18, 1890 AND FILED FOR RECORD ARPIL 25, 1890 IN VOLUME 10 OF DEEDS, PAGE 450 OF THE RECORDS OF SAID COUNTY; THENCE SOUTHERLY ALONG A LINE DRAWN PARALLEL WITH THE CENTERLINE OF SAID 100.0 FOOT WIDE RIGHT OF WAY 219.3 FEET, MROE OR LESS, TO THE SAID NORTH LINE OF WOODWORTH STREET; THENCE WESTERLY ALONG SAID NORTH LINE OF WOODWORTH STREET 45.69 FEET TO THE POINT OF BEGINNING.

3.2 SITE AND VICINITY GENERAL CHARACTERISTICS

The subject property is located in an area characterized by commercial and residential development. The subject property has been developed with two commercial structures. A property site map is included as Figure 2.

The median elevation of the site is approximately 56 feet above mean sea level. The site topography is generally level.

Soils in the area of the subject property are described in the Soil Survey of Skagit County Area, Washington (U.S. Department of Agriculture [USDA], 1989). The average annual precipitation at the property is approximately 35 inches, the average annual air temperature is approximately 50° F, and the average frost-free period is approximately 160 to 220 days. The type of soil found on the subject property is the Urban Land-Mr. Vernon-Field complex. The unit is 40 percent Urban land, 30 percent Mt. Vernon very fine sandy loam, and 20 percent Field silt loam.

Urban land consists of areas where development (e.g. paved areas and structures) obscure the native soils to the point that identification is not feasible.

The Mt. Vernon soil is a very deep, moderately well drained soil that formed in a mixture of recent alluvium and volcanic ash. Permeability is moderate and available water capacity is high. The seasonal high water table is at a depth of approximately 2 to 4 feet from November to April.

The Field soil is a very deep, moderately well drained soil that formed in a mixture of recent alluvium and volcanic ash. Permeability is moderate and available water capacity is high. The seasonal high water table is at a depth of 2 to 5 feet from November to May.

The site is underlain by Lahar of the Kennedy Creek assemblage of the Holocene (WSDNR, 2000). The Lahar consists of moderately to poorly sorted volcanic sand and gravel with local cobble gravel, silt, and clay. Color is pale to dark yellowish brown, olive gray, or light to dark gray, depending on oxidation state. Thickness is generally 10 to 20 meters.

The area is designated as Zone X (areas of minimal flooding) by the National Flood Insurance Rate Program (FEMA, 1989).

3.3 CURRENT USE OF THE PROPERTY

The subject property is located in an area characterized by commercial and residential development. The subject property is currently used by an automobile dealership and repair center.

3.4 DESCRIPTION OF STRUCTURES, ROADS, AND OTHER IMPROVEMENTS ONSITE

The subject property is currently developed with two structures. The main structure located north of West Ferry Street is approximately 26,200 sq. ft. in area. Offices, a sales floor, and various automobile repair shops are located in the main structure. The other structure located south of West Ferry Street is approximately 2,205 sq. ft. in area. Offices are located in this structure. The remainder of the property is paved.

3.5 CURRENT USE OF THE ADJOINING PROPERTIES

The layout of the subject property and adjoining properties is shown on Figure 2. The subject property is bordered on the north by a railroad and a fabricated metal producer. The subject property is bordered on the west by an automobile parts retailer. Residences and an electric power station are located to the south of the subject property. Retail shops and a gasoline service station are located to the east of the subject property, across Eastern Street.

4.0 USER PROVIDED INFORMATION

Mr. Travis Coulter of North Cascade Ford Inc. provided user information for the subject property on July 6, 2011. A User Information Checklist completed by Mr. Coulter is included in Appendix A.

4.1 TITLE RECORDS

A deed history for the subject property was not provided by the user.

4.2 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

Mr. Coulter was not aware of any environmental liens or activity or use limitations associated with the subject property.

4.3 SPECIALIZED KNOWLEDGE

Mr. Coulter had no specialized knowledge of the subject property.

4.4 VALUATION REDUCTION FOR ENVIRONMENTAL ISSUES

Mr. Coulter was not aware of any valuation reduction for environmental issues associated with the subject property.

4.5 OWNER, PROPERTY MANAGER, AND OCCUPANT INFORMATION

The property owner is Coulter Properties, LLC, which is represented by Mr. Travis Coulter. Mr. Coulter is also the owner and manager of the occupant, North Cascade Ford, Inc. The phone number for Mr. Coulter is (360) 770-2590.

4.6 REASON FOR PERFORMING PHASE I ESA

A Phase I ESA is required by North Cascade Ford Inc. as one component of its due diligence process. The Client requested that a Phase I ESA be performed on the subject property in order to satisfy one of the requirements to qualify for the innocent landowner defense to CERCLA liability. This ESA was performed in order to identify recognized environmental conditions associated with the subject property through the scope reflected in the text of this report.

5.0 RECORDS REVIEW

An ASTM standard records search and regulatory profile of the subject property and adjacent properties within a one-mile minimum search distance was compiled by Environmental Data Resources, Inc. (EDR). A total of 63 federal, state, and proprietary databases were searched by EDR.

5.1 STANDARD ENVIRONMENTAL RECORDS SOURCES

The regulatory profile provided by EDR included searches of the ASTM-required standard environmental record sources. The summary of the EDR report findings reviewed by Whatcom Environmental is provided in Appendix B.

The subject property is listed under two names: Vern Sims Ford Sedro Woolley, and Cascade Ford. The site is listed in the Resource Conservation and Recovery Act – Conditionally Exempt Small Quantity Generator database (RCRA CESQG, Appendix B, p. GR-3) and the Underground Storage Tank Database (UST, Appendix B, p. GR-6) under Vern Sims Ford. The UST database showed that a steel tank of undisclosed size had been closed in place by 1996, and a second steel tank less than 1,100 gallons in size had been closed in place by 1996 (see Section 5.2 for additional information). The site is listed in the database of spills reported to the Spill Prevention, Preparedness, and Response Division of the Department of Ecology (SPILLS, Appendix B, p. GR-12) under Cascade Ford. The SPILLS database showed that waste oil was spilled onsite in 2004. The quantity spilled was not reported.

A total of 51 listed sites, including the subject property, were identified within the ASTM required search radii of the subject property. The closest site of note is the Osprey Boat Company / Skagit Manufacturing / Thermacor Northwest / Janicki Industries property located north of the subject property at 500 Metcalf Street. The site is located adjacent to the north side of the subject property across the railroad tracks at a higher elevation. The site is listed in the Comprehensive Environmental Response, Compensation, and Liability Information System as a site with No Further Remedial Action Planned (CERC-NFRAP, Appendix B, p. GR-2). It was evaluated in the 1980s and it was determined that the site did not qualify to be a Superfund site. The site is listed in the Confirmed and Suspected Contaminated Sites List (CSCSL,

Appendix B, p. GR-4) and the CSCSL Hazardous Sites List (HSL, Appendix B, p. GR-4) for confirmed contamination of surface water and soil by metals and petroleum products; and for remediation of soil for polychlorinated biphenyls (PCBs). It is listed as awaiting cleanup. The site is listed in the UST database for one concrete tank which was closed in place. The site is listed in the Independent Cleanup Reports database (ICR, Appendix B, p. GR-9) for reports from 1992 related to PCB, petroleum products, asbestos, metals, and volatile organic compounds contamination.

The second closest site of note is the Herbs Muffler & Tune Up Center property located at 224 West Ferry Street. The site is located approximately 130 feet west of the subject property at a similar elevation. The site is listed in the CSCSL and CSCSL HSL databases for confirmed contamination of groundwater and soil by petroleum products (including gasoline), benzene, and non-halogenated solvents; and for suspected contamination of groundwater and soil by polynuclear aromatic hydrocarbons, base/neutral/acid organics, metals, and methyl tertiary-butyl ether (MTBE). The site status is classified as "Cleanup Started". The site is listed in the Leaking Underground Storage Tank database (LUST, Appendix B, p. GR-5) for a 1993 release to soil and a 1996 release to soil and groundwater. The status is listed as "Cleanup Started". The site is listed in the UST database for four coated steel tanks removed in 2003 and three dielectric coated steel tanks still in operation.

The third closest site of note is the Wash Rack property located at 101 Ferry Street. The site is approximately 130 feet east of the subject property across Eastern Street at a similar elevation. The site is listed in the UST database for three tanks removed at an undisclosed time, four temporarily closed tanks, and one exempt tank. The site is listed in the LUST database for a 2003 release to soil and groundwater. The site is listed in the CSCSL database for confirmed contamination of groundwater and soil by benzene, non-halogenated solvents, diesel, gasoline, and other petroleum products. The site has not been cleaned up.

The fourth site of note is the Chevron #97502 property located at 124 Ferry Street. The site is approximately 340 feet east of the subject property at a similar elevation. The site is listed in the ICR database for voluntary cleanup reports from 1992 through 2000 related to the contamination of groundwater and soil by petroleum products. The site is listed in the CSCSL database for confirmed contamination of groundwater and soil by benzene, non-halogenated solvents, diesel, and gasoline. The site is listed in the LUST database for a 1991 release to groundwater and soil. Cleanup has been started at the site. The site is listed in the UST database for six removed storage tanks.

The fifth site of note is the Skagit Petroleum / Associated Petroleum Products property located at 700 Borseth Street. The site is approximately 270 feet southwest of the subject property at a lower elevation. The site is listed in the ICR database for reports from 1999 and 2000 related to the contamination of groundwater and soil by petroleum products, metals, and non-halogenated solvents due to a tank spill. The site is listed in the CSCSL and CSCSL HSL databases for confirmed contamination of groundwater and soil by petroleum products, metals, and non-halogenated solvents. Cleanup has started at the site.

The sixth site of note is the Fred Nelson Chevrolet / Countryside Chevrolet property located at 221 Woodworth Street, approximately 700 feet southeast of the subject property at a similar elevation. The site is listed in the LUST and CSCSL databases for a 1991 release to the soil which was reportedly cleaned up in 1995. The cleanup was not confirmed by the Department of Ecology. The site is listed in the UST database for one removed tank.

All but one of the orphaned sites were located from the list provided by EDR. The only site of interest was the Janicki Industries property located at 500 Metcalf Street, adjacent to the north side of the subject property across the railroad tracks. It is listed in the RCRA CESQG database.

The review of standard environmental record sources has revealed several recognized environmental conditions at the subject property. Two historical USTs were located on the subject property. No information on the condition of the tanks or soils at the time of the tank closure is available. A waste oil spill occurred at the property in 2004. Due to the proximity of several contaminated sites in the area of the subject property, it is possible that the subject property may be affected by migrating contamination.

5.2 ADDITIONAL ENVIRONMENTAL RECORD SOURCES

The website for the Skagit County Public Works Solid Waste Division was reviewed to locate any nearby recycling and transfer facilities. The Sedro-Woolley City Recycling Facility is located approximately 0.6 mile southeast of the subject property.

A 2008 GIS database of reclaimed surface mine sites in Washington State created by the Washington State Department of Natural Resources, Division of Geology and Earth Resources, was reviewed. The information indicated that no reclaimed surface mines were located on or near the subject property.

A 2008 GIS database of oil and gas test well sites in Washington State created by the Washington State Department of Natural Resources, Division of Geology and Earth Resources, was reviewed to assess the possibility of historical drilling on the subject property. The information indicated that no drilling for oil or gas occurred on or near the subject property.

The website of the Washington State Department of Ecology's Integrated Site Information System was used to obtain additional information regarding the subject property. The UST database showed that by 1996 a tank which held leaded gasoline and a tank which held heating fuel were closed in place on the subject property (see Section 5.1). The date of closure was not recorded for either tank.

A public records request was made to the Department of Emergency Management/Fire Marshal's Office on July 12, 2011, via e-mail. The Department keeps records of emergency responses back to 1981. There are no records of any hazardous material responses associated with the subject property. However, there are records related to nearby properties. An incident occurred in 2007 at 224 West Ferry Street, located at the northeast corner of West Ferry Street and Borseth Street, west of the subject property. Vandals had opened a valve on a waste oil tank, causing less than 100 gallons of oil to spill into a dry storm drain. The oil appeared to be confined to a single manhole, and was pumped out the day of discovery. An incident occurred in 1989 at 700 Borseth Street at a fuel storage facility located on the southwest corner of West Ferry Street and Borseth Street, west of the subject property. A malfunctioning valve caused between 5 and 10 gallons of diesel to leak from a pump. The report indicated that most of the fuel was contained and removed with absorbent pads. An incident occurred in 1989 at 124 Ferry Street at a gasoline station located east of the subject property. Approximately 100 gallons of gasoline were spilled while filling a UST. The fuel spread into the street, entered a catch basin and flowed to manholes at the intersection of Ferry and Metcalf Streets and of Woodworth and Metcalf Streets. The majority of the fuel was in the manhole at Ferry and Metcalf. In response, the gasoline was pumped out of the manholes, the asphalt was washed off, foam was put into the manholes to reduce the likelihood of an explosion, and water was flushed through the system. Copies of the records from by the Department of Emergency Management are provided in Appendix C.

A public records request was made to the Washington State Department of Ecology via facsimile (425-649-4450) on July 12, 2011, regarding underground storage tank records. Ecology had only responded with a notice that our request had been received by the time of the production of this report.

The review of additional environmental record sources has revealed a recognized environmental condition at the subject property. Two historical USTs were located on the subject property. No information on the condition of the tanks or soils at the time of the tank closure is available.

5.3 PHYSICAL SETTING SOURCES

Several sources of information were reviewed to determine the physical setting of the subject property. The ASTM-required source, the U.S. Geological Survey (USGS) Sedro Woolley North, WA Quadrangle (USGS, 1994) was reviewed.

Other sources reviewed included the Geologic Map of the Bellingham 1:100,000 Quadrangle (WSDNR, 2000), the Soil Survey of Skagit County, Washington (USDA, 1989), and the Federal Emergency Management Agency Flood Insurance Rate Map (FEMA, 1989).

5.4 HISTORICAL SETTING SOURCES

Five Sanborn fire insurance maps, from 1903, 1907, 1925, 1944, and 1953, were obtained from Environmental Data Resources Inc. A summary of the findings is provided in Section 5.5.1.

Kroll Atlases of Skagit County, Washington, were not available at the Burlington Public Library. A summary of the findings is provided in Section 5.5.2.

One Metsker Atlas of Skagit County, Washington, from 1996 was reviewed at the Burlington Public Library. A copy of the Metsker Atlas reviewed is presented in Appendix C. A summary of the findings is provided in Section 5.5.3.

The Polk City Directories on file at the Burlington Public Library were reviewed. A summary of the findings is provided in Section 5.5.4.

Aerial photographs taken in 1937 and 2009 were obtained online from the Skagit County iMap website. Aerial photographs taken in 1966, 1979, and sometime in the 1990s were obtained from the Sedro-Woolley Planning Department. Aerial photographs taken in 1941, 1956, 1968, 1974, 1981, 1990, 2005, and 2006 were obtained from Environmental Data Resources Inc. Copies of the aerial photographs reviewed are presented in Appendix C. A summary of the aerial photograph findings is provided below in Section 5.5.5.

Historical topographic maps from 1921 and 1951 (USGS Wickersham, WA Quadrangle 1:62,500 series) and from 1981 and 1994 (USGS Sedro-Woolley North, WA Quadrangle 1:24,000 series) were reviewed. Copies of the historical topographic maps reviewed are presented in Appendix C. A summary of the historical topographic map findings is provided below in Section 5.5.6.

5.5 HISTORICAL USE INFORMATION ON THE PROPERTY

The subject property has had a variety of uses since the early 1900s. A few residences were located on the subject property from the early 1900s to at least the 1950s, possibly as late as the 1980s. A gasoline station was located on parcel P77410 from the 1920s to at least the 1950s, possibly as late as the 1980s. A hospital was located on parcel P77412 during the 1900s and 1910s. A feed mill and storage facility was located on parcel P77452 from the early 1900s to at least the 1950s, possibly as late as the 1980s. A hotel was located on P77492 from the early 1900s to at least the 1950s. In the mid-1960's a U-shaped building was located on the parcels south of West Ferry Street. Its purpose is unknown. A railroad depot was located on the north half of parcel P109239 from the early 1900s to at least the 1950s and possibly as late as the 1970s. A second depot was located on parcel P77493 during the 1920s, which became the site of a veterinary office and fuel and transfer station by the 1940s and 1950s.

An electric plant powered by steam and fuel oil was located on parcel P77451 in 1907. By the 1920s and through the 1940s a wood shed and wood yard had replaced the electric plant. The original automobile dealership had replaced the wood yard in the early 1950s. In the 1970s, that building was expanded to be the site of the current dealership. By 1979, the southern parcels of the subject property had been converted to parking lots for the automobile dealership, and by the 1990s the same had happened to the northern parcels. An additional office building was constructed in 2007 on parcel P77493, south of West Ferry Street. A summary of the historical uses of the property is included below.

5.5.1 SANBORN MAPS

Sanborn fire insurance maps from 1903, 1907, 1925, 1944, and 1953 were obtained from Environmental Data Resources Inc. Copies of the Sanborn maps are provided in Appendix C.

Several items of note are shown on the subject property. A railroad depot was located on the north half of parcel P109239 from the 1903 map to the 1953 map. A second depot belonging to the Pacific Northwest Traction Company was located on parcel P77493 in the 1925 map. The 1944 and 1953 maps show this building as a transfer station with an office and storage area. A local historical website states that at this point the building housed a veterinary office and a fuel and transfer service station (Skagit River Journal, 2005). The maps show coal sheds next to the building on parcel P109239, so coal may have been the only fuel stored at that site. A small coal storage structure was also shown on the northern portion of parcel P109239 from the 1907 map to the 1953 map. The 1907 map shows an electric generator and an associated 10,000 gallon above-ground oil tank located on the north end of parcel P77451. The 1925 through the 1953 maps show an oil and gasoline station located on the southern portion of the western-most parcel (P77410). The 1925 map shows a structure for automobiles, perhaps a garage or a shop, located approximately at the east end of parcel P77451. The 1944 map shows the structure was expanded, and described an "Oil House" in the center of the structure. The 1953 map shows the original footprint of the automobile dealership on parcel P77451 and addresses it as 120 Ferry Street. A gasoline tank is shown off the eastern end of the original dealership.

Recognized environmental conditions were noted during the Sanborn fire insurance map review. A gasoline tank is shown on parcel P77451, next to or perhaps under the current automobile dealership footprint. An automobile shop with an oil house was located on the same parcel before the current automobile dealership building was constructed in the 1950s. A 10,000 gallon above-ground oil tank was located on the north end of parcel P77451. A gasoline station is shown on parcel P77410. Coal was stored on parcel P109239.

5.5.2 KROLL ATLAS

Kroll Atlases of Skagit County, Washington, were not available at the Burlington Public Library.

5.5.3 METSKER ATLAS

One Metsker Atlas of Skagit County, Washington, from 1996 was reviewed at the Burlington Public Library. Copies of the Metsker Atlases are provided in Appendix C.

No recognized environmental conditions were noted during the Metsker Atlas review.

5.5.4 CITY DIRECTORIES

The Polk City Directories on file at the Burlington Public Library were reviewed. The earliest directories available were from the mid-1970s, which showed two businesses on the subject property: the Lentz Supply garden equipment retailer at W Ferry Street, and the Sims Vern Ford automobile dealership at 116 W Ferry Street. By the 1990s Lentz Supply was no longer on the subject property.

700 Borseth Street is listed as the Standard Oil Company of California in the 1970s and as Skagit Petroleum in the 1990s. See Section 5.1 for additional information.

No recognized environmental conditions were noted during the City Directory review.

5.5.5 AERIAL PHOTOGRAPHS

Aerial photographs of the subject property and surrounding area were reviewed to assess prior land utilization. Aerial photographs from the years 1937, 1941, 1956, 1966, 1968, 1974, 1979, 1981, 1990, sometime in the 1990s, 2005, 2006, and 2009 were reviewed. Copies of the aerial photographs are included in Appendix C.

In the 1937 and 1941 photographs the subject property has been developed with several structures. According to the Sanborn fire insurance maps (see Section 5.5.1), some of the visible structures are railroad depots, coal sheds, residences, a feed mill, a wood shed, and a gasoline station.

In the 1956 image the structures on the subject property appear to have changed somewhat. According to the Sanborn maps, the main automobile dealership had been constructed by this time. The industrial facility adjacent to the north side of the subject property had been constructed by this time.

By 1966, the automobile dealership had been remodeled and expanded. Structures related to the railroad are visible on the eastern side of the subject property, as well as the building which had housed the feed mill. A U-shaped building was located on the subject property south of West Ferry Street. It appears the gasoline station on the west end of the subject property was still in operation.

The 1968 and 1974 images are of too small a scale to effectively interpret the use of the subject property and adjacent properties.

By 1979, the southern parcels of the subject property had been converted to parking lots for the automobile dealership. The automobile dealership had been slightly expanded in the area of the historical underground storage tank (see Section 5.5.1). All but one of the structures near the railroad had been demolished, though the feed mill building was still in operation (though it is unknown what its use was). The gasoline station on the west end of the subject property appears to have still been in operation.

The 1981 and 1990 images are of too small a scale to effectively interpret the use of the subject property and adjacent properties; however it appears the feed mill building and possibly the gasoline station had been demolished by 1990.

There is little change between the larger-scale image from the 1990s and the photographs from 2005 and 2006. The only structure on the subject property was the main automobile dealership and a smaller structure adjacent to the railroad on the east end of the property; the remainder of the property was parking lots.

The 2009 photograph shows the subject property in its current state. The main automobile dealership and parking lots are located on the northern parcels, and a smaller office building and parking lots are located on the southern parcels. Nearby properties are residential, commercial, and industrial.

No recognized environmental conditions were noted during the historic aerial photograph review.

5.5.6 HISTORIC TOPOGRAPHIC MAPS

Historical topographic maps were reviewed as part of this ESA. One topographic map quadrangle (USGS Wickersham, WA Quadrangle 1:62,500 series) published in 1921 and 1951 was reviewed. One topographic map quadrangle (USGS Sedro-Woolley North, WA Quadrangle 1:24,000 series) published in 1981 and photorevised in 1994 was reviewed. In the 1921 map the subject property is shown as developed with four structures north of West Ferry Street and three structures south of West Ferry Street. Several railroads tied in together on and near the subject property. The 1951 map shows the subject property and surrounding area as a "built up area" and one building next to the railroad is shown. One of the nearby railroad lines may have been decommissioned by this time since it is not shown. The 1981 map shows automobile dealership, a structure near a railroad spur, and three other buildings on the west side of the subject property. The industrial facility adjacent to the north side of the subject property had

been constructed by this time. The mail automobile dealership is the only building shown on the subject property in the 1994 map. Copies of the historical topographic maps are provided in Appendix C.

No recognized environmental conditions were noted during the historical topographic map review.

5.5.7 TITLE DOCUMENTS

Title documents were not provided by the Client.

5.6 HISTORICAL USE INFORMATION ON ADJOINING PROPERTIES

Review of historical use information did not identify evidence of any historical recognized environmental conditions on any property adjacent to the subject property.

6.0 SITE RECONNAISSANCE

Mr. Thomas Davis and Ms. Tegan Conner of Whatcom Environmental conducted a site reconnaissance of the subject property on July 8, 2011, as part of the Phase I ESA. A photographic log showing selected views of the subject property is included in the report.

6.1 METHODOLOGY AND LIMITING CONDITIONS

Environmental professionals from Whatcom Environmental conducted the site reconnaissance. All accessible areas of the subject property were explored.

6.2 GENERAL SITE SETTING

The subject property is an approximately 3.4 acre commercial property located at 116 West Ferry Street in Sedro-Woolley, Washington. The property is currently the site of North Cascade Ford, an automobile dealership and repair shop. Mr. Joe Krivanek, the Controller, accompanied Whatcom Environmental personnel while inside the main building.

The property has two structures: an office/retail structure located on the parcels south of West Ferry Street; and the larger main structure which contains offices, a paint shop, a body shop, a "quick lane" repair shop, a detail shop, and a retail area, located north of West Ferry Street. The remainder of the property is used for parking automobiles and is therefore almost entirely paved. Parcel P109239 is covered in gravel.

Several drains were observed in the main building, though no oil/water separator was observed and when asked employees did not know where it was or if one was present. No drains are located in the paint shop. Boilers were observed in the main building; Mr. Krivanek stated that they are fueled by natural gas. Several lifts are located onsite; three underground hydraulic lifts were observed. A mechanic who had worked onsite for approximately 20 years stated that they recently put oil in them for the first time since he can remember. He also stated that the oil in the underground lifts is very old and that he has never noticed any visible leaks. Several drums of hazardous materials – including waste oil, antifreeze, and paint thinner

are stored in the shops. Paint is stored in a small room by the paint shop. No evidence of hazardous material dumping was observed on the subject property.

Evidence of historical underground storage tanks was observed on the subject property. Two vent lines were observed on the southeastern exterior side of the main building, between the Quick-Lane and the sales office.

Waste oil is stored in an above ground storage tank located on the north side of the main building. Waste anti-freeze is stored in the same area in drums. No secondary containment was observed. Staining was observed in the waste oil and antifreeze storage area on the asphalt that runs down to the gravel at the edge of the railroad tracks. An oily sheen was noted on the puddles there.

A concrete slab was observed west of the main building, adjacent to West Ferry Street. What the slab is indicative of is unknown.

One recognized environmental condition was observed during the site reconnaissance. Two vent lines were observed on the southeastern exterior side of the main building, which is evidence of the operation of historical underground storage tanks.

7.0 INTERVIEWS

Whatcom Environmental personnel conducted five interviews as part of the ESA process.

7.1 INTERVIEW WITH OWNER

Mr. Travis Coulter was interviewed on July 6, 2011, via e-mail. Mr. Coulter is the owner of the subject property and of the occupant, North Cascade Ford, an automobile dealership and service center. He has been associated with the property for eight years. He stated that the main building was constructed in 1953 and was remodeled in 1971 and 2008. He stated that the smaller office building was constructed in 2007. He stated that there are boilers for heating onsite. Mr. Coulter stated that there are hazardous materials onsite, including materials such as oil and paint thinner. He stated that a waste oil above ground storage tank is located onsite. He stated that there is two below ground hydraulic lifts and 13 above ground hydraulic lifts located in the service shop. He stated that no underground storage tanks have been onsite to his knowledge. Mr. Coulter stated that, to his best knowledge, there have been no leaks or spills of any hazardous substances or petroleum products on the subject property. Mr. Coulter stated that, to the best of his knowledge, no fill material has been brought onsite. He stated that he has never noticed any stressed vegetation or strange odors associated with the subject property. He stated that no drinking water or groundwater monitoring wells are located onsite. A record of the interview is included in Appendix D.

7.2 INTERVIEW WITH SITE MANAGER

The site is currently managed by the owner. See Section 7.1.

7.3 INTERVIEWS WITH OCCUPANTS

Ms. Sue Straathof, the Parts Manager for North Cascade Ford, has been employed onsite since 1985. She did not recall any storage tanks having been removed or any major spills occurring during her employment. She stated that the main building has only had the

interior remodeled during the time of her employment. She stated that there was a mill located on the subject property south of West Ferry Street in the early 1900's.

Mr. Wayne Ellis, who's been employed onsite for approximately 6 years, stated that Emerald Services handles all waste disposals. He recalled that Fisher and Sons performed the alterations to the storm drain system on the exterior eastern side of the main building. He did not recall any storage tanks having been removed or any major spills occurring during his employment.

Mr. Greg Brue, who's been employed onsite since the early 1980's, stated that he did not recall any storage tanks having been removed or any major spills occurring during his employment.

7.4 INTERVIEWS WITH LOCAL GOVERNMENT OFFICIALS

Assistant Fire Chief Tod Olson of the Sedro-Woolley Fire Department was contacted on July 13, 2011, via telephone (360-855-2252). He stated that there were no records of underground or above ground storage tanks associated with the subject property. When informed of the records of closed-in-place USTs on the subject property, Mr. Olson stated that the Fire Department does allow smaller tanks to be closed-in-place.

7.5 INTERVIEW WITH OTHERS

No other interviews were conducted.

8.0 FINDINGS

The subject property has had a variety of uses since the early 1900s. A few residences were located on the subject property from the early 1900s to at least the 1950s, possibly as late as the 1980s. A gasoline station was located on parcel P77410 from the 1920s to at least the 1950s, possibly as late as the 1980s. A hospital was located on parcel P77412 during the 1900s and 1910s. A feed mill and storage facility was located on parcel P77452 from the early 1900s to at least the 1950s, possibly as late as the 1980s. A hotel was located on P77492 from the early 1900s to at least the 1950s. In the mid-1960's a U-shaped building was located on the parcels south of West Ferry Street. Its purpose is unknown. A railroad depot was located on the north half of parcel P109239 from the early 1900s to at least the 1950s and possibly as late as the 1970s. A second depot was located on parcel P77493 during the 1920s, which became the site of a veterinary office and fuel and transfer station by the 1940s and 1950s. An electric plant powered by steam and fuel oil was located on parcel P77451 in 1907. By the 1920s and through the 1940s a wood shed and wood yard had replaced the electric plant. The original automobile dealership had replaced the wood yard in the early 1950s. In the 1970s, that building was expanded to be the site of the current dealership. By 1979, the southern parcels of the subject property had been converted to parking lots for the automobile dealership, and by the 1990s the same had happened to the northern parcels. An additional office building was constructed in 2007 on parcel P77493, south of West Ferry Street.

During the site reconnaissance, no evidence of an oil/water separator was found. Several hydraulic lifts are located onsite; three underground hydraulic lifts were observed that only recently required additional oil for the first time. Numerous containers and drums of hazardous materials, including waste oil, antifreeze, paint, and paint thinner, are stored onsite. Waste oil is stored in an above ground storage tank located on the north side of the main building. Waste anti-freeze is stored in the same area in drums. No secondary containment was observed. Staining was observed in the waste oil and antifreeze storage area on the asphalt that runs down to the gravel at the edge of the railroad tracks. An oily sheen was noted on the puddles there.

This Phase I ESA has revealed evidence of recognized environmental conditions associated with the subject property.

- During the site reconnaissance, two vent lines were observed on the southeastern exterior side of the main building, which is evidence of historical underground storage tanks. The Washington State UST database showed that by 1996 a tank which held leaded gasoline and a tank less than 1,100 gallons in size which held heating fuel were closed in place on the subject property. The date of closure was not recorded for either tank. No information on the condition of the tanks or soils at the time of the tank closure is available. It is unknown if these tanks correspond to the vent pipes observed during the site reconnaissance. An underground gasoline storage tank was observed on a 1953 Sanborn fire insurance map. Records indicating that it had been removed were not found. It is unclear if the tank shown on the map corresponds to the location of the vent pipes or the closed-in-place tanks.

- A gasoline station was located on the west end of the subject property from the 1920s to at least the 1950s, possibly as late as the 1980s.

- Prior to the construction of the current automobile dealership, an automobile shop with an oil house was located in the same area on the subject property. A 10,000 gallon above-ground oil tank was located on the north end of parcel P77451 in the early 1900s.

- Coal was stored on the northern and southern portions of parcel P109239 as part of railroad and fuel transfer operations in the early to mid-1900s.

- A government database showed that waste oil was spilled onsite in 2004. The quantity spilled was not reported.

- Additionally, due to the proximity of several contaminated sites in the immediate area, it is possible that the subject property may be affected by migrating contamination. Five sites within 350 feet of the subject property are listed in the Washington State CSCSL database, and two of those are listed in the LUST database.

9.0 OPINION

Based on the results of the Phase I ESA documented in this report, further investigation regarding previous use of the subject property is recommended. We recommend that soil borings be drilled at the locations of the identified recognized environmental conditions listed in Section 8.0, and that soil and or groundwater samples be collected for laboratory analysis to determine if soil and/or groundwater contamination is present at the site.

10.0 CONCLUSIONS

A Phase I ESA was conducted in general conformance with the scope and limitations of ASTM Designation E 1527-05 for the North Cascade Ford property located at 116 West Ferry Street in the City of Sedro-Woolley, Washington. Any exceptions to, or deletions from, this practice are described in Section 11 of this report.

This Phase I ESA has revealed evidence of recognized environmental conditions associated with the subject property.

- Historical underground storage tanks are located at the subject property. It is unknown if they were all closed in place and/or removed, or what the condition of the tanks or soils was at the time of closure.
- A historical gasoline station was located on the west end of the subject property.
- An automobile shop with an oil house was historically located in the same location on the subject property as the current automobile dealership.
- A 10,000 gallon above-ground oil tank was historically located on the subject property.
- Coal was stored on the subject property as part of historical railroad and transport operations.
- Due to the proximity of several contaminated sites in the immediate area, it is possible that the subject property may be affected by migrating contamination.

11.0 DEVIATIONS

There were no significant deviations from the standard practice for Phase I ESA as presented in ASTM Designation E 1527-05. One slight deviation would be that no historical title documents were reviewed.

12.0 ADDITIONAL SERVICES

No additional services were rendered as part of this ESA.

13.0 REFERENCES

American Society for Testing and Materials (ASTM). 2005. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (Designation: E 1527-05). 34 pp.

Federal Emergency Management Agency. December 5, 1989. Flood Insurance Rate Map. City of Sedro Woolley, Skagit County, WA. Map #:5301590002B.

Skagit River Journal. "Birth and death of the Interurban, 1912-30, Part 2 of 6-part series". Posted June 10, 2005. <http://www.stumpranchonline.com/skagitjournal/Railroad/Interurban/Interurban03-Argus19130502.html>. Accessed July 12, 2010.

U.S. Department of Agriculture (USDA). 1989. Soil Survey of Skagit County Area, Washington. Soil Conservation Service. 443 pp.

U.S. Geological Survey (USGS). 1921, 1951.Wickersham, WA Quadrangle. 15 minute series topographic map.

U.S. Geological Survey (USGS). 1981, 1994. Sedro Woolley North, WA Quadrangle. 7.5 minute series topographic map.

Washington State Department of Natural Resources. 2000. Geologic Map of the Bellingham 1:100,000 Quadrangle, Washington. Open File Report 2000-5.

Washington Department of Ecology. 2000. Dangerous Waste Regulations. Chapter 173-303 WAC.

Washington Department of Ecology. 2001. Model Toxics Control Act Cleanup Regulations. Chapter 173-340 WAC.

14.0 ENVIRONMENTAL PROFESSIONAL STATEMENT

We declare that, to the best of our professional knowledge and belief, we meet the definition of Environmental professional as defined in §312.10 of 40 CFR 312.

We have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. We have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Harold Cashman
Project Manager

Tegan Conner
QA/QC Reviewer

15.0 QUALIFICATIONS

Whatcom Environmental Services (Whatcom Environmental) provides a wide range of environmental site assessment and remediation services to commercial, industrial, and municipal clients in Whatcom County. Whatcom Environmental was founded in 1997 and is owned and operated by Mr. Harold Cashman and Mr. Eric Libolt.

Whatcom Environmental assists clients with remedial investigation/feasibility study project management for sites regulated by the state Model Toxics Control Act (MTCA) and the federal Resource Conservation and Recovery Act (RCRA). Whatcom Environmental performs site assessments at Underground Storage Tank (UST) sites and has successfully closed a number of UST systems, including systems that have been out of service for several years. Whatcom Environmental has prepared and negotiated numerous site investigation, remediation, and closure plans with the Washington Department of Ecology. Whatcom Environmental also provides environmental site assessment services to lending institutions and municipal clients in Whatcom County.

Mr. Cashman received his Masters degree in Geology from Western Washington University in 1991. Mr. Cashman is a Professional Geologist registered in the State of Washington (Registered Geologist #341). He has worked in Whatcom County as a geologist/environmental consultant for over ten years. Mr. Cashman has performed a variety of work in Whatcom County including environmental site assessments, closure of RCRA regulated surface impoundments, delineation of dissolved hydrocarbon plumes, and preparation of MTCA Independent Remedial Action Reports. In performing his RCRA/MTCA project work, he has closely interacted with federal and state regulatory agencies. Mr. Cashman's resume is included in Appendix E.

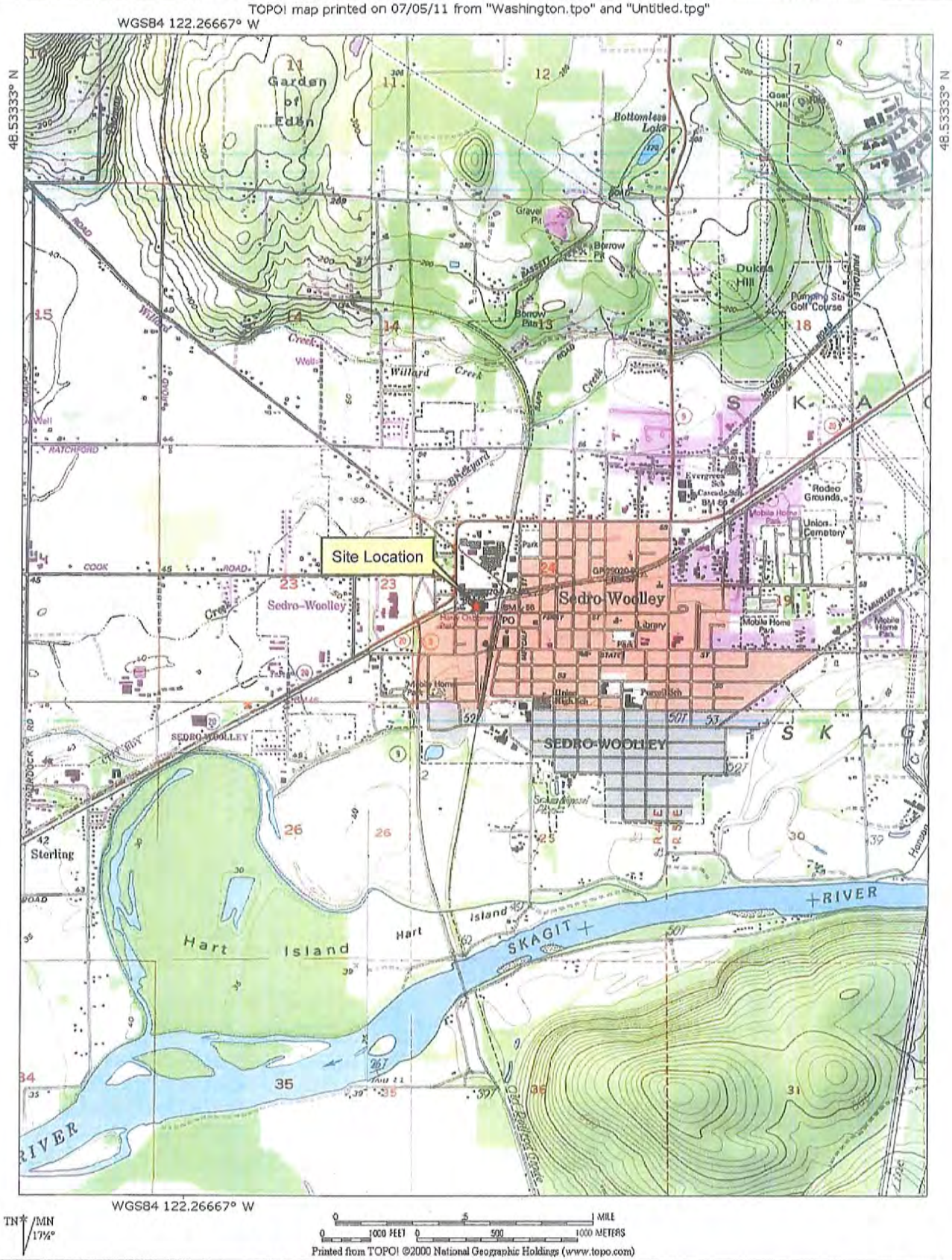
Mr. Thomas Davis received a Bachelors degree in Geology/Geophysics from Western Washington University. Mr. Davis received a Masters degree in Geography/Geographic Information Systems from Huxley College of the Environment at Western Washington University in December 2006. He joined Whatcom Environmental in the Fall of 2002 and has performed many local environmental site assessments for municipal and private clients. Mr. Davis' resume is included in Appendix E.

Ms. Tegan Conner received a Bachelors degree in Environmental Science from Huxley College of the Environment at Western Washington University in 2006. She began working at

Whatcom Environmental in the spring of 2006. Her projects mainly involve updating geographic information systems and assisting with environmental site assessments. Ms. Conner's resume is included in Appendix E.

Mr. Cashman, Mr. Davis, and Ms. Conner have completed 40 hours of Hazardous Waste and Emergency Response Training in accordance with 29 CFR 1910.120. Mr. Cashman and Mr. Davis are registered Washington State Underground Storage Tank Site Assessors. Mr. Davis is a registered AHERA Asbestos Building Inspector and a Certified Lead Based Paint Inspector.

TOPO! map printed on 07/05/11 from "Washington.tpo" and "Untitled.tpg"

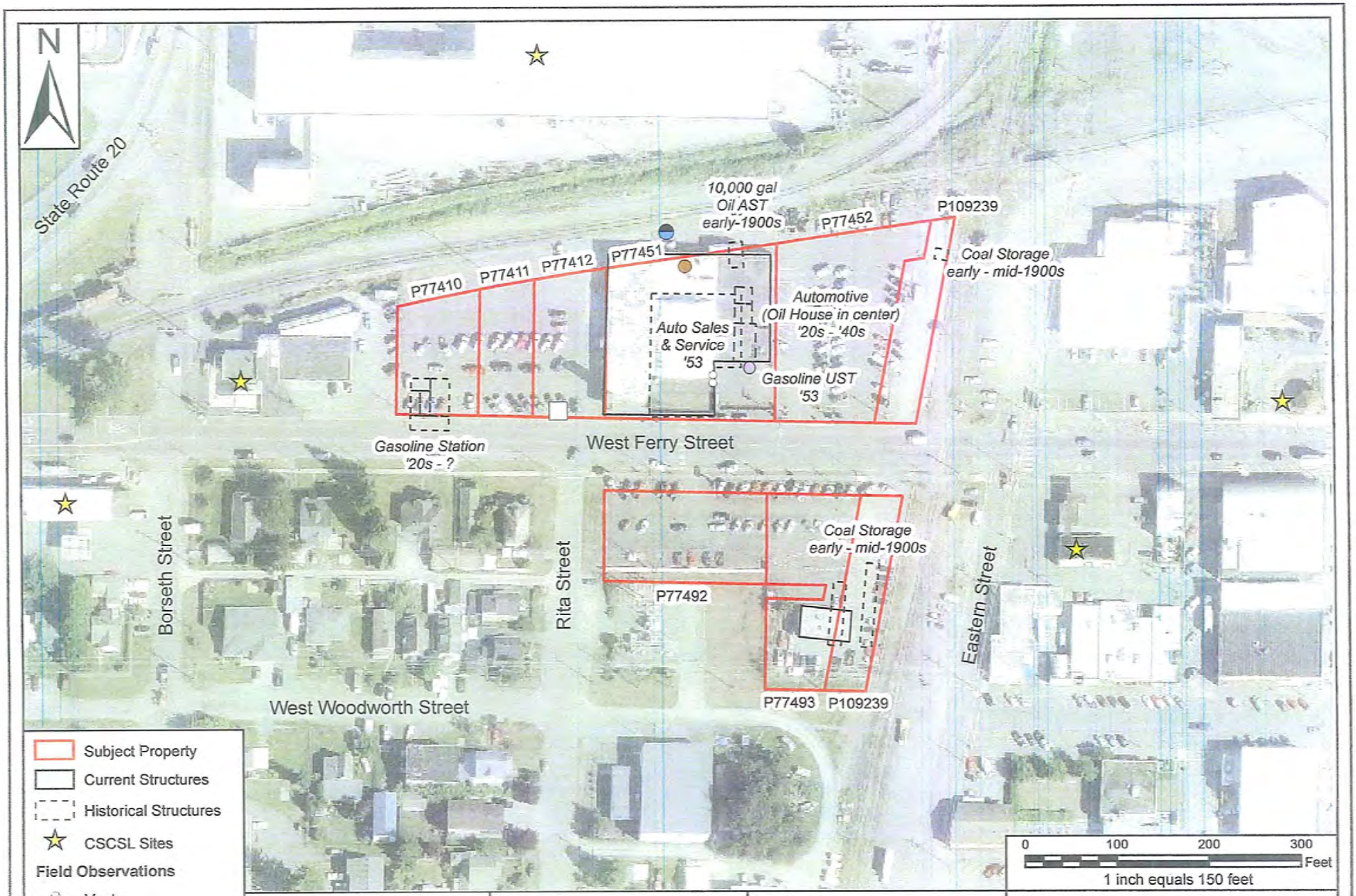


TN 17½° MN

0 5 MILE
0 1000 FEET 0 500 1000 METERS

Printed from TOPO! ©2000 National Geographic Holdings (www.topo.com)

Prepared for:	Prepared by:		
North Cascade Ford	whatcom ENVIRONMENTAL	Site Location Map	
		Cascade Ford Phase I ESA 7/13/11	Figure 1



All data are approximate and should be used for relative location reference only.

2009 aerial photograph from Skagit County iMap.

Prepared for:

North Cascade Ford

Prepared by:

nwhatcom ENVIRONMENTAL

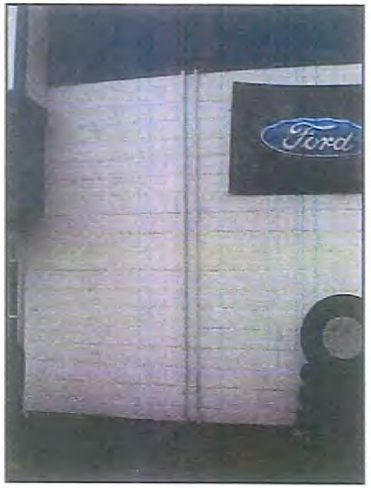
Subject Property Site Map

Cascade Ford
Phase I ESA
7/13/11

Figure 2



Photograph 1. A view to the east from the western edge of the subject property located north of West Ferry Street.



Photograph 2. A view of the two vent pipes located on the southeastern side of the main building. These may indicate the presence of one or more tanks.



Photograph 3. An interior view of the maintenance bay in the main building. The three underground hydraulic lifts are visible in the foreground.



Photograph 4. An interior view of the maintenance bay in the main building.

Prepared for:	North Cascade Ford	Prepared by:	nwhatcom ENVIRONMENTAL	North Cascade Ford Phase I ESA	July 8, 2011	**Photograph Log**



Photograph 5. A view of the paint storage room in the main building.



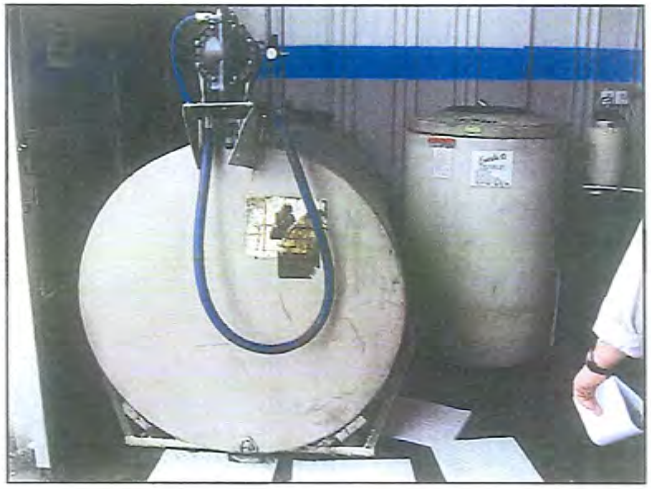
Photograph 6. A view of various chemicals stored for the auto detailing area of the main building.



Photograph 7. A view of some waste storage drums for the auto detailing area of the main building.



Photograph 8. A view of oil storage tanks in the "Quick Lane" in the main building.



Photograph 9. A view of the waste oil storage tank in the wash bay of the main building. Note the absorbent pads and stains around the tank.



Photograph 10. A view of waste and product storage in the wash bay, adjacent to the waste oil storage tank.



Photograph 11. A view of drums storing clean oil.



Photograph 12. A view outside of the wash bay. An oily sheen was observed on the puddles on the right side of the photograph.

APPENDIX A

User Provided Information

Whatcom Environmental Services
Phase I ESA User Information Request Form

Project: *North Cascade Ford Phase I ESA*

Completed By (User): *Travis Coulter*

Date: *7/6/11*

Property Name:

Address: *116 West Ferry Street, Sedro-Woolley*

Owner Name: *Coulter Properties, LLC*

Owner Phone: *360-770-2590*

Occupant Name: *North Cascade Ford, Inc.*

Occupant Phone: *360-855-1551*

Site Manager Name: *Travis Coulter*

Site Manager Phone: *360-770-2590*

Tax Parcel Number(s):

4176-011-005-0002
4176-011-900-0107
4177-001-006-0001
4177-007-006-0008
4177-007-011-0001
4176-011-900-0008
4177-001-011-0004
350424-3-082-0200

Property Zoning:

Has a chain of title back to 1940 or time of first development (whichever is earlier) been ordered? If so, when will it be available?

No

Is the user aware of any environmental liens or use limitations on the property?

No

Is the user aware of any possible recognized environmental conditions at the property?

No

Is the user aware of any issues at the property that may reduce the value of the property?

No

Other comments on the subject property?

No

Other comments on the scope of the ESA?

No

APPENDIX B

Regulatory Profile

116 West Ferry Street
116 West Ferry Street
Sedro Woolley, WA 98284

Inquiry Number: 3115983.2s
July 06, 2011

The EDR Radius Map™ Report with GeoCheck®

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

SECTION	PAGE
Executive Summary	ES1
Overview Map	2
Detail Map	3
Map Findings Summary	4
Map Findings	7
Orphan Summary	188
Government Records Searched/Data Currency Tracking	GR-1

GEOCHECK ADDENDUM

Physical Setting Source Addendum	A-1
Physical Setting Source Summary	A-2
Physical Setting SSURGO Soil Map	A-5
Physical Setting Source Map	A-9
Physical Setting Source Map Findings	A-11
Physical Setting Source Records Searched	A-28

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-05) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

116 WEST FERRY STREET
SEDRO WOOLLEY, WA 98284

COORDINATES

Latitude (North):	48.505600 - 48° 30' 20.2"
Longitude (West):	122.242100 - 122° 14' 31.6"
Universal Tranverse Mercator:	Zone 10
UTM X (Meters):	555982.9
UTM Y (Meters):	5372556.5
Elevation:	56 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	48122-E2 SEDRO-WOOLLEY NORTH, WA
Most Recent Revision:	1994
South Map:	48122-D2 SEDRO-WOOLLEY SOUTH, WA
Most Recent Revision:	1985
Southwest Map:	48122-D3 MOUNT VERNON, WA
Most Recent Revision:	1981
West Map:	48122-E3 ALGER, WA
Most Recent Revision:	1994

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	2005, 2006
Source:	USDA

TARGET PROPERTY SEARCH RESULTS

The target property was identified in the following records. For more information on this property see page 7 of the attached EDR Radius Map report:

Site	Database(s)	EPA ID
VERN SIMS FORD SEDRO WOOLLEY 116 W FERRY SEDRO WOOLLEY, WA 98284	RCRA-CESQG FINDS ALLSITES UST	WAD027487560
CASCADE FORD NEXT TO 116 WEST FERRY STREET SEDRO WOOLLEY, WA	SPILLS	N/A

EXECUTIVE SUMMARY

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ..... National Priority List
Proposed NPL ..... Proposed National Priority List Sites
NPL LIENS ..... Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ..... National Priority List Deletions

Federal CERCLIS list

CERCLIS ..... Comprehensive Environmental Response, Compensation, and Liability Information System
FEDERAL FACILITY ..... Federal Facility Site Information listing

Federal RCRA CORRACTS facilities list

CORRACTS ..... Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ..... RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ..... RCRA - Large Quantity Generators
RCRA-SQG ..... RCRA - Small Quantity Generators

Federal institutional controls / engineering controls registries

US ENG CONTROLS ..... Engineering Controls Sites List
US INST CONTROL ..... Sites with Institutional Controls

Federal ERNS list

ERNS ..... Emergency Response Notification System

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ..... Solid Waste Facility Database

State and tribal leaking storage tank lists

INDIAN LUST ..... Leaking Underground Storage Tanks on Indian Land

EXECUTIVE SUMMARY

State and tribal registered storage tank lists

AST..... Aboveground Storage Tank Locations
INDIAN UST..... Underground Storage Tanks on Indian Land
FEMA UST..... Underground Storage Tank Listing

State and tribal institutional control / engineering control registries

INST CONTROL..... Institutional Control Site List

State and tribal voluntary cleanup sites

INDIAN VCP..... Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS..... Brownfields Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS..... A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

DEBRIS REGION 9..... Torres Martinez Reservation Illegal Dump Site Locations
ODI..... Open Dump Inventory
SWTIRE..... Solid Waste Tire Facilities
INDIAN ODI..... Report on the Status of Open Dumps on Indian Lands

Local Lists of Hazardous waste / Contaminated Sites

US CDL..... Clandestine Drug Labs
CDL..... Clandestine Drug Lab Contaminated Site List
HIST CDL..... List of Sites Contaminated by Clandestine Drug Labs
US HIST CDL..... National Clandestine Laboratory Register

Local Land Records

LIENS 2..... CERCLA Lien Information
LUCIS..... Land Use Control Information System

Records of Emergency Release Reports

HMIRS..... Hazardous Materials Information Reporting System

Other Ascertainable Records

DOT OPS..... Incident and Accident Data
DOD..... Department of Defense Sites
FUDS..... Formerly Used Defense Sites
CONSENT..... Superfund (CERCLA) Consent Decrees

ROD	Records Of Decision
UMTRA	Uranium Mill Tailings Sites
MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
ICIS	Integrated Compliance Information System
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
RAATS	RCRA Administrative Action Tracking System
UIC	Underground Injection Wells Listing
DRYCLEANERS	Drycleaner List
NPDES	Water Quality Permit System Data
AIRS	Washington Emissions Data System
Inactive Drycleaners	Inactive Drycleaners
INDIAN RESERV	Indian Reservations
SCRD DRYCLEANERS	State Coalition for Remediation of Drycleaners Listing
FINANCIAL ASSURANCE	Financial Assurance Information Listing
COAL ASH	Coal Ash Disposal Site Listing
COAL ASH DOE	Sleam-Electric Plan Operation Data
COAL ASH EPA	Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER	PCB Transformer Registration Database

EDR PROPRIETARY RECORDS

EDR Proprietary Records

Manufactured Gas Plants	EDR Proprietary Manufactured Gas Plants

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

STANDARD ENVIRONMENTAL RECORDS

Federal CERCLIS NFRAP site List

CERC-NFRAP: Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

A review of the CERC-NFRAP list, as provided by EDR, and dated 02/25/2011 has revealed that there is 1 CERC-NFRAP site within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
OSPREY BOAT COMPANY METCALF ST	*500 METCALF ST*	*ENE 1/8 - 1/4 (0.174 mi.)*	*E19*	*54*

Federal RCRA generators list

RCRA-CESQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

A review of the RCRA-CESQG list, as provided by EDR, and dated 03/11/2011 has revealed that there are 4 RCRA-CESQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
COMMERCIAL AIRCRAFT INTERIORS	550 METCALF ST BLDG L1	ENE 1/8 - 1/4 (0.170 mi.)	E18	52
THERMACOR NORTHWEST	*500 METCALF ST BLDG A3*	*ENE 1/8 - 1/4 (0.174 mi.)*	*E21*	*65*
COUNTRYSIDE CHEVROLET	*221 WOODWORTH ST*	*ESE 1/8 - 1/4 (0.193 mi.)*	*23*	*76*
SEDRO WOOLLEY AUTO PARTS INC	*816 MURDOCK ST*	*E 1/8 - 1/4 (0.241 mi.)*	*F26*	*92*

State- and tribal - equivalent NPL

HSL: The Hazardous Sites List is a subset of the CSCSL Report. It includes sites which have been assessed and ranked using the Washington Ranking Method (WARM).

A review of the HSL list, as provided by EDR, and dated 03/01/2011 has revealed that there are 4 HSL sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HERBS MUFFLER & TUNE UP CENTER Facility Type: Hazardous Sites List		*WSW 0 - 1/8 (0.030 mi.)*	*B4*	*12*
ASSOCIATED PETROLEUM PRODUCTS Facility Type: Hazardous Sites List	*700 BORSETH*	*WSW 0 - 1/8 (0.090 mi.)*	*D14*	*45*
OSPREY BOAT COMPANY METCALF ST Facility Type: Hazardous Sites List	*500 METCALF ST*	*ENE 1/8 - 1/4 (0.174 mi.)*	*E19*	*54*
ARCO 5581 Facility Type: Hazardous Sites List	*830 MOORE ST*	*ENE 1/2 - 1 (0.745 mi.)*	*50*	*170*

State- and tribal - equivalent CERCLIS

CSCSL: The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. The data come from the Department of Ecology's Confirmed & Suspected Contaminated Sites List.

A review of the CSCSL list, as provided by EDR, and dated 04/26/2011 has revealed that there are 13 CSCSL sites within approximately 1 mile of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HERBS MUFFLER & TUNE UP CENTER		*WSW 0 - 1/8 (0.030 mi.)*	*B4*	*12*
SEDRO WOOLEY WASH RACK III	*101 FERRY*	*ESE 0 - 1/8 (0.073 mi.)*	*C8*	*24*
CHEVRON USA INC SS 97502	*124 FERRY ST*	*E 0 - 1/8 (0.086 mi.)*	*C11*	*35*
ASSOCIATED PETROLEUM PRODUCTS	*700 BORSETH*	*WSW 0 - 1/8 (0.090 mi.)*	*D14*	*45*
OSPREY BOAT COMPANY METCALF ST	*500 METCALF ST*	*ENE 1/8 - 1/4 (0.174 mi.)*	*E19*	*54*
COUNTRYSIDE CHEVROLET	*221 WOODWORTH ST*	*ESE 1/8 - 1/4 (0.193 mi.)*	*23*	*76*
ARCO 5581	*830 MOORE ST*	*ENE 1/2 - 1 (0.745 mi.)*	*50*	*170*

Lower Elevation	Address	Direction / Distance	Map ID	Page
SNELSON COMPANIES INC	*601 W STATE ST*	*WSW 1/4 - 1/2 (0.416 mi.)*	*H40*	*140*
GOODYEAR NELSON HARDWOOD LUMBE	*JAMESON ST*	*S 1/4 - 1/2 (0.471 mi.)*	*I44*	*157*
MARBLEMOUNT PARK SERVICE	*2105 HWY 20*	*WSW 1/4 - 1/2 (0.472 mi.)*	*45*	*160*
LOW AUTO SALES LOWELL ENBERG	*2093 HWY 20*	*WSW 1/2 - 1 (0.510 mi.)*	*J48*	*165*
TRAIL ROAD SHELL	*802 W SR 20*	*WSW 1/2 - 1 (0.525 mi.)*	*J49*	*169*
WA DOT SEDRO WOOLEY MAINT FACI	*901 BENNETT ST*	*ESE 1/2 - 1 (0.849 mi.)*	*51*	*184*

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the Department of Ecology's Leaking Underground Storage Tanks Site List.

A review of the LUST list, as provided by EDR, and dated 05/24/2011 has revealed that there are 7 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HERBS MUFFLER & TUNE UP CENTER		*WSW 0 - 1/8 (0.030 mi.)*	*B4*	*12*
SEDRO-WOOLLEY WASH RACK	101 FERRY ST	ESE 0 - 1/8 (0.073 mi.)	C7	24
FRED NELSON CHEVROLET INC	221 WOODWORTH	SSW 0 - 1/8 (0.078 mi.)	9	31
CHEVRON USA INC SS 97502	*124 FERRY*	*E 0 - 1/8 (0.086 mi.)*	*C12*	*39*

Lower Elevation	Address	Direction / Distance	Map ID	Page
SNELSON COMPANIES INC	*601 W STATE ST*	*WSW 1/4 - 1/2 (0.416 mi.)*	*H41*	*152*
GOODYEAR NELSON HARDWOOD LUMBE	*JAMESON ST*	*S 1/4 - 1/2 (0.471 mi.)*	*I44*	*157*
SEDRO WOOLLEY LUMBER CO	*109 JAMESON ST*	*S 1/4 - 1/2 (0.472 mi.)*	*I46*	*161*

State and tribal registered storage tank lists

UST: The Underground Storage Tank database contains registered USTs. USTs are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA). The data come from the Department of Ecology's Statewide UST Site/Tank Report.

A review of the UST list, as provided by EDR, and dated 05/24/2011 has revealed that there are 9 UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
HERBS MUFFLER & TUNE UP CENTER	*224 W FERRY ST*	*WSW 0 - 1/8 (0.030 mi.)*	*B5*	*18*
LENTZ SUPPLY INC	*100 W FERRY ST*	*E 0 - 1/8 (0.070 mi.)*	*C6*	*22*
SEDRO WOOLEY WASH RACK III	*101 FERRY*	*ESE 0 - 1/8 (0.073 mi.)*	*C8*	*24*
CHEVRON USA INC SS 97502	*124 FERRY*	*E 0 - 1/8 (0.086 mi.)*	*C12*	*39*
SEDRO WOOLLEY CENTRAL OFFICE 2	*209 FERRY*	*E 1/8 - 1/4 (0.169 mi.)*	*16*	*50*
OSPREY BOAT COMPANY METCALF ST	*500 METCALF ST*	*ENE 1/8 - 1/4 (0.174 mi.)*	*E19*	*54*
COUNTRYSIDE CHEVROLET	*221 WOODWORTH ST*	*ESE 1/8 - 1/4 (0.193 mi.)*	*23*	*76*
LOGGERS & CONTRACTOR SUPPLY PR	*227 E STATE ST*	*SE 1/8 - 1/4 (0.241 mi.)*	*25*	*89*
VERIZON SEDRO WOOLEY CO	*813 MURDOCK*	*E 1/8 - 1/4 (0.244 mi.)*	*F27*	*103*

State and tribal voluntary cleanup sites

VCP: Sites that have entered either the Voluntary Cleanup Program or its predecessor Independent Remedial Action Program.

A review of the VCP list, as provided by EDR, and dated 04/26/2011 has revealed that there are 2 VCP sites within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SNELSON COMPANIES INC	*601 W STATE ST*	*WSW 1/4 - 1/2 (0.416 mi.)*	*H40*	*140*
SEDRO WOOLLEY LUMBER CO	*109 JAMESON ST*	*S 1/4 - 1/2 (0.472 mi.)*	*I46*	*161*

ICR: These are remedial action reports Ecology has received from either the owner or operator of the site. These actions have been conducted without department oversight or approval and are not under an order or decree.

A review of the ICR list, as provided by EDR, and dated 12/01/2002 has revealed that there are 7 ICR sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON #9 7502	124 FERRY ST.	E 0 - 1/8 (0.086 mi.)	C10	32
SKAGIT PETROLEUM CO.	700 BORSETH ST.	WSW 0 - 1/8 (0.090 mi.)	D13	45
OSPREY BOAT COMPANY METCALF ST	*500 METCALF ST*	*ENE 1/8 - 1/4 (0.174 mi.)*	*E19*	*54*
SKAGIT MANUFACTURING (6 REPORT	500 METCALF ST.	ENE 1/8 - 1/4 (0.174 mi.)	E20	65

Lower Elevation	Address	Direction / Distance	Map ID	Page
SNELSON COMPANIES INC	*601 W STATE ST*	*WSW 1/4 - 1/2 (0.416 mi.)*	*H40*	*140*
MARBLEMOUNT PARK SERVICE	*2105 HWY 20*	*WSW 1/4 - 1/2 (0.472 mi.)*	*45*	*160*
SEDRO WOOLLEY LUMBER CO	*109 JAMESON ST*	*S 1/4 - 1/2 (0.472 mi.)*	*I46*	*161*

EXECUTIVE SUMMARY

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Hazardous waste / Contaminated Sites

ALLSITES: Information on facilities and sites of interest to the Department of Ecology.

A review of the ALLSITES list, as provided by EDR, and dated 05/10/2011 has revealed that there are 35 ALLSITES sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
VALLEY AUTO SUPPLY NAPA	220 W FERRY ST	SW 0 - 1/8 (0.027 mi.)	B3	12
HERBS MUFFLER & TUNE UP CENTER		***WSW 0 - 1/8 (0.030 mi.)***	***B4***	***12***
LENTZ SUPPLY INC	***100 W FERRY ST***	***E 0 - 1/8 (0.070 mi.)***	***C6***	***22***
SEDRO WOOLEY WASH RACK III	***101 FERRY***	***ESE 0 - 1/8 (0.073 mi.)***	***C8***	***24***
CHEVRON USA INC SS 97502	***124 FERRY ST***	***E 0 - 1/8 (0.086 mi.)***	***C11***	***35***
ASSOCIATED PETROLEUM PRODUCTS	***700 BORSETH***	***WSW 0 - 1/8 (0.090 mi.)***	***D14***	***45***
CUSTOM ENGINE & MACHINE	809 EASTERN AVE	SE 0 - 1/8 (0.112 mi.)	15	49
SEDRO WOOLLEY CENTRAL OFFICE 2	***209 FERRY***	***E 1/8 - 1/4 (0.169 mi.)***	***16***	***50***
COMMERCIAL AIRCRAFT INTERIORS	***550 METCALF ST BLDG L1***	***ENE 1/8 - 1/4 (0.170 mi.)***	***E17***	***52***
OSPREY BOAT COMPANY METCALF ST	***500 METCALF ST***	***ENE 1/8 - 1/4 (0.174 mi.)***	***E19***	***54***
THERMACOR NORTHWEST	***500 METCALF ST BLDG A3***	***ENE 1/8 - 1/4 (0.174 mi.)***	***E21***	***65***
VOLLANS AUTOMOTIVE INC	487 METCALF ST	ENE 1/8 - 1/4 (0.183 mi.)	22	75
COUNTRYSIDE CHEVROLET	***221 WOODWORTH ST***	***ESE 1/8 - 1/4 (0.193 mi.)***	***23***	***76***
LOGGERS & CONTRACTOR SUPPLY PR	***227 E STATE ST***	***SE 1/8 - 1/4 (0.241 mi.)***	***25***	***89***
SEDRO WOOLLEY AUTO PARTS INC	***816 MURDOCK ST***	***E 1/8 - 1/4 (0.241 mi.)***	***F26***	***92***
VERIZON SEDRO WOOLEY CO	***813 MURDOCK***	***E 1/8 - 1/4 (0.244 mi.)***	***F27***	***103***
CHRISTINE JOHNSON DDS	825 MURDOCK ST	E 1/8 - 1/4 (0.245 mi.)	F28	105
WOOLLEYS	***339 FERRY ST***	***E 1/4 - 1/2 (0.268 mi.)***	***29***	***105***
HERBERT ASHER BEST CLEANERS	***922 3RD ST***	***SE 1/4 - 1/2 (0.272 mi.)***	***30***	***109***
JANICKI INDUSTRIES INC	***500 METCALF BLDG L123E***	***NNE 1/4 - 1/2 (0.284 mi.)***	***31***	***111***
PUGET SOUND AUTOMOTIVE	304 STATE ST	ESE 1/4 - 1/2 (0.287 mi.)	32	120
RITE AID 5248	***506 CROSSROADS SQ***	***WNW 1/4 - 1/2 (0.308 mi.)***	***33***	***120***
NW AUTO BARN	***809 PUGET ST***	***ESE 1/4 - 1/2 (0.320 mi.)***	***34***	***130***
LARRY BRADBURN	***402 STATE***	***ESE 1/4 - 1/2 (0.324 mi.)***	***35***	***133***
PAT RIMMER TIRE STORE	204 W MORRE ST	NNW 1/4 - 1/2 (0.343 mi.)	G36	135
HAP W W KEMP	***204 W MOORE***	***NNW 1/4 - 1/2 (0.344 mi.)***	***G37***	***136***
SKAGIT COUNTY FOOD BANK	***250 W MOORE ST***	***NNW 1/4 - 1/2 (0.346 mi.)***	***G38***	***138***
ARBOR GLEN	***755 COOK RD***	***WNW 1/4 - 1/2 (0.430 mi.)***	***42***	***155***

Lower Elevation	Address	Direction / Distance	Map ID	Page
NORTHWEST TINMAN	307 W STATE ST	SSW 1/8 - 1/4 (0.204 mi.)	24	88
SEDRO WOOLLEY HIGH SCHOOL	***3RD & NELSON***	***SSE 1/4 - 1/2 (0.402 mi.)***	***39***	***138***
SNELSON COMPANIES INC	***601 W STATE ST***	***WSW 1/4 - 1/2 (0.416 mi.)***	***H40***	***140***
LADONNA BOTSFORD	***307 BENNET ST***	***SSE 1/4 - 1/2 (0.457 mi.)***	***43***	***156***
GOODYEAR NELSON HARDWOOD LUMBE	***JAMESON ST***	***S 1/4 - 1/2 (0.471 mi.)***	***I44***	***157***
SEDRO WOOLLEY LUMBER CO	***109 JAMESON ST***	***S 1/4 - 1/2 (0.472 mi.)***	***I46***	***161***
ATKINSON FAMILY DENTISTRY	727 TRAIL RD	W 1/4 - 1/2 (0.488 mi.)	47	165

CSCSL NFA: The data set contains information about sites previously on the Confirmed and Suspected Contaminated Sites list that have received a No Further Action (NFA) determination. Because it is necessary to maintain historical records of sites that have been investigated and cleaned up, sites are not deleted from the database when cleanup activities are completed. Instead a No Further Action code is entered based upon the type of NFA determination the site received.

A review of the CSCSL NFA list, as provided by EDR, and dated 04/26/2011 has revealed that there is 1 CSCSL NFA site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
SEDRO WOOLLEY LUMBER CO	*109 JAMESON ST*	*S 1/4 - 1/2 (0.472 mi.)*	*I46*	*161*

Other Ascertainable Records

RCRA-NonGen: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

A review of the RCRA-NonGen list, as provided by EDR, and dated 03/11/2011 has revealed that there are 3 RCRA-NonGen sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON USA INC SS 97502	*124 FERRY*	*E 0 - 1/8 (0.086 mi.)*	*C12*	*39*
ASSOCIATED PETROLEUM PRODUCTS	*700 BORSETH*	*WSW 0 - 1/8 (0.090 mi.)*	*D14*	*45*
OSPREY BOAT COMPANY METCALF ST	*500 METCALF ST*	*ENE 1/8 - 1/4 (0.174 mi.)*	*E19*	*54*

MANIFEST: Hazardous waste manifest information.

A review of the MANIFEST list, as provided by EDR, and dated 12/31/2009 has revealed that there are 4 MANIFEST sites within approximately 0.25 miles of the target property.

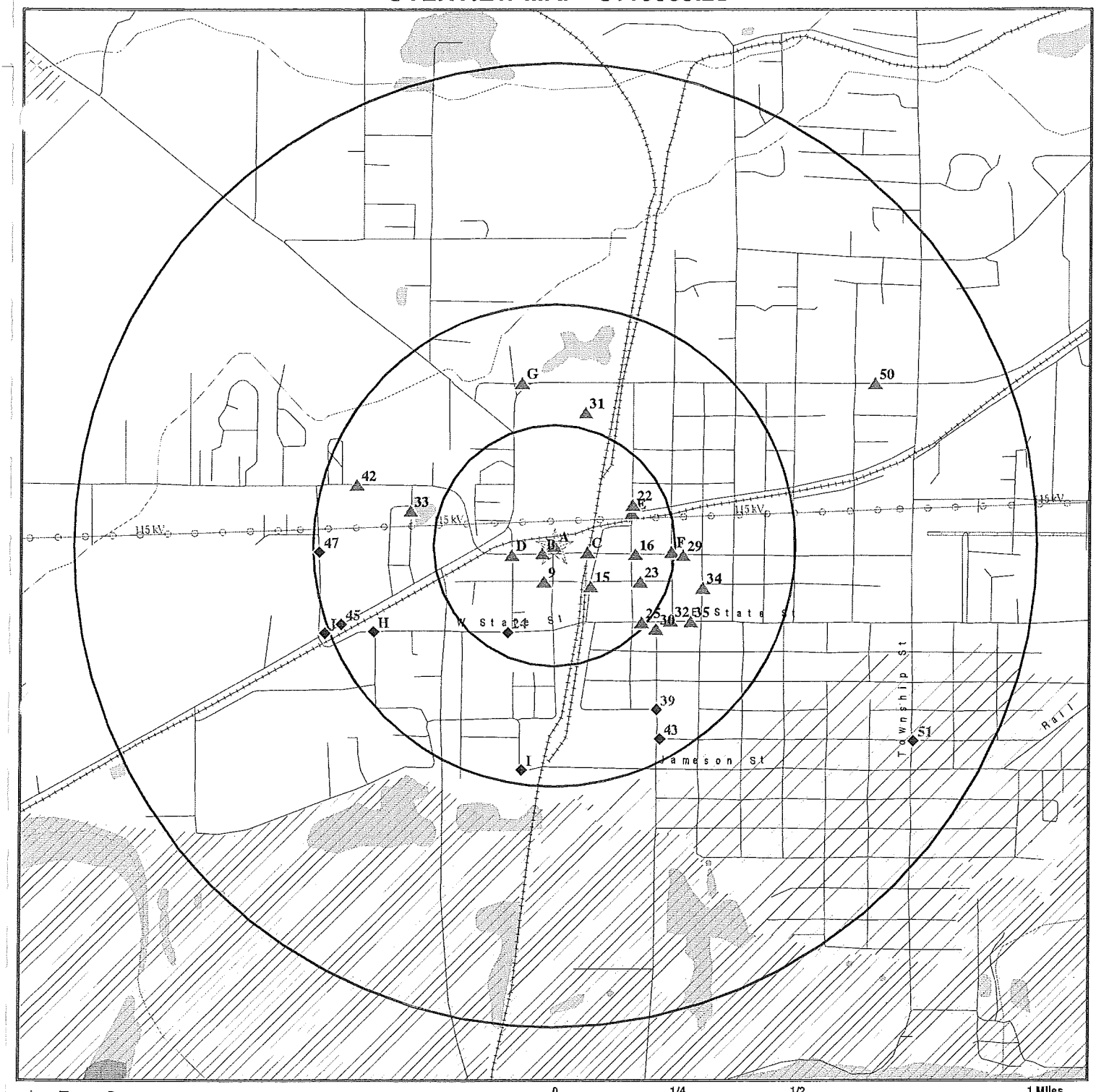
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CHEVRON USA INC SS 97502	*124 FERRY ST*	*E 0 - 1/8 (0.086 mi.)*	*C11*	*35*
THERMACOR NORTHWEST	*500 METCALF ST BLDG A3*	*ENE 1/8 - 1/4 (0.174 mi.)*	*E21*	*65*
COUNTRYSIDE CHEVROLET	*221 WOODWORTH ST*	*ESE 1/8 - 1/4 (0.193 mi.)*	*23*	*76*
SEDRO WOOLLEY AUTO PARTS INC	*816 MURDOCK ST*	*E 1/8 - 1/4 (0.241 mi.)*	*F26*	*92*

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 19 records.

Site Name	Database(s)
ECONOMY CLEANERS HWY 99	FINDS, ALLSITES
LONNIE B HODGIN FALLING & LOGGIN	ALLSITES, UST
UNITED GENERAL HOSPITAL	FINDS, ALLSITES
RIGHT OF WAY	FINDS, CSCSL, ALLSITES, UST
JACKPOT STATION 154	FINDS, CSCSL, ALLSITES, VCP
JAMESON AVENUE PROPERTIES	CSCSL, ALLSITES, UST
JANICKI INDUSTRIES	ALLSITES, SPILLS, NPDES
SEDRO WOOLLEY CITY OF	ALLSITES, NPDES
CASCADES JOB CORPS CENTER	RCRA-NonGen, FINDS, ALLSITES
PANORAMA DUMP	FINDS, CSCSL, ALLSITES, BROWNFIELDS
NORTH CASCADES GATEWAY CENTER	ALLSITES
NIELSEN BROS LOGGING CO	ALLSITES, SPILLS
HI Q COMPOST FACILITY	SWF/LF
NORTH CASCADES GATEWAY CENTER	RCRA-SQG, FINDS
WA DOT BRG 009215	RCRA-NonGen
JANICKI INDUSTRIES INC	RCRA-CESQG
1476 MOORE STREET	ERNS
300 FEET WEST OF LOVRICKS MARINA	ERNS
CHEVRON #6774	ICR

OVERVIEW MAP - 3115983.2s



0 1/4 1/2 1 Miles

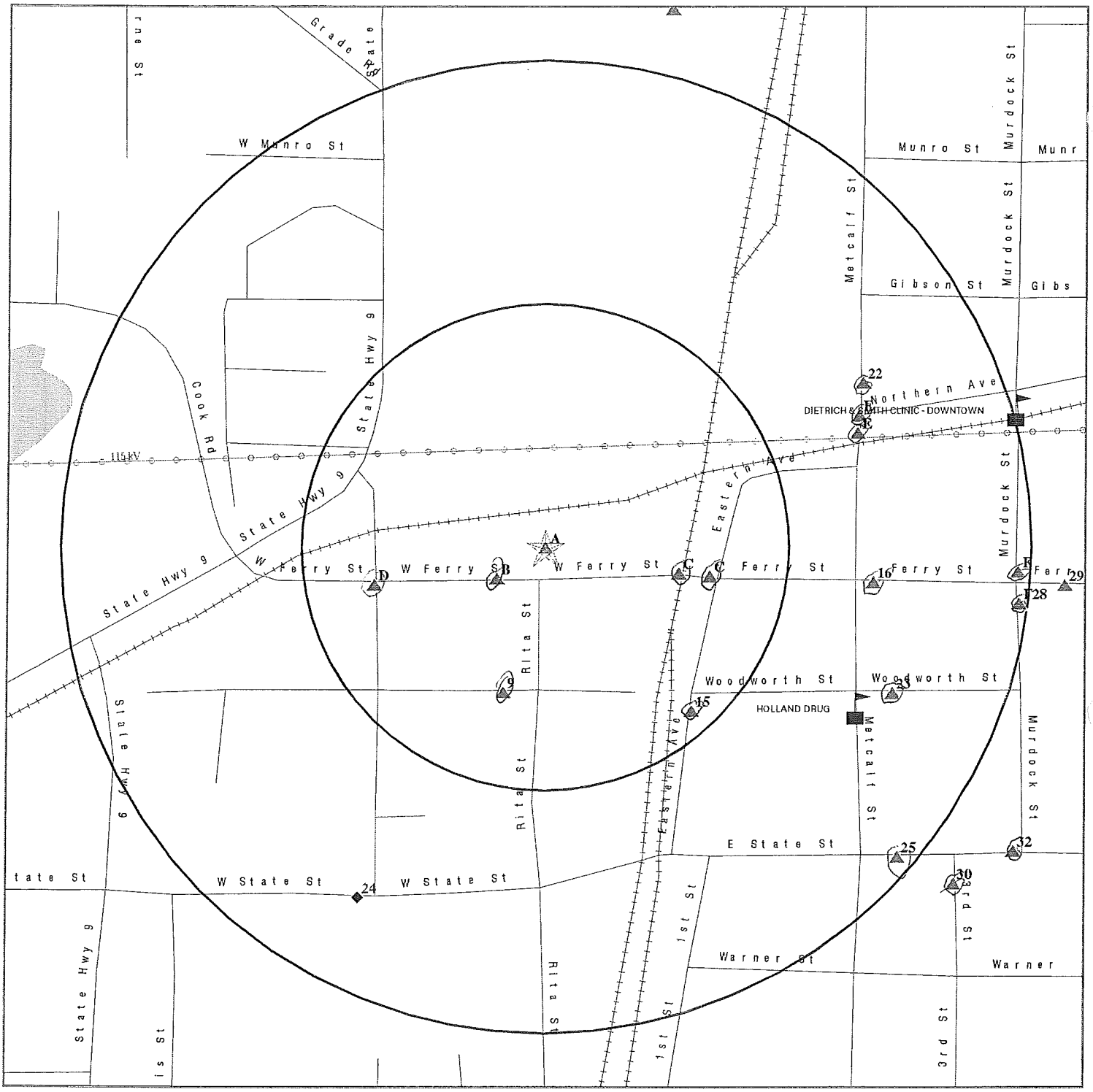
- ☆ Target Property
- △ Sites at elevations higher than or equal to the target property
- ◆ Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 116 West Ferry Street	CLIENT: Whatcom Environmental Services
ADDRESS: 116 West Ferry Street Sedro Woolley WA 98284	CONTACT: Tegan Conner
LAT/LONG: 48.5056 / 122.2421	INQUIRY #: 3115983.2s DATE: July 06, 2011 9:12 am

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DETAIL MAP - 3115983.2s



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- Sensitive Receptors
- National Priority List Sites
- Dept. Defense Sites
- Indian Reservations BIA
- Power transmission lines
- Oil & Gas pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME: 116 West Ferry Street ADDRESS: 116 West Ferry Street Sedro Woolley WA 98284 LAT/LONG: 48.5056 / 122.2421	CLIENT: Whatcom Environmental Services CONTACT: Tegan Conner INQUIRY #: 3115983.2s DATE: July 06, 2011 9:13 am

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MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL		1.000	0	0	0	0	NR	0
Proposed NPL		1.000	0	0	0	0	NR	0
NPL LIENS		TP	NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL		1.000	0	0	0	0	NR	0
Federal CERCLIS list								
CERCLIS		0.500	0	0	0	NR	NR	0
FEDERAL FACILITY		1.000	0	0	0	0	NR	0
Federal CERCLIS NFRAP site List								
CERC-NFRAP		0.500	0	1	0	NR	NR	1
Federal RCRA CORRACTS facilities list								
CORRACTS		1.000	0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF		0.500	0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG		0.250	0	0	NR	NR	NR	0
RCRA-SQG		0.250	0	0	NR	NR	NR	0
RCRA-CESQG	X	0.250	0	4	NR	NR	NR	4
Federal institutional controls / engineering controls registries								
US ENG CONTROLS		0.500	0	0	0	NR	NR	0
US INST CONTROL		0.500	0	0	0	NR	NR	0
Federal ERNS list								
ERNS		TP	NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
HSL		1.000	2	1	0	1	NR	4
State- and tribal - equivalent CERCLIS								
CSCSL		1.000	4	2	3	4	NR	13
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF		0.500	0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST		0.500	4	0	3	NR	NR	7
INDIAN LUST		0.500	0	0	0	NR	NR	0

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
State and tribal registered storage tank lists								
UST	X	0.250	4	5	NR	NR	NR	9
AST		0.250	0	0	NR	NR	NR	0
INDIAN UST		0.250	0	0	NR	NR	NR	0
FEMA UST		0.250	0	0	NR	NR	NR	0
State and tribal institutional control / engineering control registries								
INST CONTROL		0.500	0	0	0	NR	NR	0
State and tribal voluntary cleanup sites								
INDIAN VCP		0.500	0	0	0	NR	NR	0
VCP		0.500	0	0	2	NR	NR	2
ICR		0.500	2	2	3	NR	NR	7
State and tribal Brownfields sites								
BROWNFIELDS		0.500	0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS		0.500	0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
DEBRIS REGION 9		0.500	0	0	0	NR	NR	0
ODI		0.500	0	0	0	NR	NR	0
SWTIRE		0.500	0	0	0	NR	NR	0
INDIAN ODI		0.500	0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US CDL		TP	NR	NR	NR	NR	NR	0
ALLSITES	X	0.500	7	11	17	NR	NR	35
CSCSL NFA		0.500	0	0	1	NR	NR	1
CDL		TP	NR	NR	NR	NR	NR	0
HIST CDL		TP	NR	NR	NR	NR	NR	0
US HIST CDL		TP	NR	NR	NR	NR	NR	0
Local Land Records								
LIENS 2		TP	NR	NR	NR	NR	NR	0
LUCIS		0.500	0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS		TP	NR	NR	NR	NR	NR	0
SPILLS	X	TP	NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA-NonGen		0.250	2	1	NR	NR	NR	3

MAP FINDINGS SUMMARY

Database	Target Property	Search Distance (Miles)	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
DOT OPS		TP	NR	NR	NR	NR	NR	0
DOD		1.000	0	0	0	0	NR	0
FUDS		1.000	0	0	0	0	NR	0
CONSENT		1.000	0	0	0	0	NR	0
ROD		1.000	0	0	0	0	NR	0
UMTRA		0.500	0	0	0	NR	NR	0
MINES		0.250	0	0	NR	NR	NR	0
TRIS		TP	NR	NR	NR	NR	NR	0
TSCA		TP	NR	NR	NR	NR	NR	0
FTTS		TP	NR	NR	NR	NR	NR	0
HIST FTTS		TP	NR	NR	NR	NR	NR	0
SSTS		TP	NR	NR	NR	NR	NR	0
ICIS		TP	NR	NR	NR	NR	NR	0
PADS		TP	NR	NR	NR	NR	NR	0
MLTS		TP	NR	NR	NR	NR	NR	0
RADINFO		TP	NR	NR	NR	NR	NR	0
FINDS	X	TP	NR	NR	NR	NR	NR	0
RAATS		TP	NR	NR	NR	NR	NR	0
UIC		TP	NR	NR	NR	NR	NR	0
MANIFEST		0.250	1	3	NR	NR	NR	4
DRYCLEANERS		0.250	0	0	NR	NR	NR	0
NPDES		TP	NR	NR	NR	NR	NR	0
AIRS		TP	NR	NR	NR	NR	NR	0
Inactive Drycleaners		0.250	0	0	NR	NR	NR	0
INDIAN RESERV		1.000	0	0	0	0	NR	0
SCRD DRYCLEANERS		0.500	0	0	0	NR	NR	0
FINANCIAL ASSURANCE		TP	NR	NR	NR	NR	NR	0
COAL ASH		0.500	0	0	0	NR	NR	0
COAL ASH DOE		TP	NR	NR	NR	NR	NR	0
COAL ASH EPA		0.500	0	0	0	NR	NR	0
PCB TRANSFORMER		TP	NR	NR	NR	NR	NR	0
EDR PROPRIETARY RECORDS								
EDR Proprietary Records								
Manufactured Gas Plants		1.000	0	0	0	0	NR	0

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1
Target Property

VERN SIMS FORD SEDRO WOOLLEY
116 W FERRY
SEDRO WOOLLEY, WA 98284

RCRA-CESQG **1000306069**
FINDS **WAD027487560**
ALLSITES
UST

Site 1 of 2 in cluster A

Actual:
56 ft.

RCRA-CESQG:

Date form received by agency:	02/27/2004
Facility name:	VERN SIMS FORD SEDRO WOOLLEY
Facility address:	116 W FERRY SEDRO WOOLLEY, WA 98284
EPA ID:	WAD027487560
Mailing address:	116 W FERRY ST SEDRO WOOLLEY, WA 98284-1415
Contact:	DAN SIMS
Contact address:	116 W FERRY ST SEDRO WOOLLEY, WA 98284-1415
Contact country:	US
Contact telephone:	(360)855-1551
Contact email:	Not reported
EPA Region:	10
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	DAN SIMS
Owner/operator address:	116 W FERRY ST SEDRO WOOLLEY, WA 98284
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	08/13/1996
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No

VERN SIMS FORD SEDRO WOOLLEY (Continued) **1000306069**

Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 12/31/2003
Facility name: VERN SIMS FORD SEDRO WOOLLEY
Classification: Not a generator, verified

Facility Has Received Notices of Violations:
Regulation violated: SR - -200(1)(b) / -630(5)(a)
Area of violation: Generators - General
Date violation determined: 10/03/2000
Date achieved compliance: 12/01/2000
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/23/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -170(1)(a)
Area of violation: Generators - General
Date violation determined: 10/03/2000
Date achieved compliance: 12/01/2000
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/23/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200 (1)(b)/ -630(7)
Area of violation: Generators - General
Date violation determined: 10/03/2000
Date achieved compliance: 12/01/2000
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/23/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

VERN SIMS FORD SEDRO WOOLLEY (Continued) **1000306069**

Evaluation Action Summary:
Evaluation date: 10/03/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 12/01/2000
Evaluation lead agency: State

Evaluation date: 12/27/1999
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

FINDS:

Registry ID: 110005318307

Environmental Interest/Information System
Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ALLSITES:
Facility Id: 58313566
Latitude: 48.505229999999997
Longitude: -122.24220800000001
Geographic location identifier (alias facid): 58313566
Facility Name: Vern Sims Ford Sedro Woolley
Latitude Decimal Degrees: 48.505229999999997
Longitude Decimal Degrees: -122.24220800000001
Coordinate Point Areal Extent Code: 4
Horizontal Accuracy Code: 6
Coordinate Point Geographic Position Code: 5
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 58313566
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: I
Federal Program Indentifier: WAD027487560
Interaction Start Date: 7/11/1986
Interaction End Date: 12/31/2003
prgm_facil: Not reported
cur_sys_pr: HAZWASTE
cur_sys_nm: TURBOWASTE

VERN SIMS FORD SEDRO WOOLLEY (Continued) **1000306069**

Geographic Location Identifier (Alias Facid):	58313566
Interaction (Aka Env Int) Type Code:	HWP
Interaction (Aka Env Int) Description:	Hazardous Waste Planner
Interaction Status:	I
Federal Program Indentifier:	WAD027487560
Interaction Start Date:	1/1/1995
Interaction End Date:	12/31/1995
prgm_facil:	Not reported
cur_sys_pr:	HAZWASTE
cur_sys_nm:	HWPPRT

Geographic Location Identifier (Alias Facid):	58313566
Interaction (Aka Env Int) Type Code:	UST
Interaction (Aka Env Int) Description:	Underground Storage Tank
Interaction Status:	I
Federal Program Indentifier:	9030
Interaction Start Date:	6/8/1998
Interaction End Date:	5/3/2000
prgm_facil:	Not reported
cur_sys_pr:	TOXICS
cur_sys_nm:	ISIS

UST:

Facility ID:	58313566
Site ID:	9030
Lat Deg:	48
Lat Min:	30
Lat Sec:	18.827999999990652
Long Deg:	-122
Long Min:	14
Long Sec:	31.948800000018309
UBI:	Not reported
Phone Number:	2068551551
Tank ID:	26578
Tank Name:	1
Install Date:	12/31/1964
Capacity:	Not reported
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Closed in Place
TankSystem Status Change Date:	8/26/1996
Tank Status:	Closed in Place
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Steel
Tank Construction:	Not reported
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Material:	Steel
Pipe Construction:	Not reported
Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Not reported

VERN SIMS FORD SEDRO WOOLLEY (Continued) **1000306069**

Tank Primary Release Detection: Not reported
Tank Second Release Detection: Not reported
Pipe Tightness Test: Not reported
Tank Actual Status Date: 8/6/1996
Tag Number: Not reported

Tank ID: 26738
Tank Name: 2
Install Date: 12/31/1964
Capacity: 111 TO 1,100 Gallons
Tank Upgrade Date: 1/1/0001
TankSystem Status: Closed in Place
TankSystem Status Change Date: 8/26/1996
Tank Status: Closed in Place
Tank Permit Expiration Date: 1/1/0001
Tank Closure Date: 1/1/0001
Tank Pumping System: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Steel
Tank Construction: Not reported
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Pipe Material: Steel
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Tank Primary Release Detection: Not reported
Tank Second Release Detection: Not reported
Pipe Tightness Test: Not reported
Tank Actual Status Date: 8/6/1996
Tag Number: Not reported

A2 **CASCADE FORD** **SPILLS** **S109887677**
Target **NEXT TO 116 WEST FERRY STREET** **N/A**
Property **SEDRO WOOLLEY, WA**

Site 2 of 2 in cluster A

Actual: **56 ft.**

SPILLS:
Facility ID: 544519
Medium: Not reported
Material Desc: PETROLEUM - WASTE/USED OIL
Material Qty: Not reported
Material Units: Not reported
Date Received: 11/4/2004
Contact Name: Not reported

B3 **VALLEY AUTO SUPPLY NAPA** **ALLSITES** **S110039169**
SW **220 W FERRY ST** **N/A**
< 1/8 **SEDRO WOOLLEY, WA 98284**
0.027 mi.
143 ft. **Site 1 of 3 in cluster B**

Relative: ALLSITES:
Equal Facility Id: 13359
Latitude: 48.505615924664198
Actual: Longitude: -122.243210202892
56 ft. Geographic location identifier (alias facid): 13359
Facility Name: Valley Auto Supply NAPA
Latitude Decimal Degrees: 48.505615924700002
Longitude Decimal Degrees: -122.243210203
Coordinate Point Areal Extent Code: 0
Horizontal Accuracy Code: 99
Coordinate Point Geographic Position Code: 8
Location Verified Code: Not reported

Geographic Location Identifier (Alias Facid): 13359
Interaction (Aka Env Int) Type Code: LSC
Interaction (Aka Env Int) Description: Local Source Control
Interaction Status: I
Federal Program Indentifier: Not reported
Interaction Start Date: 6/23/2009
Interaction End Date: 4/29/2010
prgm_facil: Valley Auto Supply NAPA
cur_sys_pr: HAZWASTE
cur_sys_nm: LSC

B4 **HERBS MUFFLER & TUNE UP CENTER** **CSCSL** **U003027505**
WSW **HSL** **N/A**
< 1/8 **SEDRO WOOLLEY, WA** **ALLSITES**
0.030 mi. **LUST**
157 ft. **Site 2 of 3 in cluster B**

Relative: CSCSL:
Equal Facility ID: 60892684
Region: Northwest
Actual: Lat/Long: 48.505386000000 / -122.2443229999
56 ft. Brownfield Status: Not reported
Rank Status: 3
Clean Up Siteid: 7104
Site Status: Cleanup Started
PSI?: Not reported
Contaminant Name: Petroleum Products - unspecified
Ground Water: C
Surface Water: Not reported
Soil: Not reported
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Northwest

Facility ID: 60892684
Region: Northwest
Lat/Long: 48.505386000000 / -122.2443229999
Brownfield Status: Not reported
Rank Status: 3

HERBS MUFFLER & TUNE UP CENTER (Continued) **U003027505**

Clean Up Siteid:	7104
Site Status:	Cleanup Started
PSI?:	Not reported
Contaminant Name:	Petroleum-Gasoline
Ground Water:	Not reported
Surface Water:	Not reported
Soil:	C
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest
Facility ID:	60892684
Region:	Northwest
Lat/Long:	48.505386000000 / -122.2443229999
Brownfield Status:	Not reported
Rank Status:	3
Clean Up Siteid:	7104
Site Status:	Cleanup Started
PSI?:	Not reported
Contaminant Name:	Petroleum-Other
Ground Water:	Not reported
Surface Water:	Not reported
Soil:	C
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest
Facility ID:	60892684
Region:	Northwest
Lat/Long:	48.505386000000 / -122.2443229999
Brownfield Status:	Not reported
Rank Status:	3
Clean Up Siteid:	7104
Site Status:	Cleanup Started
PSI?:	Not reported
Contaminant Name:	Polynuclear Aromatic Hydrocarbons
Ground Water:	S
Surface Water:	Not reported
Soil:	S
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest
Facility ID:	60892684
Region:	Northwest
Lat/Long:	48.505386000000 / -122.2443229999
Brownfield Status:	Not reported
Rank Status:	Not reported
Clean Up Siteid:	7272
Site Status:	Cleanup Started
PSI?:	Not reported
Contaminant Name:	Benzene
Ground Water:	C
Surface Water:	Not reported

HERBS MUFFLER & TUNE UP CENTER (Continued) **U003027505**

Soil:	C
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest
Facility ID:	60892684
Region:	Northwest
Lat/Long:	48.505386000000 / -122.2443229999
Brownfield Status:	Not reported
Rank Status:	Not reported
Clean Up Siteid:	7272
Site Status:	Cleanup Started
PSI?:	Not reported
Contaminant Name:	Petroleum-Gasoline
Ground Water:	C
Surface Water:	Not reported
Soil:	C
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest
Facility ID:	60892684
Region:	Northwest
Lat/Long:	48.505386000000 / -122.2443229999
Brownfield Status:	Not reported
Rank Status:	3
Clean Up Siteid:	7104
Site Status:	Cleanup Started
PSI?:	Not reported
Contaminant Name:	Base/Neutral/Acid Organics
Ground Water:	S
Surface Water:	Not reported
Soil:	S
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest
Facility ID:	60892684
Region:	Northwest
Lat/Long:	48.505386000000 / -122.2443229999
Brownfield Status:	Not reported
Rank Status:	3
Clean Up Siteid:	7104
Site Status:	Cleanup Started
PSI?:	Not reported
Contaminant Name:	Metals - Other
Ground Water:	S
Surface Water:	Not reported
Soil:	S
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest

HERBS MUFFLER & TUNE UP CENTER (Continued) **U003027505**

Facility ID:	60892684
Region:	Northwest
Lat/Long:	48.505386000000 / -122.2443229999
Brownfield Status:	Not reported
Rank Status:	3
Clean Up Siteid:	7104
Site Status:	Cleanup Started
PSI?:	Not reported
Contaminant Name:	Metals Priority Pollutants
Ground Water:	S
Surface Water:	Not reported
Soil:	S
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest

Facility ID:	60892684
Region:	Northwest
Lat/Long:	48.505386000000 / -122.2443229999
Brownfield Status:	Not reported
Rank Status:	3
Clean Up Siteid:	7104
Site Status:	Cleanup Started
PSI?:	Not reported
Contaminant Name:	Methyl tertiary-butyl ether
Ground Water:	S
Surface Water:	Not reported
Soil:	S
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest

Facility ID:	60892684
Region:	Northwest
Lat/Long:	48.505386000000 / -122.2443229999
Brownfield Status:	Not reported
Rank Status:	3
Clean Up Siteid:	7104
Site Status:	Cleanup Started
PSI?:	Not reported
Contaminant Name:	Non-Halogenated Solvents
Ground Water:	C
Surface Water:	Not reported
Soil:	C
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest

HSL:

edr_fstat:	WA
edr_fzip:	Not reported
edr_fcnty:	SKAGIT
edr_zip:	Not reported
Facility Type:	**Hazardous Sites List**

HERBS MUFFLER & TUNE UP CENTER (Continued) **U003027505**

Facility Status: Cleanup Started
FSID Number: 60892684
Rank: 3
Region: NW

ALLSITES:
Facility Id: 60892684
Latitude: 48.505386000000001
Longitude: -122.24432299999999
Geographic location identifier (alias facid): 60892684
Facility Name: HERBS MUFFLER & TUNE UP CENTER
Latitude Decimal Degrees: 48.505386000000001
Longitude Decimal Degrees: -122.24432299999999
Coordinate Point Areal Extent Code: 4
Horizontal Accuracy Code: 4
Coordinate Point Geographic Position Code: 5
Location Verified Code: Y

Geographic Location Identifier (Alias Facid): 60892684
Interaction (Aka Env Int) Type Code: LUST
Interaction (Aka Env Int) Description: LUST Facility
Interaction Status: A
Federal Program Indentifier: 577
Interaction Start Date: 4/14/1993
Interaction End Date: Not reported
prgm_facil: Not reported
cur_sys_pr: TOXICS
cur_sys_nm: ISIS

Geographic Location Identifier (Alias Facid): 60892684
Interaction (Aka Env Int) Type Code: UST
Interaction (Aka Env Int) Description: Underground Storage Tank
Interaction Status: A
Federal Program Indentifier: 577
Interaction Start Date: 3/20/2000
Interaction End Date: Not reported
prgm_facil: Not reported
cur_sys_pr: TOXICS
cur_sys_nm: ISIS

Geographic Location Identifier (Alias Facid): 60892684
Interaction (Aka Env Int) Type Code: TIER2
Interaction (Aka Env Int) Description: Emergency/Haz Chem Rpt TIER2
Interaction Status: I
Federal Program Indentifier: CRK000037630
Interaction Start Date: 1/1/1995
Interaction End Date: 7/4/1776
prgm_facil: Not reported
cur_sys_pr: HAZWASTE
cur_sys_nm: EPCRA

Geographic Location Identifier (Alias Facid): 60892684
Interaction (Aka Env Int) Type Code: TIER2
Interaction (Aka Env Int) Description: Emergency/Haz Chem Rpt TIER2
Interaction Status: A
Federal Program Indentifier: CRK000037630
Interaction Start Date: 3/1/2001

HERBS MUFFLER & TUNE UP CENTER (Continued) **U003027505**

Interaction End Date:	Not reported
prgm_facil:	Not reported
cur_sys_pr:	HAZWASTE
cur_sys_nm:	EPCRA
Geographic Location Identifier (Alias Facid):	60892684
Interaction (Aka Env Int) Type Code:	SCS
Interaction (Aka Env Int) Description:	State Cleanup Site
Interaction Status:	A
Federal Program Indentifier:	Not reported
Interaction Start Date:	6/29/2005
Interaction End Date:	Not reported
prgm_facil:	HERBS MUFFLER & TUNE UP CENTER
cur_sys_pr:	TOXICS
cur_sys_nm:	ISIS
Geographic Location Identifier (Alias Facid):	60892684
Interaction (Aka Env Int) Type Code:	LSC
Interaction (Aka Env Int) Description:	Local Source Control
Interaction Status:	I
Federal Program Indentifier:	Not reported
Interaction Start Date:	6/27/2009
Interaction End Date:	4/29/2010
prgm_facil:	Herbs Chevron
cur_sys_pr:	HAZWASTE
cur_sys_nm:	LSC

LUST:

edr_fstat:	WA
edr_fzip:	982840425
edr_fcnty:	SKAGIT
edr_zip:	Not reported
FS ID:	60892684
Facility ID:	577
Facility Status:	Cleanup Started
Release ID:	4353
Affected Media:	Soil
Alternate Name:	CHEVRON HERB'S
Release Notification Date:	4/14/1993
Release Status Date:	6/1/1995
Site Response Unit Code:	NORTHWEST
Lat/Long:	48.505386 / -122.244323
edr_fstat:	WA
edr_fzip:	982840425
edr_fcnty:	SKAGIT
edr_zip:	Not reported
FS ID:	60892684
Facility ID:	577
Facility Status:	Cleanup Started
Release ID:	473943
Affected Media:	Soil
Alternate Name:	HERB'S CHEVRON
Release Notification Date:	1/11/1996
Release Status Date:	1/11/1996
Site Response Unit Code:	NORTHWEST

HERBS MUFFLER & TUNE UP CENTER (Continued) **U003027505**

Lat/Long:	48.505386 / -122.244323
edr_fstat:	WA
edr_fzip:	982840425
edr_fcnty:	SKAGIT
edr_zip:	Not reported
FS ID:	60892684
Facility ID:	577
Facility Status:	Cleanup Started
Release ID:	473943
Affected Media:	Ground Water
Alternate Name:	HERB'S CHEVRON
Release Notification Date:	1/11/1996
Release Status Date:	1/11/1996
Site Response Unit Code:	NORTHWEST
Lat/Long:	48.505386 / -122.244323

B5 **HERBS MUFFLER & TUNE UP CENTER** **FINDS 1007068007**
WSW **224 W FERRY ST** **UST N/A**
< 1/8 **SEDRO WOOLLEY, WA 98284**
0.030 mi.
157 ft. **Site 3 of 3 in cluster B**

Relative:
Equal

Actual:
56 ft.

FINDS:

Registry ID: 110015446052

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

ICIS (Integrated Compliance Information System) is the Integrated Compliance Information System and provides a database that, when complete, will contain integrated Enforcement and Compliance information across most of EPA's programs. The vision for ICIS is to replace EPA's independent databases that contain Enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions. This information is maintained in ICIS by EPA in the Regional offices and it Headquarters. A future release of ICIS will replace the Permit Compliance System (PCS) which supports the NPDES and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities occurring in the Region that support Compliance and Enforcement programs. These include; Incident Tracking, Compliance Assistance, and Compliance Monitoring.

UST:

Facility ID:	60892684
Site ID:	577
Lat Deg:	48
Lat Min:	30
Lat Sec:	19.389600000005203

HERBS MUFFLER & TUNE UP CENTER (Continued) **1007068007**

Long Deg:	-122
Long Min:	14
Long Sec:	39.562799999979461
UBI:	6005811350010001
Phone Number:	3608559907

Tank ID:	3304
Tank Name:	3
Install Date:	1/1/1976
Capacity:	2,001 to 4,999 Gallons
Tank Upgrade Date:	1/1/1996
TankSystem Status:	Removed
TankSystem Status Change Date:	12/10/2003
Tank Status:	Removed
Tank Permit Expiration Date:	6/30/2004
Tank Closure Date:	12/10/2003
Tank Pumping System:	Pressurized System
Tank Spill Prevention:	Spill Bucket/Spill Box
Tank Overfill Prevention:	Overfill Alarm
Tank Material:	Coated Steel
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Impressed Current
Pipe Material:	Fiberglass
Pipe Construction:	Double Wall Pipe
Pipe Primary Release Detection:	Automatic Line Leak Detection
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Corrosion Resistant
Tank Primary Release Detection:	Automatic Tank Gauging
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Other
Tank Actual Status Date:	11/3/2003
Tag Number:	A3937

Tank ID:	3325
Tank Name:	5
Install Date:	11/10/2003
Capacity:	5,000 to 9,999 Gallons
Tank Upgrade Date:	11/10/2003
TankSystem Status:	Operational
TankSystem Status Change Date:	8/26/1996
Tank Status:	Operational
Tank Permit Expiration Date:	6/30/2011
Tank Closure Date:	1/1/0001
Tank Pumping System:	Pressurized System
Tank Spill Prevention:	Spill Bucket/Spill Box
Tank Overfill Prevention:	Ball Float Valve (vent line)
Tank Material:	Dielectric Coated Steel
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Sacrificial Anode
Pipe Material:	Flexible Piping
Pipe Construction:	Double Wall Pipe
Pipe Primary Release Detection:	Automatic Line Leak Detection
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Corrosion Resistant

HERBS MUFFLER & TUNE UP CENTER (Continued) **1007068007**

Tank Primary Release Detection: Automatic Tank Gauging
Tank Second Release Detection: Not reported
Pipe Tightness Test: Annual
Tank Actual Status Date: 11/10/2003
Tag Number: A3937

Tank ID: 3341
Tank Name: 1
Install Date: 1/1/1976
Capacity: 2,001 to 4,999 Gallons
Tank Upgrade Date: 1/1/1996
TankSystem Status: Removed
TankSystem Status Change Date: 12/10/2003
Tank Status: Removed
Tank Permit Expiration Date: 6/30/2004
Tank Closure Date: 12/10/2003
Tank Pumping System: Pressurized System
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Overfill Alarm
Tank Material: Coated Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Impressed Current
Pipe Material: Fiberglass
Pipe Construction: Double Wall Pipe
Pipe Primary Release Detection: Automatic Line Leak Detection
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Corrosion Resistant
Tank Primary Release Detection: Automatic Tank Gauging
Tank Second Release Detection: Not reported
Pipe Tightness Test: Other
Tank Actual Status Date: 11/3/2003
Tag Number: A3937

Tank ID: 3393
Tank Name: 4
Install Date: 1/1/1976
Capacity: 1,101 to 2,000 Gallons
Tank Upgrade Date: 1/1/1996
TankSystem Status: Removed
TankSystem Status Change Date: 12/10/2003
Tank Status: Removed
Tank Permit Expiration Date: 6/30/2004
Tank Closure Date: 12/10/2003
Tank Pumping System: Pressurized System
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Overfill Alarm
Tank Material: Coated Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Impressed Current
Pipe Material: Fiberglass
Pipe Construction: Double Wall Pipe
Pipe Primary Release Detection: Automatic Line Leak Detection
Pipe Second Release Detection: Not reported

HERBS MUFFLER & TUNE UP CENTER (Continued) **1007068007**

Pipe Corrosion Protection: Corrosion Resistant
Tank Primary Release Detection: Automatic Tank Gauging
Tank Second Release Detection: Not reported
Pipe Tightness Test: Other
Tank Actual Status Date: 11/3/2003
Tag Number: A3937

Tank ID: 3411
Tank Name: 6
Install Date: 11/10/2003
Capacity: 5,000 to 9,999 Gallons
Tank Upgrade Date: 11/10/2003
TankSystem Status: Operational
TankSystem Status Change Date: 8/26/1996
Tank Status: Operational
Tank Permit Expiration Date: 6/30/2011
Tank Closure Date: 1/1/0001
Tank Pumping System: Pressurized System
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Ball Float Valve (vent line)
Tank Material: Dielectric Coated Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Sacrificial Anode
Pipe Material: Flexible Piping
Pipe Construction: Double Wall Pipe
Pipe Primary Release Detection: Automatic Line Leak Detection
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Corrosion Resistant
Tank Primary Release Detection: Automatic Tank Gauging
Tank Second Release Detection: Not reported
Pipe Tightness Test: Annual
Tank Actual Status Date: 11/10/2003
Tag Number: A3937

Tank ID: 3452
Tank Name: 2
Install Date: 1/1/1976
Capacity: 2,001 to 4,999 Gallons
Tank Upgrade Date: 1/1/1996
TankSystem Status: Removed
TankSystem Status Change Date: 12/10/2003
Tank Status: Removed
Tank Permit Expiration Date: 6/30/2004
Tank Closure Date: 12/10/2003
Tank Pumping System: Pressurized System
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Overfill Alarm
Tank Material: Coated Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Impressed Current
Pipe Material: Fiberglass
Pipe Construction: Double Wall Pipe
Pipe Primary Release Detection: Automatic Line Leak Detection

HERBS MUFFLER & TUNE UP CENTER (Continued) **1007068007**

Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Corrosion Resistant
Tank Primary Release Detection: Automatic Tank Gauging
Tank Second Release Detection: Not reported
Pipe Tightness Test: Other
Tank Actual Status Date: 11/3/2003
Tag Number: A3937

Tank ID: 618422
Tank Name: 7
Install Date: 11/10/2003
Capacity: 5,000 to 9,999 Gallons
Tank Upgrade Date: 11/10/2003
TankSystem Status: Operational
TankSystem Status Change Date: 1/1/0001
Tank Status: Operational
Tank Permit Expiration Date: 6/30/2011
Tank Closure Date: 1/1/0001
Tank Pumping System: Pressurized System
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Ball Float Valve (vent line)
Tank Material: Dielectric Coated Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Sacrificial Anode
Pipe Material: Flexible Piping
Pipe Construction: Double Wall Pipe
Pipe Primary Release Detection: Automatic Line Leak Detection
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Corrosion Resistant
Tank Primary Release Detection: Automatic Tank Gauging
Tank Second Release Detection: Not reported
Pipe Tightness Test: Annual
Tank Actual Status Date: 11/10/2003
Tag Number: A3937

C6 **LENTZ SUPPLY INC** **FINDS** **1007068561**
East **100 W FERRY ST** **ALLSITES** **N/A**
< 1/8 **SEDRO WOOLLEY, WA 98284** **UST**
0.070 mi.
368 ft. **Site 1 of 6 in cluster C**

Relative:
Equal

FINDS:

Registry ID: 110015451615

Actual:
56 ft.

Environmental Interest/Information System
Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

ALLSITES:

LENTZ SUPPLY INC (Continued) **1007068561**

Facility Id:	56639898
Latitude:	48.505229999999997
Longitude:	-122.241878
Geographic location identifier (alias facid):	56639898
Facility Name:	LENTZ SUPPLY INC
Latitude Decimal Degrees:	48.505229999999997
Longitude Decimal Degrees:	-122.241878
Coordinate Point Areal Extent Code:	4
Horizontal Accuracy Code:	6
Coordinate Point Geographic Position Code:	5
Location Verified Code:	N
Geographic Location Identifier (Alias Facid):	56639898
Interaction (Aka Env Int) Type Code:	UST
Interaction (Aka Env Int) Description:	Underground Storage Tank
Interaction Status:	I
Federal Program Indentifier:	5630
Interaction Start Date:	6/8/1998
Interaction End Date:	5/3/2000
prgm_facil:	Not reported
cur_sys_pr:	TOXICS
cur_sys_nm:	ISIS

UST:

Facility ID:	56639898
Site ID:	5630
Lat Deg:	48
Lat Min:	30
Lat Sec:	18.827999999990652
Long Deg:	-122
Long Min:	14
Long Sec:	30.760799999999335
UBI:	Not reported
Phone Number:	2068550311
Tank ID:	35941
Tank Name:	1
Install Date:	12/31/1964
Capacity:	111 TO 1,100 Gallons
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Closed in Place
TankSystem Status Change Date:	8/26/1996
Tank Status:	Closed in Place
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Steel
Tank Construction:	Not reported
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Material:	Steel
Pipe Construction:	Not reported
Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported

LENTZ SUPPLY INC (Continued) 1007068561

Pipe Corrosion Protection: Not reported
Tank Primary Release Detection: Not reported
Tank Second Release Detection: Not reported
Pipe Tightness Test: Not reported
Tank Actual Status Date: 8/6/1996
Tag Number: Not reported

C7 **SEDRO-WOOLLEY WASH RACK** LUST S108074980
ESE **101 FERRY ST** N/A
< 1/8 **SEDRO-WOOLLEY, WA 98284**
0.073 mi.
383 ft. **Site 2 of 6 in cluster C**

Relative:
Equal

Actual:
56 ft.

LUST:

edr_fstat:	WA
edr_fzip:	98284
edr_fcnty:	SKAGIT
edr_zip:	Not reported
FS ID:	72197485
Facility ID:	3647
Facility Status:	Awaiting Cleanup
Release ID:	592073
Affected Media:	Ground Water
Alternate Name:	Sedro-Woolley Wash Rack
Release Notification Date:	6/12/2006
Release Status Date:	12/12/2003
Site Response Unit Code:	NORTHWEST
Lat/Long:	48.50523 / -122.241808

edr_fstat:	WA
edr_fzip:	98284
edr_fcnty:	SKAGIT
edr_zip:	Not reported
FS ID:	72197485
Facility ID:	3647
Facility Status:	Awaiting Cleanup
Release ID:	592073
Affected Media:	Soil
Alternate Name:	Sedro-Woolley Wash Rack
Release Notification Date:	6/12/2006
Release Status Date:	12/12/2003
Site Response Unit Code:	NORTHWEST
Lat/Long:	48.50523 / -122.241808

C8 **SEDRO WOOLEY WASH RACK III** FINDS 1007066282
ESE **101 FERRY** CSCSL N/A
< 1/8 **SEDRO WOOLLEY, WA 98284** ALLSITES
0.073 mi. UST
383 ft. **Site 3 of 6 in cluster C**

Relative:
Equal

Actual:
56 ft.

FINDS:

Registry ID: 110015428624

Environmental Interest/Information System
Washington Facility / Site Identification System (WA-FSIS) provides a

SEDRO WOOLEY WASH RACK III (Continued) **1007066282**

means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

CSCSL:

Facility ID:	72197485
Region:	Northwest
Lat/Long:	48.505229999999 / -122.2418080000
Brownfield Status:	Not reported
Rank Status:	Not reported
Clean Up Siteid:	10270
Site Status:	Awaiting Cleanup
PSI?:	Not reported
Contaminant Name:	Benzene
Ground Water:	C
Surface Water:	Not reported
Soil:	C
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest

Facility ID:	72197485
Region:	Northwest
Lat/Long:	48.505229999999 / -122.2418080000
Brownfield Status:	Not reported
Rank Status:	Not reported
Clean Up Siteid:	10270
Site Status:	Awaiting Cleanup
PSI?:	Not reported
Contaminant Name:	Non-Halogenated Solvents
Ground Water:	C
Surface Water:	Not reported
Soil:	C
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest

Facility ID:	72197485
Region:	Northwest
Lat/Long:	48.505229999999 / -122.2418080000
Brownfield Status:	Not reported
Rank Status:	Not reported
Clean Up Siteid:	10270
Site Status:	Awaiting Cleanup
PSI?:	Not reported
Contaminant Name:	Petroleum-Diesel
Ground Water:	C
Surface Water:	Not reported
Soil:	C
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported

SEDRO WOOLEY WASH RACK III (Continued) **1007066282**

Responsible Unit: Northwest

Facility ID: 72197485
Region: Northwest
Lat/Long: 48.505229999999 / -122.2418080000
Brownfield Status: Not reported
Rank Status: Not reported
Clean Up Siteid: 10270
Site Status: Awaiting Cleanup
PSI?: Not reported
Contaminant Name: Petroleum-Gasoline
Ground Water: C
Surface Water: Not reported
Soil: C
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Northwest

Facility ID: 72197485
Region: Northwest
Lat/Long: 48.505229999999 / -122.2418080000
Brownfield Status: Not reported
Rank Status: Not reported
Clean Up Siteid: 10270
Site Status: Awaiting Cleanup
PSI?: Not reported
Contaminant Name: Petroleum-Other
Ground Water: C
Surface Water: Not reported
Soil: C
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Northwest

ALLSITES:
Facility Id: 72197485
Latitude: 48.505229999999997
Longitude: -122.24180800000001
Geographic location identifier (alias facid): 72197485
Facility Name: SEDRO WOOLEY WASH RACK III
Latitude Decimal Degrees: 48.505229999999997
Longitude Decimal Degrees: -122.24180800000001
Coordinate Point Areal Extent Code: 4
Horizontal Accuracy Code: 6
Coordinate Point Geographic Position Code: 5
Location Verified Code: N

Geographic Location Identifier (Alias Facid): 72197485
Interaction (Aka Env Int) Type Code: UST
Interaction (Aka Env Int) Description: Underground Storage Tank
Interaction Status: A
Federal Program Indentifier: 3647
Interaction Start Date: 1/1/1958
Interaction End Date: Not reported
prgm_facil: Not reported

SEDRO WOOLEY WASH RACK III (Continued) **1007066282**

cur_sys_pr:	TOXICS
cur_sys_nm:	ISIS
Geographic Location Identifier (Alias Facid):	72197485
Interaction (Aka Env Int) Type Code:	TIER2
Interaction (Aka Env Int) Description:	Emergency/Haz Chem Rpt TIER2
Interaction Status:	A
Federal Program Indentifier:	CRK000011100
Interaction Start Date:	1/1/1987
Interaction End Date:	Not reported
prgm_facil:	Not reported
cur_sys_pr:	HAZWASTE
cur_sys_nm:	EPCRA
Geographic Location Identifier (Alias Facid):	72197485
Interaction (Aka Env Int) Type Code:	LUST
Interaction (Aka Env Int) Description:	LUST Facility
Interaction Status:	A
Federal Program Indentifier:	3647
Interaction Start Date:	6/12/2006
Interaction End Date:	Not reported
prgm_facil:	Not reported
cur_sys_pr:	TOXICS
cur_sys_nm:	ISIS

UST:

Facility ID:	72197485
Site ID:	3647
Lat Deg:	48
Lat Min:	30
Lat Sec:	18.827999999990652
Long Deg:	-122
Long Min:	14
Long Sec:	30.508800000021665
UBI:	6019912620010004
Phone Number:	3607341922
Tank ID:	1320
Tank Name:	6W
Install Date:	12/31/1964
Capacity:	111 TO 1,100 Gallons
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Removed
TankSystem Status Change Date:	10/29/2001
Tank Status:	Removed
Tank Permit Expiration Date:	11/30/2001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Material:	Not reported
Pipe Construction:	Not reported

SEDRO WOOLEY WASH RACK III (Continued) **1007066282**

Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Tank Primary Release Detection: Not reported
Tank Second Release Detection: Not reported
Pipe Tightness Test: Not reported
Tank Actual Status Date: 6/7/1993
Tag Number: A3119

Tank ID: 2029
Tank Name: 8E
Install Date: 12/31/1964
Capacity: 5,000 to 9,999 Gallons
Tank Upgrade Date: 1/1/0001
TankSystem Status: Removed
TankSystem Status Change Date: 8/26/1996
Tank Status: Removed
Tank Permit Expiration Date: 1/1/0001
Tank Closure Date: 1/1/0001
Tank Pumping System: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Not reported
Tank Construction: Not reported
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Pipe Material: Not reported
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Tank Primary Release Detection: Not reported
Tank Second Release Detection: Not reported
Pipe Tightness Test: Not reported
Tank Actual Status Date: 8/6/1996
Tag Number: A3119

Tank ID: 2396
Tank Name: 4R
Install Date: 1/1/1959
Capacity: 2,001 to 4,999 Gallons
Tank Upgrade Date: 12/1/1988
TankSystem Status: Temporarily Closed
TankSystem Status Change Date: 2/11/2005
Tank Status: Temporarily Closed
Tank Permit Expiration Date: 11/30/2006
Tank Closure Date: 1/1/0001
Tank Pumping System: Suction System Pump Check Valve
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Automatic Shutoff (fill pipe)
Tank Material: Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Impressed Current and Interior Lining
Pipe Material: Steel

SEDRO WOOLEY WASH RACK III (Continued) **1007066282**

Pipe Construction: Single Wall Pipe
Pipe Primary Release Detection: Suction
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Impressed Current
Tank Primary Release Detection: Statistical Inventory Reconciliation
Tank Second Release Detection: Not reported
Pipe Tightness Test: Not reported
Tank Actual Status Date: 12/31/2004
Tag Number: A3119

Tank ID: 316
Tank Name: 2U
Install Date: 1/1/1945
Capacity: 5,000 to 9,999 Gallons
Tank Upgrade Date: 12/1/1988
TankSystem Status: Temporarily Closed
TankSystem Status Change Date: 2/11/2005
Tank Status: Temporarily Closed
Tank Permit Expiration Date: 11/30/2006
Tank Closure Date: 1/1/0001
Tank Pumping System: Suction System Pump Check Valve
Tank Spill Prevention: Spill Bucket/Spill Box
Tank Overfill Prevention: Automatic Shutoff (fill pipe)
Tank Material: Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Impressed Current and Interior Lining
Pipe Material: Steel
Pipe Construction: Single Wall Pipe
Pipe Primary Release Detection: Suction
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Impressed Current
Tank Primary Release Detection: Statistical Inventory Reconciliation
Tank Second Release Detection: Not reported
Pipe Tightness Test: Not reported
Tank Actual Status Date: 12/31/2004
Tag Number: A3119

Tank ID: 3528
Tank Name: 7E
Install Date: 12/31/1964
Capacity: 5,000 to 9,999 Gallons
Tank Upgrade Date: 1/1/0001
TankSystem Status: Removed
TankSystem Status Change Date: 8/26/1996
Tank Status: Removed
Tank Permit Expiration Date: 1/1/0001
Tank Closure Date: 1/1/0001
Tank Pumping System: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Not reported
Tank Construction: Not reported
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported

SEDRO WOOLEY WASH RACK III (Continued) **1007066282**

Pipe Material:	Not reported
Pipe Construction:	Not reported
Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Not reported
Tank Primary Release Detection:	Not reported
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	8/6/1996
Tag Number:	A3119

Tank ID:	3759
Tank Name:	3R
Install Date:	1/1/1959
Capacity:	2,001 to 4,999 Gallons
Tank Upgrade Date:	12/1/1988
TankSystem Status:	Temporarily Closed
TankSystem Status Change Date:	2/11/2005
Tank Status:	Temporarily Closed
Tank Permit Expiration Date:	11/30/2006
Tank Closure Date:	1/1/0001
Tank Pumping System:	Suction System Pump Check Valve
Tank Spill Prevention:	Spill Bucket/Spill Box
Tank Overfill Prevention:	Automatic Shutoff (fill pipe)
Tank Material:	Steel
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Impressed Current and Interior Lining
Pipe Material:	Steel
Pipe Construction:	Single Wall Pipe
Pipe Primary Release Detection:	Suction
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Impressed Current
Tank Primary Release Detection:	Statistical Inventory Reconciliation
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	12/31/2004
Tag Number:	A3119

Tank ID:	4535
Tank Name:	5F
Install Date:	1/1/1958
Capacity:	111 TO 1,100 Gallons
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Exempt
TankSystem Status Change Date:	9/16/1997
Tank Status:	Exempt
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Not reported
Tank Spill Prevention:	None
Tank Overfill Prevention:	None
Tank Material:	Not reported
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Not reported

SEDRO WOOLEY WASH RACK III (Continued) **1007066282**

Tank Corrosion Protection:	None
Pipe Material:	Other
Pipe Construction:	Single Wall Pipe
Pipe Primary Release Detection:	Suction
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	None
Tank Primary Release Detection:	Other
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	8/6/1996
Tag Number:	A3119

Tank ID:	5668
Tank Name:	1S
Install Date:	1/1/1945
Capacity:	2,001 to 4,999 Gallons
Tank Upgrade Date:	12/1/1988
TankSystem Status:	Temporarily Closed
TankSystem Status Change Date:	2/11/2005
Tank Status:	Temporarily Closed
Tank Permit Expiration Date:	11/30/2006
Tank Closure Date:	1/1/0001
Tank Pumping System:	Suction System Pump Check Valve
Tank Spill Prevention:	Spill Bucket/Spill Box
Tank Overfill Prevention:	Automatic Shutoff (fill pipe)
Tank Material:	Steel
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Impressed Current and Interior Lining
Pipe Material:	Steel
Pipe Construction:	Single Wall Pipe
Pipe Primary Release Detection:	Suction
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Impressed Current
Tank Primary Release Detection:	Statistical Inventory Reconciliation
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	12/31/2004
Tag Number:	A3119

9
SSW
< 1/8
0.078 mi.
409 ft.

FRED NELSON CHEVROLET INC **LUST** **U001122250**
221 WOODWORTH **N/A**
SEDRO-WOOLLEY, WA 98284

Relative:
Equal

Actual:
56 ft.

LUST:

edr_fstat:	WA
edr_fzip:	982841432
edr_fcnty:	SKAGIT
edr_zip:	Not reported
FS ID:	7511196
Facility ID:	1080
Facility Status:	Cleanup Started
Release ID:	2454
Affected Media:	Soil
Alternate Name:	COUNTRYSIDE CHEVROLET

FRED NELSON CHEVROLET INC (Continued) **U001122250**

Release Notification Date:	8/14/1991
Release Status Date:	8/14/1991
Site Response Unit Code:	NORTHWEST
Lat/Long:	48.50449 / -122.23686
edr_fstat:	WA
edr_fzip:	982841432
edr_fcnty:	SKAGIT
edr_zip:	Not reported
FS ID:	7511196
Facility ID:	1080
Facility Status:	Reported Cleaned Up
Release ID:	2454
Affected Media:	Soil
Alternate Name:	COUNTRYSIDE CHEVROLET
Release Notification Date:	8/14/1991
Release Status Date:	6/1/1995
Site Response Unit Code:	NORTHWEST
Lat/Long:	48.50449 / -122.23686

C10 **CHEVRON #9 7502** **ICR S103503068**
East **124 FERRY ST.** **N/A**
< 1/8 **SEDRO WOOLLEY, WA 98284**
0.086 mi.
455 ft. **Site 4 of 6 in cluster C**

Relative: **Equal**

Actual: **56 ft.**

ICR:

Date Ecology Received Report:	10/13/95
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Groundwater, Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	95-07
County Code:	29
Contact:	Not reported
Report Title:	Not reported
Date Ecology Received Report:	10/17/97
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Groundwater, Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	95-15
County Code:	29
Contact:	Not reported
Report Title:	Not reported
Date Ecology Received Report:	04/10/98
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Groundwater, Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	98-05
County Code:	29
Contact:	Not reported

CHEVRON #9 7502 (Continued) **S103503068**

Report Title:	Not reported
Date Ecology Received Report:	10/15/98
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Groundwater, Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	98-15
County Code:	29
Contact:	Not reported
Report Title:	Not reported
Date Ecology Received Report:	04/16/99
Contaminants Found at Site:	Not reported
Media Contaminated:	Groundwater, Soil
Waste Management:	Not reported
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	98-16
County Code:	29
Contact:	Not reported
Report Title:	Not reported
Date Ecology Received Report:	10/25/99
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Groundwater, Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	98-19
County Code:	29
Contact:	Not reported
Report Title:	Not reported
Date Ecology Received Report:	/ /
Contaminants Found at Site:	Pesticides
Media Contaminated:	Groundwater, Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Not reported
Site Register Issue:	91-30
County Code:	29
Contact:	Not reported
Report Title:	Not reported
Date Ecology Received Report:	02/24/94
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Groundwater, Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	93-21
County Code:	29
Contact:	Not reported
Report Title:	Not reported

CHEVRON #9 7502 (Continued) **S103503068**

Date Ecology Received Report:	01/04/95
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Groundwater, Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	94-03
County Code:	29
Contact:	Not reported
Report Title:	Not reported

Date Ecology Received Report:	08/19/93
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Groundwater, Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	93-09
County Code:	29
Contact:	Not reported
Report Title:	Not reported

Date Ecology Received Report:	02/04/92
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Groundwater, Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	92-18
County Code:	29
Contact:	Not reported
Report Title:	Not reported

Date Ecology Received Report:	04/17/92
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Groundwater, Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	92-23
County Code:	29
Contact:	Not reported
Report Title:	Not reported

Date Ecology Received Report:	07/25/96
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Groundwater, Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	94-32
County Code:	29
Contact:	Not reported
Report Title:	Not reported

Date Ecology Received Report:	03/19/97
Contaminants Found at Site:	Petroleum products

CHEVRON #9 7502 (Continued) **S103503068**

Media Contaminated:	Groundwater, Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	94-49
County Code:	29
Contact:	Not reported
Report Title:	Not reported
Date Ecology Received Report:	05/15/00
Contaminants Found at Site:	Not reported
Media Contaminated:	Groundwater, Soil
Waste Management:	Tank
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	98-42
County Code:	29
Contact:	Not reported
Report Title:	Ground Water Monitoring - March 2000

C11 **CHEVRON USA INC SS 97502** **CSCSL S109824751**
East **124 FERRY ST** **ALLSITES N/A**
< 1/8 **SEDRO WOOLLEY, WA 98284** **MANIFEST**
0.086 mi.
455 ft. **Site 5 of 6 in cluster C**

Relative:
Equal

Actual:
56 ft.

CSCSL:

Facility ID:	61112475
Region:	Northwest
Lat/Long:	48.505499999999 / -122.2388299999
Brownfield Status:	Not reported
Rank Status:	Not reported
Clean Up Siteid:	6368
Site Status:	Cleanup Started
PSI?:	Not reported
Contaminant Name:	Benzene
Ground Water:	C
Surface Water:	Not reported
Soil:	C
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest
Facility ID:	61112475
Region:	Northwest
Lat/Long:	48.505499999999 / -122.2388299999
Brownfield Status:	Not reported
Rank Status:	Not reported
Clean Up Siteid:	6368
Site Status:	Cleanup Started
PSI?:	Not reported
Contaminant Name:	Non-Halogenated Solvents
Ground Water:	C
Surface Water:	Not reported
Soil:	C
Sediment:	Not reported
Air:	Not reported

CHEVRON USA INC SS 97502 (Continued) **S109824751**

Bedrock: Not reported
Responsible Unit: Northwest

Facility ID: 61112475
Region: Northwest
Lat/Long: 48.505499999999 / -122.2388299999
Brownfield Status: Not reported
Rank Status: Not reported
Clean Up Siteid: 6368
Site Status: Cleanup Started
PSI?: Not reported
Contaminant Name: Petroleum-Diesel
Ground Water: C
Surface Water: Not reported
Soil: C
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Northwest

Facility ID: 61112475
Region: Northwest
Lat/Long: 48.505499999999 / -122.2388299999
Brownfield Status: Not reported
Rank Status: Not reported
Clean Up Siteid: 6368
Site Status: Cleanup Started
PSI?: Not reported
Contaminant Name: Petroleum-Gasoline
Ground Water: C
Surface Water: Not reported
Soil: C
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Northwest

ALLSITES:
Facility Id: 61112475
Latitude: 48.505499999999998
Longitude: -122.23882999999999
Geographic location identifier (alias facid): 61112475
Facility Name: Chevron USA Inc SS 97502
Latitude Decimal Degrees: 48.505499999999998
Longitude Decimal Degrees: -122.23882999999999
Coordinate Point Areal Extent Code: 0
Horizontal Accuracy Code: 4
Coordinate Point Geographic Position Code: 5
Location Verified Code: Y

Geographic Location Identifier (Alias Facid): 61112475
Interaction (Aka Env Int) Type Code: HWG
Interaction (Aka Env Int) Description: Hazardous Waste Generator
Interaction Status: I
Federal Program Indentifier: WAD988487773
Interaction Start Date: 5/22/1991
Interaction End Date: 12/31/2009

CHEVRON USA INC SS 97502 (Continued) **S109824751**

prgm_facil:	CHEVRON USA INC SS 97502
cur_sys_pr:	HAZWASTE
cur_sys_nm:	TURBOWASTE
Geographic Location Identifier (Alias Facid):	61112475
Interaction (Aka Env Int) Type Code:	UST
Interaction (Aka Env Int) Description:	Underground Storage Tank
Interaction Status:	I
Federal Program Indentifier:	5236
Interaction Start Date:	3/20/2000
Interaction End Date:	3/20/2000
prgm_facil:	Not reported
cur_sys_pr:	TOXICS
cur_sys_nm:	ISIS
Geographic Location Identifier (Alias Facid):	61112475
Interaction (Aka Env Int) Type Code:	VOLCLNST
Interaction (Aka Env Int) Description:	Voluntary Cleanup Sites
Interaction Status:	I
Federal Program Indentifier:	NW0480
Interaction Start Date:	5/22/2000
Interaction End Date:	5/2/2005
prgm_facil:	Chevron USA Inc SS 97502
cur_sys_pr:	TOXICS
cur_sys_nm:	ISIS
Geographic Location Identifier (Alias Facid):	61112475
Interaction (Aka Env Int) Type Code:	VOLCLNST
Interaction (Aka Env Int) Description:	Voluntary Cleanup Sites
Interaction Status:	A
Federal Program Indentifier:	NW1452
Interaction Start Date:	5/2/2005
Interaction End Date:	Not reported
prgm_facil:	Chevron USA Inc SS 97502
cur_sys_pr:	TOXICS
cur_sys_nm:	ISIS
Geographic Location Identifier (Alias Facid):	61112475
Interaction (Aka Env Int) Type Code:	LUST
Interaction (Aka Env Int) Description:	LUST Facility
Interaction Status:	A
Federal Program Indentifier:	5236
Interaction Start Date:	2/13/1991
Interaction End Date:	Not reported
prgm_facil:	Not reported
cur_sys_pr:	TOXICS
cur_sys_nm:	ISIS
Geographic Location Identifier (Alias Facid):	61112475
Interaction (Aka Env Int) Type Code:	HWG
Interaction (Aka Env Int) Description:	Hazardous Waste Generator
Interaction Status:	A
Federal Program Indentifier:	WAD988487773
Interaction Start Date:	7/28/2009
Interaction End Date:	Not reported
prgm_facil:	CHEVRON 97502
cur_sys_pr:	HAZWASTE

CHEVRON USA INC SS 97502 (Continued) **S109824751**

cur_sys_nm:	TURBOWASTE
Geographic Location Identifier (Alias Facid):	61112475
Interaction (Aka Env Int) Type Code:	HWOTHER
Interaction (Aka Env Int) Description:	Haz Waste Management Activity
Interaction Status:	A
Federal Program Indentifier:	WAD988487773
Interaction Start Date:	12/31/2009
Interaction End Date:	Not reported
prgm_facil:	CHEVRON USA INC SS 97502
cur_sys_pr:	HAZWASTE
cur_sys_nm:	TURBOWASTE

WA MANIFEST:

Facility Site ID Number:	61112475
SWC Desc:	Not reported
FWC Desc:	Not reported
Form Comm:	Not reported
Data Year:	2009
Permit by Rule:	False
Treatment by Generator:	False
Mixed radioactive waste:	False
Importer of hazardous waste:	False
Immediate recycler:	False
Treatment/Storage/Disposal/Recycling Facility:	False
Generator of dangerous fuel waste:	False
Generator marketing to burner:	False
"Other marketers (i.e., blender, distributor, etc.)":	False
Utility boiler burner:	False
Industry boiler burner:	False
Industrial Furnace:	False
Smelter defferal:	False
Universal waste - batteries - generate:	False
Universal waste - thermostats - generate:	False
Universal waste - mercury - generate:	False
Universal waste - lamps - generate:	False
Universal waste - batteries - accumulate:	False
Universal waste - thermostats - accumulate:	False
Universal waste - mercury - accumulate:	False
Universal waste - lamps - accumulate:	False
Destination Facility for Universal Waste:	False
Off-specification used oil burner - utility boiler:	False
Off-specification used oil burner - industrial boiler:	False
Off-specification used oil burner - industrial furnace:	False
EPA ID:	WAD988487773
Facility Address 2:	Not reported
TAX REG NBR:	409018069
NAICS CD:	447110
BUSINESS TYPE:	Not reported
MAIL NAME:	Chevron USA
MAIL ADDR LINE1:	PO Box 6004
MAIL CITY,ST,ZIP:	San Ramon, CA 94583
MAIL COUNTRY:	UNITED STATES
LEGAL ORG NAME:	Chevron USA
LEGAL ORG TYPE:	Private
LEGAL ADDR LINE1:	PO Box 6004

CHEVRON USA INC SS 97502 (Continued) **S109824751**

LEGAL CITY,ST,ZIP:	San Ramon, CA 94583
LEGAL COUNTRY:	UNITED STATES
LEGAL PHONE NBR:	(925)842-3733
LEGAL EFFECTIVE DATE:	Not reported
LAND ORG NAME:	Chevron USA
LAND ORG TYPE:	Private
LAND PERSON NAME:	Not reported
LAND ADDR LINE1:	PO Box 6004
LAND CITY,ST,ZIP:	San Ramon, CA 94583
LAND COUNTRY:	UNITED STATES
LAND PHONE NBR:	(925)842-3733
OPERATOR ORG NAME:	Not reported
OPERATOR ORG TYPE:	Private
OPERATOR ADDR LINE1:	PO BOX 6004
OPERATOR CITY,ST,ZIP:	SAN RAMON, CA 94583
OPERATOR COUNTRY:	UNITED STATES
OPERATOR PHONE NBR:	(925)842-3733
OPERATOR EFFECTIVE DATE:	Not reported
SITE CONTACT NAME:	Jocko Rodriguez
SITE CONTACT ADDR LINE1:	PO BOX 6004
SITE CONTACT ZIP:	SAN RAMON, CA 94583
SITE CONTACT COUNTRY:	UNITED STATES
SITE CONTACT PHONE NBR:	(925)842-3733
SITE CONTACT EMAIL:	nawtdesk@chevron.com
FORM CONTACT NAME:	Jocko Rodriguez
FORM CONTACT ADDR LINE1:	PO BOX 6004
FORM CONTACT CITY,ST,ZIP:	SAN RAMON, CA 94583
FORM CONTACT COUNTRY:	UNITED STATES
FORM CONTACT PHONE NBR:	(925)842-3733
FORM CONTACT EMAIL:	nawtdesk@chevron.com
GEN STATUS CD:	XQG
MONTHLY GENERATION:	False
BATCH GENERATION:	False
ONE TIME GENERATION:	False
TRANSPORTS OWN WASTE:	False
TRANSPORTS OTHRS WASTE:	False
RECYCLER ONSITE:	False
TRANSFER FACILITY:	False
OTHER EXEMPTION:	Not reported
UW BATTERY GEN:	False
USED OIL TRANSPORTER:	False
USED OIL TRANSFER FACLTY:	False
USED OIL PROCESSOR:	False
USED OIL REREFINER:	False
USED OIL FUEL MRKTR DIRECTS SHPMNTS:	False
USED OIL FUEL MRKTR MEETS SPECS:	False

C12
East
< 1/8
0.086 mi.
455 ft.

CHEVRON USA INC SS 97502
124 FERRY
SEDRO WOOLLEY, WA 98284

Site 6 of 6 in cluster C

RCRA-NonGen **1000659112**
FINDS **WAD988487773**
LUST
UST

Relative:
Equal

Actual:
56 ft.

RCRA-NonGen:
Date form received by agency: 02/12/2010
Facility name: CHEVRON 97502
Facility address: 124 FERRY ST
SEDRO WOOLLEY, WA 98284

CHEVRON USA INC SS 97502 (Continued) **1000659112**

EPA ID:	WAD988487773
Mailing address:	PO BOX 6004
	SAN RAMON, CA 94583
Contact:	JOCKO RODRIGUEZ
Contact address:	PO BOX 6004
	SAN RAMON, CA 94583
Contact country:	US
Contact telephone:	(925) 842-3733
Contact email:	NAWTDESK@CHEVRON.COM
EPA Region:	10
Classification:	Non-Generator
Description:	Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:

Owner/operator name:	CHEVRON USA
Owner/operator address:	PO BOX 6004
	SAN RAMON, 94583
Owner/operator country:	US
Owner/operator telephone:	(925)842-3733
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	01/01/1900
Owner/Op end date:	Not reported

Owner/operator name:	JOCKO RODRIGUEZ
Owner/operator address:	PO BOX 6004
	SAN RAMON, 94583
Owner/operator country:	US
Owner/operator telephone:	(925)842-3733
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/1900
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	03/11/2003
Facility name:	CHEVRON 97502
Site name:	CHEVRON USA INC SS 97502
Classification:	Not a generator, verified

CHEVRON USA INC SS 97502 (Continued) **1000659112**

Violation Status: No violations found

FINDS:

Registry ID: 110005361900

Environmental Interest/Information System
Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

LUST:

edr_fstat:	WA
edr_fzip:	982841409
edr_fcnty:	SKAGIT
edr_zip:	Not reported
FS ID:	61112475
Facility ID:	5236
Facility Status:	Cleanup Started
Release ID:	1962
Affected Media:	Soil
Alternate Name:	CHEVRON STATION # 9-7502
Release Notification Date:	2/13/1991
Release Status Date:	6/1/1995
Site Response Unit Code:	NORTHWEST
Lat/Long:	48.5055 / -122.23883

edr_fstat:	WA
edr_fzip:	982841409
edr_fcnty:	SKAGIT
edr_zip:	Not reported
FS ID:	61112475
Facility ID:	5236
Facility Status:	Cleanup Started
Release ID:	1962
Affected Media:	Ground Water
Alternate Name:	CHEVRON STATION # 9-7502
Release Notification Date:	2/13/1991
Release Status Date:	6/1/1995
Site Response Unit Code:	NORTHWEST
Lat/Long:	48.5055 / -122.23883

UST:

Facility ID:	61112475
Site ID:	5236
Lat Deg:	48

CHEVRON USA INC SS 97502 (Continued) **1000659112**

Lat Min:	30
Lat Sec:	19.799999999992224
Long Deg:	-122
Long Min:	14
Long Sec:	19.787999999974772
UBI:	Not reported
Phone Number:	2068550161

Tank ID:	28534
Tank Name:	4
Install Date:	12/31/1964
Capacity:	111 TO 1,100 Gallons
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Removed
TankSystem Status Change Date:	8/26/1996
Tank Status:	Removed
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Steel
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Material:	Not reported
Pipe Construction:	Not reported
Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Not reported
Tank Primary Release Detection:	Not reported
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	8/6/1996
Tag Number:	Not reported

Tank ID:	28571
Tank Name:	6
Install Date:	12/31/1964
Capacity:	111 TO 1,100 Gallons
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Removed
TankSystem Status Change Date:	8/26/1996
Tank Status:	Removed
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Not reported
Tank Construction:	Not reported
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Material:	Not reported
Pipe Construction:	Not reported
Pipe Primary Release Detection:	Not reported

CHEVRON USA INC SS 97502 (Continued) **1000659112**

Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Tank Primary Release Detection: Not reported
Tank Second Release Detection: Not reported
Pipe Tightness Test: Not reported
Tank Actual Status Date: 8/6/1996
Tag Number: Not reported

Tank ID: 28634
Tank Name: 2
Install Date: 12/31/1964
Capacity: Not reported
Tank Upgrade Date: 1/1/0001
TankSystem Status: Removed
TankSystem Status Change Date: 8/26/1996
Tank Status: Removed
Tank Permit Expiration Date: 1/1/0001
Tank Closure Date: 1/1/0001
Tank Pumping System: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Steel
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Pipe Material: Not reported
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Tank Primary Release Detection: Not reported
Tank Second Release Detection: Not reported
Pipe Tightness Test: Not reported
Tank Actual Status Date: 8/6/1996
Tag Number: Not reported

Tank ID: 28667
Tank Name: 5
Install Date: 12/31/1964
Capacity: 111 TO 1,100 Gallons
Tank Upgrade Date: 1/1/0001
TankSystem Status: Removed
TankSystem Status Change Date: 8/26/1996
Tank Status: Removed
Tank Permit Expiration Date: 1/1/0001
Tank Closure Date: 1/1/0001
Tank Pumping System: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Not reported
Tank Construction: Not reported
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Pipe Material: Not reported
Pipe Construction: Not reported

CHEVRON USA INC SS 97502 (Continued) **1000659112**

Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Not reported
Tank Primary Release Detection:	Not reported
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	8/6/1996
Tag Number:	Not reported

Tank ID:	28699
Tank Name:	1
Install Date:	12/31/1964
Capacity:	Not reported
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Removed
TankSystem Status Change Date:	8/26/1996
Tank Status:	Removed
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Steel
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Material:	Not reported
Pipe Construction:	Not reported
Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Not reported
Tank Primary Release Detection:	Not reported
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	8/6/1996
Tag Number:	Not reported

Tank ID:	28766
Tank Name:	3
Install Date:	12/31/1964
Capacity:	Not reported
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Removed
TankSystem Status Change Date:	8/26/1996
Tank Status:	Removed
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Steel
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Material:	Not reported

CHEVRON USA INC SS 97502 (Continued) **1000659112**

Pipe Construction:	Not reported
Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Not reported
Tank Primary Release Detection:	Not reported
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	8/6/1996
Tag Number:	Not reported

D13 **SKAGIT PETROLEUM CO.** **ICR** **S104586217**
WSW **700 BORSETH ST.** **N/A**
< 1/8 **SEDRO WOOLLEY, WA 98284**
0.090 mi.
475 ft. **Site 1 of 2 in cluster D**

Relative:
Equal

Actual:
56 ft.

ICR:

Date Ecology Received Report:	06/14/99
Contaminants Found at Site:	Petroleum products
Media Contaminated:	Groundwater, Soil
Waste Management:	Not reported
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	98-25
County Code:	29
Contact:	Not reported
Report Title:	Not reported

Date Ecology Received Report:	06/01/00
Contaminants Found at Site:	Metals, Petroleum products, Non-haologenated solvents
Media Contaminated:	Groundwater, Soil
Waste Management:	Tank, Spill
Region:	North Western
Type of Report Ecology Received:	Interim cleanup report
Site Register Issue:	98-27
County Code:	29
Contact:	Not reported
Report Title:	Not reported

D14 **ASSOCIATED PETROLEUM PRODUCTS INC** **RCRA-NonGen** **1000105572**
WSW **700 BORSETH** **FINDS** **WAD011810066**
< 1/8 **SEDRO WOOLLEY, WA 98284** **CSCSL**
0.090 mi. **ALLSITES**
475 ft. **Site 2 of 2 in cluster D** **HSL**

Relative:
Equal

Actual:
56 ft.

RCRA-NonGen:

Date form received by agency:	09/15/2003
Facility name:	SKAGIT PETROLEUM
Facility address:	700 BORSETH ST SEDRO WOOLLEY, WA 982841402
EPA ID:	WAD011810066
Mailing address:	PO BOX 248 SEDRO WOOLLEY, WA 98284-0248
Contact:	BRAD ROBERSON
Contact address:	PO BOX 248 SEDRO WOOLLEY, WA 98284-0248

ASSOCIATED PETROLEUM PRODUCTS INC (Continued) **1000105572**

Contact country: US
Contact telephone: (206)613-1443
Contact email: Not reported
EPA Region: 10
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: BRAD ROBERSON
Owner/operator address: PO BOX 248
SEDRO WOOLLEY, WA 98284
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 02/12/1997
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

FINDS:

Registry ID: 110005315417

Environmental Interest/Information System
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ASSOCIATED PETROLEUM PRODUCTS INC (Continued) **1000105572**

CSCSL:

Facility ID:	25296975
Region:	Northwest
Lat/Long:	48.505989999999 / -122.2444700000
Brownfield Status:	Not reported
Rank Status:	3
Clean Up Siteid:	2363
Site Status:	Awaiting Cleanup
PSI?:	Not reported
Contaminant Name:	Metals Priority Pollutants
Ground Water:	B
Surface Water:	Not reported
Soil:	C
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest

Facility ID:	25296975
Region:	Northwest
Lat/Long:	48.505989999999 / -122.2444700000
Brownfield Status:	Not reported
Rank Status:	3
Clean Up Siteid:	2363
Site Status:	Awaiting Cleanup
PSI?:	Not reported
Contaminant Name:	Non-Halogenated Solvents
Ground Water:	C
Surface Water:	Not reported
Soil:	C
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest

Facility ID:	25296975
Region:	Northwest
Lat/Long:	48.505989999999 / -122.2444700000
Brownfield Status:	Not reported
Rank Status:	3
Clean Up Siteid:	2363
Site Status:	Awaiting Cleanup
PSI?:	Not reported
Contaminant Name:	Petroleum Products - unspecified
Ground Water:	C
Surface Water:	Not reported
Soil:	C
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest

ALLSITES:

Facility Id:	25296975
Latitude:	48.505989999999997
Longitude:	-122.24447000000001

ASSOCIATED PETROLEUM PRODUCTS INC (Continued) **1000105572**

Geographic location identifier (alias facid):	25296975
Facility Name:	ASSOCIATED PETROLEUM PRODUCTS INC
Latitude Decimal Degrees:	48.505989999999997
Longitude Decimal Degrees:	-122.24447000000001
Coordinate Point Areal Extent Code:	99
Horizontal Accuracy Code:	99
Coordinate Point Geographic Position Code:	99
Location Verified Code:	N

Geographic Location Identifier (Alias Facid):	25296975
Interaction (Aka Env Int) Type Code:	TIER2
Interaction (Aka Env Int) Description:	Emergency/Haz Chem Rpt TIER2
Interaction Status:	A
Federal Program Indentifier:	WAD011810066
Interaction Start Date:	1/1/1988
Interaction End Date:	Not reported
prgm_facil:	Not reported
cur_sys_pr:	HAZWASTE
cur_sys_nm:	EPCRA

Geographic Location Identifier (Alias Facid):	25296975
Interaction (Aka Env Int) Type Code:	SCS
Interaction (Aka Env Int) Description:	State Cleanup Site
Interaction Status:	I
Federal Program Indentifier:	Not reported
Interaction Start Date:	4/7/2000
Interaction End Date:	12/20/2004
prgm_facil:	ASSOCIATED PETROLEUM PRODUCTS INC
cur_sys_pr:	TOXICS
cur_sys_nm:	ISIS

Geographic Location Identifier (Alias Facid):	25296975
Interaction (Aka Env Int) Type Code:	HWG
Interaction (Aka Env Int) Description:	Hazardous Waste Generator
Interaction Status:	I
Federal Program Indentifier:	WAD011810066
Interaction Start Date:	6/18/1981
Interaction End Date:	12/31/2001
prgm_facil:	Not reported
cur_sys_pr:	HAZWASTE
cur_sys_nm:	TURBOWASTE

Geographic Location Identifier (Alias Facid):	25296975
Interaction (Aka Env Int) Type Code:	VOLCLNST
Interaction (Aka Env Int) Description:	Voluntary Cleanup Sites
Interaction Status:	I
Federal Program Indentifier:	NW1368
Interaction Start Date:	12/20/2004
Interaction End Date:	2/23/2010
prgm_facil:	ASSOCIATED PETROLEUM PRODUCTS INC
cur_sys_pr:	TOXICS
cur_sys_nm:	ISIS

Geographic Location Identifier (Alias Facid):	25296975
Interaction (Aka Env Int) Type Code:	INDUSTGP
Interaction (Aka Env Int) Description:	Industrial SW GP
Interaction Status:	I

ASSOCIATED PETROLEUM PRODUCTS INC (Continued) **1000105572**

Federal Program Indentifier:	SO3000702
Interaction Start Date:	2/12/1993
Interaction End Date:	8/31/2005
prgm_facil:	ASSOCIATED PETROLEUM PRODUCTS INC
cur_sys_pr:	WATQUAL
cur_sys_nm:	PARIS

HSL:

edr_fstat:	WA
edr_fzip:	Not reported
edr_fcnty:	SKAGIT
edr_zip:	Not reported
Facility Type:	**Hazardous Sites List**
Facility Status:	Cleanup Started
FSID Number:	25296975
Rank:	3
Region:	NW

---

15 **CUSTOM ENGINE & MACHINE** **ALLSITES** **S110626113**
SE **809 EASTERN AVE** **N/A**
< 1/8 **SEDRO WOOLLEY, WA 98284**
0.112 mi.
594 ft.

Relative:
Equal

Actual:
56 ft.

ALLSITES:

Facility Id:	24522
Latitude:	48.504263000000002
Longitude:	-122.240272
Geographic location identifier (alias facid):	24522
Facility Name:	Custom Engine & Machine
Latitude Decimal Degrees:	48.504263000000002
Longitude Decimal Degrees:	-122.240272
Coordinate Point Areal Extent Code:	0
Horizontal Accuracy Code:	99
Coordinate Point Geographic Position Code:	8
Location Verified Code:	Not reported
Geographic Location Identifier (Alias Facid):	24522
Interaction (Aka Env Int) Type Code:	LSC
Interaction (Aka Env Int) Description:	Local Source Control
Interaction Status:	I
Federal Program Indentifier:	Not reported
Interaction Start Date:	10/9/2009
Interaction End Date:	10/9/2009
prgm_facil:	Custom Engine & Machine
cur_sys_pr:	HAZWASTE
cur_sys_nm:	LSC

16 East 1/8-1/4 0.169 mi. 891 ft. **SEDRO WOOLLEY CENTRAL OFFICE 2160B01**
209 FERRY
SEDRO WOOLLEY, WA 98284

ALLSITES U003025821
UST N/A

Relative: Higher

Actual: 57 ft.

ALLSITES:

Facility Id:	692717
Latitude:	48.505229999999997
Longitude:	-122.239698
Geographic location identifier (alias facid):	692717
Facility Name:	SEDRO WOOLLEY CENTRAL OFFICE 2160B01
Latitude Decimal Degrees:	48.505229999999997
Longitude Decimal Degrees:	-122.239698
Coordinate Point Areal Extent Code:	4
Horizontal Accuracy Code:	6
Coordinate Point Geographic Position Code:	5
Location Verified Code:	N

Geographic Location Identifier (Alias Facid):	692717
Interaction (Aka Env Int) Type Code:	UST
Interaction (Aka Env Int) Description:	Underground Storage Tank
Interaction Status:	I
Federal Program Indentifier:	12297
Interaction Start Date:	1/1/1974
Interaction End Date:	5/3/2000
prgm_facil:	Not reported
cur_sys_pr:	TOXICS
cur_sys_nm:	ISIS

Geographic Location Identifier (Alias Facid):	692717
Interaction (Aka Env Int) Type Code:	TIER2
Interaction (Aka Env Int) Description:	Emergency/Haz Chem Rpt TIER2
Interaction Status:	I
Federal Program Indentifier:	CRK000005470
Interaction Start Date:	1/1/1987
Interaction End Date:	7/4/1776
prgm_facil:	Not reported
cur_sys_pr:	HAZWASTE
cur_sys_nm:	EPCRA

UST:

Facility ID:	692717
Site ID:	12297
Lat Deg:	48
Lat Min:	30
Lat Sec:	18.827999999990652
Long Deg:	-122
Long Min:	14
Long Sec:	22.912800000015068
UBI:	Not reported
Phone Number:	2068550010

Tank ID:	19418
Tank Name:	2160-B01-2
Install Date:	1/1/1974
Capacity:	111 TO 1,100 Gallons
Tank Upgrade Date:	1/1/0001

SEDRO WOOLLEY CENTRAL OFFICE 2160B01 (Continued) **U003025821**

TankSystem Status:	Removed
TankSystem Status Change Date:	8/26/1996
Tank Status:	Removed
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Not reported
Tank Spill Prevention:	Not reported
Tank Overfill Prevention:	Not reported
Tank Material:	Steel
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	Not reported
Pipe Material:	Steel
Pipe Construction:	Not reported
Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	Not reported
Tank Primary Release Detection:	Not reported
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Not reported
Tank Actual Status Date:	8/6/1996
Tag Number:	Not reported

Tank ID:	19548
Tank Name:	2160-B01-1
Install Date:	2/1/1974
Capacity:	111 TO 1,100 Gallons
Tank Upgrade Date:	1/1/0001
TankSystem Status:	Removed
TankSystem Status Change Date:	8/26/1996
Tank Status:	Removed
Tank Permit Expiration Date:	1/1/0001
Tank Closure Date:	1/1/0001
Tank Pumping System:	Suction System Tank Check Valve
Tank Spill Prevention:	None
Tank Overfill Prevention:	None
Tank Material:	Not reported
Tank Construction:	Single Wall Tank
Tank Tightness Test:	Not reported
Tank Corrosion Protection:	None
Pipe Material:	Not reported
Pipe Construction:	Single Wall Pipe
Pipe Primary Release Detection:	Not reported
Pipe Second Release Detection:	Not reported
Pipe Corrosion Protection:	None
Tank Primary Release Detection:	Weekly Manual Gauging
Tank Second Release Detection:	Not reported
Pipe Tightness Test:	Every 3 Years (suction tank check valve)
Tank Actual Status Date:	8/6/1996
Tag Number:	Not reported

E17 **COMMERCIAL AIRCRAFT INTERIORS LLC** **FINDS** **1011399441**
ENE **550 METCALF ST BLDG L1** **ALLSITES** **N/A**
1/8-1/4 **SEDRO WOOLLEY, WA 98284**
0.170 mi.
899 ft. **Site 1 of 5 in cluster E**

Relative:
Higher

Actual:
59 ft.

FINDS:

Registry ID: 110035443375

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ALLSITES:

Facility Id:	6331154
Latitude:	48.506549
Longitude:	-122.23861100000001
Geographic location identifier (alias facid):	6331154
Facility Name:	Commercial Aircraft Interiors LLC
Latitude Decimal Degrees:	48.506549
Longitude Decimal Degrees:	-122.23861100000001
Coordinate Point Areal Extent Code:	99
Horizontal Accuracy Code:	99
Coordinate Point Geographic Position Code:	8
Location Verified Code:	Not reported
Geographic Location Identifier (Alias Facid):	6331154
Interaction (Aka Env Int) Type Code:	HWG
Interaction (Aka Env Int) Description:	Hazardous Waste Generator
Interaction Status:	I
Federal Program Indentifier:	WAH000031624
Interaction Start Date:	8/9/2007
Interaction End Date:	12/31/2007
prgm_facil:	Not reported
cur_sys_pr:	HAZWASTE
cur_sys_nm:	TURBOWASTE

E18 **COMMERCIAL AIRCRAFT INTERIORS LLC** **RCRA-CESQG** **1010788367**
ENE **550 METCALF ST BLDG L1** **WAH000031624**
1/8-1/4 **SEDRO WOOLLEY, WA 98284**
0.170 mi.
899 ft. **Site 2 of 5 in cluster E**

Relative:
Higher

Actual:
59 ft.

RCRA-CESQG:

Date form received by agency:	04/22/2008
Facility name:	COMMERCIAL AIRCRAFT INTERIORS LLC
Facility address:	550 METCALF ST BLDG L1 SEDRO WOOLLEY, WA 98284
EPA ID:	WAH000031624
Mailing address:	1387 PACIFIC DR BURLINGTON, WA 98233
Contact:	RICHARD PHILLIPS

COMMERCIAL AIRCRAFT INTERIORS LLC (Continued) **1010788367**

Contact address:	1387 PACIFIC DR BURLINGTON, WA 98233
Contact country:	US
Contact telephone:	(360)757-3117
Contact email:	Not reported
EPA Region:	10
Land type:	Private
Classification:	Conditionally Exempt Small Quantity Generator
Description:	Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste; or generates 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste during any calendar month, and accumulates at any time: 1 kg or less of acutely hazardous waste; or 100 kg or less of any residue or contaminated soil, waste or other debris resulting from the cleanup of a spill, into or on any land or water, of acutely hazardous waste

Owner/Operator Summary:

Owner/operator name:	COMMERCIAL AIRCRAFT INTERIORS LLC
Owner/operator address:	1387 PACIFIC DR BURLINGTON, WA 98233
Owner/operator country:	US
Owner/operator telephone:	Not reported
Legal status:	Private
Owner/Operator Type:	Operator
Owner/Op start date:	01/01/2006
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

Historical Generators:

Date form received by agency:	12/31/2007
Facility name:	COMMERCIAL AIRCRAFT INTERIORS LLC
Classification:	Not a generator, verified

COMMERCIAL AIRCRAFT INTERIORS LLC (Continued) **1010788367**

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 12/12/2008
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

E19
ENE
1/8-1/4
0.174 mi.
920 ft.

Relative:
Higher

Actual:
60 ft.

OSPREY BOAT COMPANY METCALF ST **CERC-NFRAP 1000235567**
500 METCALF ST **RCRA-NonGen WAD009252040**
SEDRO WOOLLEY, WA 98284 **FTTS**
HIST FTTS
Site 3 of 5 in cluster E **PADS**
FINDS
CSCSL
ALLSITES
HSL
UST
ICR

CERC-NFRAP:
Site ID: 1000624
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Alias Name(s):
Alias Name: SKAGIT CORP
Alias Address: Not reported
WA

Alias Name: SKAGIT MFG CO DELTA RESOURCES INC
Alias Address: Not reported
SKAGIT, WA

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: Not reported
Date Completed: 05/01/1981
Priority Level: Not reported

Action: SITE INSPECTION
Date Started: 08/01/1981
Date Completed: 08/01/1981
Priority Level: Higher priority for further assessment

Action: PRELIMINARY ASSESSMENT
Date Started: 05/21/1985
Date Completed: 11/08/1985
Priority Level: Low priority for further assessment

Action: SITE INSPECTION
Date Started: 02/18/1988
Date Completed: 02/18/1988
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

OSPREY BOAT COMPANY METCALF ST (Continued) **1000235567**

Action: ARCHIVE SITE
Date Started: Not reported
Date Completed: 03/29/1993
Priority Level: Not reported

RCRA-NonGen:
Date form received by agency: 03/12/2008
Facility name: OSPREY BOAT COMPANY METCALF ST
Facility address: 500 METCALF ST
SEDRO WOOLLEY, WA 98284
EPA ID: WAD009252040
Mailing address: PO BOX 196
SILVANA, WA 98287
Contact: JERRY P MCCULLEY
Contact address: PO BOX 196
SILVANA, WA 98287
Contact country: US
Contact telephone: (360)855-2649
Contact email: Not reported
EPA Region: 10
Land type: Private
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: OSPREY BOAT COMPANY METCALF ST
Owner/operator address: PO BOX 196
SILVANA, WA 98287
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 12/31/2002
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 12/31/2003
Facility name: OSPREY BOAT COMPANY METCALF ST

OSPREY BOAT COMPANY METCALF ST (Continued) **1000235567**

Classification: Not a generator, verified

Date form received by agency: 12/31/1990
Facility name: OSPREY BOAT COMPANY METCALF ST
Site name: DELTA RESOURCES INC SKAGIT MFG
Classification: Large Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: SR - -016 / -170
Area of violation: Generators - General
Date violation determined: 08/06/2002
Date achieved compliance: 12/02/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/16/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -141(1)
Area of violation: Generators - General
Date violation determined: 08/06/2002
Date achieved compliance: 01/23/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/16/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -070(3)
Area of violation: Generators - General
Date violation determined: 08/06/2002
Date achieved compliance: 01/23/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/16/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -170(3)(b)
Area of violation: Generators - Records/Reporting
Date violation determined: 08/06/2002
Date achieved compliance: 01/23/2003
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/16/2002

OSPREY BOAT COMPANY METCALF ST (Continued) **1000235567**

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200(1)(d) / -200(1)(c)
Area of violation: Generators - General
Date violation determined: 08/06/2002
Date achieved compliance: 11/01/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/16/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -630(5)(a)
Area of violation: Generators - General
Date violation determined: 08/06/2002
Date achieved compliance: 11/20/2002
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/16/2002
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200(1)(d)
Area of violation: Generators - General
Date violation determined: 06/15/2000
Date achieved compliance: 08/01/2000
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/11/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -060(1)
Area of violation: Generators - General
Date violation determined: 06/15/2000
Date achieved compliance: 07/28/2000
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/11/2000
Enf. disposition status: Not reported

OSPREY BOAT COMPANY METCALF ST (Continued) **1000235567**

Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200(1)(c)
Area of violation: Generators - General
Date violation determined: 06/15/2000
Date achieved compliance: 08/01/2000
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/11/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -070(3)
Area of violation: Generators - General
Date violation determined: 06/15/2000
Date achieved compliance: 12/20/2000
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/11/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - -200(1)(b) / -630(2-10)
Area of violation: Generators - General
Date violation determined: 06/15/2000
Date achieved compliance: 08/14/2000
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/11/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 09/27/2007
Evaluation: COMPLIANCE ASSISTANCE VISIT
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 08/06/2002
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE

OSPREY BOAT COMPANY METCALF ST (Continued) **1000235567**

Area of violation: Generators - General
Date achieved compliance: 01/23/2003
Evaluation lead agency: State

Evaluation date: 08/06/2002
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 12/02/2002
Evaluation lead agency: State

Evaluation date: 08/06/2002
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 11/20/2002
Evaluation lead agency: State

Evaluation date: 08/06/2002
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Records/Reporting
Date achieved compliance: 01/23/2003
Evaluation lead agency: State

Evaluation date: 08/06/2002
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 11/01/2002
Evaluation lead agency: State

Evaluation date: 06/15/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 08/01/2000
Evaluation lead agency: State

Evaluation date: 06/15/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 12/20/2000
Evaluation lead agency: State

Evaluation date: 06/15/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 08/14/2000
Evaluation lead agency: State

Evaluation date: 06/15/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/28/2000
Evaluation lead agency: State

Evaluation date: 02/02/1984
Evaluation: FOCUSED COMPLIANCE INSPECTION
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA Contractor/Grantee

OSPREY BOAT COMPANY METCALF ST (Continued) **1000235567**

Evaluation date: 02/02/1984
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA Contractor/Grantee

FTTS INSP:
Inspection Number: 19890308WA003 1
Region: 10
Inspection Date: 03/08/89
Inspector: MAULE
Violation occurred: No
Investigation Type: Section 6 PCB State Conducted
Investigation Reason: Neutral Scheme, Region
Legislation Code: TSCA
Facility Function: User

HIST FTTS INSP:
Inspection Number: 19890308WA003 1
Region: 10
Inspection Date: Not reported
Inspector: MAULE
Violation occurred: No
Investigation Type: Section 6 PCB State Conducted
Investigation Reason: Neutral Scheme, Region
Legislation Code: TSCA
Facility Function: User

PADS:
EPAID: WAD009252040
Facility name: 1 SKAGIT PLANT SEDRO WOOLLEY
Facility Address: 500 METCALF STREET
SEDRO WOOLLEY, WA 98284
Facility country: US
Generator: Yes
Storer: No
Transporter: No
Disposer: No
Research facility: No
Smelter: No
Facility owner name: US BANK OF WASH./NATL BK OF AK
Contact title: Not reported
Contact name: MATTSON, MR. M.V.
Contact tel: (206)461-7166
Contact extension: Not reported
Mailing address: PO BOX 151
SEDRO WOOLLEY, WA
Mailing country: US
Cert. title: Not reported
Cert. name: Not reported
Cert. date: 1/28/1992
Date received: 3/4/1992

FINDS:

OSPREY BOAT COMPANY METCALF ST (Continued) **1000235567**

Registry ID: 110002150555

Environmental Interest/Information System

NCDB (National Compliance Data Base) supports implementation of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) and the Toxic Substances Control Act (TSCA). The system tracks inspections in regions and states with cooperative agreements, enforcement actions, and settlements.

US EPA TRIS (Toxics Release Inventory System) contains information from facilities on the amounts of over 300 listed toxic chemicals that these facilities release directly to air, water, land, or that are transported off-site.

Registry ID: 110014347082

Environmental Interest/Information System

Washington Facility / Site Identification System (WA-FSIS) provides a means to query and display data maintained by the Washington Department of Ecology. This system contains key information for each facility/site that is currently, or has been, of interest to the Air Quality, Dam Safety, Hazardous Waste, Toxics Cleanup, and Water Quality Programs.

RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

CSCSL:

Facility ID:	2661
Region:	Northwest
Lat/Long:	48.507649999999 / -122.23871
Brownfield Status:	Not reported
Rank Status:	3
Clean Up Siteid:	764
Site Status:	Awaiting Cleanup
PSI?:	Not reported
Contaminant Name:	Metals Priority Pollutants
Ground Water:	Not reported
Surface Water:	C
Soil:	C
Sediment:	Not reported
Air:	Not reported
Bedrock:	Not reported
Responsible Unit:	Northwest

Facility ID:	2661
Region:	Northwest
Lat/Long:	48.507649999999 / -122.23871
Brownfield Status:	Not reported
Rank Status:	3
Clean Up Siteid:	764
Site Status:	Awaiting Cleanup

OSPREY BOAT COMPANY METCALF ST (Continued) **1000235567**

PSI?: Not reported
Contaminant Name: Petroleum Products - unspecified
Ground Water: Not reported
Surface Water: C
Soil: C
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Northwest

Facility ID: 2661
Region: Northwest
Lat/Long: 48.507649999999 / -122.23871
Brownfield Status: Not reported
Rank Status: 3
Clean Up Siteid: 764
Site Status: Awaiting Cleanup
PSI?: Not reported
Contaminant Name: Polychlorinated biPhenyls (PCB)
Ground Water: Not reported
Surface Water: Not reported
Soil: R
Sediment: Not reported
Air: Not reported
Bedrock: Not reported
Responsible Unit: Northwest

ALLSITES:
Facility Id: 2661
Latitude: 48.507649999999998
Longitude: -122.23871
Geographic location identifier (alias facid): 2661
Facility Name: Osprey Boat Company Metcalf St
Latitude Decimal Degrees: 48.507649999999998
Longitude Decimal Degrees: -122.23871
Coordinate Point Areal Extent Code: 99
Horizontal Accuracy Code: 4
Coordinate Point Geographic Position Code: 99
Location Verified Code: Y

Geographic Location Identifier (Alias Facid): 2661
Interaction (Aka Env Int) Type Code: TIER2
Interaction (Aka Env Int) Description: Emergency/Haz Chem Rpt TIER2
Interaction Status: A
Federal Program Indentifier: WAD009252040
Interaction Start Date: 1/1/1988
Interaction End Date: Not reported
prgm_facil: Not reported
cur_sys_pr: HAZWASTE
cur_sys_nm: EPCRA

Geographic Location Identifier (Alias Facid): 2661
Interaction (Aka Env Int) Type Code: TRI
Interaction (Aka Env Int) Description: Toxics Release Inventory
Interaction Status: I
Federal Program Indentifier: WAD009252040
Interaction Start Date: 1/1/1988

OSPREY BOAT COMPANY METCALF ST (Continued) **1000235567**

Interaction End Date:	10/3/2002
prgm_facil:	Not reported
cur_sys_pr:	HAZWASTE
cur_sys_nm:	EPCRA
Geographic Location Identifier (Alias Facid):	2661
Interaction (Aka Env Int) Type Code:	HWG
Interaction (Aka Env Int) Description:	Hazardous Waste Generator
Interaction Status:	I
Federal Program Indentifier:	WAD009252040
Interaction Start Date:	10/11/1988
Interaction End Date:	12/31/1995
prgm_facil:	Not reported
cur_sys_pr:	HAZWASTE
cur_sys_nm:	TURBOWASTE
Geographic Location Identifier (Alias Facid):	2661
Interaction (Aka Env Int) Type Code:	TRI
Interaction (Aka Env Int) Description:	Toxics Release Inventory
Interaction Status:	I
Federal Program Indentifier:	WAD009252040
Interaction Start Date:	1/1/1989
Interaction End Date:	10/3/2002
prgm_facil:	Not reported
cur_sys_pr:	HAZWASTE
cur_sys_nm:	EPCRA
Geographic Location Identifier (Alias Facid):	2661
Interaction (Aka Env Int) Type Code:	UST
Interaction (Aka Env Int) Description:	Underground Storage Tank
Interaction Status:	I
Federal Program Indentifier:	Not reported
Interaction Start Date:	6/8/1998
Interaction End Date:	5/3/2000
prgm_facil:	Not reported
cur_sys_pr:	TOXICS
cur_sys_nm:	ISIS
Geographic Location Identifier (Alias Facid):	2661
Interaction (Aka Env Int) Type Code:	HWG
Interaction (Aka Env Int) Description:	Hazardous Waste Generator
Interaction Status:	I
Federal Program Indentifier:	WAD009252040
Interaction Start Date:	8/3/2000
Interaction End Date:	12/31/2003
prgm_facil:	Not reported
cur_sys_pr:	HAZWASTE
cur_sys_nm:	TURBOWASTE
Geographic Location Identifier (Alias Facid):	2661
Interaction (Aka Env Int) Type Code:	INDPNDNT
Interaction (Aka Env Int) Description:	Independent Cleanup
Interaction Status:	A
Federal Program Indentifier:	Not reported
Interaction Start Date:	1/1/1900
Interaction End Date:	Not reported
prgm_facil:	Osprey Boat Company Metcalf St

OSPREY BOAT COMPANY METCALF ST (Continued) **1000235567**

cur_sys_pr: TOXICS
cur_sys_nm: ISIS

HSL:
edr_fstat: WA
edr_fzip: Not reported
edr_fcnty: SKAGIT
edr_zip: Not reported
Facility Type: Hazardous Sites List
Facility Status: Awaiting Cleanup
FSID Number: 2661
Rank: 3
Region: NW

UST:
Facility ID: 2661
Site ID: 4624
Lat Deg: 48
Lat Min: 30
Lat Sec: 27.53999999999337
Long Deg: -122
Long Min: 14
Long Sec: 19.355999999991127
UBI: Not reported
Phone Number: 2068551141

Tank ID: 9048
Tank Name: 18
Install Date: 12/31/1964
Capacity: Not reported
Tank Upgrade Date: 1/1/0001
TankSystem Status: Closed in Place
TankSystem Status Change Date: 8/26/1996
Tank Status: Closed in Place
Tank Permit Expiration Date: 1/1/0001
Tank Closure Date: 1/1/0001
Tank Pumping System: Not reported
Tank Spill Prevention: Not reported
Tank Overfill Prevention: Not reported
Tank Material: Concrete
Tank Construction: Single Wall Tank
Tank Tightness Test: Not reported
Tank Corrosion Protection: Not reported
Pipe Material: Not reported
Pipe Construction: Not reported
Pipe Primary Release Detection: Not reported
Pipe Second Release Detection: Not reported
Pipe Corrosion Protection: Not reported
Tank Primary Release Detection: Not reported
Tank Second Release Detection: Not reported
Pipe Tightness Test: Not reported
Tank Actual Status Date: 8/6/1996
Tag Number: Not reported

OSPREY BOAT COMPANY METCALF ST (Continued) **1000235567**

ICR:
- Date Ecology Received Report: / /
- Contaminants Found at Site: PCB's, Petroleum products
- Media Contaminated: Soil
- Waste Management: Not reported
- Region: North Western
- Type of Report Ecology Received: Interim cleanup report
- Site Register Issue: 98-32
- County Code: 29
- Contact: Not reported
- Report Title: Electrical Equipment Removal & Disposal Services

---

E20 **SKAGIT MANUFACTURING (6 REPORTS)** **ICR** **S103509492**
ENE **500 METCALF ST.** **N/A**
1/8-1/4 **SEDRO WOOLLEY, WA 98284**
0.174 mi.
920 ft. **Site 4 of 5 in cluster E**

Relative:
Higher

Actual:
60 ft.

ICR:
- Date Ecology Received Report: 12/16/92
- Contaminants Found at Site: Total petroleum hydrocarbons, PCB's, Asbestos, Metals, Volatile Organic Compounds
- Media Contaminated: Soil, Sediment, Groundwater
- Waste Management: Not reported
- Region: North Western
- Type of Report Ecology Received: Not reported
- Site Register Issue: 92-42
- County Code: 29
- Contact: Not reported
- Report Title: Not reported

E21 **THERMACOR NORTHWEST** **RCRA-CESQG** **1005906282**
ENE **500 METCALF ST BLDG A3** **FINDS** **WAH000018689**
1/8-1/4 **SEDRO WOOLLEY, WA 98284** **ALLSITES**
0.174 mi. **MANIFEST**
920 ft. **Site 5 of 5 in cluster E**

Relative:
Higher

Actual:
60 ft.

RCRA-CESQG:
- Date form received by agency: 03/10/2010
- Facility name: THERMACOR NORTHWEST
- Facility address: 500 METCALF ST BLDG A3
  SEDRO WOOLLEY, WA 98284
- EPA ID: WAH000018689
- Mailing address: 118 KLEIN RD
  CHEHALIS, WA 98532
- Contact: KEN FOOTE
- Contact address: 118 KLEIN RD.
  CHEHALIS, WA 98532
- Contact country: US
- Contact telephone: (360) 262-9710
- Contact email: Not reported
- EPA Region: 10
- Classification: Conditionally Exempt Small Quantity Generator
- Description: Handler: generates 100 kg or less of hazardous waste per calendar month, and accumulates 1000 kg or less of hazardous waste at any time; or generates 1 kg or less of acutely hazardous waste per calendar

Count: 19 ;ds.

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
BURLINGTON	1007070319	ECONOMY CLEANERS HWY 99	1340 HWY 99	98284	FINDS, ALLSITES
SEDRO WOOLLEY	U004020920	LONNIE B HODGIN FALLING & LOGGIN	2607 HWY 20	98284	ALLSITES, UST
SEDRO WOOLLEY	1007072068	UNITED GENERAL HOSPITAL	1971 HWY 20	98284	FINDS, ALLSITES
SEDRO WOOLLEY	1007067586	RIGHT OF WAY	736TH SR9 & KALLOCK RD	98284	FINDS, CSCSL, ALLSITES, UST
SEDRO WOOLLEY	1007265582	WA DOT BRG 009215	SR 9 MP 54.38-MP 54.56 SKAGIT	98284	RCRA-NonGen
SEDRO WOOLLEY	1007077713	JACKPOT STATION 154	1102 W HC 20	98284	FINDS, CSCSL, ALLSITES, VCP
SEDRO WOOLLEY	S110336394	HI Q COMPOST FACILITY	1020 HODGIN ST		SWF/LF
SEDRO WOOLLEY	U004106715	JAMESON AVENUE PROPERTIES	JAMESON ST & BNRR	98284	CSCSL, ALLSITES, UST
SEDRO WOOLLEY	1010337609	JANICKI INDUSTRIES INC	500 METCALF BLDG L123E & M	98284	RCRA-CESQG
SEDRO WOOLLEY	S107154747	JANICKI INDUSTRIES	1476 MOORE ST		ALLSITES, SPILLS, NPDES
SEDRO WOOLLEY	S110040711	SEDRO WOOLLEY CITY OF	70 MURDOCK ST	98284	ALLSITES, NPDES
SEDRO WOOLLEY	1000166142	CASCADES JOB CORPS CENTER	7782 NORTHERN STATE RD	98284	RCRA-NonGen, FINDS, ALLSITES
SEDRO WOOLLEY	S105454302	CHEVRON #6774	OLD & COOK RD	98284	ICR
SEDRO WOOLLEY	1001491159	NORTH CASCADES GATEWAY CENTER	7688 OLD NORTHERN STATE HOSPIT	98284	RCRA-SQG, FINDS
SEDRO WOOLLEY	1011265868	PANORAMA DUMP	OLD DAY CREEK RD	98284	FINDS, CSCSL, ALLSITES,
					BROWNFIELDS
SEDRO WOOLLEY	S109555601	NORTH CASCADES GATEWAY CENTER	7688 OLD NORTHERN STATE HOSPIT	98284	ALLSITES
SEDRO WOOLLEY	S106239310	NIELSEN BROS LOGGING CO	25046 STHY 20		ALLSITES, SPILLS
SEDRO-WOOLLEY	2007304919	1476 MOORE STREET	1476 MOORE STREET	98284	ERNS
SKAGIT COUNTY	2008890833	300 FEET WEST OF LOVRICKS MARINA	300 FEET WEST OF LOVRICKS MARI		ERNS

(Find the remainder of the regulatory profile in the PDF version of this Phase I ESA)

APPENDIX C

Historical Use Information

Department of Emergency Management Records

SKAGIT COUNTY
DEPARTMENT OF EMERGENCY MANAGEMENT

EMERGENCY
Mitigation
Preparedness
Response
Recovery

2911 East College Way, Suite B, Mount Vernon, WA 98273
Phone: (360) 428-3250; FAX: (360) 428-3255

SERVING
Anacortes
Burlington
Concrete
Hamilton
La Conner
Lyman
Mount Vernon
Sedro-Woolley
Skagit County

July 15, 2011

Tegan Conner
228 East Champion St, Ste 101
Bellingham WA 98225

Re: 100 (West) Ferry Street (P77452, P109239), 115 West Ferry Street (P77492, P77493), and 116 West Ferry Street (P77410, P77411, P77412, P77451) 220 West Ferry Street (P77409); 224 West Ferry Street (P77413); Rita Street (P77494) (Puget Sound Energy Power Station - NE corner of W Woodworth Street and Rita Street); 102 Woodworth Street (P77489); 104 Woodworth Street (P77490); 101 Ferry Street (P77478); 100 E Ferry Street (P77459); 500 Metcalf Street (P37350)

To: Tegan,

In review of the Skagit County Department of Emergency Management records from 1981 to the present, we have responded to two incidents at the above addresses. Please see attached files for incidences at 224 West Ferry Street and 124 Ferry Street in Sedro Woolley.

The enclosed information is not to indicate that there were no spills prior to 1981. It also does not reflect any releases not reported to us or any that this Department's assistance was not requested.

This office has provided you with all information available regarding the above noted Public Disclosure Request.

It is our intention to close this request on July 29, 2011. However, if you are not fully satisfied with the information provided or believe that additional materials are available, please contact me and I will be happy to make additional inquiries.

Sincerely,

Krista Salinas
Public Records Assistant
Skagit County Department of Emergency Management

Form updated: 01/16/05

SKAGIT COUNTY DEPARTMENT OF EMERGENCY MANAGEMENT
FIELD INCIDENT REPORT

DEM Incident No.	07-09-2007-1	Type of Incident	FIRE	SAR		HAZ-MAT Spill to drain		OTHER

Date	7/9/07	Notification Time	07:20	Caller Name	Dean Klingur SWFD via Cascade
Call Back No.	661-6261	Incident Location	Herb's Chevron 224 W Ferry Street, Sedro Woolley, WA		

Situation as Notified Vandals opened valve on waste oil tank. Oil flowed to storm drain. No water in system. Oil appears to be confined to a single man hole.

Owner was notified by the Fire Chief that he was required to notify Department of Ecology.

RESPONSE

X No Field Response Required | Responded and Arrived on Scene at | | Date |

Situation at Scene SWFD on site. Owner onsite also. City sewer supervisor en route.

DEM is trying to locate a pumping service to put on stand-by in case they are needed.

FIRE

File No. | Fire Report Attached |

SAR

SAR Mission No. | Evidence Search No. |

HAZ-MAT / OTHER

Mission No.	NA	Haz-Mat Substance	Waste motor oil	Placard No.	0
Estimate Quantity Released	Less than 100 gal.	Time of Release	unknown	Duration	

Behavior | Airborne | Waterborne | Fire | Explosion | Storm Sewer only |

OWNER / OPERATOR

Vehicle / Vessel I.D. NA | Description |

Apparent Responsible Party or Company	Herb's Chevron		
Phone	Address	224 W. Ferry St., Sedro Woolley, WA	
Driver / Operator	Vandals	D.O.B.	I.D.
Phone	Address		

RESPONDERS

Agencies on Scene	Name / Title	Contact No.
Sedro Woolley Fire Dept	Chief Klinger	360-855 2252
Sedro Woolley Sewer Dept.	Ray Meltzer	
Skagit County Emergency Management (DEM)	Dan Cain, Interim Director / no field response	360-428-3250

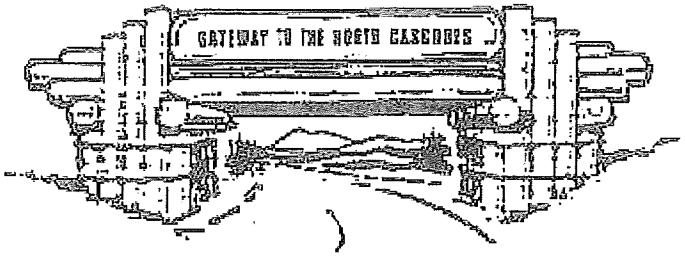
Chief Klinger called at 08:32 and had the situation under control. Owner had Emerald Services coming to pump out manhole. DEM made arrangements to re-supply SWFD with clean-up materials.

Departed Scene At:

Form Completed By: Dan Cain

Date 7/09/07 Time 08:48

720 Murdock St.
Sedro-Woolley,
WA 98284



Wayne Moritz
Fire Chief
206 855-2252

Sedro-Woolley Fire Department

RECEIVED
SEP - 7 1989

September 5, 1989

Tom Sheahan / Emergency Management
700 South 2nd Street Room 203
Mount Vernon, WA 98273

Dear Tom,

On August 29, 1989 we answered a call at Skagit Petroleum, located at Borseth and Ferry. Upon arrival we found diesel fuel leaking from inside of one diesel pump. The owner was notified and the valve was shut down. We contained the fuel mostly to the cement apron. I would guess that approximately 5 to 10 gallons spilled and that 2 to 3 gallons got onto the driveway. We dammed the fuel with dirt and used absorbent pads to mop up the fuel.

The owner took the panel off the pump and all was in-tact. We said that the 32 valve didn't function right, and that he just had that valve replaced. Once the fuel was mopped up, he said he would stay there, so we returned to the station. I felt there wasn't enough fuel that had spilled to call you, seeing how we kept 95% of it on the apron. If you feel I should have contacted you, please let me know and we will notify you from now on.

Cordially,

Wayne Moritz
Fire Chief

WM/ac

Sedro-Woolley Fire Department

Roster

Beitler, H.	1	1	Date 6/29/66	Time 0437	X City / Dist 457
Jonell, R.	2	0	Occupants Name Skag. T Petroleum		
Kelly, P	4	0	Address Borset E. Ferry		Phone
Bryant, J.	5	0	Owners Name		
Moritz, W.	6	1	Address		Phone
Brodersen, R.	8	0			
Koster, R.	9	1	Officier In Charge Moritz, W.	Duty Officer	
Colgan, P.	10	1	Type: Fire ___ Aid ___		
Peters, K.	11	1	Veh. Acc. ___ Other X		
Klinger, D.	12	0	Unit Response: E-51 ___ E-52 ___ E-56 X		
Chandler, G.	13	1	E-58 ___ E-853 ___ E-854 ___ E855 ___		
Carlson, M.	14	0	E-859 ___ R-57 X R-860 ___ T-52 ___		
Hayes, E.	15	1	T-853 ___ T-854 ___ T-855 ___ T859 ___		
Lockwood, R.	16	0	Med-1 ___ Med-2 ___ Med-7 ___		
Storie, W.	17	0			
Moser, T.	18	0			
Ellis, R.	19	1			
Fifield, P.	20	0			
Hyatt, R.	22	1			
Blankenship, J.	23	0			
Wakeman, S.	25	1			
Parker, R.	26	0			
Huisman, T.	27	0			
Wagner, P.	28	0			
Strinden, E.	29	0			
Masters, J.	30	0			
Dahl, T.	32	1			
Murphy, E.	33	1			
Meissner, T.	34	1			
	1	3			

Type Description: Diesel Sp. 22

Comments: Diesel was leaking from pump

Owner notified, shut off at storage

Tank used absorbate pads. The 52

Volvo malfunctioned it was just replaced

the other day. Rep 5-10 gals spilled

upon concrete pad. Owner left to

attend & clean up (We dammed with

dirt)

Signature: Wayne Moritz

Time Out	Time Arrived	Time BIQ
0437	0439	0515

SPILL 1
7-25-89

SKAGIT COUNTY
DEPARTMENT OF EMERGENCY MANAGEMENT
County Administration Bldg, Rm 203, 2nd & Kincaid St Mount Vernon, WA 98273
Phone: (206) 336-9400 or 336-9403

EMERGENCY
Mitigation
Preparedness
Response
Recovery

SERVING
Anacortes
Burlington
Concrete
Hamilton
La Conner
Lyman
Mount Vernon
Sedro-Woolley
Skagit County

Sedro-Woolley Gasoline Spill

July 25, 1989

Report by: Thomas J. Sheahan, Director

At approximately 1459, Sedro-Woolley "911" Dispatch received a call from a truck driver of American Transport, P. O. Box 1735, Auburn, Washington 98071, Telephone: 1-800-447-7780.

The driver's name was Bill Battle. Mr. Battle stated that there was a gas spill of approximately 100 gallons. At approximately 1506 hours, our office received a call from Sedro-Woolley Dispatch telling us of the spill. I arrived at approximately 1521 hours. The Sedro-Woolley Police, Sedro-Woolley Fire Department, and Fire Protection District #8 were on the scene. Just before I arrived, Chief Banta of the Burlington Fire Department arrived. Sedro-Woolley Fire Chief Wayne Moritz gave Ted Banta and me an quick briefing, and we assigned tasks.

Chief Ted Banta immediately checked the lower explosive level with his gas sniffer and found it to be approximately 60%. He did this at approximately 1530 hours. It was decided by Chief Moritz, Chief Banta, and myself that we needed to immediately expand the security of the scene due to the high explosive nature of the scene, and we needed to get some foam to cover the gasoline in the manhole at Woodworth and Metcalf Street intersection. The Burlington Fire Department was called for under mutual aid. The Sedro-Woolley Fire Department assisted the Sedro-Woolley Police in securing the scene.

Chief Wayne Moritz then took me to the Chevron Station at 124 Ferry Street and showed me what apparently had happened. The truck and trailer was off-loading fuel into the underground tanks. He was unloading Unleaded Fuel into a center tank which was located between the Regular and Supreme tanks. The tanks were located in front of the lube room on the north side of the truck and trailer which was jackknifed for unloading. The fill hose was still full which was approximately a four-inch hose, 40 feet long, with the estimated fuel in that line to be 35 gallons. The gasoline that escaped ran in an alluvial fan to the street. At the fill hole it was 15 feet wide, and at the street it was 25 feet wide covering an area of approximately 44 feet long, 1 1/2 to 3 feet wide which pretty well dissolved the asphalt along the curb. It then entered a catch basin and from there went to a manhole located at the intersection of Ferry and Metcalf Streets. It then ran in a southerly direction for approximately 300 feet to the next catch basin located at Woodworth and Metcalf Streets. The majority of the fuel was in the first manhole.

It was then decided to call in a pump truck and have the first manhole pumped out. I told Mr. Battle, the driver, that we needed to do this because we did not want the fuel to run through the storm system. He said they had pumping equipment in Seattle, but that was a couple of hours away. We felt time was critical, and there was a local contractor (Vintage Oil) that could be at the site in less than an hour. The cost was minimal at $205.00 (see attached bill). This was okayed by the Mr. Battle and Chuck Culp at 4:05 p.m.

There was a great deal that still needed to be done after discussing the situation with Chief Moritz and Chief Banta. We needed to drain the fuel from the off-loading hose as it was full. There were two 2 1/2" fire hoses deployed to protect the truck, station, and adjacent buildings. We then pulled my truck and the service station operator's pickup in and pumped 35 gallons out of the unleaded system into those vehicles which relieved the fuel from the fill hose. We then backed the trucks away from the station, and I released the truck and driver at 1640 hours. Vintage Oil arrived at the scene at about 1640 hours and under the supervision of Chief Moritz, started pumping the manhole at 1650 hours. There were approximately 350 gallons pumped off, and we ran an additional 10 to 20 gallons of water into the system to flush the product. Then we pumped that off. Vintage oil was released shortly after 5:00 p.m.

Both Sedro-Woolley and Burlington Fire Departments then put more foam into the system at the two manholes in the intersection of Metcalf and Ferry. Burlington Fire washed the asphalt to remove any gas residue from the pavement. There was obvious damage to the pavement for that first 125 feet to the catch basin. Chief Banta then checked the lower explosive limits and found it to be 10 to 15%. We ran approximately 8,000 gallons of water through the system before fire service left the area. The fire departments left the scene at approximately 1730 hours.

I then spoke to the service station attendant Leonard J. Bauer who said he was in the lube room and noticed gas on the ground under the truck and trailer. He immediately snuffed his cigarette. He stated that he believed the driver was in the cab. However, when I spoke to the second attendant Mike Vermeis, he said the driver was on the north side of the truck sticking the tanks when someone pulled in for gas. He then came back and he saw gas all over the ground. He thought the driver was up on the truck. Mike said he then told the driver of the leak. The driver immediately called "911" for help. All of the attendants removed people from the area until fire and police arrived.

There was a Public Utility District No. 1 (424-7104) water meter close by which was saturated with gasoline. The Public Utility District may have to remove the meter.

One other point is that the outfall for this storm system drops into a slough at the end of 3rd Street. A containment may need to be put up in that area because from there it goes to the Skagit River.

A list of possible costs:

Fire Department Man Hours:

Sedro-Woolley Fire Department -

Burlington Fire Department - No Charge

Fire Protection District No. 8 -

Foam and Pads:

Sedro-Woolley Fire Department

Burlington Fire Department - No Charge

City of Sedro-Woolley:

Street Dept. (Repair) -

Police Department -

Skagit County Public Utility District No. 1: No Charge

Skagit County Department of Emergency Management - Cost of one Spill Response Kit (See attached bill).

Report by: Thomas J. Sheahan, Director

TJS/skb

Attachments

Supplemental Report - Sedro-Woolley Gasoline Spill of July 25, 1989

Report by: Thomas J. Sheahan, Director TJS.

On July 27, 1989, at approximately 1:00 p.m., I spoke to Gary Engebretsen, Manager of the Chevron Station who said he spoke to his employees and they stated the following:

Leonard Bauer and Mike Vermeis were in the office of the service station. Leonard was facing the truck and Mike's back was to the truck. Leonard said he could smell gas and was first to notice it. He also noticed the driver was in the cab. Craig White was in the lube room and he looked up and saw gas running down to the street. Craig said the driver was just coming around the cab. The driver shut down the system and Craig shut off all of the pumps. The driver was shook because he asked a couple of times who to call. He asked how do I call Fire. The reply was "911". He asked how do I call Police. The reply was "911".

Gary Engebretsen said he ordered 5,500 gallons of unleaded gasoline. They said they would deliver it between 7:00 to 10:00 a.m. Gary ran out of unleaded gasoline at 9:30 a.m. The capacity of the tank is 6,700 gallons and they brought 5,200 gallons, which overtopped due to the fact that unleaded and regular were apparently mixed.

TJS/skb

Full Line of Auto Repair

Gary's Gateway Chevron
Chevron Dealer
124 Cherry St., Sedro Woolley, WA 98284
Phone 855-0161

Gary Engebretsen — Open 24 Hours

Chevron U.S.A. Inc.
1325 - 5th Street 62, Marysville, WA 98270
Mail P.O. Box 467, Marysville, WA 98270
Phone (206) 658-0933, (206) 339-7255 Car Phone

C. L. (Cal) Andersen
Territory Manager

Chevron U.S.A. Inc.
P.O. Box 220, Seattle, WA 98111
Phone (206) 628-5219

P. R. (Phil) Briggs
Senior Construction and Maintenance Representative

THORNE ENVIRONMENTAL
"Treatment by Design"

9730 64th Avenue West
Suite 202
Lynnwood, Washington 98036
TEL: (206) 775-6750
FAX: (206) 672-9244

Carl R. Andersen
Project Manager

THORNE ENVIRONMENTAL
"Treatment by Design"

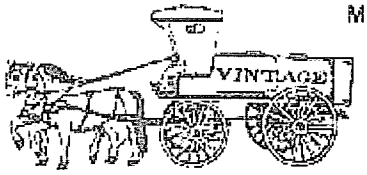
9730 64th Avenue West
Suite 202
Lynnwood, Washington 98036
TEL: (206) 775-6750
FAX: (206) 672-9244

Steven R. Bruce
Environmental Manager

VINTAGE OIL INC.

1-800-387-1961
1-298-2044

Russel Baldwin
Manager



744 South March Pt. Rd., Anacortes, WA 98221
WAD 980981013

Chief Wayne Moritz
Sedro-Woolley Fire Department
720 Murdock
Sedro-Woolley, WA 98284
855-0236

Chief Ron John
Sedro-Woolley Police Department
720 Murdock
Sedro-Woolley, WA 98284
855-0111

Chief Jim Allen
Fire Protection District No. 8
1898-34 Prairie Road
Sedro-Woolley, WA 98284
856-4570 (Work)

Chief Ted Banta
Burlington Fire Department
P. O. Box 303
Burlington, WA 98233
755-0261

OFFICE
(206) 336-9420 SCAN 554-3400
EMERGENCY ONLY
336-9403 or 336-3146

Anacortes 293-9568, Ext. 400
Concrete 853-8711, Ext. 400

HOME (206) 757-4851

THOMAS J. SHEAHAN
DIRECTOR

Skagit Department
of Emergency Management

COUNTY ADMINISTRATION BUILDING, ROOM 203
2nd & KINCAID STREETS
MOUNT VERNON, WASHINGTON 98273

SEDRO-WOOLLEY POLICE DEPARTMENT

Name in Media / Mail Release Name	Date of Report	Time of Report	Complaint Number
	7-25-89	1459	89-07-3192

Type of Report	Complaint Received By	Officer Assigned
Fire Dept. / Gas Spill	Howard/ Heitman	SWFD

Complainants Last Name	First	Middle	Sex	DOB:	WILL YOU PROSECUTE / TESTIFY?
GATEWAY CHEVRON					( ) Yes ( ) No

Address	Street	City	State	Home Phone	Work Phone
124	Ferry	Sedro Woolley			

Date of Occurance	Location of Incident

WITNESS / VICTIM / OTHER	Last Name / Firm Name	First:	Middle	DOB:	Phone:
	Address	Street	City	State	

PROPERTY TYPE:	Brand	Ser. #	Mod. #	Color	Value

( ) Lost ( ) Found ( ) Damaged / ( ) Recovered ( ) Caliber: ID #:

VEHICLE: License Number	State	Make	Model	Style	Color	Registered Owner:

( ) Suspect ( ) Victim ( ) Other ( )

SUSPECT #1:	Last Name	First	Middle	DOB:	Hgt:	Wgt:	Hair:	Eyes:

ADDRESS:	Street	City	State

CLOTHING DESCRIPTION:	Hat	Coat	Shirt	Pants	Shoes	Other

SUSPECT #2:	Last Name	First	Middle	DOB:	Hgt:	Wgt:	Hair:	Eyes:

ADDRESS:	Street	City	State

CLOTHING DESCRIPTION:	Hat	Coat	Shirt	Pants	Shoes	Other

NARRATIVE: Gateway Chevron called to advise of gas spill of approximately 100 Gallons.
1500 1st Dispatch
1500 802 ENR
1501 2nd Dispatch
1502 56 & 801 ENR
1503 801 Request Dept of Emergency Services
1504 Contact Sewer Dept / approx 93 gal in Storm Sewer
1504 Sewer Dept Notified
1505 57 ENR
1506 Street Dept Bring Load of Sand
1506 57 AR
1506 Tom Sheans office notified
1507 Street Dept Notified
1[illegible] Burlington 44 requests 1020

1800 56 RIG
1811 56 91C

OFFICER ADVISED _____ Hours _____

OFFICER'S SIGNATURE: _____

SUPERVISOR'S SIGNATURE _____

Information Only ( )
Unfounded ( )
Founded ( )
Non-Criminal ( )
Cleared ( )



Scott Terrell / Skagit Valley Herald

Sedro-Woolley Police Detective Ken Rosencrantz (left) and Deputy Chief Bud Heitman look down a manhole at the intersection of Ferry and Metcalf streets Tuesday afternoon after gasoline spilled from a tanker truck into a storm drain. Fire crews kept the gas from exploding underneath the street.

Crews avert explosion in S-W gas spill

By MICK BOROUGHS
Staff Writer

SEDRO-WOOLLEY — One of Sedro-Woolley's busiest intersections was blocked off for more than three hours Tuesday afternoon after gasoline spilled into a storm drain threatening an explosion.

Between 50 to 100 gallons of unleaded gas spilled from a gasoline truck topping off an underground tank at Gary's Gateway Chevron station.

The incident occurred at 3 p.m. Tuesday at the station located at the intersection of Ferry and Metcalf streets.

The gas spread 100 feet down the street into a storm drain, said Tom Sheahan, director of Skagit County's Department of Emergency Management.

"I just cannot believe that we didn't have an explosion," Sheahan said. "I just can't commend the fire and police services enough for securing the area and keeping it from exploding."

The gas and fumes spread about 200 feet down the drainage system underneath Metcalf Street, the city's main shopping district, Sheahan said.

"The gas of course is very flammable, but when it is in the catch basins it can become quite explosive," Sheahan said.

Burlington Fire Chief Ted Bunta, assisting the Sedro-Woolley Fire Department and Fire District 3 crews, took explosive tests in several Metcalf Street manholes.

"His readings were in the high 60 percentile," Sheahan said. "Anything above 20 (percentile) is critical."

"When I got over there the gas fumes were really strong over the street," said Sedro-Woolley Deputy Police Chief Bud Heitman. "If a spark ignited it, it would have come out with a boom," he said. "I suspect those storms sewer lids would have looked like flying saucers down there."

Foam was poured into the manholes and gasoline was pumped out to reduce the amount of air and fuel confined in the drainage system, he said. Crews flushed water through the system to disperse the foam.

Meanwhile, fire crews drained the remaining 40 gallons of fuel in the tanker truck and had fire hoses ready to protect nearby buildings, Sheahan said.

The area was blocked off to traffic until 6 p.m., but it was not necessary to evacuate nearby stores, Bud Heitman said.

"We blocked off the area and it was pretty vacant," Heitman said.

No one was hurt in the incident, he added.

Representatives from Chevron and American Transport Inc. of Auburn are investigating the spill.

Cal Anderson, a Chevron district manager in Marysville said it is the first time that the station has ever had a problem with a spill.

"I'm still gathering information from the driver and from attendants at the station," Anderson said. "It sounds like a matter of he just got one extra compartment of fuel in one of the tanks that he shouldn't have."

Anderson said the tank could hold up to 6,500 gallons of unleaded gas.

Mike Leach, vice president of American Transport Inc., disputed earlier reports of 100 gallons spilled and said only 30 gallons were lost.

But Sheahan said he believes the spill was greater than 100 gallons judging by its spread.

Leach said his driver would have had checked tank readings prior to filling it.

Leach said he was not sure which driver delivered the fuel or if the driver was familiar with that station. He said his company has never had a fuel spill before.

Each tanker truck carries up to 10,000 gallons of fuel, he said.

The spilled gas did considerable damage to the asphalt overlay on Metcalf Street along a length of 80 feet, he said.

Cost of the cleanup and damage repair and who will pay for it has not been determined yet, Heitman said.

Concrete schools approve $3.1 million budget

By CHRISTINE VALDEZ
Staff Writer

CONCRETE — Starting a new community education program and coping with increased enrollment will result in a 6.8-percent increase in the School District's program in the district's budget. The district is looking for a part-time director who will earn about $15,000 to run the program, Hurn said.

The program is expected to start Sept. 1. The first class will

survey to find out what classes people want, Hurn said.

In other business, the board discussed the future of the gymnasium in Marblemount.

The gym stands at the site of the Marblemount school, which was dismantled when it and the

said in a phone call he
interested in demolishing th
gymnasium if he could keep th
materials.

The board is waiting to receiv
something in writing from th
man, she said.

The board has been working

VINTAGE OIL, INC.
744 South March Pt. Rd.
Anacortes, WA 98221

1-800-367-1961
206-293-2044
WAD 980987622

CUSTOMER'S ORDER NO. | DEPT. | DATE 7-26-89

NAME American Transport

ADDRESS

SOLD BY	CASH	C.O.D.	CHARGE	ON ACCT.	MDSE.RTN.	PAID OUT

QUAN.		DESCRIPTION	PRICE	AMOUNT
	1			
	2	1½ hr Truck Time	5.50 per hour	8.25
	3			
	4	350 gallons gas/water Mix	.35¢ a gallon	122.50
	5			
	6			
	7	Total		205.00
	8			
	9			
	10			
	11			
	12	← Thank you +		
	13			
	14			
	15			
	16			
	17			
	18	PLEASE PAY THIS INVOICE		

REC'D BY

REDIFORM
SH 320

KEEP THIS SLIP
FOR REFERENCE

SKAGIT COUNTY
DEPARTMENT OF EMERGENCY MANAGEMENT

County Administration Bldg. Rm. 203, 2nd & Kincaid St. Mount Vernon, WA 98273
Phone: (206)-336-9400 or 336-9403

EMERGENCY
Mitigation
Preparedness
Response
Recovery

SERVING
Anacortes
Burlington
Concrete
Hamilton
La Conner
Lyman
Mount Vernon
Sedro-Woolley
Skagit County

S T A T E M E N T

TO: American Transport, Inc.
P. O. Box 1736
Auburn, WA 98071
Phone: 735-2300 or 1-800-447-7780

FROM: Thomas J. Sheahan, Director

DATE: July 27, 1989

SUBJECT: Cost of Materials to Clean Up the Gasoline Spill which Occurred on July 25, 1989, at the Chevron Service Station in Sedro-Woolley Located at 124 Ferry Street

Please remit the following for the replacement cost of three spill pack kits of absorbent pads used to clean up gasoline spilled in surface area. The spill was greater than 100 gallons but less than 350 gallons and occurred at 124 Ferry Street, Sedro-Woolley.

3 Spill Packs of Absorbent Pads at $32.34 each = $97.02

Total Amount Due $97.02

Please make the check payable to:

Skagit County Dept. of Emergency Management
County Administration Bldg., Room 203
700 South 2nd Street
Mount Vernon, Washington 98273

Thank you,

Thomas J. Sheahan
Director

TJS/skb

SKAGIT COUNTY
DEPARTMENT OF EMERGENCY MANAGEMENT

County Administration Bldg, Rm 203, 2nd & Kincaid St Mount Vernon, WA 98273
Phone: (206) 336-9400 or 336-9403

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Skagit County

COVER MEMO

TO: Frank Stratton DATE: 07/28/89

FAX NO. 628-5284

FROM: Tom Meehan
Director

FAX NO. (206) 336-9478

Message consists of 11 pages, including this cover sheet.

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COMMENTS:

SL:FAXCOVR.QFM/J.JG

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DEPARTMENT OF EMERGENCY MANAGEMENT

County Administration Bldg. Rm. 203, 2nd & Kincaid St. Mount Vernon, WA 98273
Phone: (206) 336-9400 or 336-9403

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Mount Vernon
Sedro-Woolley
Skagit County

COVER MEMO

TO: Chuck Culp DATE: 07/28/89

FAX NO. 546-6586

FROM: Thomas Drechsel
Director

FAX NO. (206) 336-9478

Message consists of 11 pages, including this cover sheet.

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COMMENTS:

SL:FAXCOVR.GEM/.JJG

FIELD INCIDENT REPORT

Date 7-25-89 Notification Time 0516 (24 Hr. Clock)

Name of Caller Dispatch Call Back No. 855-0111

Agency S.W. Dispatch Time Arrived 1531

Agencies on Scene S.W. Police S.W. Fire Fire Dist #2
Burlington Fire

Situation A C

Owner/Driver/Contact Person Bill Battle D.O.B.
Address Phone
Vehicle I.D. No. Year Model
Apparent Responsible Person or Company
Address Phone

NATURAL DISASTER:

___ Avalanche	___ Flood	___ Severe Local Storm
___ Drought	___ Forest Fire	___ Tsunami
___ Earthquake	___ Landslide	___ Volcano

TECHNOLOGICAL (MAN-MADE):

___ Aircraft (Downed)	___ Marine Accident	___ Search and Rescue
___ Bomb Threat	___ Mines	___ Terrorism
___ Communications Failure	___ Nuclear Storage	___ Urban Fire
	___ Nuclear War	___ Transportation Accident
___ Dam Failure	___ Riot or Unlawful Assembly	
___ Energy Emergency		

Type of Carrier

Yes Hazardous Materials: Chemical Name Gasoline (unleaded A)
Placard No. 1203
On 302 Chemical List? ___ Yes ___ No
Field Estimate of Quantity Released More than 100 gallons
Time of Release 1500hrs
Duration of Release Unknown

Material Behavior upon Release: ___ No Reaction ___ Became Airborne
___ Caused Fire ___ Became Water Borne Y Contaminated Area
___ Caused Explosion ___ Other

1. EBS ACTIVATION: Yes ___ N/A Y Time ___

Standby Alert ___ Time ___ DEM ___ Law Y
Duty Alert ___ SAR ___ Fire Y Hosp. ___
Public Works Y

2. ESTABLISH COMMAND POST: Yes Y N/A ___ Time ___

3. EVACUATION: Yes Y N/A ___ No. of People ___

Where evacuated to: Within the immediate area

(OVER)

Chevron

Chevron U.S.A. Inc.
P.O. Box 220, Seattle, WA 98111 • Phone (206) 628-5250

Larry Day
Regional Manager
Northwest Marketing

REC[illegible]
AUG 28 1989
[illegible]

August 23, 1989

Mr. Tom Sheahan
Department of Emergency Management
Skagit County
County Administration Building, Room 203
2nd & Kincaid Street
Mount Vernon, WA 98273

Dear Mr. Sheahan,

Chevron U.S.A. wishes to thank you and the many emergency services groups for their prompt and professional response to the recent gasoline spill at our service station in Sedro-Woolley. By all accounts, your emergency response averted a potentially serious environmental and safety incident. Chevron considers an incident of this magnitude of highest concern and appreciated the full cooperation offered during our follow-up.

If there is any way that we can be of assistance to you with your agency programs, please feel free to call upon us.

Very truly yours,

L. L. DAY

By [signature]

FMS:cr

cc: Mr. Gary Engebretsen
Chief Wayne Moritz
Chief Jim Allen
Chief Ted Banta

Sanborn Fire Insurance Maps

116 West Ferry Street
116 West Ferry Street
Sedro Woolley, WA 98284

Inquiry Number: 3115983.3
July 06, 2011

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

7/06/11

Site Name:
116 West Ferry Street
116 West Ferry Street
Sedro Woolley, WA 98284

Client Name:
Whatcom Environmental
228 East Champion Street
Bellingham, WA 98225

EDR Inquiry # 3115983.3

Contact: Tegan Conner

EDR® Environmental Data Resources Inc

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Certified Sanborn Results:

Site Name: 116 West Ferry Street
Address: 116 West Ferry Street
City, State, Zip: Sedro Woolley, WA 98284
Cross Street:
P.O. # NA
Project: North Cascade Ford Phase I ESA
Certification # 6088-4D1A-93C6

Sanborn® Library search results
Certification # 6088-4D1A-93C6

Maps Provided:

1953
1944
1925
1907
1903

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

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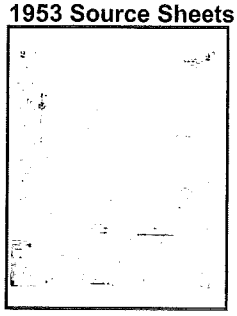
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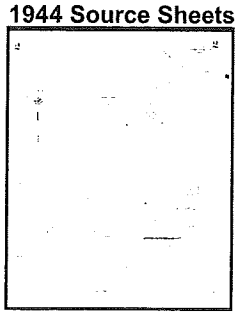
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1953 Source Sheets



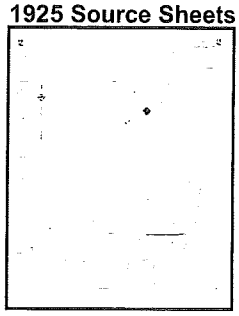
Volume 1, Sheet 2

1944 Source Sheets



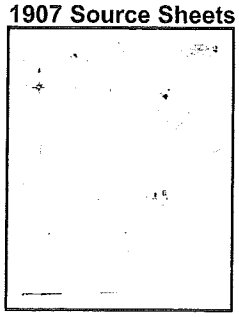
Volume 1, Sheet 2

1925 Source Sheets



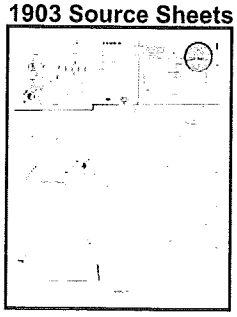
Volume 1, Sheet 2

1907 Source Sheets



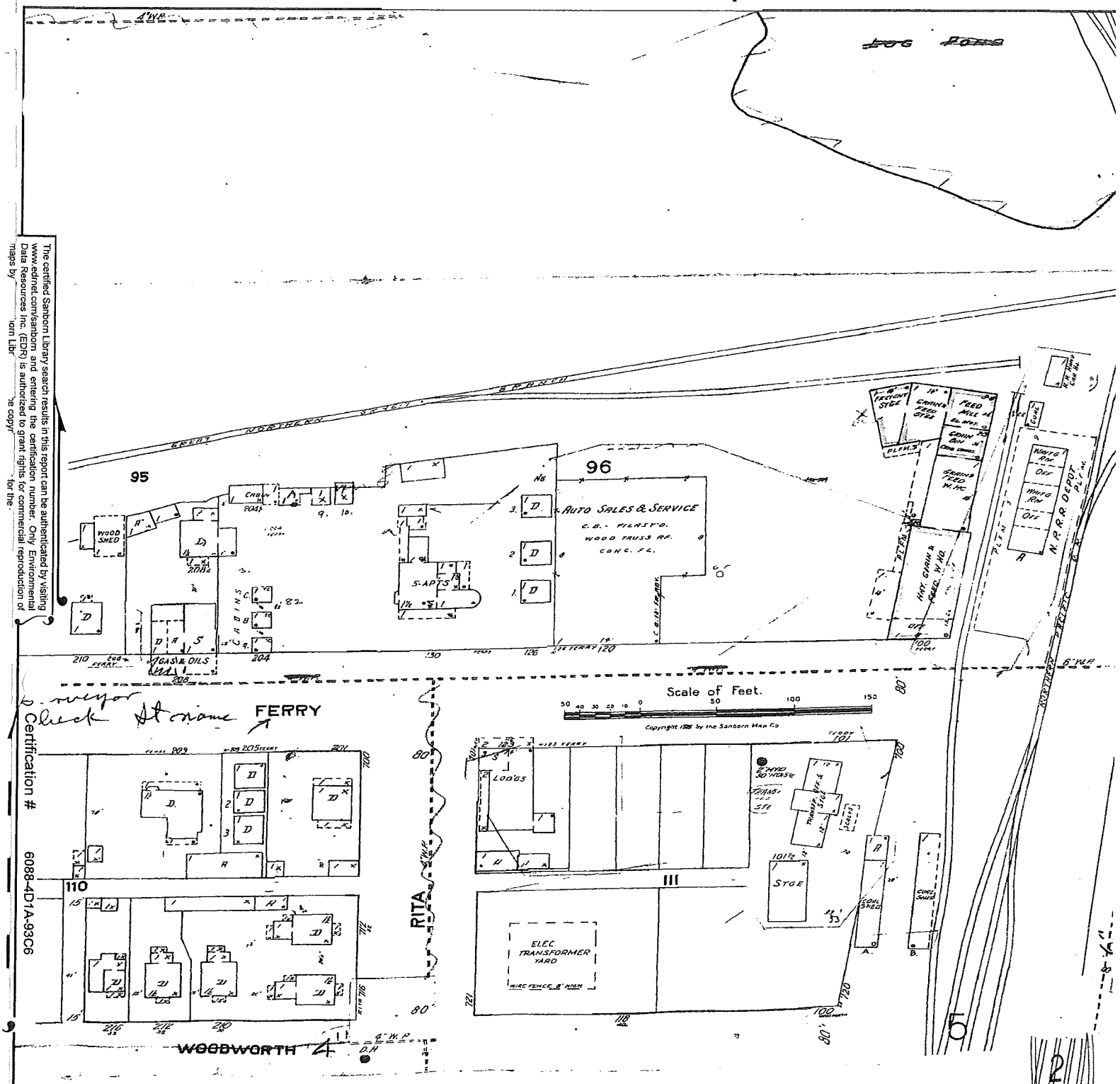
Volume 1, Sheet 2

1903 Source Sheets



Volume 1, Sheet Keymap/Sheet1

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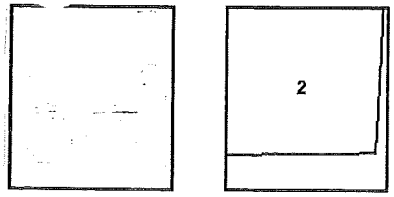


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Address:	116 West Ferry Street
City, ST, ZIP:	Sedro Woolley WA 98284
Client:	Whatcom Environmental Services
EDR Inquiry:	3115983.3
Order Date:	7/6/2011 2:55:00 PM
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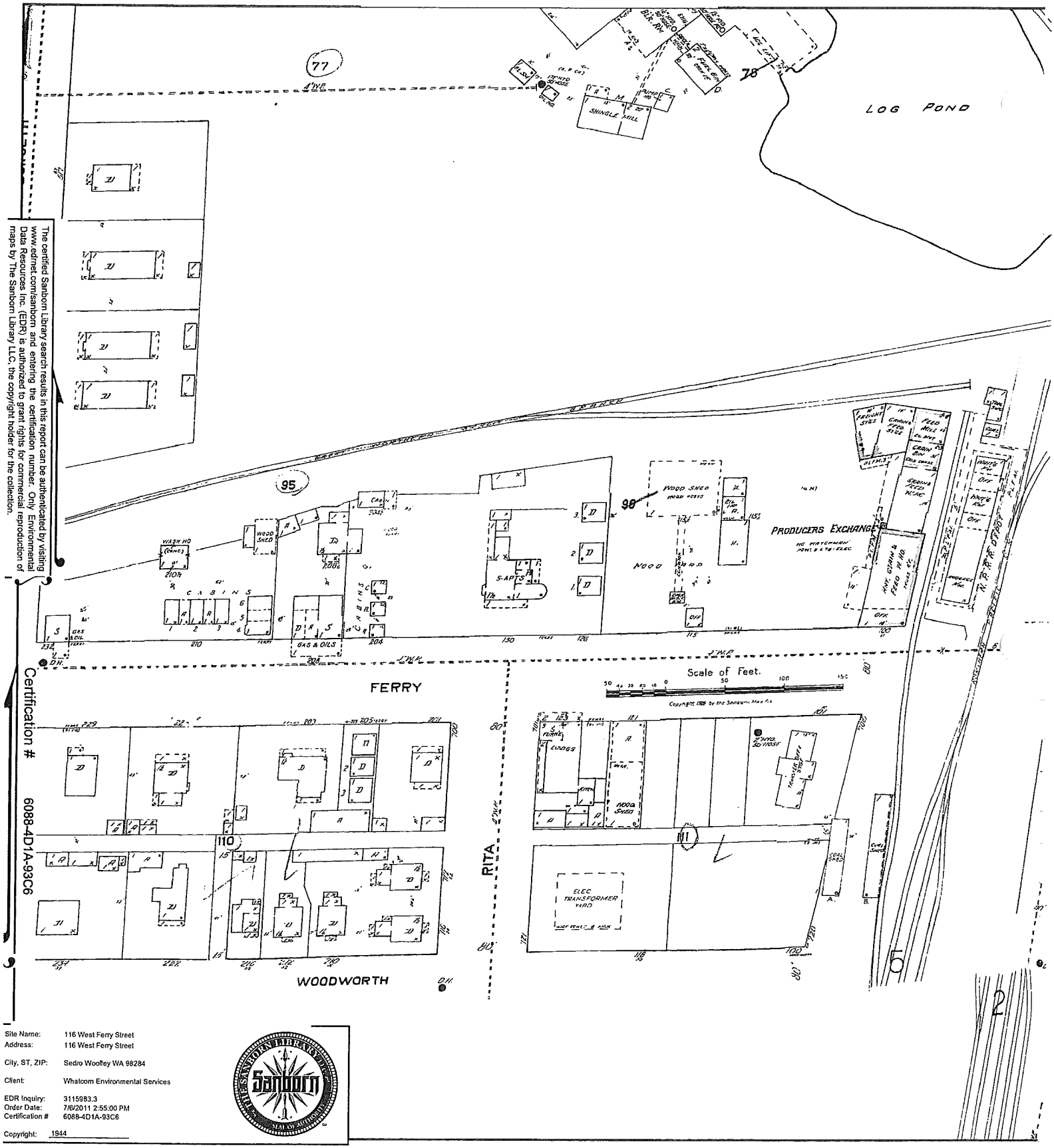


Volume 1, Sheet 2

0 Feet 150 300 600

N

1944 Certified Sanborn Map

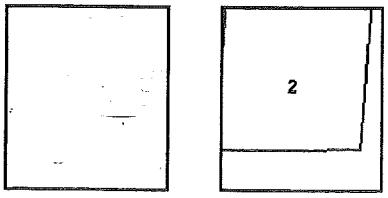


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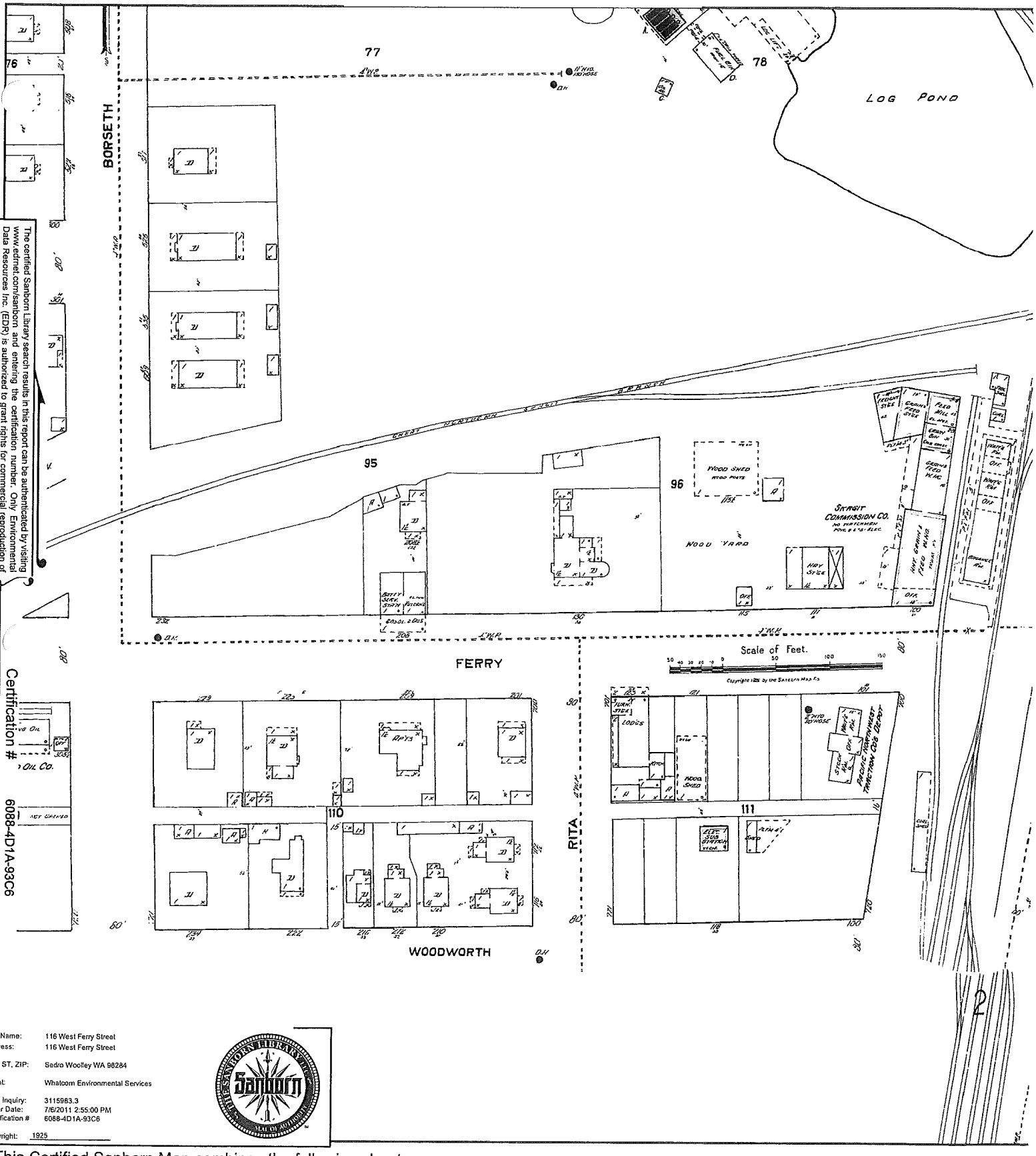
Site Name: 116 West Ferry Street
Address: 116 West Ferry Street
City, ST, ZIP: Sedro Woolley WA 98284
Client: Whatcom Environmental Services
EDR Inquiry: 3115983.3
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Volume 1, Sheet 2

1925 Certified Sanborn Map

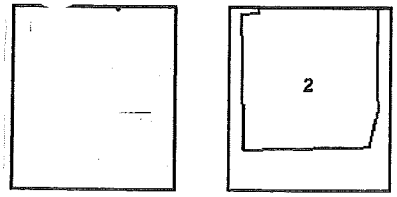


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Client:	Whatcom Environmental Services
EDR Inquiry:	3115983.3
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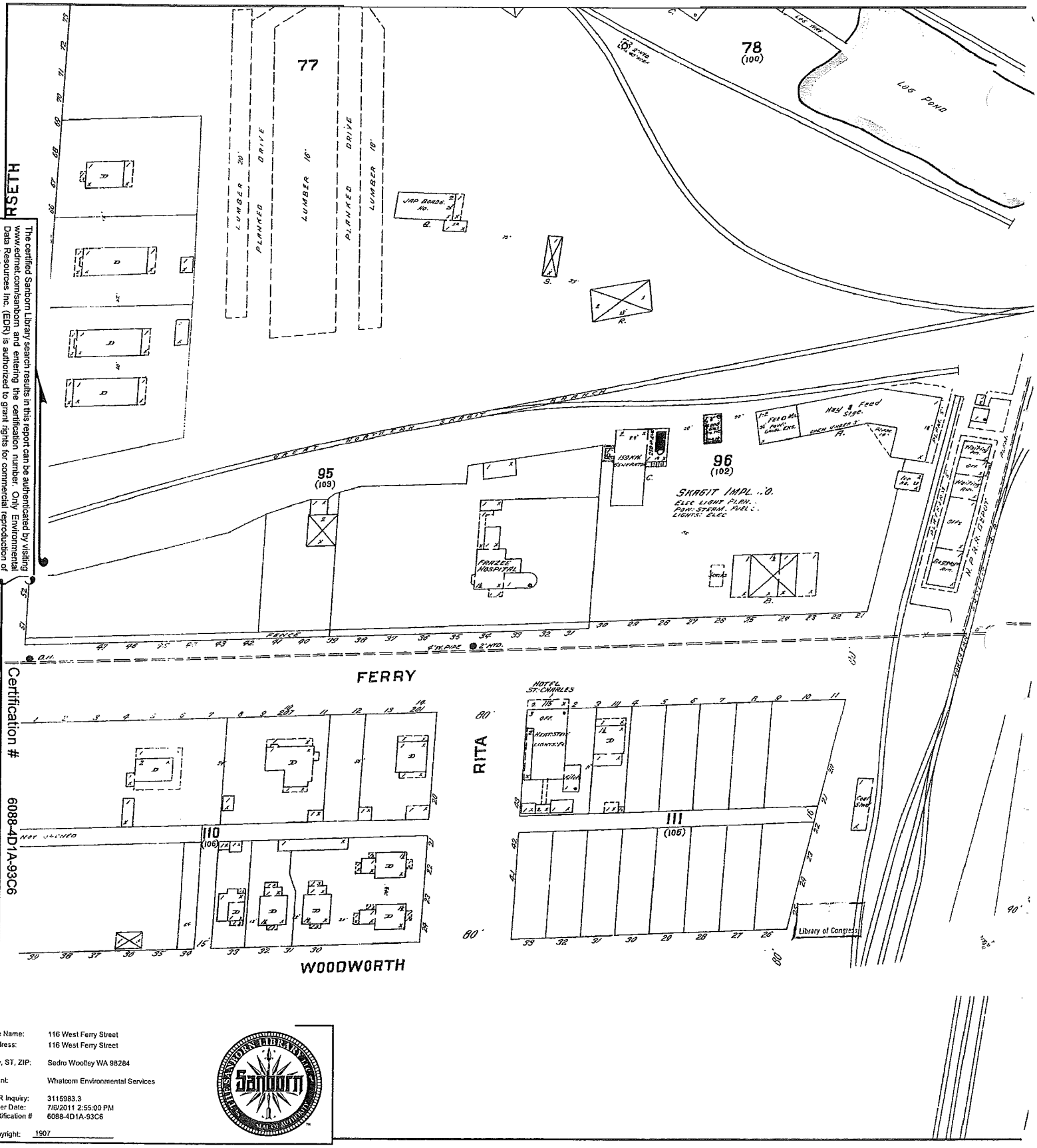


Volume 1, Sheet 2

0 Feet 150 300 600

N

1907 Certified Sanborn Map

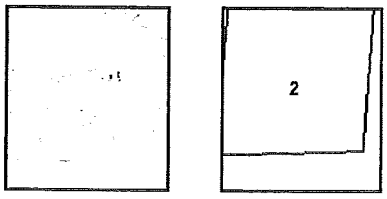


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Address:	116 West Ferry Street
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Client:	Whatcom Environmental Services
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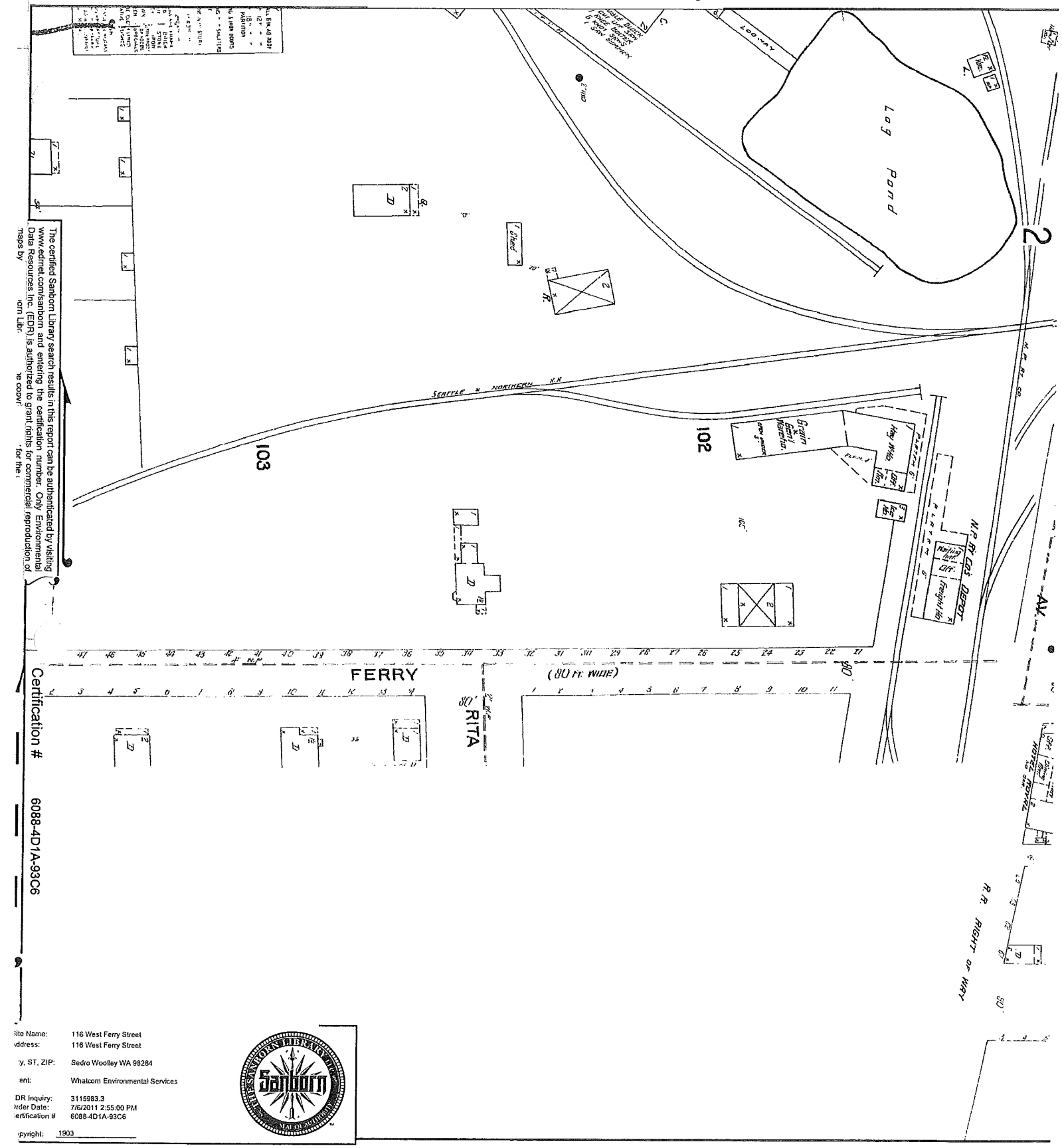


Volume 1, Sheet 2

0 Feet 150 300

N

1903 Certified Sanborn Map



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Site Name: 116 West Ferry Street
Address: 116 West Ferry Street
City, ST, ZIP: Sedro Woolley WA 98284
Client: Whatcom Environmental Services
EDR Inquiry: 3115983.3
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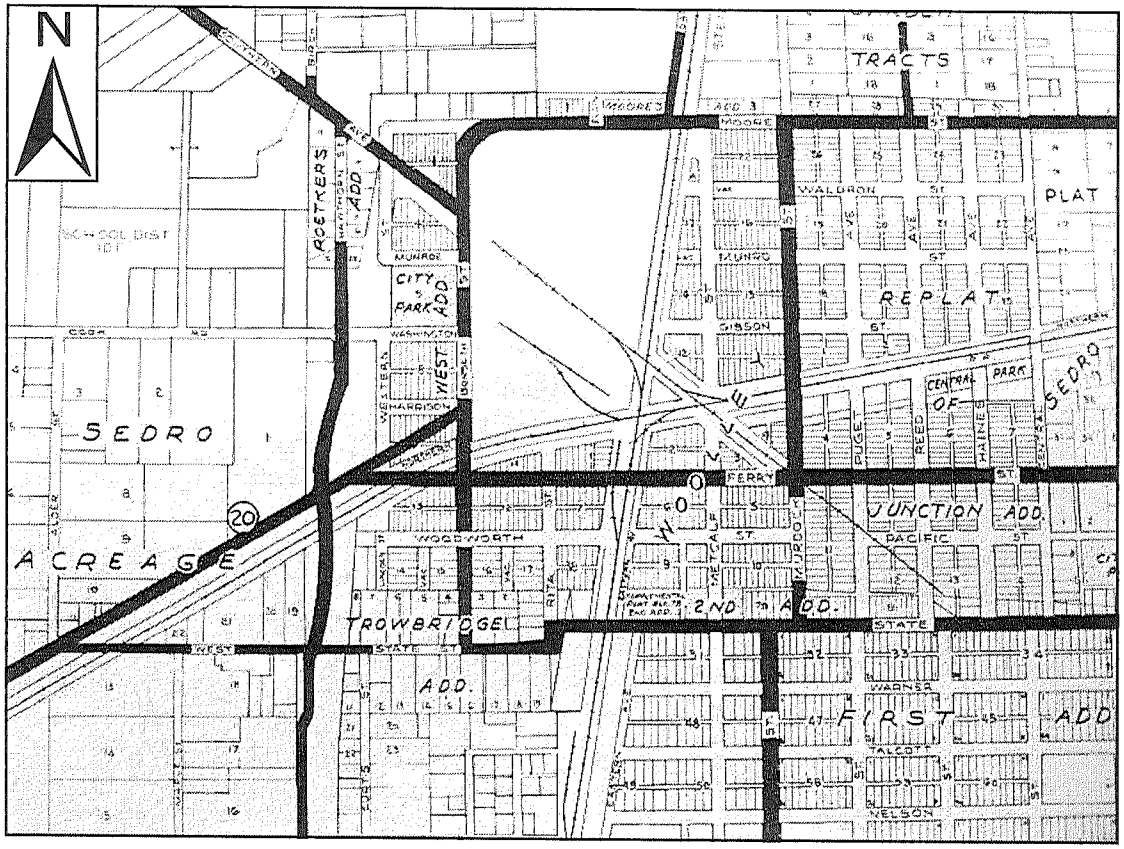
0 Feet 150 300 600

Volume 1, Sheet Keymap/Sheet1

Keymap/Sheet1

N

Metsker Atlases



1996

Prepared for:	North Cascade Ford	Prepared by:	nwhatcom ENVIRONMENTAL	North Cascade Ford Phase I ESA	**Historical Metsker Atlases**

Historical Aerial Photographs

116 West Ferry Street
116 West Ferry Street
Sedro Woolley, WA 98284

Inquiry Number: 3115983.4
July 07, 2011

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

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Date EDR Searched Historical Sources:

Aerial Photography July 07, 2011

Target Property:

116 West Ferry Street

Sedro Woolley, WA 98284

Year	*Scale*	*Details*	*Source*
1941	Aerial Photograph. Scale: 1"=750'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: July 10, 1941	EDR
1956	Aerial Photograph. Scale: 1"=1000'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: April 09, 1956	EDR
1968	Aerial Photograph. Scale: 1"=1000'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: September 04, 1968	EDR
1974	Aerial Photograph. Scale: 1"=1000'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: August 30, 1974	EDR
1981	Aerial Photograph. Scale: 1"=1000'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: August 08, 1981	EDR
1990	Aerial Photograph. Scale: 1"=750'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: July 10, 1990	EDR
2005	Aerial Photograph. Scale: 1"=604'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: January 01, 2005	EDR
2006	Aerial Photograph. Scale: 1"=604'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: January 01, 2006	EDR

APPENDIX D

Interview Documentation

Phase I ESA Interview Questionnaire

PROJECT: North Cascade Ford Phase I ESA

Interview Information

Date, Time, Location: *7/6/2011; onsite*

Interviewer: *via e-mail*

Person being interviewed: *Travis Coulter*

Connection with property: *Owner*

Length of time associated with property: *8 years*

Do any helpful documents exist?

1. ESA reports: *No*
2. Environmental Audit reports: *No*
3. Environmental Permits (solid waste, hazardous waste, wastewater, NPDES, etc.): *No*
4. Registration for above or underground storage tanks: *No*
5. Safety plans, SPCC plans, community right-to-know plans, etc.: *No*
6. Correspondence from govt. agencies concerning past or current violations: *No*
7. Hazardous waste generator notices: *No*
8. Geologic or hydrogeologic reports: *No*
9. Geotechnical reports: *No*
10. MSDS: *Yes*
11. Archaeological assessments: *No*

Current Subject Property Use

What is the current use of the property?

Car Dealership

What was the past use of the property?

Car Dealership

Please describe all structures located on the property (size, age, etc):

26,000 sq. ft. Main Building – 1953/1971/2008
2,000 sq. ft. Adjacent Building – 2007

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Are building drawings available?

No

What are the means of heating and cooling the structures? (including fuel sources on the subject property):

No cooling / Boilers

What is the source of the potable water supply?

City water

Are the structures plumbed to a municipal sewer system?

Yes

Are floor drains or sumps located in the buildings?

Floor drains

Is there a septic system located on the property?

No

Adjacent Property Use
What are the current uses of adjoining properties?

North: *Light manufacturing – boats/air plane parts*

South: *Residential*

East: *Ace Hardware Store / Gas Station*

West: *Napa Auto Parts / Gas Station*

What are the past uses of adjoining properties?

North: *Manufacturing*

South: *Residential*

East: *Same as above*

West: *Same as above*

Hazardous Materials
Would any current uses of the property involve the use, treatment, storage, disposal, or generation of hazardous substances?

? – oil, paint thinner, etc.

Are there any hazardous substances currently onsite?
Type/Quantity:

How stored (containers and conditions)?

Have there been any hazardous substances onsite in the past?

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Are there/have there been any above ground storage tanks located onsite?
Content, capacity, age: *Waste oil*

Are there/have there been any below ground storage tanks located onsite?
Content, capacity, age: *None known*

Are there/have there been any drums stored on the subject property?
Type/quantity: *No*

Have there been any leaks/spills of hazardous substances/petroleum products on the subject property? If so, describe. *No*

Are there/have there been any containers holding PCB's located on the subject property? *No*

Are there/have there been any hydraulic lifts onsite? If so, describe (e.g. above/below ground, number, location).
Yes – 2 below, 13 above / Service Shop

Property Conditions
Is there any stressed vegetation currently on the subject property?
No

Have you ever observed stressed vegetation on the subject property in the past?
No

Are drinking water or groundwater monitoring wells located on the subject property?
No

Are drywells or sumps located on the subject property?
No

Have you observed water in standing surface water or sumps?
No

Are there pits, ponds, or lagoons located on the subject property?
No

Are there vent pipes or other types of pipes located onsite?
No

Have you ever noticed any odors coming from the site?
No

Are there stains or corrosion visible on soil or pavement?
No

Is there any fill material located onsite?
No

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APPENDIX E

Resumes of Environmental Professionals

Harold J. Cashman

Whatcom Environmental Services Inc.
228 East Champion Street, Suite 101
Bellingham, WA 98225
(360) 752-9571
hjcashman@whatcomenvironmental.com

Position

President
Years of professional experience: 21

Education

M.S., Geology, Western Washington University, 1991
B.S., Geology/Environmental Studies, St. Lawrence University, 1986
Indiana University Geological Field Mapping Techniques, 1986

Professional History

1997-Present: President, Whatcom Environmental Services
1991-1997: Project Manager/Geologist, K. W. Brown Environmental Services
1989-1991: Graduate Research Assistant, Western Washington University

Certifications/Training/Professional Organizations

Licensed Washington Professional Geologist #341 (Hydrogeologist Specialty)
Registered Washington State Underground Storage Tank Site Assessor
Certified Lead Sampling Technician

8-hour HAZWOPER for Supervisors and Managers (29 CFR 1910.120)
40-hour Personal Protection and Safety Training (29 CFR 1910.120)
RCRA Hazardous Waste Management Training (40 CFR 260-281)
Northwest Construction Consumer Council CSTOP Certified
Mold Awareness and Risk Management, 2002
Model Toxics Control Act Workshop, Washington Dept. of Ecology, 2001
Monitored Natural Attenuation for Groundwater, EPA, 1998
Natural Attenuation for Remediation of Contaminated Sites, NGWA, 1997
In-Situ and On-Site Bioreclamation, Battelle, 1995
Project Management Seminar, Skillpath, 1992
Applied Groundwater Modeling, IGWMC, 1992
Member Association of Ground Water Scientists and Engineers (AGWSE/NGWA)

Areas of Expertise

Geologic mapping and hydrogeologic investigation of surficial stratigraphic units
Hydrogeologic site characterizations/monitoring well installation/development/sampling
Voluntary Cleanup Program alternatives for Model Toxic Control Act sites
RCRA corrective action at SWMUs/ *in situ* closure of waste management units
Interaction and negotiation with environmental regulatory agencies
Bioremediation of hydrocarbon-impacted soils
Underground storage tank site assessment
Monitored natural attenuation of hydrocarbon-impacted groundwater
NPDES Permitting and Monitoring
SEPA Permitting

Presentations and Publications

Miller, M., H.J. Cashman, and E.D. Libolt. 2004. Acme Fuel Tanker Spill: Interagency Cooperation and Cleanup. Presented at the 2004 Environmental Health: Leading the Way Annual Educational Conference.

Lindsay, C. S., H. J. Cashman, and M. D. Watkins. 1995. Stratigraphy and Hydrogeology of the Mountain View Upland, Whatcom County, Washington. Presented at the 1st Symposium on the Hydrogeology of Washington State.

Engebretson, D. C., K. P. Kelley, H. J. Cashman, and M. A. Richards. 1992, 180 Million years of subduction, *GSA Today*, 2, 93-100.

Cashman, H. J. 1990. A New Determination of Pacific-Kula Relative Motions. Unpublished Master of Science thesis, Western Washington University, Bellingham, WA.

Engebretson, D. C., K. P. Kelley, and H. J. Cashman. 1990. Estimates for global subduction parameters since 180 Ma, *EOS, Trans. AGU*, 71, 1575.

Cashman, H. and D. Engebretson. 1989. Evaluation of possible asymmetric spreading in the vicinity of the Pacific-Farallon-Kula triple junction. *EOS, Trans. AGU*, 70,1342.

Engebretson, D., H. Cashman, and K. Kelley, 1989. Review and implications of global patterns in asymmetric seafloor accretion, *Geol. Soc. Amer. Abstracts with Programs*, 21, 35.

Thomas A. Davis

Whatcom Environmental Services
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Bellingham, WA 98225
(360) 752-9571
tdavis@whatcomenvironmental.com

Position

Project Manager/GIS Technician
Years of Experience: 9

Education

M.S., Geography, Huxley College of the Environment, Western Washington University, 2006

B.S., Geology, Western Washington University, 1997

Professional History

July 2002-Present: Project Manager/GIS Tech, Whatcom Environmental Services

Certifications/Training

40-hour Hazardous Waste and Emergency Response Training (Certification #: 07-1437)
Northwest Construction Consumer Council C-STOP certified
ICC Certified Washington State UST Site Assessor (WA UST Site Assessor #5252393)
AHERA Asbestos Building Inspector (Certification #: 107980)
Certified Lead-Based Paint Inspector (Certification #: 6063)

Areas of Expertise

Geographic Information System (GIS) design and maintenance
Phase I Environmental Site Assessments
UST Site Assessments
NPDES Surface Water Sampling and Data Review
Geophysical Techniques – GPR, Seismic Refraction, Resistivity, Magnetic and Gravitational Surveys
Investigation of Landslide Hazards
Geologic Mapping & Soil Surveying

Typical Projects

- Underground storage tank site assessment for a former gasoline station on Lummi Island, Washington. The discovery of petroleum contaminated soil prompted a soil removal action at the site. Soil was treated onsite saving the client a substantial amount of money. The site assessment and independent

remedial action reports were prepared and sent to Ecology. Site was given a "No Further Action" letter by Ecology.

- Oversight and coordination of soil removal action at a residential property in Bellingham, WA that was historically a gas station. The site assessment and independent remedial action reports were prepared and sent to Ecology. A "No Further Action" letter was received for the site.
- Preparation of Phase I Environmental Site Assessments for the City of Bellingham. Assessment sites include properties the City is buying in the Lake Whatcom Watershed to enhance reservoir protection.
- Spill response documentation and coordination at a tanker truck rollover accident in the City of Tacoma's Watershed. Remedial work included coordination of efforts with NRC remediation contractors, The US Army Corps of Engineers, Tacoma Public Utilities, WA Ecology, and US EPA.
- Underground Storage Tank site assessments.
- Site investigation and remediation work at MTCA controlled sites.
- Design, creation, and maintenance of a GIS for the Oily Water, Phenolic Water, and Storm Water Sewer system of a local oil refinery.
- Preparation of site maps and figures using ESRI GIS software from field notes and imported datasets.
- Use of hand-held GPS unit to locate features in the field from in office map locations and map general property features.
- Management of soil and groundwater analytical data using Microsoft Excel database.
- Research into the locations and subsurface extents of Whatcom County Coal Mines

Presentations and Publications

Davis, T. A. 2006. The Development of a GIS-Based Kinematic Regional Rockfall Hazard Assessment Tool. Unpublished Master of Science Thesis, Huxley College of the Environment, Western Washington University, Bellingham, WA.

Davis, T. A. 2004. A GIS-based Kinematic Analysis of Bedrock Fracture and Slope Interaction in an Area Adjacent to the Squire Creek Landslide, Snohomish County, WA: Seeking locations that pose a potential threat of failure, or may have already failed. Presented at: Association of Washington Geographers 2004 Spring Meeting. University College of the Fraser Valley, Abbotsford, B.C. April 23-24, 2004.

Tegan R. Conner

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Bellingham, WA 98225
(360) 752-9571
tconner@whatcomenvironmental.com

Position

Environmental Technician
Years of Experience: 5

Education

B.S., Environmental Science, Western Washington University, 2006

Professional History

May 2006-Present: Environmental Technician, Whatcom Environmental Services
August 2006-December 2006: GIS Technician, Lummi Sewer and Water District
Summer 2005: Intern, Nisqually National Wildlife Refuge

Certifications/Training

Northwest Construction Consumer Council C-STOP certified
40-hr Hazardous Waste Operations & Emergency Response Training (Certificate #105692)
Introduction to the State Environmental Policy Act – NW Environmental Training Center
RCRA Hazardous Waste Management Training (Certificate #106268)

Areas of Expertise

Geographic Information System (GIS) design and maintenance
Phase I Environmental Site Assessments

Typical Projects

- Preparation of Phase I Environmental Site Assessments.
- Preparation of site maps and figures using ESRI GIS software.
- Assist in Underground Storage Tank site assessments
- Track industrial waste manifests, satellite accumulation records, container storage area records, and waste sampling events and perform related data entry.
- Creation and maintenance of tables for sampling results.
- Creation and maintenance of a GIS for the Stormwater Sewer system of a local refinery.
- Assist LQGs with Dangerous Waste Annual Report using TurboWaste.net

DRAFT

PHASE II ENVIRONMENTAL SITE ASSESSMENT
NORTH CASCADE FORD INC.
116 WEST FERRY STREET
SEDRO WOOLLEY, WASHINGTON

prepared for:

Mr. Travis Coulter
North Cascade Ford Inc.
116 West Ferry Street
Sedro-Woolley, Washington 98284

December 7, 2011

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DRAFT

PHASE II ENVIRONMENTAL SITE ASSESSMENT
NORTH CASCADE FORD INC.
116 WEST FERRY STREET
SEDRO WOOLLEY, WASHINGTON

Prepared for:

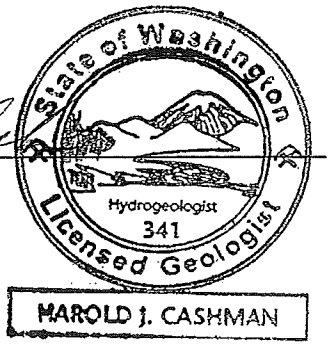
Mr. Travis Coulter
North Cascade Ford Inc.
116 West Ferry Street
Sedro-Woolley, Washington 98284

Prepared by:

Whatcom Environmental Services
228 East Champion Street #101
Bellingham, Washington 98225

December 7, 2011

Harold Cashman
Project Manager



Thomas Davis
QA/QC Reviewer

TABLE OF CONTENTS

		PAGE
1.0	INTRODUCTION	1
2.0	BACKGROUND INFORMATION	3
2.1	Site Description and Features	3
2.2	Adjacent Property Land Use	3
2.3	Previous Investigations/Site History	3
3.0	WORK PERFORMED AND RATIONALE	5
3.1	Objective of Assessment	5
3.2	Exploration and Sampling Methods	5
3.3	Soil and Groundwater Screening Levels	6
3.4	Laboratory Analytical Methods	7
4.0	INVESTIGATION RESULTS	9
4.1	Waste Oil Storage Area (Boring B-1)	9
4.2	Former Above-Ground Oil Tank (Boring B-2)	10
4.3	Former Automotive/Oil House (Boring B-3)	11
4.5	Former Gasoline Service Station (Borings B-6 and B-7):	12
4.6	Former Railroad Depot/Coal Storage (Borings B-8 and B-9):	13
5.0	DATA INTERPRETATION	14
5.1	Waste Oil Storage Area Findings (Boring B-1)	14
5.2	Former Above-Ground Oil Tank Findings (Boring B-2)	14
5.3	Former Automotive/Oil House Findings (Boring B-3)	15
5.5	Former Gasoline Service Station Findings (Borings B-6 and B-7):	15
5.6	Former Railroad Depot/Coal Storage Findings (Borings B-8 and B-9):	16
6.0	CONCLUSIONS	17
7.0	LIMITATIONS	19
8.0	REFERENCES	20

LIST OF FIGURES

Figure 1. Subject Property Location Map
Figure 2. Soil Boring Location Map

LIST OF TABLES

Table 1. Soil Sample Descriptions
Table 2. Soil Sample TPH and BTEX Analytical Results
Table 3. Soil Sample cPAH Analytical Results
Table 4. Soil Sample PCB Analytical Results
Table 5. Soil Sample Metals Analytical Results
Table 6. Groundwater Sample TPH and BTEX Analytical Results

LIST OF APPENDICES

Appendix A - Soil Borelogs
Appendix B - Original Soil Laboratory Analytical Data
Appendix C - Original Groundwater Laboratory Analytical Data

1.0 INTRODUCTION

A Phase II Environmental Site Assessment (ESA) has been performed at the North Cascade Ford Inc. automobile dealership located at 116 West Ferry Street in Sedro Woolley, Washington, in general conformance with the scope and limitations of ASTM Practice E 1903-11 – Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process.

The statement of objectives of the Phase II ESA included investigation of subsurface soil and groundwater quality at the following locations:

- **Former Waste Oil Storage Area**
- **Former Above-Ground Oil Tank**
- **Former Automotive/Oil House**
- **Former Underground Storage Tank(s)**
- **Former Gasoline Service Station**
- **Former Railroad Depot/Coal Storage**

The Phase II Environmental Site Assessment was completed in order to investigate the subsurface soil and groundwater conditions at the above referenced sites which were identified as Recognized Environmental Conditions (RECs) in the Phase I ESA dated July 15, 2011 (Phase I Environmental Site Assessment: North Cascade Ford, 116 West Ferry Street, Sedro-Woolley, Washington).

This report summarizes the results of the site investigation work completed in November 2011. The investigation was conducted per the scope-of-work described in the Whatcom Environmental Services proposal to North Cascade Ford dated October 14, 2011. Nine soil borings were drilled at the site and soil and groundwater samples were collected in an attempt to determine if soil and/or groundwater contamination is located on the subject property at the locations identified in the Phase I ESA.

Soil borings were drilled and soil and groundwater samples were collected for laboratory analysis. Field screening observations and the laboratory analytical data indicate that past releases of petroleum products have impacted the soil and groundwater at the subject

property.

Soil and/or groundwater contamination was identified at concentrations exceeding the Model Toxic Control Act (MTCA) Method A target cleanup levels at the following locations:

- **Former Waste Oil Storage Area**
- **Former Above-Ground Oil Tank**
- **Former Underground Storage Tank(s)**
- **Former Gasoline Service Station**
- **Former Railroad Depot/Coal Storage**

2.0 BACKGROUND INFORMATION

This Phase II ESA was conducted for the light industrial property located at 116 West Ferry Street, approximately 1.2 miles north of the Skagit River, in Sedro-Woolley, Washington. The site location is shown on Figure 1.

2.1 Site Description and Features

The subject property is located in an area characterized by commercial and residential development. The subject property is currently used by an automobile dealership and repair center. The property is comprised of eight parcels and is located in the north half of the southwest quarter of Section 24 in Township 35 North, Range 4 East. The subject property encompasses approximately 3.4 acres.

The subject property is currently developed with two structures. The main structure located north of West Ferry Street is approximately 26,200 sq. ft. in area. Offices, a sales floor, and various automobile repair shops are located in the main structure. The other structure located south of West Ferry Street is approximately 2,205 sq. ft. in area. Offices are located in this structure. The remainder of the property is paved.

2.2 Adjacent Property Land Use

The layout of the subject property and adjoining properties is shown on Figure 2. The subject property is bordered on the north by a railroad and a fabricated metal producer. The subject property is bordered on the west by an automobile parts retailer. Residences and an electric power station are located to the south of the subject property. Retail shops and a gasoline service station are located to the east of the subject property, across Eastern Street.

2.3 Previous Investigations/Site History

A Phase I Environmental Site Assessment for the subject property was completed by Whatcom Environmental Services on July 15, 2011. The Phase I ESA revealed six areas within the subject property considered Recognized Environmental Conditions (RECs) warranting further investigation. The RECs identified in the Phase I ESA included:

- **Former Waste Oil Storage Area**: Waste oil was stored in the past in an above ground storage tank located on the north side of the main building. Waste anti-freeze was stored in the same area in drums. No secondary containment was observed. Staining was observed in the waste oil and antifreeze storage area on the asphalt that runs down to the gravel at the edge of the railroad tracks. An oily sheen was noted on the puddles on the gravel.

- **Former Above-ground Oil Tank**: A 10,000 gallon above-ground oil tank was located on the north end of parcel P77451 in the early 1900s.

- **Former Automotive/Oil House**: Prior to the construction of the current automobile dealership, an automobile shop with an oil house was located in the center of the subject property. The location of the former oil house is under the current building.

- **Former Underground Storage Tank(s):** During the Phase I ESA site reconnaissance, two vent lines were observed on the southeastern exterior side of the main building, which is evidence of historical underground storage tanks. The Washington State UST database showed that by 1996 a tank which held leaded gasoline and a tank less than 1,100 gallons in size which held heating fuel were closed in place on the subject property. The date of closure was not recorded for either tank. No information on the condition of the tanks or soils at the time of the tank closure was available. It is unknown if these tanks correspond to the vent pipes observed during the site reconnaissance. An underground gasoline storage tank was observed on a 1953 Sanborn fire insurance map. Records indicating that it had been removed were not found. It is unclear if the tank shown on the map corresponds to the location of the vent pipes or the closed-in-place tanks.

- **Former Gasoline Service Station**: A gasoline station was located on parcel P77410 from the 1920s to at least the 1950s, possibly as late as the 1980s.

- **Former Railroad Depot/Coal Storage**: Coal was stored on the northern and southern portions of parcel P109239 as part of railroad and fuel transfer operations in the early to mid-1900s.

Additional information regarding site geology, hydrogeology and adjacent land use is provided in the Phase I ESA (WES, 2011). No other previous investigations are known to have been conducted at the site.

3.0 WORK PERFORMED AND RATIONALE

On November 15, 2011, Whatcom Environmental Services performed a subsurface investigation at the subject property. The subsurface investigation included the drilling of nine soil borings and field screening and collection of soil and water samples which were analyzed at a Washington Department of Ecology certified laboratory. Boring locations were chosen based on the location of the RECs identified in the Phase I ESA (WES, 2011).

3.1 Objective of Assessment

The main objective of the work performed during the Phase II ESA is to assist the User (North Cascade Ford Inc.) to obtain sound, scientifically valid data concerning actual property conditions related to the RECs identified in the Phase I ESA report (WES, 2011). The information provided herein will provide the User with additional information to determine its choices of action in connection with the following objectives: (1) assess whether there has been a release of hazardous substances to soil or groundwater at the subject property at the locations identified in the Phase I ESA, (2) provide information relevant to identifying, defining, and evaluating property conditions associated with target analytes that may pose risk to human health or the environment at the locations identified in the Phase I ESA, and (3) provide information relevant to evaluating and allocating business environmental risk in transactional and contractual contexts, including transferring, financing, and insuring the subject property.

3.2 Exploration and Sampling Methods

In an attempt to collect data concerning the actual property conditions, as well as characterize any other contamination related to the property, nine soil borings were drilled by Cascade Drilling using a direct-push hydraulic and percussion drive-point sampling system (GeoProbe) on November 15, 2011. Subsurface utilities were located prior to commencing drilling using both public and private location services. Each soil boring location was hand excavated to 5 feet below ground surface (bgs) using a hand auger to ensure the boring location was free of underground utilities. Soil boring locations are shown on Figure 2.

The sampling equipment was decontaminated prior to drilling each test hole. The majority of the borings were continuously cored to a depth of 15 feet bgs. Soil cores were logged in the field and soil descriptions generally followed ASTM D 2487 'Unified Soil Classification

System' procedures for description and identification of soils. The soil cores were field screened for petroleum products using a photoionization detector (PID) to evaluate organic vapor concentrations and by conducting sheen tests. Immediately after the soil cores were described a portion of the sample was sheen tested and the remainder of the sample was placed in labeled re-sealable bags. Sheen test results were recorded as: NS – no sheen, VSS – very slight sheen, SS – slight sheen, MS – moderate sheen, and HS – heavy sheen. The PID was inserted into the re-sealable bag and a headspace reading was measured and organic vapor concentrations (in parts per million) were recorded on the borelogs. Soil samples were collected in containers provided by the laboratory and stored in a cooler with ice. Groundwater samples were collected by inserting polyethylene tubing into the probe casing and withdrawing water using a peristaltic pump. Groundwater samples were collected in preserved bottles provided by the lab.

The test holes were backfilled to the surface using bentonite-based grout materials specified in WAC 173-160. Soil sample descriptions and field screening results are summarized in Table 1. Soil and groundwater sampling results are discussed below in Section 4.0.

3.3 Soil and Groundwater Screening Levels

The soil and groundwater screening levels for the Phase II ESA investigation were established for unrestricted land use in accordance with WAC 173-340. There are two options for establishing soil cleanup levels for unrestricted land use under the Model Toxics Control Act (MTCA) - Method A and Method B.

MTCA Method A target cleanup levels for soil are provided in WAC 173-340, Table 740-1, and for groundwater in Table 720-1. MTCA Method B cleanup levels are based on the reasonable maximum exposure expected to occur at the site and were developed to evaluate direct contact, leaching, and vapor pathways using equations provided in WAC 173-340.

The soil and water data collected during the Phase II ESA investigation were compared to the applicable MTCA Method A target cleanup levels. The MTCA Method A cleanup levels for soil are shown on Tables 2 through 5, and the MTCA Method A cleanup levels for groundwater are shown on Table 6. MTCA Method B cleanup levels were not evaluated as part of the Phase II ESA investigation.

3.4 Laboratory Analytical Methods

Soil and groundwater samples collected from the site were analyzed for varying constituents determined by the specific contaminants likely released by the RECs identified in the Phase I ESA (WES, 2011). Samples were analyzed for diesel and lube-oil range total petroleum hydrocarbons (TPH) using Method NWTPH-Dx; gasoline range TPH using Method NWTPH-Gx; benzene, toluene, ethylbenzene, and total xylenes (BTEX) constituents using EPA Method 8021; polychlorinated biphenyls (PCBs) using EPA Method 8082; arsenic, cadmium, chromium, and lead using EPA Method 6020; mercury using EPA Method 7471 and carcinogenic polycyclic aromatic hydrocarbons (cPAHs) using EPA Method 8270 SIM.

One soil sample was collected from each soil boring at a depth likely to contain significant levels of contamination as determined by field screening results. Water samples were collected from soil borings as warranted by site conditions.

- **Former Waste Oil Storage Area (Boring B-1)**: One soil sample was collected and analyzed for gasoline and diesel range TPH, BTEX, cPAHs, PCBs, and metals. One groundwater sample was collected and analyzed for gasoline and diesel range TPH and BTEX constituents.

- **Former Above-ground Oil Tank (Boring B-2)**: One soil sample was collected and analyzed for gasoline and diesel range TPH, BTEX, cPAHs, PCBs, and metals. One groundwater sample was collected and analyzed for gasoline and diesel range TPH and BTEX constituents.

- **Former Automotive/Oil House (Boring B-3):** One soil sample was collected and analyzed for gasoline and diesel range TPH and BTEX constituents.

- **Former Underground Storage Tank(s) (Borings B-4 and B-5):** One soil sample was collected from each boring and analyzed for gasoline and diesel range TPH, BTEX, and metals. One groundwater sample was collected from each boring and analyzed for gasoline and diesel range TPH and BTEX constituents.

- **Former Gasoline Service Station (Borings B-6 and B-7):** One soil sample was collected from boring B-6 and analyzed for gasoline and diesel range TPH and BTEX constituents. One soil sample was collected from boring B-7 and analyzed for gasoline and diesel range TPH, BTEX constituents, and metals. One groundwater sample was collected from B-7 and analyzed for gasoline and diesel range TPH and BTEX constituents.

- **Former Railroad Depot/Coal Storage (Borings B-8 and B-9):** One soil sample was collected from each boring and analyzed for cPAHs.

Soil and groundwater sampling results are discussed below in Section 4.0.

4.0 INVESTIGATION RESULTS

Nine soil borings completed at the subject property provide information related to the subsurface conditions present at the subject property. The Phase II ESA investigation described herein has provided sound, scientifically valid data concerning actual property conditions related to the RECs identified in the Phase I ESA report (WES, 2011).

The typical soil profile at the subject property consists of sandy gravel fill material from 2 inches to approximately 2 feet bgs, and silt or silty fine sand with occasional woody debris from approximately 2 feet to 15 feet bgs. Groundwater was typically encountered at 5 to 6 feet bgs.

The nine soil boring locations are shown on Figure 2. Soil sample descriptions are included in Table 1. Soil samples collected from seven of the nine borings completed during the subsurface investigation (B-1, B-2, B-4, B-5, B-7, B-8, and B-9) contained concentrations of one or more contaminants which exceeded the respective MTCA Method A target cleanup levels for unrestricted land use. Soil sample laboratory analytical results are provided in Tables 2 through 5. The original soil laboratory analytical data report is included in Appendix B.

Groundwater samples were collected from five borings (B-1, B-2, B-4, B-5, and B-7). The sample collected from boring B-2 contained gasoline range, diesel range and lube oil range TPH at concentrations which exceeded the MTCA Method A cleanup levels. The sample collected from boring B-7 contained gasoline range TPH at a concentration which exceeded the MTCA Method A cleanup level. Groundwater analytical results are provided in Table 6. The original groundwater laboratory analytical data report is included in Appendix C.

4.1 Waste Oil Storage Area (Boring B-1)

The soil cores collected from Boring B-1 drilled near the location of the former waste oil tank yielded field screening evidence of petroleum contamination. Organic vapor concentrations and oily sheens increased from 39 ppm with a slight sheen near the ground surface to 284 ppm with a heavy sheen at approximately 5 feet bgs. By approximately 10 feet bgs no organic vapors or sheens were detected. The soil borelog for Boring B-1 is included in Appendix A.

The soil sample collected from Boring B-1 at a depth of 5 feet bgs showed evidence of petroleum contamination. Soil located at the former waste oil storage area has been impacted by gasoline, diesel, and lube-oil range TPH at relatively high concentrations. Gasoline range TPH was detected at a concentration of 810 mg/kg, which exceeds the MTCA Method A target cleanup level of 100 mg/kg. Diesel range TPH was detected at a concentration of 16,000 mg/kg, which exceeds the cleanup level of 2,000 mg/kg. Lube-oil range TPH was detected at a concentration of 32,000 mg/kg, which exceeds the cleanup level of 2,000 mg/kg. Carcinogenic PAHs were detected at a concentration of 0.55 mg/kg, which exceeds the MTCAT Method A target cleanup level of 0.10 mg/kg. PCB 1260 was detected at a concentration of 1.3 mg/kg, which exceeds the MTCA Method A target cleanup level of 1.0 mg/kg. Lead was detected at a concentration of 520 mg/kg, which exceeds the MTCA Method A cleanup level of 250 mg/kg (Tables 2-5). The original soil laboratory data report is included in Appendix B.

A groundwater sample collected from Boring B-1 showed evidence of contamination from gasoline and diesel range TPH. Both constituents were detected at concentrations below the MTCA Method A cleanup levels (Table 6). The original groundwater laboratory data report is included in Appendix C.

4.2 Former Above-Ground Oil Tank (Boring B-2)

The soil cores collected from Boring B-2 drilled near the location of the former above-ground oil tank yielded field screening evidence of petroleum contamination. Significant organic vapor concentrations and oily sheens were not encountered until approximately 5 feet bgs. The soil cores collected from 5 to 15 feet bgs yielded organic vapor detections up to 227 ppm and heavy sheens. The soil borelog for Boring B-2 is included in Appendix A.

The soil sample collected from Boring B-2 at a depth of 14 feet showed evidence of petroleum contamination. Gasoline range TPH was detected at a concentration of 750 mg/kg, which exceeds the MTCA Method A target cleanup level of 100 mg/kg. Diesel range TPH was detected at a concentration of 2,400 mg/kg, which exceeds the cleanup level of 2,000 mg/kg L (Tables 2-5). The original soil laboratory data report is included in Appendix B.

A groundwater sample collected from Boring B-2 at the former above-ground oil tank location contained relatively high concentrations of gasoline, diesel, and lube-oil range TPH. Gasoline range TPH was detected at a concentration of 1,400 ug/L, which exceeds the MTCA Method A target cleanup level of 1,000 ug/L. Diesel range TPH was detected at a concentration of 13,000 ug/L, which exceeds the cleanup level of 500 ug/L. Lube-oil range TPH was detected

at a concentration of 8,600 ug/L, which exceeds the cleanup level of 500 ug/L (Table 6). The original groundwater laboratory data report is included in Appendix C.

4.3 Former Automotive/Oil House (Boring B-3)

The soil cores collected from Boring B-3 drilled near the location of the former automotive/oil house did not yield field screening evidence of petroleum contamination. No organic vapors or oily sheens were encountered to a depth of approximately 15 feet bgs. The soil borelog for Boring B-3 is included in Appendix A.

The soil sample collected from boring B-3 at a depth of 5 feet bgs did not show any evidence of petroleum contamination (Table 2). A groundwater sample was not collected from Boring B-3.

4.4 Former Underground Storage Tank(s) (Borings B-4 and B-5):

The soil cores collected from Borings B-4 and B-5 drilled near the location of the former underground storage tanks yielded field screening evidence of petroleum contamination. Significant organic vapor concentrations and oily sheens were not encountered in Boring B-4 until approximately 5.5 feet bgs, where an organic vapor concentration of 159 ppm was detected and a moderate sheen was observed. The organic vapor concentrations and oily sheens decreased with depth, and were not detected by approximately 13 feet bgs. Significant organic vapor concentrations and oily sheens were not encountered in Boring B-5 until approximately 8 feet bgs, where an organic vapor concentration of 98 ppm was detected and a moderate sheen was observed. The organic vapor concentrations and oily sheens decreased with depth, and were not detected by approximately 11 feet bgs. The soil borelogs for Borings B-4 and B-5 are included in Appendix A.

Soil located at the former underground storage tanks area has been impacted by gasoline and diesel range TPH at relatively high concentrations. The soil sample collected from Boring B-4 at a depth of 6 feet bgs showed evidence of contamination from gasoline range and diesel range TPH, mercury, arsenic, chromium and lead. Gasoline range TPH was detected at a concentration of 270 mg/kg, which exceeds the MTCA Method A target cleanup level of 100 mg/kg. Diesel range TPH was detected at a concentration of 16,000 mg/kg, which exceeds the cleanup level of 2,000 mg/kg (Tables 2 and 5). The original soil laboratory data report is included in Appendix B.

The soil sample collected from Boring B-5 at a depth of 8 feet bgs showed evidence of contamination from gasoline range and diesel range TPH, arsenic, chromium and lead. Gasoline range TPH was detected at a concentration of 470 mg/kg, which exceeds the MTCA Method A target cleanup level of 100 mg/kg. Diesel range TPH was detected at a concentration of 5,200 mg/kg, which exceeds the MTCA Method A target cleanup level of 2,000 mg/kg (Tables 2 and 5). The original soil laboratory data report is included in Appendix B.

Groundwater samples collected from Borings B-4 and B-5 showed evidence of contamination from gasoline range and diesel range TPH. Both constituents were detected at concentrations below the MTCA Method A cleanup levels (Table 6). The original groundwater laboratory data report is included in Appendix C.

4.5 Former Gasoline Service Station (Borings B-6 and B-7):

Soil Borings B-6 and B-7 were drilled near the location of the former gasoline station. Soil Boring B-6, drilled at the western property boundary, did not yield field screening evidence of petroleum contamination. No organic vapors or oily sheens were encountered to a depth of approximately 15 feet bgs. Soil Boring B-7 yielded field screening evidence of petroleum contamination. Significant organic vapor concentrations and oily sheens were not encountered in Boring B-7 until approximately 6 feet bgs, where an organic vapor concentration of 257 ppm was detected and a moderate sheen was observed. At 11 feet bgs an organic vapor concentration of 467 ppm was detected with a moderate sheen. The organic vapor concentrations and oily sheens decreased with depth, and were not detected by approximately 15 feet bgs. The soil borelogs for Borings B-6 and B-7 are included in Appendix A.

The soil sample collected from Boring B-6 at a depth of 6 feet bgs did not show any evidence of contamination (Table 2). A groundwater sample was not collected from boring B-6.

The soil sample collected from Boring B-7 at a depth of 11 feet bgs showed evidence of contamination from gasoline range TPH, benzene, toluene, ethylbenzene, xylenes, arsenic, chromium and lead. Gasoline range TPH was detected in soil Boring B-7 at a concentration of 2,000 mg/kg, which exceeds the MTCA Method A target cleanup level of 100 mg/kg. Benzene was detected at a concentration of 0.62 mg/kg, which exceeds that MTCA Method A target cleanup level of 0.03 mg/kg (Table 2). The original soil laboratory data report is included in Appendix B.

The groundwater sample collected from Boring B-7 showed evidence of contamination from gasoline range and diesel range TPH, ethylbenzene and xylenes. Gasoline range TPH was detected at a concentration of 3,500 ug/L, which exceeds the MTCA Method A target cleanup level of 1,000 ug/L (Table 6). The original groundwater laboratory data report is included in Appendix C.

4.6 Former Railroad Depot/Coal Storage (Borings B-8 and B-9):

The soil cores collected from Borings B-8 and B-9 drilled near the location of the former coal storage areas did not yield field screening evidence of petroleum contamination. No organic vapors or petroleum sheens were detected in either boring. Soil Boring B-8 was drilled in the northeast corner of parcel P109239. At approximately 1.5 feet bgs black silty sand with what appeared to be coal fragments or burned coal debris was encountered. The black material extended to a depth of approximately 5.5 feet, where native tan silt was encountered. Soil Boring B-9 was drilled in the southeast portion of parcel P109239. At approximately 1 foot bgs black silty sand with what appeared to be coal fragments or burned coal debris was encountered. The black material extended to a depth of approximately 5 feet, where native tan silt was encountered. The soil borelogs for Borings B-8 and B-9 are included in Appendix A.

The soil sample collected from Boring B-8 at a depth of 2 feet bgs and the soil sample collected from Boring B-9 at a depth of 2 feet bgs showed evidence of contamination from the following cPAHs: benzo[A]anthracene, chrysene, benzo[B]fluoranthene, benzo[K]fluoranthene, benzo[A]pyrene, indeno[1,2,3-Cd]pyrene and dibenz[A,H]anthracene. The MTCA Method A cleanup level for cPAHs is based upon the sum of all cPAH constituents (Ecology, 2007). The soil sample collected from Boring B-8 contained cPAHs at a summed concentration of 0.30 mg/kg which exceeded the MTCA Method A cleanup level of 0.1 mg/kg. The soil sample collected from Boring B-9 contained cPAHs at a summed concentration of 0.26 mg/kg which exceeded the MTCA Method A cleanup level of 0.1 mg/kg (Table 3). The original soil laboratory data report is included in Appendix B.

Groundwater samples were not collected from Borings B-8 or B-9.

5.0 DATA INTERPRETATION

Review of the data collected during the Phase II ESA investigation indicate that soil and groundwater at five of the six areas of concern identified as RECs in the Phase I ESA have been impacted by contaminants at concentrations which exceed the MTCA Method A target cleanup levels.

5.1 Waste Oil Storage Area Findings (Boring B-1)

The soil sample collected from Boring B-1 at a depth of 5 feet bgs showed evidence of contamination from gasoline range, diesel range and lube oil range TPH, ethylbenzene, cPAHs, PCB-1260, mercury, arsenic, chromium and lead. The sample contained gasoline range, diesel range, and lube oil range TPH, cPAHs, PCB-1260, and lead at concentrations which exceeded the MTCA Method A cleanup levels.

A groundwater sample collected from Boring B-1 at the former waste oil storage area contained low concentrations of gasoline and diesel range TPH which did not exceed the MTCA Method A target cleanup levels.

The data indicate that a release of waste oil to soil occurred sometime in the past. Field screening observations indicate that the waste oil contamination extends from the ground surface to a depth of approximately 10 feet bgs, indicating that historical waste oil spills at the former waste oil storage area are the likely cause of the release.

5.2 Former Above-Ground Oil Tank Findings (Boring B-2)

The soil sample collected from Boring B-2 at a depth of 14 feet showed evidence of contamination from gasoline range, diesel range, and lube oil range TPH, cPAHs, arsenic, chromium and lead. The sample contained gasoline and diesel range TPH at concentrations which exceeded the MTCA Method A cleanup levels.

A groundwater sample collected from boring B-2 showed evidence of contamination from gasoline range, diesel range and lube oil range TPH, benzene, toluene, and xylenes. The sample contained gasoline range, diesel range, and lube oil range TPH at concentrations which exceeded the MTCA Method A cleanup levels.

Field screening observations indicated that the contamination was encountered at a depth of approximately 5 feet bgs, indicating that contamination could be migrating in the subsurface at that boring location. Field screening observations indicate that the petroleum contamination encountered at soil Boring B-2 extends from 5 feet bgs to at least 15 feet bgs. The total depth of contamination at the Boring B-2 location was not determined.

5.3 Former Automotive/Oil House Findings (Boring B-3)

No evidence of petroleum contamination was observed at the location of soil Boring B-3. The former automotive/oil house identified in the Phase I ESA was located beneath the current building. If soil or groundwater contamination is associated with the former automotive/oil house, it does not appear to have migrated to the location of soil Boring B-3.

5.4 Former Underground Storage Tank(s) Findings (Borings B-4 and B-5):

Soil located at the former underground storage tanks area has been impacted by gasoline and diesel range TPH at relatively high concentrations. Gasoline and diesel range TPH were detected at concentrations which exceeded the MTCA Method A target cleanup levels.

The groundwater samples collected from Borings B-4 and B-5 at the former underground storage tanks area contained low concentrations of gasoline and diesel range TPH which did not exceed the MTCA Method A target cleanup levels.

The data are indicative of a release of gasoline and diesel to soil from the abandoned underground storage tank(s). Field screening observations indicated that the contamination was encountered at a depth of approximately 5.5 to 7 feet bgs, indicating that contamination could be migrating in the subsurface at those boring locations. The exact location of the abandoned underground storage tanks has not been determined.

5.5 Former Gasoline Service Station Findings (Borings B-6 and B-7):

Soil located at the former gasoline service station area has been impacted by gasoline range TPH at relatively high concentrations. Gasoline range TPH was detected in soil in Boring B-7 at a concentration which exceeded the MTCA Method A target cleanup level.

A groundwater sample collected from Boring B-7 at the former gasoline service station location contained a relatively high concentration of gasoline range TPH which exceeded the MTCA Method A target cleanup level.

The data are indicative of a release of gasoline to soil and groundwater from the operation of the former gasoline service station. Field screening observations indicated that the contamination was encountered at a depth of approximately 6 feet bgs, indicating that contamination could be migrating in the subsurface at that boring location. The organic vapor concentrations and oily sheens decreased with depth, and were not detected by approximately 15 feet bgs. The exact location of the former gasoline service station tanks and product piping has not been determined.

5.6 Former Railroad Depot/Coal Storage Findings (Borings B-8 and B-9):

Soil located at the former railroad depot/coal storage areas has been impacted by the following carcinogenic PAHs at concentrations which exceeded the MTCA Method A cleanup level: benzo[A]anthracene, chrysene, benzo[B]fluoranthene, benzo[K]fluoranthene, benzo[A]-pyrene, indeno[1,2,3-Cd]pyrene, and dibenz[A,H]anthracene.

Groundwater samples were not collected from Borings B-8 or B-9.

The field screening observations and laboratory analytical data indicate that shallow soils ranging to a depth of approximately 5 feet bgs have been impacted by past coal storage practices. The extent of the residual coal debris is not known.

6.0 CONCLUSIONS

A Phase II ESA investigation was completed in November 2011 at the North Cascade Ford automobile dealership located at 116 West Ferry Street in Sedro Woolley, Washington, in general conformance with the scope and limitations of ASTM Practice E 1903-11 – Standard Practice for Environmental Site Assessments: Phase II Environmental Site Assessment Process.

The statement of objectives of the Phase II ESA included investigation of subsurface conditions at the following locations which were identified as Recognized Environmental Conditions (RECs) in the Phase I ESA dated July 15, 2011 (Phase I Environmental Site Assessment: North Cascade Ford, 116 West Ferry Street, Sedro-Woolley, Washington):

- **Former Waste Oil Storage Area**
- **Former Above-Ground Oil Tank**
- **Former Automotive/Oil House**
- **Former Underground Storage Tank(s)**
- **Former Gasoline Service Station**
- **Former Railroad Depot/Coal Storage**

The Phase II Environmental Site Assessment was completed in order to investigate the subsurface soil and groundwater conditions at the above referenced areas of concern. Nine soil borings were drilled at the subject property and soil and groundwater samples were collected for laboratory analysis in an attempt to determine if soil and/or groundwater contamination is located at the locations identified as RECs in the Phase I ESA.

Field screening observations and the laboratory analytical data indicate that past releases of petroleum products and other contaminants have impacted the soil and groundwater at the subject property. Review of the data collected during the Phase II ESA investigation indicate that soil and/or groundwater at five of the six areas of concern identified as RECs in the Phase I ESA have been impacted by contaminants at concentrations which exceed the MTCA Method A target cleanup levels.

Soil and/or groundwater contamination was identified at concentrations exceeding the MTCA Method A target cleanup levels at the following locations:

- **Former Waste Oil Storage Area**
- **Former Above-Ground Oil Tank**
- **Former Underground Storage Tank(s)**
- **Former Gasoline Service Station**
- **Former Railroad Depot/Coal Storage**

The locations described above have been impacted by a release(s) of regulated contaminants at concentrations which exceed applicable cleanup levels. The extent of soil and groundwater contamination at the identified locations has not been delineated and further investigation is necessary to determine the extent of contamination at the subject property.

7.0 LIMITATIONS

No site investigation can wholly eliminate uncertainty regarding the potential for contamination in connection with a property. Performance of this investigation by Whatcom Environmental Services Inc. is intended to reduce, but not eliminate, uncertainty regarding the potential for environmental contamination in connection with the subject property.

The interpretation of subsurface soil and groundwater conditions is based on Whatcom Environmental Services' field observations and chemical analytical data collected from relatively widely spaced sampling locations at the site. It is possible that contamination exists beneath portions of the site that were not explored, sampled, or analyzed. No warranty, express or implied, is given regarding the presence of hidden or unidentified sources of contamination of the subject property. In addition, no warranty, express or implied is given regarding geotechnical or geologic hazards.

This environmental report is based on conditions that existed at the time the investigation was performed and samples collected. The findings and conclusions of this report may be affected by the passage of time, by manmade events such as construction on or adjacent to the site, or by natural events such as floods, earthquakes, ground instability, or groundwater fluctuations.

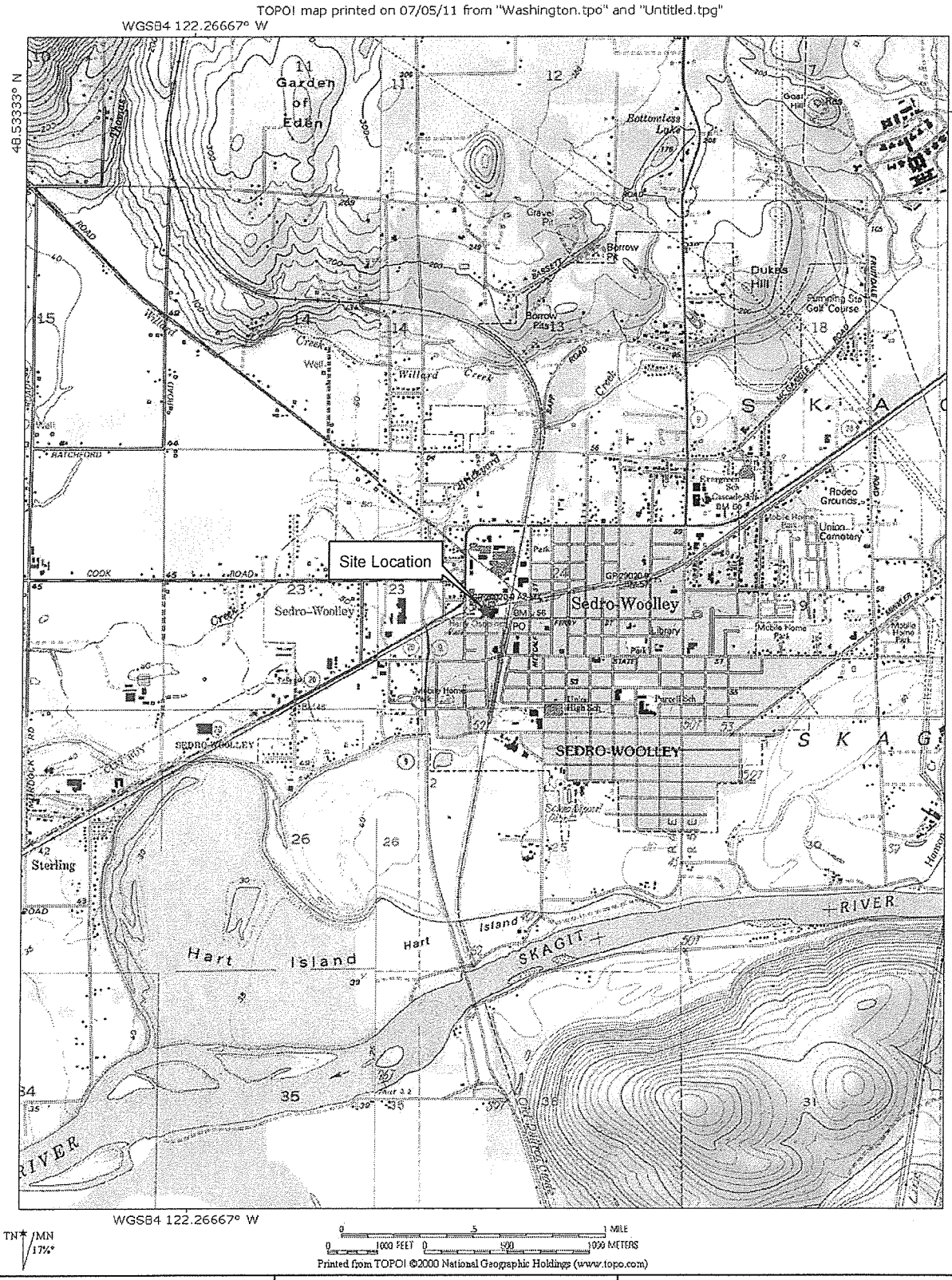
Within the limitations of scope, schedule, and budget, our services have been executed in accordance with generally accepted environmental practices in this area at the time this report was prepared. No warranty or other conditions, express or implied, should be understood.

This report has been prepared for use by Mr. Travis Coulter and North Cascade Ford Inc. Whatcom Environmental Services prepares a report for the client's exclusive use for a particular project and in accordance with generally accepted practices at the time of investigation. This report was prepared for exclusive use by the client and its agents and may not be used, relied upon, or assigned to a third party without written consent from Whatcom Environmental Services Inc. This report is not intended for use by others, and the information contained herein is not applicable to other sites. This report may be made available to regulatory agencies.

8.0 REFERENCES

Washington State Department of Ecology (Ecology). 2007. Model Toxics Control Act Cleanup Regulation Chapter 173-340 WAC. Publication No. 94-06. Revised November 2007.

Whatcom Environmental Services. July 15, 2011. Phase I Environmental Site Assessment: North Cascade Ford, 116 West Ferry Street, Sedro-Woolley, Washington.



Prepared for:	Prepared by:	Site Location Map	
North Cascade Ford	whatcom ENVIRONMENTAL	N. Cascade Ford 12/7/11	Figure 1

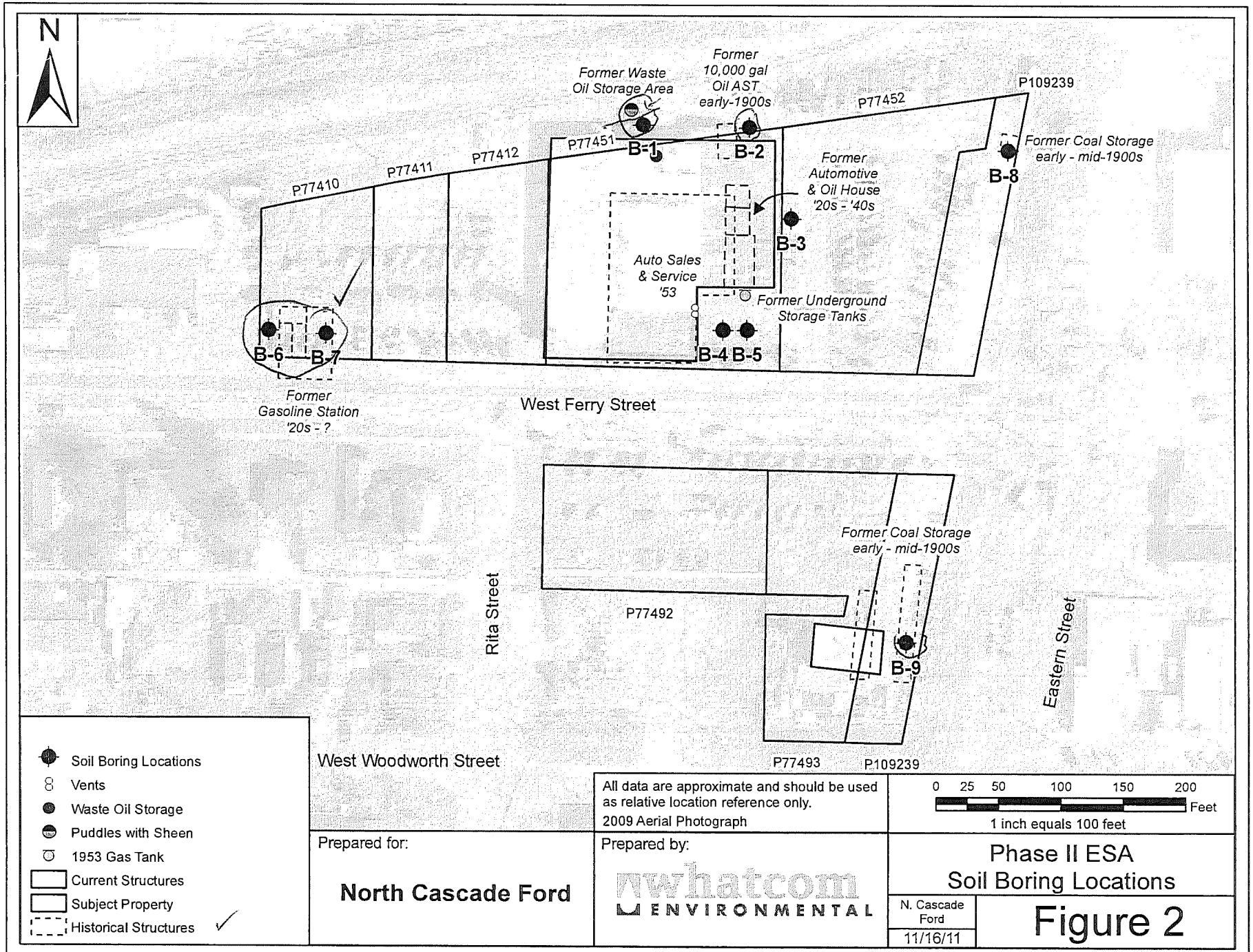

N
Former Waste Oil Storage Area
Former 10,000 gal Oil AST early-1900s
P109239
P77452
P77451
P77412
P77411
P77410
B-1
B-2
Former Automotive & Oil House '20s - '40s
Former Coal Storage early - mid-1900s
B-8
B-3
Auto Sales & Service '53
Former Underground Storage Tanks
B-4 B-5
B-6
B-7
Former Gasoline Station '20s - ?
West Ferry Street
Former Coal Storage early - mid-1900s
Rita Street
P77492
B-9
Eastern Street
West Woodworth Street
P77493
P109239
Soil Boring Locations
Vents
Waste Oil Storage
Puddles with Sheen
1953 Gas Tank
Current Structures
Subject Property
Historical Structures
All data are approximate and should be used as relative location reference only.
2009 Aerial Photograph
0 25 50 100 150 200
Feet
1 inch equals 100 feet
Prepared for:
North Cascade Ford
Prepared by:
whatcom ENVIRONMENTAL
Phase II ESA
Soil Boring Locations
N. Cascade Ford
11/16/11
Figure 2

Table 2. Soil Sample TPH and BTEX Analytical Results - North Cascade Ford

Sample ID	Date	NWTPH-Gx Gasoline Range	NWTPH-Dx Diesel Range	NWTPH-Dx Lube-Oil Range	EPA-8260B Benzene	EPA-8260B Toluene	EPA-8260B Ethyl-benzene	EPA-8260B Xylenes
	units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B-1 5ft	11/15/2011	**810**	**16,000**	**32,000**	ND	ND	2.4	ND
B-2 14 ft	11/15/2011	**750**	**2,400**	1,900	ND	ND	ND	ND
B-3 5ft	11/15/2011	ND	ND	ND	ND	ND	ND	ND
B-4 6ft	11/15/2011	**270**	**16,000**	ND	ND	ND	ND	ND
B-5 8ft	11/15/2011	**470**	**5,200**	ND	ND	ND	ND	ND
B-6 6ft	11/15/2011	ND	ND	ND	ND	ND	ND	ND
B-7 11ft	11/15/2011	**2,000**	ND	ND	**0.62**	2.7	2.3	2.6
B-8 2ft	11/15/2011	NA	NA	NA	NA	NA	NA	NA
B-9 2ft	11/15/2011	NA	NA	NA	NA	NA	NA	NA
MTCA Method A Clean-up Levels:		100/30*	2,000	2,000	0.03	7.0	6.0	9.0

Bold - Concentrations of the analyte exceed the MTCA Method A cleanup level

NA - indicates sample not analyzed for the indicated analyte

ND - indicates analyte was not detected at level above reporting limit

*Cleanup level dependent on presence of benzene

Table 3. Soil Sample cPAH Analytical Results - North Cascade Ford

Sample ID	Date units:	EPA-8270 SIM Benzo[A] Anthracene mg/kg	EPA-8270 SIM Chrysene mg/kg	EPA-8270 SIM Benzo[B] Fluoranthene mg/kg	EPA-8270 SIM Benzo[K] Fluoranthene mg/kg	EPA-8270 SIM Benzo[A] Pyrene mg/kg	EPA-8270 SIM Indeno[1,2,3-Cd]Pyrene mg/kg	EPA-8270 SIM Dibenz[A,H] Anthracene mg/kg	EPA-8270 SIM Total TEC* mg/kg
B-1 5ft	11/15/2011	0.53	0.71	0.31	0.33	0.4	0.3	ND	**0.5541**
B-2 14 ft	11/15/2011	0.049	0.28	ND	ND	ND	ND	ND	0.0077
B-3 5ft	11/15/2011	NA	NA	NA	NA	NA	NA	NA	NA
B-4 6ft	11/15/2011	NA	NA	NA	NA	NA	NA	NA	NA
B-5 8ft	11/15/2011	NA	NA	NA	NA	NA	NA	NA	NA
B-6 6ft	11/15/2011	NA	NA	NA	NA	NA	NA	NA	NA
B-7 11ft	11/15/2011	NA	NA	NA	NA	NA	NA	NA	NA
B-8 2ft	11/15/2011	0.31	0.33	0.20	0.20	0.21	0.12	0.046	**0.3009**
B-9 2ft	11/15/2011	0.20	0.24	0.18	0.16	0.18	0.15	0.10	**0.2614**
MTCA Method A Clean-up Levels:		Use Total Toxic Equivalent Concentration (see last column)							0.10

Bold - Concentrations of the analyte exceed the MTCA Method A cleanup level

NA - indicates sample not analyzed for the indicated analyte

ND - indicates analyte was not detected at level above reporting limit

* Total Toxic Equivalent Concentration calculated using the toxicity equivalency methodology provided in WAC 173-340-708(8)

Table 4. Soil Sample PCB Analytical Results - North Cascade Ford

Sample ID	Date	EPA-8082 PCB-1016	EPA-8082 PCB-1221	EPA-8082 PCB-1232	EPA-8082 PCB-1242	EPA-8082 PCB-1248	EPA-8082 PCB-1254	EPA-8082 PCB-1260
	units:	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
B-1 5ft	11/15/2011	ND	ND	ND	ND	ND	ND	**1.3**
B-2 14 ft	11/15/2011	ND	ND	ND	ND	ND	ND	ND
B-3 5ft	11/15/2011	NA	NA	NA	NA	NA	NA	NA
B-4 6ft	11/15/2011	NA	NA	NA	NA	NA	NA	NA
B-5 8ft	11/15/2011	NA	NA	NA	NA	NA	NA	NA
B-6 6ft	11/15/2011	NA	NA	NA	NA	NA	NA	NA
B-7 11ft	11/15/2011	NA	NA	NA	NA	NA	NA	NA
B-8 2ft	11/15/2011	NA	NA	NA	NA	NA	NA	NA
B-9 2ft	11/15/2011	NA	NA	NA	NA	NA	NA	NA
MTCA Method A Clean-up Levels:		Sum 1.0						

Bold - Concentrations of the analyte exceed the MTCA Method A cleanup level

NA - indicates sample not analyzed for the indicated analyte

ND - indicates analyte was not detected at level above reporting limit

Table 5. Soil Sample Metals Analytical Results - North Cascade Ford

Sample ID	Date units:	EPA-7471 Mercury mg/kg	EPA-6020 Arsenic mg/kg	EPA-6020 Cadmium mg/kg	EPA-6020 Chromium mg/kg	EPA-6020 Lead mg/kg
B-1 5ft	11/15/2011	0.17	4.6	ND	21	**520**
B-2 14 ft	11/15/2011	ND	2.4	ND	17	2.0
B-3 5ft	11/15/2011	NA	NA	NA	NA	NA
B-4 6ft	11/15/2011	0.039	5.7	ND	42	6.7
B-5 8ft	11/15/2011	ND	3.7	ND	14	2.2
B-6 6ft	11/15/2011	NA	NA	NA	NA	NA
B-7 11ft	11/15/2011	ND	1.4	ND	7.5	1.7
B-8 2ft	11/15/2011	NA	NA	NA	NA	NA
B-9 2ft	11/15/2011	NA	NA	NA	NA	NA
MTCA Method A Clean-up Levels:		2	20	2	2,000	250

Bold - Concentrations of the analyte exceed the MTCA Method A cleanup level

NA - indicates sample not analyzed for the indicated analyte

ND - indicates analyte was not detected at level above reporting limit

Table 6. Groundwater Sample TPH and BTEX Analytical Results - North Cascade Ford

Sample ID*	Date units:	NWTPH-Gx Gasoline Range µg/L	NWTPH-Dx Diesel Range µg/L	NWTPH-Dx Lube Oil Range µg/L	EPA-8021 Benzene µg/L	EPA-8021 Toluene µg/L	EPA-8021 Ethylbenzene µg/L	EPA-8021 Xylenes µg/L
B-1	11/15/2011	200	430	ND	ND	ND	ND	ND
B-2	11/15/2011	**1,400**	**13,000**	**8,600**	1.2	2.4	ND	5.3
B-3	-	NA	NA	NA	NA	NA	NA	NA
B-4	11/15/2011	220	470	ND	ND	ND	ND	ND
B-5	11/15/2011	160	400	ND	ND	ND	ND	ND
B-6	-	NA	NA	NA	NA	NA	NA	NA
B-7	11/15/2011	**3,500**	380	ND	ND	ND	22	25
MTCA Method A Clean-up Levels:		1,000/800**	500	500	5	1,000	700	1,000

Bold - Concentrations of the analyte exceed the MTCA Method A cleanup level

ND - Indicates analyte was not detected at level above reporting limit

* Sample ID corresponds to boring ID

** Cleanup level dependent on presence of benzene

Table 1. Soil Sample Descriptions - North Cascade Ford

Sample ID	Date units:	Depth (ft bgs)	Location and Description	Sheen Test*	PID (ppm)
B-1 5ft	11/15/2011	5	Collected from boring B-1 at 5 feet bgs. Silty fine sand, brown, firm, moist	HS	284
B-2 14 ft	11/15/2011	14	Collected from boring B-2 at 14 feet bgs. Medium to coarse sand, brown, loose, wet	HS	227
B-3 5ft	11/15/2011	5	Collected from boring B-3 at 5 feet bgs. Silty find sand, light brown, firm, dry	NS ✓	0.0
B-4 6ft	11/15/2011	6	Collected from boring B-4 at 6 feet bgs. Silty fine sand, gray, slightly plastic, wet	MS	159
B-5 8ft	11/15/2011	8	Collected from boring B-5 at 8 feet bgs. Medium sand, gray, firm, wet	MS	98
B-6 6ft	11/15/2011	6	Collected from boring B-6 at 6 feet bgs. Fine to medium sand, brown, loose, moist	NS ✓	0.0
B-7 11ft	11/15/2011	11	Collected from boring B-7 at 11 feet bgs. Medium to coarse sand, gray, loose, wet	MS	467
B-8 2ft	11/15/2011	2	Collected from boring B-8 at 2 feet bgs. Silty sand with coal fragments, black, dry	NS ✓	0.0
B-9 2ft	11/15/2011	2	Collected from boring B-9 at 2 feet bgs. Silty sand with coal fragments, black, dry	NS ✓	0.0

* NS = No Sheen; VSS = Very Slight Sheen; SS = Slight Sheen; MS = Moderate Sheen; HS = Heavy Sheen;

APPENDIX A

Soil Borelogs

Boring Log

Project: North Cascade Ford
Client: Travis Coulter
Boring Number: **B-1**
Location: Former waste oil storage area
Date Completed: 11/15/11

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: Harold Cashman
First Encountered Water: ~ 6 feet
Total Depth: 15 feet

Depth/Description		Blow Count	PID (ppm)	Sheen	Sample
0-2"	Asphalt				
2"-6"	Sandy gravel, brown, loose, dry		39	SS ✓	
6"-1.5'	Sandy gravel, brown, loose, dry		66	SS	
1.5'-2.0'	Silty fine sand, brown, loose, dry		11	NS ✓	
2.0'-2.5'	Silt with wood fragments, brown, firm, dry		135	HS ✓	
2.5'-3.5'	Silt with wood fragments and brick (fill)		157	HS	
3.5'-5.0'	Silty fine sand, brown, firm, moist		284	HS	5 ft
5.0'-10.0'	Fine sandy silt, olive gray, wet below 6 feet		43	VSS ✓	
10.0'-15.0'	Silty fine sand, olive gray, firm, wet		0.0	NS ✓	
WATER SAMPLE COLLECTED					

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NS = No Sheen; VSS = Very Slight Sheen; SS = Slight Sheen; MS = Moderate Sheen; HS = Heavy Sheen

Boring Log

Project: North Cascade Ford
Client: Travis Coulter
Boring Number: **B-2**
Location: Near former oil AST north of main building
Date Completed: 11/15/11

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: Harold Cashman
First Encountered Water: ~ 5 feet
Total Depth: 15 feet

Depth/Description	Blow Count	PID (ppm)	Sheen	Sample
0-2" Asphalt				
2"-1.0' Sandy gravel, brown, loose, dry		0.0	SS ✓	
1.0'-2.0' Sandy gravel, brown, loose, dry		0.0	VSS ✓	
2.0'-3.0' Silty fine sand, brown, firm, dry		6.0	NS ✓	
3.0'-5.0' Silty fine sand, gray, firm, dry		0.0	NS ✓	
5.0'-10.0' Medium to coarse sand, brown, firm, wet PID = 211 ppm at 8 feet		108-211	HS ✓	
10.0'-15.0' Medium to coarse sand, brown, loose, wet, heavily oiled		227.0	HS ✓	14 ft
WATER SAMPLE COLLECTED				

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NS = No Sheen; VSS = Very Slight Sheen; SS = Slight Sheen; MS = Moderate Sheen; HS = Heavy Sheen

Boring Log

Project: North Cascade Ford
Client: Travis Coulter
Boring Number: **B-3**
Location: East side of building
Date Completed: 11/15/11

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: Harold Cashman
First Encountered Water: ~ 5 feet
Total Depth: 15 feet

Depth/Description		Blow Count	PID (ppm)	Sheen	Sample
0-4"	Asphalt				
4"-2.5'	Sandy gravel, brown, loose, dry (fill)		0.0	NS	
2.5'-5.0'	Silty fine sand, light brown, firm, dry		0.0	NS	5 ft
5.0'-8.5'	Silt, brown with minor orange mottling, firm, wet		0.0	NS	
8.5'-10.0'	Silt, gray, plastic, wet		0.0	NS	
10.0'-12.5'	Silty fine sand, brown, slightly plastic, wet		0.0	NS	
12.5'-15.0'	Clayey silt, gray, slightly plastic, wet		0.0	NS	

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Boring Log

Project: North Cascade Ford
Client: Travis Coulter
Boring Number: **B-4**
Location: Near former USTs (west boring)
Date Completed: 11/15/11

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: Harold Cashman
First Encountered Water: ~ 6 feet
Total Depth: 15 feet

Depth/Description	Blow Count	PID (ppm)	Sheen	Sample
0-4" Asphalt				
4"-2.0' Sandy gravel, brown, loose, dry		0.0	VSS	
2.0'-3.0' Sandy gravel, brown, loose, dry		0.0	NS	
3.0'-5.5' Silty fine sand, light brown, firm, dry		0.0	NS	
5.5'-10.0' Silty fine sand, gray, slightly plastic, wet PID = 96 ppm at 10 feet		159-96	MS	6 ft
10.0'-13.0' Medium sand, gray, firm, wet		7.0	NS	
13.0'-15.0' Fine sandy silt, olive brown, slightly plastic, wet, with woody layer at 14 feet		0.0	NS	
WATER SAMPLE COLLECTED				

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NS = No Sheen; VSS = Very Slight Sheen; SS = Slight Sheen; MS = Moderate Sheen; HS = Heavy Sheen

Boring Log

Project: North Cascade Ford
Client: Travis Coulter
Boring Number: **B-5**
Location: Near former USTs (east boring)
Date Completed: 11/15/11

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: Harold Cashman
First Encountered Water: ~ 5.5 feet
Total Depth: 15 feet

Depth/Description		Blow Count	PID (ppm)	Sheen	Sample
0-4"	Asphalt				
4"-1.5'	Sandy gravel with brick fragments, brown, loose, dry		0.0	NS	
1.5'-5.5'	Fine sandy silt, light brown, firm, dry		0.0	NS	
5.5'-7.0'	Fine sandy silt, light brown with orange mottling, firm, wet		0.0	NS	
7.0'-8.0'	Silt, gray, plastic, wet		20	SS	
8.0'-10.0'	Medium sand, gray, firm, wet		98	MS	8 ft
10.0'-11.0'	Medium sand, gray, firm, wet		36	VSS	
11.0'-15.0'	Fine sandy silt, olive brown, slightly plastic, wet		<1	NS	
WATER SAMPLE COLLECTED					

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Boring Log

Project: North Cascade Ford
Client: Travis Coulter
Boring Number: **B-6**
Location: Former gas station (west boring)
Date Completed: 11/15/11

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: Harold Cashman
First Encountered Water: ~ 5.5 feet
Total Depth: 15 feet

Depth/Description		Blow Count	PID (ppm)	Sheen	Sample
0-2"	Asphalt				
2"-1.0'	Silty gravel, light brown, firm, dry		0.0	NS ✓	
1.0'-2.0'	Sandy gravel, dark brown to black, loose, moist		0.0	NS ✓	
2.0'-3.0'	Silty fine sand, dark brown, firm, dry		0.0	NS ✓	
3.0'-5.5'	Silty fine sand, brown, firm, dry		0.0	NS ✓	
5.5'-6.0'	Silty fine sand, brown, firm, moist		0.0	NS ✓	
6.0'-8.0'	Fine to medium sand, brown, loose, moist		0.0	NS ✓	6 ft
8.0'-12.0'	Coarse sand, brown, loose, wet		0.0	NS ✓	
12.0'-15.0'	Silt, gray, plastic, wet		0.0	NS ✓	

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Boring Log

Project: North Cascade Ford
Client: Travis Coulter
Boring Number: **B-7**
Location: Former gas station (east boring)
Date Completed: 11/15/11

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: Harold Cashman
First Encountered Water: ~ 5.5 feet
Total Depth: 15 feet

Depth/Description	Blow Count	PID (ppm)	Sheen	Sample
0-2" Asphalt				
2"-2.5' Silty gravel, brown, firm, dry		0.0	NS ✓	
2.5'-5.5' Silty fine sand, brown with minor orange mottling, firm, dry		0.0	NS ✓	
5.5'-6.0' Silty fine sand, brown with minor orange mottling, firm, wet		0.0	NS ✓	
6.0'-9.5' Silt, gray, plastic, wet		105-257	MS ✓	
9.5'-13.0' Medium to coarse sand, gray, loose, wet		467	MS	11 ft
13.0'-15.0' Silt, olive gray, plastic, wet, with woody debris at 15 feet PID=0 ppm at 15 feet		36-0	NS ✓	
WATER SAMPLE COLLECTED				

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Boring Log

Project: North Cascade Ford
Client: Travis Coulter
Boring Number: **B-8**
Location: Northeast former coal storage area
Date Completed: 11/15/11

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: Harold Cashman
First Encountered Water: ~ 5.5 feet
Total Depth: 10 feet

Depth/Description	Blow Count	PID (ppm)	Sheen	Sample
0-1.5' Sandy gravel, brown, loose, dry		0.0	NS ✓	
1.5'-5.5' Silty sand with coal fragments, black, dry		0.0	NS ✓	2.0 ft
5.5'-10.0' Silt, tan with minor orange mottling, firm, wet		0.0	NS ✓	

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NS = No Sheen; VSS = Very Slight Sheen; SS = Slight Sheen; MS = Moderate Sheen; HS = Heavy Sheen

Boring Log

Project: North Cascade Ford
Client: Travis Coulter
Boring Number: **B-9**
Location: Southeast former coal storage area
Date Completed: 11/15/11

Sheet: 1 of 1
Drilled by: Cascade Drilling
Logged by: Harold Cashman
First Encountered Water: n/a
Total Depth: 5 feet

Depth/Description	Blow Count	PID (ppm)	Sheen	Sample
0-1.0' Sandy gravel, brown, loose, dry		0.0	NS ✓	
1.0'-2.0' Silty sand with coal fragments, black, dry		0.0	NS ✓	2 ft
2.0'-4.0' Silt, tan, firm, dry		0.0	NS ✓	
4.0'-4.5' Silty sand with moderate gravel, black and brown, firm, dry		0.0	NS ✓	
4.5'-5.0' Silt, tan, firm, dry		0.0	NS ✓	

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APPENDIX B

Original Soil Laboratory Analytical Data

November 30, 2011

Mr. Harold Cashman
Whatcom Environmental Svcs., Inc.
228 E. Champion St., Suite 101
Bellingham, WA 98225

Dear Mr. Cashman,

On November 17th, 9 samples were received by our laboratory and assigned our laboratory project number 1111096. The project was identified as your North Cascade Ford. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	11/30/2011 1111096 -01
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	11/17/2011
CLIENT PROJECT:	North Cascade Ford	COLLECTION DATE:	11/15/2011 09:15
CLIENT SAMPLE ID	B-1 5ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**810**	60	20	MG/KG	11/21/2011	GAP
Benzene	EPA-8021	U	0.70	20	MG/KG	11/21/2011	GAP
Toluene	EPA-8021	U	1.2	20	MG/KG	11/21/2011	GAP
Ethylbenzene	EPA-8021	**2.4**	1.2	20	MG/KG	11/21/2011	GAP
Xylenes	EPA-8021	U	4.7	20	MG/KG	11/21/2011	GAP
TPH-Diesel Range	NWTPH-DX	**16000**	610	20	MG/KG	11/18/2011	EBS
TPH-Oil Range	NWTPH-DX	**32000**	1200	20	MG/KG	11/18/2011	EBS
Benzo[A]Anthracene	EPA-8270 SIM	**0.53**	0.20	10	MG/KG	11/23/2011	LAP
Chrysene	EPA-8270 SIM	**0.71**	0.20	10	MG/KG	11/23/2011	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	**0.31**	0.20	10	MG/KG	11/23/2011	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	**0.33**	0.20	10	MG/KG	11/23/2011	LAP
Benzo[A]Pyrene	EPA-8270 SIM	**0.40**	0.20	10	MG/KG	11/23/2011	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	**0.30**	0.20	10	MG/KG	11/23/2011	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.20	10	MG/KG	11/23/2011	LAP
PCB-1016	EPA-8082	U	0.50	5	MG/KG	11/28/2011	LAP
PCB-1221	EPA-8082	U	0.50	5	MG/KG	11/28/2011	LAP
PCB-1232	EPA-8082	U	0.50	5	MG/KG	11/28/2011	LAP
PCB-1242	EPA-8082	U	0.50	5	MG/KG	11/28/2011	LAP
PCB-1248	EPA-8082	U	0.50	5	MG/KG	11/28/2011	LAP
PCB-1254	EPA-8082	U	0.50	5	MG/KG	11/28/2011	LAP
PCB-1260	EPA-8082	**1.3**	0.50	5	MG/KG	11/28/2011	LAP
Mercury	EPA-7471	**0.17**	0.020	1	MG/KG	11/18/2011	RAL
Arsenic	EPA-6020	**4.6**	0.80	5	MG/KG	11/22/2011	RAL
Cadmium	EPA-6020	U	1.0	5	MG/KG	11/22/2011	RAL
Chromium	EPA-6020	**21**	0.59	5	MG/KG	11/22/2011	RAL
Lead	EPA-6020	**520**	0.58	5	MG/KG	11/22/2011	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 20X Dilution	NWTPH-GX	**0 DS2**	11/21/2011	GAP
TFT 20X Dilution	EPA-8021	**0 DS2**	11/21/2011	GAP
C25 20X Dilution	NWTPH-DX	**137 DS2**	11/18/2011	EBS
Terphenyl-d14 10X Dilution	EPA-8270 SIM	**105 DS2**	11/23/2011	LAP
TCMX 5X Dilution	EPA-8082	**0 DS2**	11/28/2011	LAP
DCB 5X Dilution	EPA-8082	**0 DS2**	11/28/2011	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	11/30/2011 1111096 -01
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	11/17/2011
CLIENT PROJECT:	North Cascade Ford	COLLECTION DATE:	11/15/2011 09:15
CLIENT SAMPLE ID	B-1 5ft	WDOE ACCREDITATION:	C601

DATA RESULTS

U - Analyte analyzed for but not detected at level above reporting limit.
DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.
Chromatogram indicates that it is likely that sample contains mineral spirits, weathered diesel and lube oil.
Diesel range product results biased high due to oil range product overlap.

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	11/30/2011 1111096 -02
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	11/17/2011
CLIENT PROJECT:	North Cascade Ford	COLLECTION DATE:	11/15/2011 10:00
CLIENT SAMPLE ID	B-2 14ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**750**	30	10	MG/KG	11/21/2011	GAP
Benzene	EPA-8021	U	0.30	10	MG/KG	11/21/2011	GAP
Toluene	EPA-8021	U	0.50	10	MG/KG	11/21/2011	GAP
Ethylbenzene	EPA-8021	U	0.50	10	MG/KG	11/21/2011	GAP
Xylenes	EPA-8021	U	2.0	10	MG/KG	11/21/2011	GAP
TPH-Diesel Range	NWTPH-DX	**2400**	120	5	MG/KG	11/18/2011	EBS
TPH-Oil Range	NWTPH-DX	**1900**	250	5	MG/KG	11/18/2011	EBS
Benzo[A]Anthracene	EPA-8270 SIM	**0.049**	0.040	2	MG/KG	11/28/2011	LAP
Chrysene	EPA-8270 SIM	**0.28**	0.040	2	MG/KG	11/28/2011	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.040	2	MG/KG	11/28/2011	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.040	2	MG/KG	11/28/2011	LAP
Benzo[A]Pyrene	EPA-8270 SIM	U	0.040	2	MG/KG	11/28/2011	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.040	2	MG/KG	11/28/2011	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.040	2	MG/KG	11/28/2011	LAP
PCB-1016	EPA-8082	U	0.10	1	MG/KG	11/28/2011	LAP
PCB-1221	EPA-8082	U	0.10	1	MG/KG	11/28/2011	LAP
PCB-1232	EPA-8082	U	0.10	1	MG/KG	11/28/2011	LAP
PCB-1242	EPA-8082	U	0.10	1	MG/KG	11/28/2011	LAP
PCB-1248	EPA-8082	U	0.10	1	MG/KG	11/28/2011	LAP
PCB-1254	EPA-8082	U	0.10	1	MG/KG	11/28/2011	LAP
PCB-1260	EPA-8082	U	0.10	1	MG/KG	11/28/2011	LAP
Mercury	EPA-7471	U	0.020	1	MG/KG	11/18/2011	RAL
Arsenic	EPA-6020	**2.4**	0.77	5	MG/KG	11/22/2011	RAL
Cadmium	EPA-6020	U	1.0	5	MG/KG	11/22/2011	RAL
Chromium	EPA-6020	**17**	0.59	5	MG/KG	11/22/2011	RAL
Lead	EPA-6020	**2.0**	0.58	5	MG/KG	11/22/2011	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 10X Dilution	NWTPH-GX	**12.4 DS2**	11/21/2011	GAP
TFT 10X Dilution	EPA-8021	**6.59 DS2**	11/21/2011	GAP
C25 5X Dilution	NWTPH-DX	**112**	11/18/2011	EBS
Terphenyl-d14 2X Dilution	EPA-8270 SIM	**77.6**	11/28/2011	LAP
TCMX	EPA-8082	**56.0**	11/28/2011	LAP
DCB	EPA-8082	**79.0**	11/28/2011	LAP

U - Analyte analyzed for but not detected at level above reporting limit.
DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline, weathered diesel and lube oil.

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	11/30/2011 1111096 -03
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	11/17/2011
CLIENT PROJECT:	North Cascade Ford	COLLECTION DATE:	11/15/2011 11:00
CLIENT SAMPLE ID	B-3 5ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	2.0	0.66	MG/KG	11/21/2011	GAP
Benzene	EPA-8021	U	0.021	0.66	MG/KG	11/21/2011	GAP
Toluene	EPA-8021	U	0.036	0.66	MG/KG	11/21/2011	GAP
Ethylbenzene	EPA-8021	U	0.036	0.66	MG/KG	11/21/2011	GAP
Xylenes	EPA-8021	U	0.14	0.66	MG/KG	11/21/2011	GAP
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	11/18/2011	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	11/18/2011	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 0.66X Dilution	NWTPH-GX	**88.9**	11/21/2011	GAP
TFT 0.66X Dilution	EPA-8021	**108**	11/21/2011	GAP
C25	NWTPH-DX	**107**	11/18/2011	EBS

U - Analyte analyzed for but not detected at level above reporting limit.

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CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	11/30/2011 1111096 -04
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	11/17/2011
CLIENT PROJECT:	North Cascade Ford	COLLECTION DATE:	11/15/2011 12:35
CLIENT SAMPLE ID	B-4 6ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**270**	100	10	MG/KG	11/21/2011	GAP
Benzene	EPA-8021	U	0.31	10	MG/KG	11/21/2011	GAP
Toluene	EPA-8021	U	0.52	10	MG/KG	11/21/2011	GAP
Ethylbenzene	EPA-8021	U	0.52	10	MG/KG	11/21/2011	GAP
Xylenes	EPA-8021	U	2.1	10	MG/KG	11/21/2011	GAP
TPH-Diesel Range	NWTPH-DX	**16000**	250	10	MG/KG	11/18/2011	EBS
TPH-Oil Range	NWTPH-DX	U	500	10	MG/KG	11/18/2011	EBS
Mercury	EPA-7471	**0.039**	0.020	1	MG/KG	11/18/2011	RAL
Arsenic	EPA-6020	**5.7**	0.83	5	MG/KG	11/22/2011	RAL
Cadmium	EPA-6020	U	1.0	5	MG/KG	11/22/2011	RAL
Chromium	EPA-6020	**42**	0.59	5	MG/KG	11/22/2011	RAL
Lead	EPA-6020	**6.7**	0.58	5	MG/KG	11/22/2011	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 10X Dilution	NWTPH-GX	**7.78 DS2**	11/21/2011	GAP
TFT 10X Dilution	EPA-8021	**4.79 DS2**	11/21/2011	GAP
C25 10X Dilution	NWTPH-DX	**131 DS2**	11/18/2011	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.
Chromatogram indicates that it is likely that sample contains weathered diesel.
Gasoline range reporting limit raised due to semivolatile range product overlap.

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	11/30/2011 1111096 -05
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	11/17/2011
CLIENT PROJECT:	North Cascade Ford	COLLECTION DATE:	11/15/2011 13:20
CLIENT SAMPLE ID	B-5 8ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**470**	30	10	MG/KG	11/21/2011	GAP
Benzene	EPA-8021	U	0.30	10	MG/KG	11/21/2011	GAP
Toluene	EPA-8021	U	0.50	10	MG/KG	11/21/2011	GAP
Ethylbenzene	EPA-8021	U	0.50	10	MG/KG	11/21/2011	GAP
Xylenes	EPA-8021	U	2.0	10	MG/KG	11/21/2011	GAP
TPH-Diesel Range	NWTPH-DX	**5200**	120	5	MG/KG	11/18/2011	EBS
TPH-Oil Range	NWTPH-DX	U	250	5	MG/KG	11/18/2011	EBS
Mercury	EPA-7471	U	0.020	1	MG/KG	11/18/2011	RAL
Arsenic	EPA-6020	**3.7**	0.69	5	MG/KG	11/22/2011	RAL
Cadmium	EPA-6020	U	1.0	5	MG/KG	11/22/2011	RAL
Chromium	EPA-6020	**14**	0.59	5	MG/KG	11/22/2011	RAL
Lead	EPA-6020	**2.2**	0.58	5	MG/KG	11/22/2011	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 10X Dilution	NWTPH-GX	**4.65 DS2**	11/21/2011	GAP
TFT 10X Dilution	EPA-8021	**3.03 DS2**	11/21/2011	GAP
C25 5X Dilution	NWTPH-DX	**94.4**	11/18/2011	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline and weathered diesel.

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	11/30/2011 1111096 -06
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	11/17/2011
CLIENT PROJECT:	North Cascade Ford	COLLECTION DATE:	11/15/2011 14:30
CLIENT SAMPLE ID	B-6 6ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	11/18/2011	GAP
Benzene	EPA-8021	U	0.030	1	MG/KG	11/18/2011	GAP
Toluene	EPA-8021	U	0.050	1	MG/KG	11/18/2011	GAP
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	11/18/2011	GAP
Xylenes	EPA-8021	U	0.20	1	MG/KG	11/18/2011	GAP
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	11/18/2011	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	11/18/2011	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**59.3 GS1**	11/18/2011	GAP
TFT	EPA-8021	**71.2**	11/18/2011	GAP
C25	NWTPH-DX	**101**	11/18/2011	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
GS1 - Surrogate outside of control limits due to matrix effect.

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CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	11/30/2011 1111096 -07
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	11/17/2011
CLIENT PROJECT:	North Cascade Ford	COLLECTION DATE:	11/15/2011 15:15
CLIENT SAMPLE ID	B-7 11ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**2000**	300	100	MG/KG	11/18/2011	GAP
Benzene	EPA-8021	**0.62**	0.30	10	MG/KG	11/21/2011	GAP
Toluene	EPA-8021	**2.7**	0.50	10	MG/KG	11/21/2011	GAP
Ethylbenzene	EPA-8021	**2.3**	0.50	10	MG/KG	11/21/2011	GAP
Xylenes	EPA-8021	**2.6**	2.0	10	MG/KG	11/21/2011	GAP
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	11/18/2011	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	11/18/2011	EBS
Mercury	EPA-7471	U	0.020	1	MG/KG	11/18/2011	RAL
Arsenic	EPA-6020	**1.4**	0.78	5	MG/KG	11/22/2011	RAL
Cadmium	EPA-6020	U	1.0	5	MG/KG	11/22/2011	RAL
Chromium	EPA-6020	**7.5**	0.59	5	MG/KG	11/22/2011	RAL
Lead	EPA-6020	**1.7**	0.58	5	MG/KG	11/22/2011	RAL

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 100X Dilution	NWTPH-GX	**3.19 DS2**	11/18/2011	GAP
TFT 10X Dilution	EPA-8021	**2.15 DS2**	11/21/2011	GAP
C25	NWTPH-DX	**92.3**	11/18/2011	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
DS2 - Due to high dilution factor surrogate results should be considered uncontrolled.
Chromatogram indicates that it is likely that sample contains an unidentified gasoline range product.

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CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	11/30/2011 1111096 -08
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	11/17/2011
CLIENT PROJECT:	North Cascade Ford	COLLECTION DATE:	11/15/2011 16:00
CLIENT SAMPLE ID	B-8 2ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzo[A]Anthracene	EPA-8270 SIM	**0.31**	0.020	1	MG/KG	11/23/2011	LAP
Chrysene	EPA-8270 SIM	**0.33**	0.020	1	MG/KG	11/23/2011	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	**0.20**	0.020	1	MG/KG	11/23/2011	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	**0.20**	0.020	1	MG/KG	11/23/2011	LAP
Benzo[A]Pyrene	EPA-8270 SIM	**0.21**	0.020	1	MG/KG	11/23/2011	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	**0.12**	0.020	1	MG/KG	11/23/2011	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	**0.046**	0.020	1	MG/KG	11/23/2011	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14	EPA-8270 SIM	**76.7**	11/23/2011	LAP

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CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	11/30/2011 1111096 -09
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	11/17/2011
CLIENT PROJECT:	North Cascade Ford	COLLECTION DATE:	11/15/2011 16:30
CLIENT SAMPLE ID	B-9 2ft	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzo[A]Anthracene	EPA-8270 SIM	**0.20**	0.080	4	MG/KG	11/28/2011	LAP
Chrysene	EPA-8270 SIM	**0.24**	0.080	4	MG/KG	11/28/2011	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	**0.18**	0.080	4	MG/KG	11/28/2011	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	**0.16**	0.080	4	MG/KG	11/28/2011	LAP
Benzo[A]Pyrene	EPA-8270 SIM	**0.18**	0.080	4	MG/KG	11/28/2011	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	**0.15**	0.080	4	MG/KG	11/28/2011	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	**0.10**	0.080	4	MG/KG	11/28/2011	LAP

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
Terphenyl-d14 4X Dilution	EPA-8270 SIM	**85.1**	11/28/2011	LAP

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CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS SDG#: WDOE ACCREDITATION:	11/30/2011 1111096 C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	North Cascade Ford		

LABORATORY BLANK RESULTS

MBG-111511S2 - Batch 2286 - Soil by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	3.0	1	MG/KG	11/16/2011	DLC

MB-111511S2 - Batch 2286 - Soil by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	0.030	1	MG/KG	11/16/2011	DLC
Toluene	EPA-8021	U	0.050	1	MG/KG	11/16/2011	DLC
Ethylbenzene	EPA-8021	U	0.050	1	MG/KG	11/16/2011	DLC
Xylenes	EPA-8021	U	0.20	1	MG/KG	11/16/2011	DLC

MB-111711S - Batch 2298 - Soil by NWTPH-DX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	25	1	MG/KG	11/18/2011	EBS
TPH-Oil Range	NWTPH-DX	U	50	1	MG/KG	11/18/2011	EBS

MB-111811S - Batch 2318 - Soil by EPA-8270 SIM

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Naphthalene	EPA-8270 SIM	U	0.020	1	MG/KG	11/23/2011	LAP
Benzo[A]Anthracene	EPA-8270 SIM	U	0.020	1	MG/KG	11/23/2011	LAP
Chrysene	EPA-8270 SIM	U	0.020	1	MG/KG	11/23/2011	LAP
Benzo[B]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	11/23/2011	LAP
Benzo[K]Fluoranthene	EPA-8270 SIM	U	0.020	1	MG/KG	11/23/2011	LAP
Benzo[A]Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	11/23/2011	LAP
Indeno[1,2,3-Cd]Pyrene	EPA-8270 SIM	U	0.020	1	MG/KG	11/23/2011	LAP
Dibenz[A,H]Anthracene	EPA-8270 SIM	U	0.020	1	MG/KG	11/23/2011	LAP
Benzo[G,H,I]Perylene	EPA-8270 SIM	U	0.020	1	MG/KG	11/23/2011	LAP

MBLK-11282011 - Batch R75562 - Soil by EPA-8082

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
PCB-1016	EPA-8082	U	0.10	1	MG/KG	11/28/2011	LAP
PCB-1221	EPA-8082	U	0.10	1	MG/KG	11/28/2011	LAP
PCB-1232	EPA-8082	U	0.10	1	MG/KG	11/28/2011	LAP
PCB-1242	EPA-8082	U	0.10	1	MG/KG	11/28/2011	LAP
PCB-1248	EPA-8082	U	0.10	1	MG/KG	11/28/2011	LAP
PCB-1254	EPA-8082	U	0.10	1	MG/KG	11/28/2011	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc.	DATE:	11/30/2011
	228 E. Champion St., Suite 101	ALS SDG#:	1111096
	Bellingham, WA 98225	WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	North Cascade Ford		

LABORATORY BLANK RESULTS

MBLK-11282011 - Batch R75562 - Soil by EPA-8082

PCB-1260	EPA-8082	U	0.10	1	MG/KG	11/28/2011	LAP

MBLK-11182011 - Batch R75510 - Soil by EPA-7471

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Mercury	EPA-7471	U	0.020	1	MG/KG	11/18/2011	RAL

MB-111811S - Batch 2304 - Soil by EPA-6020

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Arsenic	EPA-6020	U	0.12	1	MG/KG	11/22/2011	RAL
Cadmium	EPA-6020	U	0.20	1	MG/KG	11/22/2011	RAL
Chromium	EPA-6020	U	0.12	1	MG/KG	11/22/2011	RAL
Lead	EPA-6020	U	0.12	1	MG/KG	11/22/2011	RAL

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc.	DATE:	11/30/2011
	228 E. Champion St., Suite 101	ALS SDG#:	1111096
	Bellingham, WA 98225	WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	North Cascade Ford		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 2286 - Soil by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	63.8			11/16/2011	DLC
TPH-Volatile Range - BSD	NWTPH-GX	60.0	6		11/16/2011	DLC

ALS Test Batch ID: 2286 - Soil by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	77.1			11/16/2011	DLC
Benzene - BSD	EPA-8021	72.3	6		11/16/2011	DLC
Toluene - BS	EPA-8021	73.5			11/16/2011	DLC
Toluene - BSD	EPA-8021	74.1	1		11/16/2011	DLC
Ethylbenzene - BS	EPA-8021	70.1			11/16/2011	DLC
Ethylbenzene - BSD	EPA-8021	70.9	1		11/16/2011	DLC
Xylenes - BS	EPA-8021	70.7			11/16/2011	DLC
Xylenes - BSD	EPA-8021	71.5	1		11/16/2011	DLC

ALS Test Batch ID: 2298 - Soil by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	92.4			11/18/2011	EBS
TPH-Diesel Range - BSD	NWTPH-DX	96.1	4		11/18/2011	EBS

ALS Test Batch ID: 2318 - Soil by EPA-8270 SIM

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Naphthalene - BS	EPA-8270 SIM	83.9			11/28/2011	LAP
Naphthalene - BSD	EPA-8270 SIM	89.9	7		11/29/2011	LAP
Benzo[G,H,I]Perylene - BS	EPA-8270 SIM	75.6			11/28/2011	LAP
Benzo[G,H,I]Perylene - BSD	EPA-8270 SIM	74.3	2		11/29/2011	LAP

ALS Test Batch ID: R75562 - Soil by EPA-8082

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
PCB-1016 - BS	EPA-8082	69.0			11/28/2011	LAP
PCB-1016 - BSD	EPA-8082	84.0	20		11/28/2011	LAP
PCB-1260 - BS	EPA-8082	75.0			11/28/2011	LAP
PCB-1260 - BSD	EPA-8082	88.0	16		11/28/2011	LAP

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc.	DATE:	11/30/2011
	228 E. Champion St., Suite 101	ALS SDG#:	1111096
	Bellingham, WA 98225	WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	North Cascade Ford		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: R75510 - Soil by EPA-7471

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Mercury - BS	EPA-7471	101			11/18/2011	RAL
Mercury - BSD	EPA-7471	101	0		11/18/2011	RAL

ALS Test Batch ID: 2304 - Soil by EPA-6020

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Arsenic - BS	EPA-6020	96.9			11/22/2011	RAL
Arsenic - BSD	EPA-6020	98.1	1		11/22/2011	RAL
Cadmium - BS	EPA-6020	96.8			11/22/2011	RAL
Cadmium - BSD	EPA-6020	99.0	2		11/22/2011	RAL
Chromium - BS	EPA-6020	98.9			11/22/2011	RAL
Chromium - BSD	EPA-6020	101	2		11/22/2011	RAL
' ead - BS	EPA-6020	101			11/22/2011	RAL
;ad - BSD	EPA-6020	102	1		11/22/2011	RAL

APPROVED BY

Laboratory Director

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Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): 1111096

Date 11/16/11 Page 1 Of 1

PROJECT ID: NORTH CASCADE FORD
REPORT TO COMPANY: WHATCOM ENV. SVCS.
PROJECT MANAGER: HAROLD CASHMAN
ADDRESS: 228 E. CHAMPION ST #101
BELLINGHAM, WA 98225
PHONE: (360) 752-9571 FAX:
P.O. NUMBER: E-MAIL: HJCASHMAN@WHATCOM...
INVOICE TO COMPANY: Whatcom Environmental
ATTENTION: Harold Cashman
ADDRESS:

LABORATORY COPY

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☒ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☒ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify): cPAHs	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. B-1 5ft	11-15-11	9:15	Soil	1		X	X	X								X	X			X	3	
2. B-2 14ft		10:00		2		X	X	X								X	X			X	3	
3. B-3 5ft		11:00		3		X	X	X													3	
4. B-4 6ft		12:35		4		X	X	X									X				2	
5. B-5 8ft		1:20		5		X	X	X									X				2	
6. B-6 6ft		2:30		6		X	X	X													2	
7. B-7 11ft		3:15		7		X	X	X									X				2	
8. B-8 2ft		4:00		8																X	2	
9. B-9 2ft	↓	4:30	↓	9																X	2	
10.																						

SPECIAL INSTRUCTIONS: Samples collected via 5035 A (Please Send Results To Harold Cashman And Dan Nemborniz)

SIGNATURES (Name, Company, Date, Time):

1. Relinquished By: [signature] WES 11/16/11 10:45
Received By:
2. Relinquished By:
Received By: Shawn Robertson ALS 11/17/11 1:10

TURNAROUND REQUESTED in Business Days*

Organic, Metals & Inorganic Analysis: ☒ Standard | 5 | 3 | 2 | 1 | SAME DAY

Fuels & Hydrocarbon Analysis: ☒ Standard | 3 | 1 | SAME DAY

OTHER: Specify:

* Turnaround request less than standard may incu... Charges

APPENDIX C

Original Groundwater Laboratory Analytical Data

November 21, 2011

Mr. Harold Cashman
Whatcom Environmental Svcs., Inc.
228 E. Champion St., Suite 101
Bellingham, WA 98225

Dear Mr. Cashman,

On November 17th, 5 samples were received by our laboratory and assigned our laboratory project number 1111097. The project was identified as your North Cascade Ford. The sample identification and requested analyses are outlined on the attached chain of custody record.

No abnormalities or nonconformances were observed during the analyses of the project samples.

Please do not hesitate to call me if you have any questions or if I can be of further assistance.

Sincerely,

ALS Laboratory Group

Rick Bagan
Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company

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ALS Environmental

CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	11/21/2011 1111097 -01
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	11/17/2011
CLIENT PROJECT:	North Cascade Ford	COLLECTION DATE:	11/15/2011 09:15
CLIENT SAMPLE ID	B-1	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**200**	50	1	UG/L	11/17/2011	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	11/17/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	11/17/2011	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/17/2011	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	11/17/2011	DLC
TPH-Diesel Range	NWTPH-DX	**430**	130	1	UG/L	11/18/2011	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	11/18/2011	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**96.3**	11/17/2011	DLC
TFT	EPA-8021	**101**	11/17/2011	DLC
C25	NWTPH-DX	**91.7**	11/18/2011	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline and weathered diesel.

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	11/21/2011 1111097 -02
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	11/17/2011
CLIENT PROJECT:	North Cascade Ford	COLLECTION DATE:	11/15/2011 10:10
CLIENT SAMPLE ID	B-2	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**1400**	250	5	UG/L	11/18/2011	DLC
Benzene	EPA-8021	**1.2**	1.0	1	UG/L	11/18/2011	DLC
Toluene	EPA-8021	**2.4**	1.0	1	UG/L	11/18/2011	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/18/2011	DLC
Xylenes	EPA-8021	**5.3**	3.0	1	UG/L	11/18/2011	DLC
TPH-Diesel Range	NWTPH-DX	**13000**	260	2	UG/L	11/18/2011	EBS
TPH-Oil Range	NWTPH-DX	**8600**	500	2	UG/L	11/18/2011	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 5X Dilution	NWTPH-GX	**101**	11/18/2011	DLC
TFT	EPA-8021	**109**	11/18/2011	DLC
C25 2X Dilution	NWTPH-DX	**89.1**	11/18/2011	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline, weathered diesel and lube oil.

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	11/21/2011 1111097 -03
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	11/17/2011
CLIENT PROJECT:	North Cascade Ford	COLLECTION DATE:	11/15/2011 12:35
CLIENT SAMPLE ID	B-4	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**220**	50	1	UG/L	11/18/2011	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	11/18/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	11/18/2011	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/18/2011	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	11/18/2011	DLC
TPH-Diesel Range	NWTPH-DX	**470**	130	1	UG/L	11/21/2011	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	11/21/2011	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**97.0**	11/18/2011	DLC
TFT	EPA-8021	**107**	11/18/2011	DLC
C25	NWTPH-DX	**93.4**	11/21/2011	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline and weathered diesel.

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	11/21/2011 1111097 -04
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	11/17/2011
CLIENT PROJECT:	North Cascade Ford	COLLECTION DATE:	11/15/2011 13:30
CLIENT SAMPLE ID	B-5	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**160**	50	1	UG/L	11/17/2011	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	11/17/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	11/17/2011	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/17/2011	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	11/17/2011	DLC
TPH-Diesel Range	NWTPH-DX	**400**	130	1	UG/L	11/21/2011	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	11/21/2011	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT	NWTPH-GX	**100**	11/17/2011	DLC
TFT	EPA-8021	**106**	11/17/2011	DLC
C25	NWTPH-DX	**70.2**	11/21/2011	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline and weathered diesel.

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS JOB#: ALS SAMPLE#:	11/21/2011 1111097 -05
CLIENT CONTACT:	Harold Cashman	DATE RECEIVED:	11/17/2011
CLIENT PROJECT:	North Cascade Ford	COLLECTION DATE:	11/15/2011 15:20
CLIENT SAMPLE ID	B-7	WDOE ACCREDITATION:	C601

DATA RESULTS

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	**3500**	500	10	UG/L	11/18/2011	DLC
Benzene	EPA-8021	U	1.0	1	UG/L	11/18/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	11/18/2011	DLC
Ethylbenzene	EPA-8021	**22**	1.0	1	UG/L	11/18/2011	DLC
Xylenes	EPA-8021	**25**	3.0	1	UG/L	11/18/2011	DLC
TPH-Diesel Range	NWTPH-DX	**380**	130	1	UG/L	11/18/2011	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	11/18/2011	EBS

SURROGATE	METHOD	%REC	ANALYSIS DATE	ANALYSIS BY
TFT 10X Dilution	NWTPH-GX	**110**	11/18/2011	DLC
TFT	EPA-8021	**133**	11/18/2011	DLC
C25	NWTPH-DX	**77.5**	11/18/2011	EBS

U - Analyte analyzed for but not detected at level above reporting limit.
Chromatogram indicates that it is likely that sample contains highly weathered gasoline and weathered diesel.
Diesel range product results biased high due to gasoline range product overlap.

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc. 228 E. Champion St., Suite 101 Bellingham, WA 98225	DATE: ALS SDG#: WDOE ACCREDITATION:	11/21/2011 1111097 C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	North Cascade Ford		

LABORATORY BLANK RESULTS

MBG-111511W - Batch 2294 - Water by NWTPH-GX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range	NWTPH-GX	U	50	1	UG/L	11/15/2011	DLC

MB-111511W - Batch 2294 - Water by EPA-8021

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
Benzene	EPA-8021	U	1.0	1	UG/L	11/15/2011	DLC
Toluene	EPA-8021	U	1.0	1	UG/L	11/15/2011	DLC
Ethylbenzene	EPA-8021	U	1.0	1	UG/L	11/15/2011	DLC
Xylenes	EPA-8021	U	3.0	1	UG/L	11/15/2011	DLC

MB-111811W - Batch 2299 - Water by NWTPH-DX

ANALYTE	METHOD	RESULTS	REPORTING LIMITS	DILUTION FACTOR	UNITS	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range	NWTPH-DX	U	130	1	UG/L	11/18/2011	EBS
TPH-Oil Range	NWTPH-DX	U	250	1	UG/L	11/18/2011	EBS

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CERTIFICATE OF ANALYSIS

CLIENT:	Whatcom Environmental Svcs., Inc.	DATE:	11/21/2011
	228 E. Champion St., Suite 101	ALS SDG#:	1111097
	Bellingham, WA 98225	WDOE ACCREDITATION:	C601
CLIENT CONTACT:	Harold Cashman		
CLIENT PROJECT:	North Cascade Ford		

LABORATORY CONTROL SAMPLE RESULTS

ALS Test Batch ID: 2294 - Water by NWTPH-GX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Volatile Range - BS	NWTPH-GX	81.3			11/17/2011	DLC
TPH-Volatile Range - BSD	NWTPH-GX	81.0	0		11/17/2011	DLC

ALS Test Batch ID: 2294 - Water by EPA-8021

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
Benzene - BS	EPA-8021	108			11/15/2011	DLC
Benzene - BSD	EPA-8021	110	2		11/15/2011	DLC
Toluene - BS	EPA-8021	103			11/15/2011	DLC
Toluene - BSD	EPA-8021	104	1		11/15/2011	DLC
Ethylbenzene - BS	EPA-8021	99.6			11/15/2011	DLC
Ethylbenzene - BSD	EPA-8021	101	1		11/15/2011	DLC
Xylenes - BS	EPA-8021	101			11/15/2011	DLC
ylenes - BSD	EPA-8021	102	1		11/15/2011	DLC

ALS Test Batch ID: 2299 - Water by NWTPH-DX

SPIKED COMPOUND	METHOD	%REC	RPD	QUAL	ANALYSIS DATE	ANALYSIS BY
TPH-Diesel Range - BS	NWTPH-DX	84.2			11/18/2011	EBS
TPH-Diesel Range - BSD	NWTPH-DX	96.0	13		11/18/2011	EBS

APPROVED BY

Laboratory Director

ADDRESS 8620 Holly Drive, Suite 100, Everett, WA 98208 | PHONE 425-356-2600 | FAX 425-356-2626
ALS Laboratory Group A Campbell Brothers Limited Company
www.alsglobal.com

RIGHT SOLUTIONS RIGHT PARTNER

ALS Laboratory Group
8620 Holly Drive, Suite 100
Everett, WA 98208
Phone (425) 356-2600
(206) 292-9059 Seattle
(425) 356-2626 Fax
http://www.alsenviro.com

Chain Of Custody/ Laboratory Analysis Request

ALS Job# (Laboratory Use Only): 1111097

Date 11/16/11 Page 1 Of 1

PROJECT ID: NORTH CASCADE FORD
REPORT TO COMPANY: WHATCOM ENV. SVCS
PROJECT MANAGER: HAROLD CASHMAN
ADDRESS: 228 E. CHAMPION ST #101
PHONE: (360) 752-9571 FAX:
P.O. NUMBER: E-MAIL: HJCASHMAN@WHATCOM...
INVOICE TO COMPANY: SAME AS ABOVE
ATTENTION: HJ CASHMAN
ADDRESS:

LABORATORY COPY

SAMPLE I.D.	DATE	TIME	TYPE	LAB#	NWTPH-HCID	NWTPH-DX	NWTPH-GX	BTEX by EPA-8021	MTBE by EPA-8021 ☐ EPA-8260 ☐	Halogenated Volatiles by EPA 8260	Volatile Organic Compounds by EPA 8260	EDB / EDC by EPA 8260 SIM (water)	EDB / EDC by EPA 8260 (soil)	Semivolatile Organic Compounds by EPA 8270	Polycyclic Aromatic Hydrocarbons (PAH) by EPA-8270 SIM ☐	PCB ☐ Pesticides ☐ by EPA 8081/8082	Metals-MTCA-5 ☐ RCRA-8 ☐ Pri Pol ☐ TAL ☐	Metals Other (Specify)	TCLP-Metals ☐ VOA ☐ Semi-Vol ☐ Pest ☐ Herbs ☐	OTHER (Specify)	NUMBER OF CONTAINERS	RECEIVED IN GOOD CONDITION?
1. B-1	11/15/11	9:15	WATER	1		X	X	X													3	
2. B-2		10:10		2		X	X	X													3	
3. B-4		12:35		3		X	X	X													3	
4. B-5		1:30		4		X	X	X													2	
5. B-7		3:20		5		X	X	X													3	
6.																						
7.																						
8.																						
9.																						
10.																						

SPECIAL INSTRUCTIONS (PLEASE SEND RESULTS TO HAROLD CASHMAN AND DAN NEMBLANER)

SIGNATURES (Name, Company, Date, Time):
1. Relinquished By: WES 11/16/11 11:05
Received By:
2. Relinquished By:
Received By: Shawn Robinson ALS 11/17/11 1:10

TURNAROUND REQUESTED in Business Days*
Organic, Metals & Inorganic Analysis: 10 Standard | 5 | 3 | 2 | 1 | SAME DAY
Fuels & Hydrocarbon Analysis: 5 Standard | 3 | 1 | SAME DAY
OTHER: Specify:

* Turnaround request less than standard may inc... Charges

APPENDIX B

SUPPLEMENTAL HISTORICAL RECORDS REVIEW

SUPPLEMENTAL HISTORICAL RECORDS REVIEW

PROJECT NO. 0747.01.05 | VSF PROPERTIES, LLC

Maul Foster & Alongi, Inc. (MFA) conducted a supplemental historical records review for the North Cascade Ford property (the Property) located at 116 West Ferry Street in Sedro-Woolley, Washington. The information provided in this report is intended to supplement the findings presented in the existing Phase I environmental site assessment (ESA) reports (GeoEngineers, 2001; Whatcom Environmental, 2011).

BACKGROUND

The Phase I ESAs (GeoEngineers, 2001; Whatcom Environmental, 2011) did not include title records; aerial photographs were not provided in the copies made available to MFA; and reproductions of the Sanborn fire insurance maps ("Sanborns") were of poor quality. Therefore, MFA independently obtained aerial photographs, Sanborns, and title reports from Environmental Data Resources, Inc. (EDR) for review. MFA also reviewed City Directory records located at the Sedro-Woolley Public Library for addresses associated with the Property's parcels.

AERIAL PHOTOGRAPHS

Aerial photographs of the Property from 1941, 1951, 1956, 1968, 1975, 1981, 1989, 1990, 1998, 2005, 2006, 2009, and 2011 were obtained from EDR and were reviewed to identify historical changes to the Property and the Property's historical uses (see Attachment A). Aerial photographs of the Property taken prior to its development were not available.

> 1941—The photograph shows signs of development; however, the number and sizes of structures are indistinguishable because of the poor quality of the photograph.
>
> 1951—The photograph shows some development on the portion of the Property north of West Ferry Street. Although the exact number and sizes of structures are not distinguishable, one large structure appears to coincide with the auto sales and service building shown on the 1953 Sanborn. Structures are also visible along the eastern perimeter of the Property, both north and south of West Ferry Street. These structures likely are the grain, feed, and hay warehouse and mill and the coal sheds shown on the 1925 to 1953 Sanborns.
>
> 1956—The poor quality of the aerial photograph makes distinguishing specific structures difficult, but it is clear that there is now development on all major portions of the Property.
>
> 1968—A building footprint is vaguely distinguishable on the northern portion of the Property. The quality of the aerial photograph makes it difficult to determine the exact proportions of the development, but the structure's general footprint appears to be roughly the same as that in the 1951 aerial. Any potential development on the rest of the Property is indistinguishable.

1975—The 1975 photograph provides a clearer picture of the structure located on the northern portion of the Property; this appears to have expanded in size between 1968 and 1975. A small structure is visible in the southwest corner of the northern portion of the Property and may be the gasoline station identified in the 1925 to 1953 Sanborns. Other development on the Property is not apparent.

1981—The same structure remains on the northern portion of the Property and appears to be surrounded by asphalt. The small structure that is seen in the 1975 photograph, possibly the gasoline station, remains on the southwest corner of the northern portion of the Property. Other development on the Property is not apparent because of the poor resolution of the photograph.

1989—The same structure remains on the northern portion of the Property. It is unclear what other development is on the Property because of the poor quality of the aerial photograph. However, it appears that the gasoline station noted on the southwest corner of the northern portion of the Property is gone.

1990—This is the first aerial photograph of quality adequate to determine that the grain, feed, and hay warehouse and mill and coal shed structures observed along the eastern portion of the Property, as shown in the 1951 aerial, are no longer present. These structures may have been removed before 1990, but the earlier aerial photograph quality was too poor to distinguish their presence or absence.

1998—The structure on northern portion of the Property remains unchanged. The rest of the parcels north of the right-of-way appear to be used for surface parking. Development south of the right-of-way appears residential in nature.

2005—No changes to the Property are visible.

2006—No changes to the Property are visible.

2009—A new structure is visible on the south end of the southern portion of the Property. The rest of the Property appears unchanged.

2011—No changes to the Property are visible.

SANBORN FIRE INSURANCE MAPS

Sanborns were requested from EDR. Sanborns from 1903, 1907, 1925, 1944, and 1953 were reviewed to identify historical changes to the Property and the Property's historical uses (see Attachment B).

1903—The 1903 Sanborn shows a few structures on the Property. A dwelling and a stable are located in the central area of the northern portion of the Property. A grain, hay, and "general" warehouse with associated office and ice house is located in the northeast corner of the northern portion of the Property. A railroad depot building with associated freight house is located along the eastern perimeter of the northern portion of the Property. The

adjacent properties consist primarily of dwelling units, a stable, and a shed. A log pond is located to the northeast of the Property.

1907—The Sanborn shows several structures on the Property. A coal shed is located along the eastern perimeter of the southern portion of the Property. An electric plant powered by steam and fuel oil and a 10,000-gallon aboveground storage tank (AST) containing oil are located at the north end of the northern portion of the Property. A hospital has replaced the dwelling formerly located in the central area of the northern portion of the Property, and a small stable is located at the northwest corner of the northern portion of the Property. Scales have been erected next to the stable located in the east-central area of the northern portion of the Property. The grain and hay warehouse is still located on the northern portion of the Property and now includes a feed mill. The railroad depot located along the eastern perimeter of the Property has expanded its footprint. A hotel is located on the southern portion of the Property. Lumber storage is located to the north of the Property, and the log pond remains to the northeast. Other surrounding properties consist primarily of dwelling units and stables.

1925—The power plant and 10,000-gallon oil AST on the northern portion of the Property have been replaced with a woodshed and wood yard with an associated auto house and small office building. The hospital has reverted to a dwelling. The stable located in the central area of the northern portion of the Property now includes hay storage. A structure, which includes a battery service station, vulcanizing, and gasoline and oils, has been erected on the west end of the northern portion of the Property and likely serves as a gasoline and auto service station. A dwelling unit and accessory auto house or garage have been constructed north of this structure. The grain and hay warehouse has expanded toward the south and now includes freight storage and a grain bin. A train depot and a shed have been erected on the southern portion of the Property and a woodshed and lodging have replaced the hotel. The coal shed remains on the eastern perimeter of the southern portion of the Property. The log pond remains to the northeast and now includes a log lift, fuel bin, and oil house; however, the lumber storage area formerly located to the north of the Property is no longer shown. Surrounding properties consist primarily of dwelling units, a woodshed, lodging, and an electrical substation to the southwest of the southern portion of the Property. A lubricating-oil-storage building is located at the corner of West Ferry and Borseth streets.

1944—Development has not changed substantially since 1925, with the following exceptions. The woodshed and wood yard on the northern portion of the Property have expanded to include a conveyor system leading from the West Ferry Street right-of-way to the shed, a second auto house, and an oil house; the hay storage and stable structure has been removed. Several dwelling units, including apartments and cabins, are located on the northern portion of the Property. A second coal shed has been added on the south portion of the Property. The shed located near the train depot on the southern portion of the Property has been removed. A shingle mill and boiler room have been constructed west of the log pond located to the northeast of the Property, and a store with gas and oil has been erected at the corner of West Ferry and Borseth streets.

1953—Development has not changed substantially since 1925, with the following exceptions. An auto sales and service building has replaced the wood yard located on the

northern portion of the Property. A gasoline tank is located immediately east of the auto sales and service building. A storage building has been erected south of the train depot building on the southern portion of the Property and scales to the east; an auto house is now attached to one of the coal sheds. The woodshed is no longer located next to the lodging structure. The electrical substation to the west of the southern portion of the Property has expanded in size. Another coal shed, associated with the train depot located along the eastern perimeter of the Property, is shown. The log pond and associated structures are no longer shown to the northeast of the Property.

TITLE REPORTS

Title records were provided by EDR and were reviewed to identify environmental liens or activity and use limitations, if any, that are currently recorded against the Property. The title reports are included as Attachment C.

The chain of title reports for parcels P109239, P77410, P77451, and P77493 include titles dating back to the mid-1930s. All but one parcel was purchased by Vera and Marie Sims in 1981. The final parcel, P109239, was purchased by the Sims family in 1996 as the entity VSF Properties, LLC. Prior to the Sims family's ownership of the Property, the parcels were individually owned by private individuals and individually operated. P77410 and P77451 were purchased together and have been operating as one property since at least 1935, the date of the oldest title report records available. Various components of the Property were owned by railroad companies, including the Burlington Northern Railroad Company and the Seattle and Northern Railway Company. The reports did not identify any use limitations or environmental liens.

CITY DIRECTORIES

City directories for the Property for the years 1980, 1981, 1983, 1985, 1987, 1989, 1990, 1991, 1993, 1998, 1999, 2000, and 2001 were located at the Sedro-Woolley Public Library (see Attachment D).

Directory information indicated that Vern Sims Ford, Inc., has operated on the Property since 1980. No other businesses were noted for the 116 West Ferry and 115 Ferry addresses. Adjacent parcels appear to have been occupied by a garden supply shop, a television and appliance store, and a private residence.

Attachments: References
A—Aerial Photographs
B—Sanborn Fire Insurance Maps
C—Title Reports
D—City Directories

REFERENCES

GeoEngineers. 2001. Phase I environmental site assessment, Sims Ford Ranch. GeoEngineers, Inc., Bellingham, Washington. April 19.

Whatcom Environmental. 2011. Phase I environmental site assessment, North Cascade Ford. Whatcom Environmental Services, Bellingham, Washington. July 15.

ATTACHMENT A

AERIAL PHOTOGRAPHS

Sims North Cascade Ford
116 W. Ferry St
Sedro Woolley, WA 98284

Inquiry Number: 3676575.5
July 26, 2013

The EDR Aerial Photo Decade Package

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

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Please contact EDR at 1-800-352-0050
with any questions or comments.

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Date EDR Searched Historical Sources:

Aerial Photography July 26, 2013

Target Property:

116 W. Ferry St

Sedro Woolley, WA 98284

Year	***Scale***	***Details***	***Source***
1941	Aerial Photograph. Scale: 1"=750'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: July 10, 1941	EDR
1951	Aerial Photograph. Scale: 1"=500'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: August 18, 1951	EDR
1956	Aerial Photograph. Scale: 1"=1000'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: April 09, 1956	EDR
1968	Aerial Photograph. Scale: 1"=750'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: September 02, 1968	EDR
1975	Aerial Photograph. Scale: 1"=500'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: August 12, 1975	EDR
1981	Aerial Photograph. Scale: 1"=1000'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: July 26, 1981	EDR
1989	Aerial Photograph. Scale: 1"=500'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: September 10, 1989	EDR
1990	Aerial Photograph. Scale: 1"=750'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Date: July 10, 1990	EDR
1998	Aerial Photograph. Scale: 1"=500'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Composite DOQQ - acquisition dates: July 20, 1998,July 25, 1998	EDR
2005	Aerial Photograph. Scale: 1"=500'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Year: 2005	EDR
2006	Aerial Photograph. Scale: 1"=500'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Year: 2006	EDR
2009	Aerial Photograph. Scale: 1"=500'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Year: 2009	EDR
2011	Aerial Photograph. Scale: 1"=500'	Panel #: 48122-E2, Sedro-Woolley North, WA;/Flight Year: 2011	EDR


Approximate
property boundary
INQUIRY #: 3676575.5
YEAR: 1941
= 750'
N


Approximate
property boundary
INQUIRY #: 3676575.5
YEAR: 1951
= 500'
N


Approximate
property boundary
INQUIRY #: 3676575.5
YEAR: 1956
= 1000'
N


Approximate
property boundary
INQUIRY #: 3676575.5
YEAR: 1968
= 750'
N


Approximate
property boundary
INQUIRY #: 3676575.5
YEAR: 1975
= 500'
N


Approximate
property boundary
INQUIRY #: 3676575.5
YEAR: 1981
= 1000'
N


Approximate
property boundary
INQUIRY #: 3676575.5
YEAR: 1989
= 500'
N


1919-193
Approximate property boundary
INQUIRY #: 3676575.5
YEAR: 1990
= 750'
N


Approximate
property boundary
INQUIRY #: 3676575.5
YEAR: 1998
= 500'
N


Approximate
property boundary
INQUIRY #: 3676575.5
YEAR: 2005
= 500'
N


Approximate property boundary
INQUIRY #: 3676575.5
YEAR: 2006
= 500'
N


Approximate
property boundary
INQUIRY #: 3676575.5
YEAR: 2009
= 500'
N


Approximate
property boundary
INQUIRY #: 3676575.5
YEAR: 2011
= 500'
N

ATTACHMENT B

SANBORN FIRE INSURANCE MAPS

Sims North Cascade Ford
116 W. Ferry St
Sedro Woolley, WA 98284

Inquiry Number: 3676575.3
July 26, 2013

Certified Sanborn® Map Report

EDR® Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

7/26/13

Site Name:
Sims North Cascade Ford
116 W. Ferry St
Sedro Woolley, WA 98284

Client Name:
Maul Foster & Alongi, Inc.
400 East Mill Plain Blvd Suite
Vancouver, WA 98660

EDR Inquiry # 3676575.3

Contact: Jacqueline Gruber

EDR® Environmental Data Resources Inc

The complete Sanborn Library collection has been searched by EDR, and fire insurance maps covering the target property location provided by Maul Foster & Alongi, Inc. were identified for the years listed below. The certified Sanborn Library search results in this report can be authenticated by visiting www.edrnet.com/sanborn and entering the certification number. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by Sanborn Library LLC, the copyright holder for the collection.

Certified Sanborn Results:

Site Name: Sims North Cascade Ford
Address: 116 W. Ferry St
City, State, Zip: Sedro Woolley, WA 98284
Cross Street:
P.O. # NA
Project: Sims North Cascade Ford
Certification # B438-4BE7-900C

Maps Provided:

1953
1944
1925
1907
1903

Sanborn® Library search results
Certification # B438-4BE7-900C

The Sanborn Library includes more than 1.2 million Sanborn fire insurance maps, which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ✓ Library of Congress
- ✓ University Publications of America
- ✓ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Sanborn Sheet Thumbnails

This Certified Sanborn Map Report is based upon the following Sanborn Fire Insurance map sheets.

1953 Source Sheets



Volume 1, Sheet 2

1944 Source Sheets



Volume 1, Sheet 2

1925 Source Sheets



Volume 1, Sheet 2

1907 Source Sheets



Volume 1, Sheet 2

1903 Source Sheets



Volume 1, Sheet Keymap/Sheet1

1953 Certified Sanborn Map

Site Name: Sims North Cascade Ford
Address: 116 W. Ferry St
City, ST, ZIP: Sedro Woolley WA 98284
Client: Maul Foster & Alongi, Inc.
EDR Inquiry: 3676575.3
Order Date: 7/26/2013 3:10:00 PM
Certification #: B438-4BE7-900C
Copyright: 1953

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Approximate property boundary

Certification # B438-4BE7-900C

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600

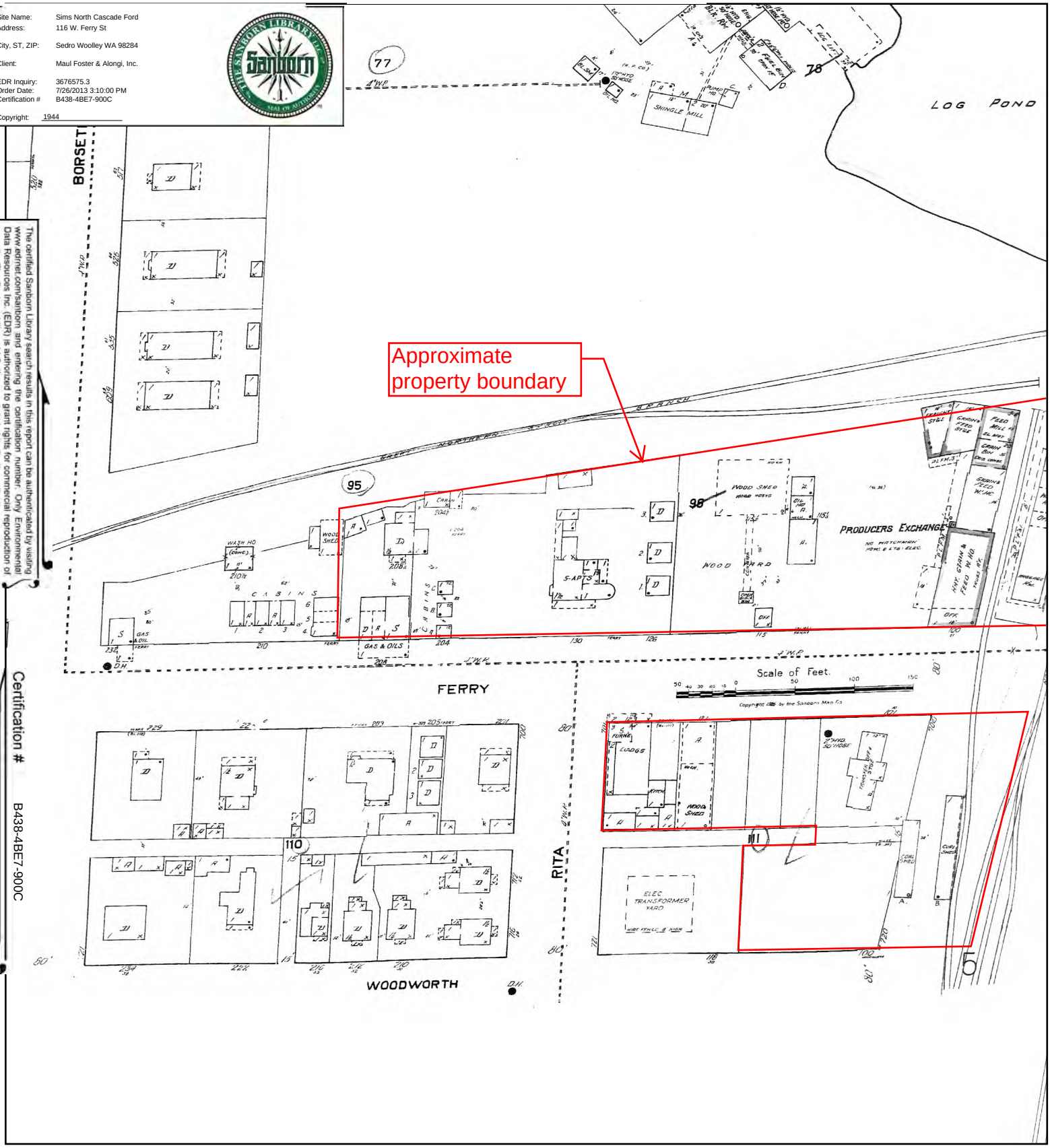
Volume 1, Sheet 2

1944 Certified Sanborn Map

Site Name: Sims North Cascade Ford
Address: 116 W. Ferry St
City, ST, ZIP: Sedro Woolley WA 98284
Client: Maul Foster & Alongi, Inc.
EDR Inquiry: 3676575.3
Order Date: 7/26/2013 3:10:00 PM
Certification # B438-4BE7-900C
Copyright: 1944

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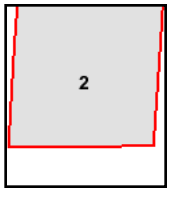
Certification # B438-4BE7-900C



This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600





Volume 1, Sheet 2

N

1925 Certified Sanborn Map

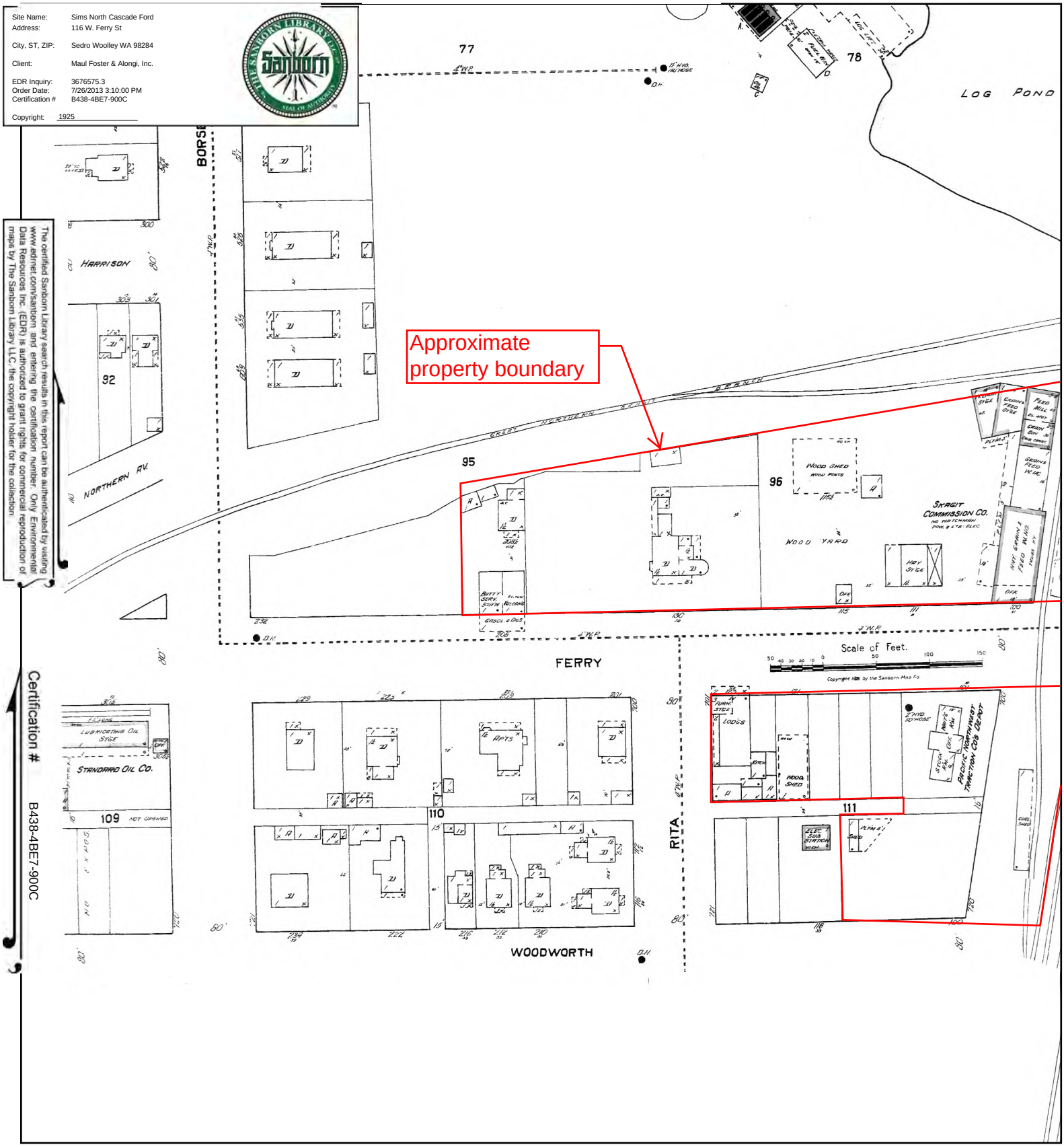
Site Name: Sims North Cascade Ford
Address: 116 W. Ferry St

City, ST, ZIP: Sedro Woolley WA 98284

Client: Maul Foster & Alongi, Inc.

EDR Inquiry: 3676575.3
Order Date: 7/26/2013 3:10:00 PM
Certification # B438-4BE7-900C

Copyright: 1925



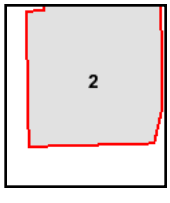
Certification # B438-4BE7-900C

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Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600





Volume 1, Sheet 2

N

1907 Certified Sanborn Map

Site Name: Sims North Cascade Ford
Address: 116 W. Ferry St

City, ST, ZIP: Sedro Woolley WA 98284

Client: Maul Foster & Alongi, Inc.

EDR Inquiry: 3676575.3
Order Date: 7/26/2013 3:10:00 PM
Certification # B438-4BE7-900C

Copyright: 1907

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Certification # B438-4BE7-900C

Approximate property boundary

BORSETH

77

78 (100)

LUMBER DRIVE

PLANKED

LUMBER 16'

LUMBER 20'

LOG POND

GREAT NORTHERN SKAGIT BRANCH

95 (109)

96 (102)

SKAGIT IMPL. CO.

FRAZEE HOSPITAL

FERRY

RITA

WOODWORTH

HOTEL ST. CHARLES

110 (106)

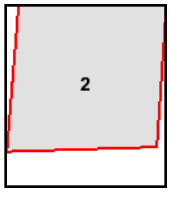
111 (105)

NOT JOINED

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600



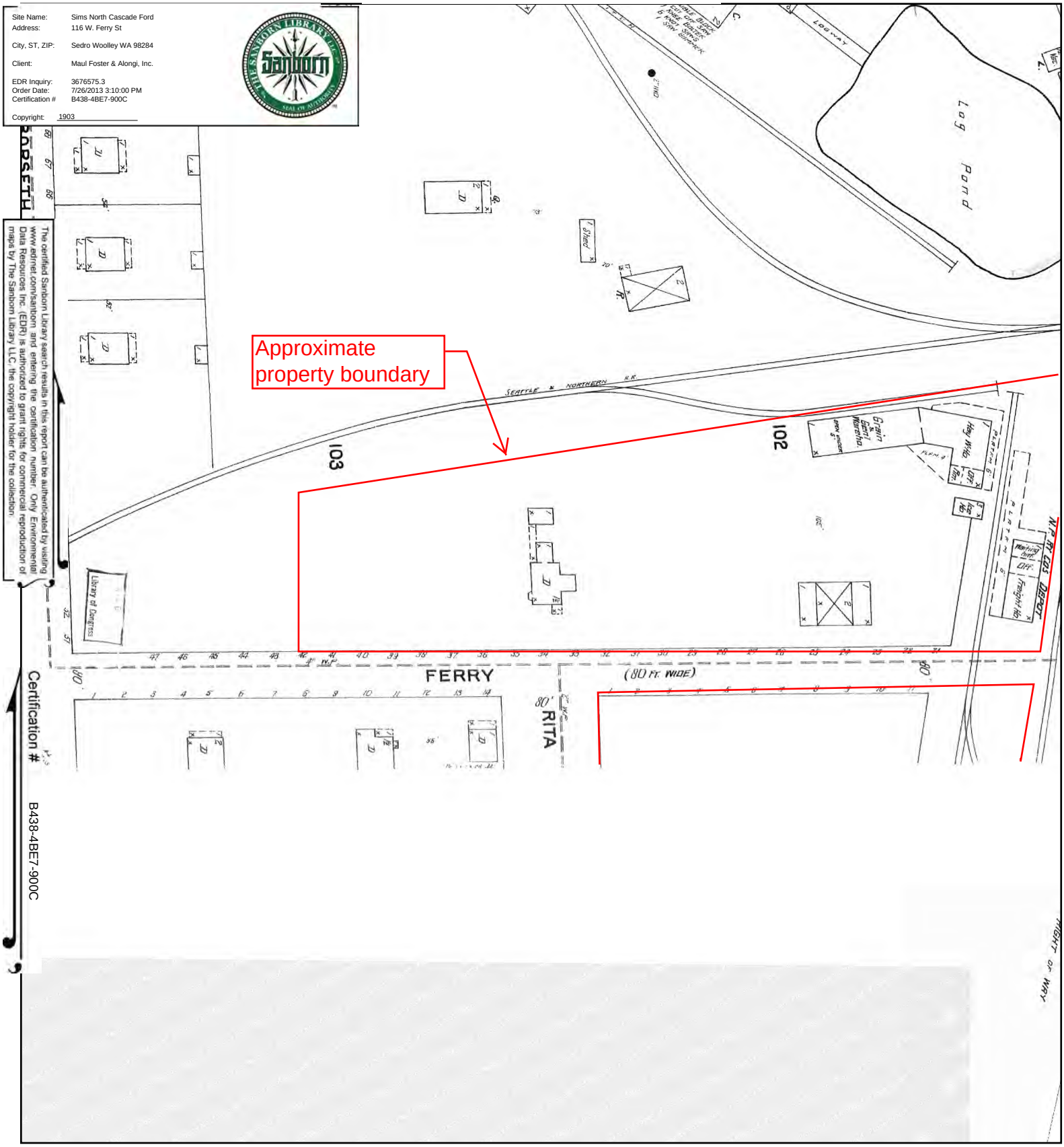


Volume 1, Sheet 2

N

1903 Certified Sanborn Map

Site Name: Sims North Cascade Ford
Address: 116 W. Ferry St
City, ST, ZIP: Sedro Woolley WA 98284
Client: Maul Foster & Alongi, Inc.
EDR Inquiry: 3676575.3
Order Date: 7/26/2013 3:10:00 PM
Certification #: B438-4BE7-900C
Copyright: 1903



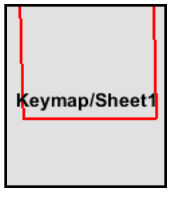
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Certification # B438-4BE7-900C

This Certified Sanborn Map combines the following sheets.
Outlined areas indicate map sheets within the collection.

0 Feet 150 300 600





Volume 1, Sheet Keymap/Sheet1

N

ATTACHMENT C

TITLE REPORTS

Sims North Cascade Ford
116 W. Ferry St.
Sedro Woolley, WA 98284

Inquiry Number: 3676603.1
August 8, 2013

The EDR Chain of Title Report

EDR Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Chain of Title

The EDR Chain of Title Report tracks a line of successive owners from the present back to 1940 of a particular parcel of property, linked together by recorded transactions which pass title. Available nationwide, this report provides a summary of a property's ownership history and is a valuable source for determining the prior uses of a property

A network of professional abstractors following established procedures, uses client s**u**pplied address Information to locate:

- Historical Chain of Title research
- Leases and Miscellaneous

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EDR Chain of Title

TARGET PROPERTY INFORMATION

ADDRESS

Sims North Cascade Ford
116 W. Ferry St.
Sedro Woolley, WA 98284

Research Source

Source 1:	Skagit County Recorder of Deeds
Source 2:	N/A
Examiner's Note:	Public records of Skagit County, OH were searched from January 1, 1940 to July 23, 2013, and no other deeds vesting title in the subject property were found of record during the period searched.

PROPERTY DESCRIPTION

Current Owner:	Coulter Properties, LLC
Legal Description:	See Deed Attached
Property Identifiers:	APN: P109239
General Comments:	N/A

HISTORICAL CHAIN OF TITLE

See Exhibit "A"

LEASES AND MISCELLANEOUS

No liens were found of record searching back during the time period of the attached chain. See attached deed for any restrictions , AUL's, amendments, leases or agreements.

Chain of Title

Exhibit “A”

EDR Chain of Title

HISTORICAL CHAIN OF TITLE

Chain 1

Type of Deed:	Deed
Title is vested in:	Coulter Properties, LLC
Title received from:	VSF Properties, LLC (a/k/a Vern Sims Ford, Inc.)
Date Executed:	April 15, 2003
Date Recorded:	April 17, 2003
Book:	
Page:	
Volume:	
Instrument #:	200304170009
Docket:	

Land Record Comments: N/A

Chain 2

Type of Deed:	Deed
Title is vested in:	Vern Sims Ford, Inc.
Title received from:	Burlington Northern Railroad Company
Date Executed:	June 14, 1996
Date Recorded:	July 24, 1996
Book:	1570
Page:	86
Volume:	
Instrument #:	
Docket:	

Land Record Comments: N/A

Chain 3

Type of Deed:	Deed
Title is vested in:	Burlington Northern Railroad Company
Title received from:	Samuel Harper and Emma Harper
Date Executed:	December 10, 1954
Date Recorded:	December 17, 1954
Book:	174
Page:	492
Volume:	
Instrument #:	
Docket:	

Land Record Comments: N/A

EDR Chain of Title

Chain 4

Type of Deed:	Deed
Title is vested in:	Samuel Harper and Emma Harper
Title received from:	Arnold Clark
Date Executed:	October 21, 1939
Date Recorded:	October 27, 1939
Book:	121
Page:	136
Volume:	
Instrument #:	
Docket:	

Land Record Comments: N/A

EDR Chain of Title

DEED EXHIBIT

UNOFFICIAL DOCUMENT

Filed for Record at the Request of:
BETTS AUSTIN JOHNSON, P.L.L.C.
1616 Cornwall Avenue, Suite 209
Post Office Box 2788
Bellingham, WA 98227-2788

200304170009
Skagit County Auditor
4/17/2003 Page 1 of 7 9:05AM

Document Title: Statutory Warranty Deed
Reference No. of Documents Released/Assigned: N/A
Grantors: VSF PROPERTIES, L.L.C., a Washington Limited Liability Company, and VERN SIMS FORD, INC., a Washington Corporation
Grantee: COULTER PROPERTIES, L.L.C., a Washington Limited Liability Company

Exhibit "A"
Abbreviated Legals:
1. PTN VAC NTHRN AV BLK 11 WEST ADD TO TOWN OF . . .
2. PTN NW ¼ SW ¼ SCT 24 TWNS 35 N RNG 4 EWM . . .
3. BLK 1 TOWN OF WOOLLEY ACC TO PLAT REC . . .
4. LOTS 1 - 6 INC BLK 7 TOWN OF WOOLLEY . . .
5. LOTS 7 - 11 INC BLK 7 TOWN OF WOOLLEY . . .

Exhibit "B"
Abbreviated Legals:
1. PTN BLK 11 WEST ADD TO TOWN OF WOOLLEY . . .
2. PT BLK 1 TOWN OF WOOLLEY, ACC TO REC PLT . .
3. 2 PARCELS LAND SIT NE ¼ SW ¼ SCT 24 TWN 35 N . . .

Legal Descriptions Attached as Exhibits "A" & "B" hereto (pages 4 & 5, and pages 6 & 7).

Exhibit "A"
Assessor's Tax Parcel ID #:
1. 4176-011-005-0002
2. 4176-011-900-0107
3. 4177-001-006-0001
4. 4177-007-006-0008
5. 4177-007-011-0001

Exhibit "B"
Assessor's Tax Parcel ID #:
1. 4176-011-900-0008
2. 4177-001-011-0004
3. 350423-3-082-0200

#18060
SKAGIT COUNTY WASHINGTON
REAL ESTATE EXCISE TAX
APR 17 2003
Amount Paid $ 30,717.00
Skagit Co. Treasurer
By Deputy

4

STATUTORY WARRANTY DEED

The GRANTORS, VSF PROPERTIES, L.L.C., a Washington Limited Liability Company, and VERN SIMS FORD, INC., a Washington Corporation, for and in consideration of Ten Dollars ($10.00) and other good and valuable consideration, the Grantors hereby convey and warrant to COULTER PROPERTIES, L.L.C., a Washington Limited Liability Company, all of their interest in the following described real estate, situated in the County of Skagit, State of Washington, including any after acquired title:

Legal descriptions for the real property conveyed by VSF PROPERTIES, L.L.C. is attached hereto as Exhibit "A."

Legal descriptions for the real property conveyed by VERN SIMS FORD, INC. is attached hereto as Exhibit "B."

DATED this 15 day of April, 2003.

VSF PROPERTIES, L.L.C.

By: VERN SIMS
Its: Manager

VERN SIMS FORD, INC.

By: VERN SIMS
Its: President

STATE OF WASHINGTON)
)ss.
COUNTY OF Skagit)

I certify that I know or have satisfactory evidence that VERN SIMS is the person who appeared before me, and said person acknowledged that he signed this instrument on oath and stated that he was authorized to execute the instrument and acknowledged it as the Manager of VSF PROPERTIES, L.L.C., to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: April 15, 2003.

STATE OF WASHINGTON WILLIAM H. JOHNSON NOTARY PUBLIC COMMISSION EXPIRES AUG. 29, 2003

Name: William H. Johnson
NOTARY PUBLIC in and for the State of Washington, residing at Burlington
My Commission Expires: 8/29/03

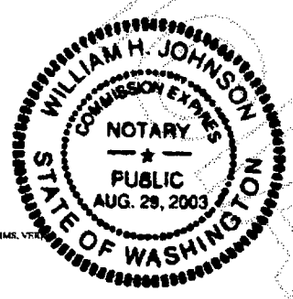
200304170009
Skagit County Auditor
4/17/2003 Page 2 of 7 9:05AM

UNOFFICIAL DOCUMENT

STATE OF WASHINGTON)
)ss.
COUNTY OF Skagit)

I certify that I know or have satisfactory evidence that VERN SIMS is the person who appeared before me, and said person acknowledged that he signed this instrument on oath and stated that he was authorized to execute the instrument and acknowledged it as the President of VERN SIMS FORD, INC., to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: April 15, 2003.



William H. Johnson
Name: William H. Johnson
NOTARY PUBLIC in and for the State of Washington, residing at Sedro.
My Commission Expires: 8/29/03.

S:\SIMS\WD COUL.THRU\FILES\CLIENTS\SIMS, VERN

UNOFFICIAL DOCUMENT

200304170009
Skagit County Auditor
4/17/2003 Page 3 of 7 9:05AM

UNOFFICIAL DOCUMENT

EXHIBIT "A"

Parcel "1": **4176-011-005-0002**

That portion of the vacated Northern Avenue and of Block 11 of "WEST ADDITION TO THE TOWN OF WOOLLEY, SKAGIT COUNTY, WASHINGTON", as per plat recorded in Volume 2 of Plats, page 89, records of Skagit County, Washington, described as follows:

Beginning at the Southwest corner of said Block 11; thence East along the South line thereof 210 feet to the true point of beginning; thence continue East along said South line 91.5 feet; thence North to the right-of-way of the Seattle and Northern Railway Company; thence in a Southwesterly direction along the South line of said right-of-way to a point due North of the true point of beginning; thence South to the true point of beginning.

Parcel "2": **4176-011-900-0107**

That portion of the Northwest 1/4 of the Southwest 1/4 of Section 24, Township 35 North, Range 4 East, W.M., and Lots 1 and 2, Block 1, "TOWN OF WOOLLEY", as per plat recorded in Volume 2 of Plats, page 92, records of Skagit County, Washington and of vacated streets adjoining described as follows:

Beginning at a point on the North line of Ferry Street, 361.5 feet East of the Southwest corner of Block 11, "WEST ADDITION TO THE TOWN OF WOOLLEY, SKAGIT COUNTY, WASHINGTON", according to the plat recorded in Volume 2 of Plats, page 89, records of Skagit County, Washington; thence East along the North line of Ferry Street 125 feet; thence North to the South line of the Seattle & Northern Railway right-of-way as shown on said plat; thence Southwesterly along said right-of-way line to a point due North of the place of beginning; thence South to the place of beginning.

200304170009
Skagit County Auditor
4/17/2003 Page 4 of 7 9:05AM

Parcel "3": 4177-001-006-0001

That part of Block 1, "TOWN OF WOOLLEY", according to the plat recorded in Volume 2 of Plats, page 92, records of Skagit County, Washington, and of the vacated streets adjoining, and vacated alley through said block, that have reverted by process of law, lying within the following boundaries:

Beginning at a point on the South line of said Block 1, which is 486.5 feet East of the Southwest corner of Block 11, "WEST ADDITION TO WOOLLEY", thence East along the South line of said Block 1 to the East line of alley as platted in said Block 1, "TOWN OF WOOLLEY"; thence North at right angles from the South line of said block to the South line of the Great Northern Railroad right-of-way; thence Westerly along the South line of said right-of-way to intersect with a line running North from the point of beginning and at right angles to the South line of said block; thence South to the point of beginning.

Parcel "4": 4177-007-006-0008

Lots 1 to 6, inclusive, Block 7, "TOWN OF WOOLLEY", according to the plat recorded in Volume 2 of Plats, page 92, records of Skagit County, Washington.

Parcel "5": 4177-007-011-0001

Lots 7 through 11, inclusive, Block 7, "TOWN OF WOOLLEY", as per plat recorded in Volume 2 of Plats, page 92, records of Skagit County, Washington.

TOGETHER WITH the West 1/2 of that portion of vacated Eastern Avenue lying West of the Northern Pacific right-of-way and directly East of said Block 7 which has reverted to said premises upon operation of law.

UNOFFICIAL DOCUMENT

200304170009
Skagit County Auditor
4/17/2003 Page 5 of 7 9:05AM

UNOFFICIAL DOCUMENT

EXHIBIT "B"

Parcel "1": 4176-011-900-0008

That portion of Block 11, "WEST ADDITION TO THE TOWN OF WOOLLEY, SKAGIT COUNTY, WASHINGTON", as per plat recorded in Volume 2 of Plats, page 89, records of Skagit County, and of vacated Northern Avenue adjoining on the North, described as follows:

Beginning at a point 301.5 feet East of the Southwest corner of Block 11, "WEST ADDITION TO WOOLLEY"; thence East along the North line of Ferry Street 60 feet; thence North to the South line of the Seattle & Northern Railway right-of-way; thence Southwesterly along said Railway line to a point due North of the point of beginning; thence South to the point of beginning.

Parcel "2": 4177-001-011-0004

That part of Block 1 "TOWN OF WOOLLEY", according to the recorded plat thereof in the Office of the Auditor of Skagit County, Washington, in Volume 2 of Plats, page 92, and of the vacated streets adjoining and vacated alley through said block, that have reverted by process of law, lying within the following described boundaries:

Beginning at a point 586.5 feet East of the Southwest corner of Block 11, of "WEST ADDITION TO WOOLLEY, SKAGIT COUNTY, WASH.", according to the recorded plat thereof in the Office of the Auditor of Skagit County, Washington in Volume 2 of Plats, page 89, and on the South line of Block 1 of the "TOWN OF WOOLLEY"; thence running North to the South line of the right-of-way of the Seattle and Northern Railway Company; thence Easterly along the South line of said right-of-way to a point 20 feet West of the West line of the original right-of-way of Northern Pacific Railway Co.; thence South parallel to and 20 feet distant from the West line of the original right-of-way of the Northern Pacific Railway Co. to the North line of Ferry Street; thence West along the North line of Ferry Street and along the South line of Block 1 of said "TOWN OF WOOLLEY", to the place of beginning; EXCEPT that portion thereof lying West of the East line of alley as platted in Block 1, "TOWN OF WOOLLEY".

200304170009
Skagit County Auditor
4/17/2003 Page 6 of 7 9:05AM

Parcel "3": 350424-3-082-0200

Two parcels of land situated in the Northeast 1/4 of the Southwest 1/4 of Section 24, Township 35 North, Range 4 East, W.M., Sedro Woolley, Skagit County, Washington, described as follows, to-wit:

Parcel 1 of Parcel "3"

Beginning at the intersection of the North line of Ferry Street with the centerline of 40.0 foot wide Eastern Avenue, vacated by the City Council of the City of Sedro Woolley by Resolution #101, duly passed and adopted on October 27, 1930; thence Northerly along the centerline of vacated Eastern Avenue 170.0 feet, more or less, to the Southerly line of Northern Avenue, according to the official plat of Sedro-Woolley, as filed in the County Auditor's Office in Skagit County, Washington; thence Easterly along said Southerly line of Northern Avenue 20.3 feet to the Easterly line of said vacated Eastern Avenue, also being on the Westerly line of Burlington Northern Railroad Company's (formerly Northern Pacific Railway Company) 100.0 foot wide right-of-way, being a portion of the same property as described in Warranty Deed from Phillip A. Woolley and Kate Woolley dated April 18, 1890 and filed for record April 25, 1890 in Volume 10 of Deeds, page 450 of the records of said County; thence Northern along said Westerly right-of-way line 42.39 feet to the Northerly line of said Northern Avenue, and being 50.0 feet Southerly, as measured at right angles from Burlington Northern Railroad Company's (formerly Great Northern Railway Company) Main Track centerline of the Burlington to Concrete, Washington Branch Line, as originally located and constructed; thence Easterly along said Northern line of Northern Avenue 26.49 feet to a point being 25.0 feet Westerly, as measured at right angles from the centerline of said Railroad Company's 100.0 foot wide right-of-way; thence Southerly along a line drawn parallel with the centerline of said 100.0 foot wide right-of-way 220.0 feet, more or less, to the said North line of Ferry Street; thence Westerly along said North line of Ferry Street 45.69 feet to the point of beginning; also,

Parcel 2 of Parcel "3"

Beginning at the intersection of the North line of Woodworth Street with the centerline of 40.0 foot wide Eastern Avenue, vacated by the City Council of the City of Sedro Woolley by Resolution #101 duly passed and adopted on October 27, 1930; thence Northerly along the centerline of vacated Eastern Avenue 219.3 feet, more or less, to the South line of 80.0 foot wide Ferry Street; thence Easterly along said South line of Ferry Street 45.69 feet to a point being 25.0 feet Westerly, as measured at right angles from the centerline of Burlington Northern Railroad Company's (formerly Northern Pacific Railway Company) 100.0 foot wide right-of-way , being a portion of the same property as described in Warranty Deed from Phillip A. Woolley and Kate Woolley dated April 18, 1890 and filed for record April 25, 1890 in Volume 10 of Deeds, page 450 of the records of said County; thence Southerly along a line drawn parallel with the centerline of said 100.0 foot wide right-of-way 219.3 feet, more or less, to the said North line of Woodworth Street; thence Westerly along said North line of Woodworth Street 45.69 feet to the point of beginning.

200304170009
Skagit County Auditor
4/17/2003 Page 7 of 7 9:05AM

Sims North Cascade Ford
116 W. Ferry St.
Sedro Woolley, WA 98284

Inquiry Number: 3676603.1
August 8, 2013

The EDR Chain of Title Report

EDR Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Chain of Title

The EDR Chain of Title Report tracks a line of successive owners from the present back to 1940 of a particular parcel of property, linked together by recorded transactions which pass title. Available nationwide, this report provides a summary of a property's ownership history and is a valuable source for determining the prior uses of a property

A network of professional abstractors following established procedures, uses client s**u**pplied address Information to locate:

- Historical Chain of Title research
- Leases and Miscellaneous

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR Chain of Title

TARGET PROPERTY INFORMATION

ADDRESS

Sims North Cascade Ford
116 W. Ferry St.
Sedro Woolley, WA 98284

Research Source

Source 1:	Skagit County Recorder of Deeds
Source 2:	N/A
Examiner's Note:	Public records of Skagit County, OH were searched from January 1, 1940 to July 23, 2013, and no other deeds vesting title in the subject property were found of record during the period searched.

PROPERTY DESCRIPTION

Current Owner:	Coulter Properties, LLC
Legal Description:	See Deed Attached
Property Identifiers:	APN: P77410, P77451
General Comments:	N/A

HISTORICAL CHAIN OF TITLE

See Exhibit "A"

LEASES AND MISCELLANEOUS

No liens were found of record searching back during the time period of the attached chain. See attached deed for any restrictions , AUL's, amendments, leases or agreements.

Chain of Title

Exhibit “A”

EDR Chain of Title

HISTORICAL CHAIN OF TITLE

Chain 1

Type of Deed:	Deed
Title is vested in:	Coulter Properties, LLC
Title received from:	VSF Properties, LLC (a/k/a Vern Sims Ford, Inc.)
Date Executed:	April 15, 2003
Date Recorded:	April 17, 2003
Book:	
Page:	
Volume:	
Instrument #:	200304170009
Docket:	

Land Record Comments: N/A

Chain 2

Type of Deed:	Deed
Title is vested in:	VSF Properties, LLC (a/k/a Vern Sims Ford, Inc.)
Title received from:	Vera F. Sims and Marie L. Sims
Date Executed:	December 1, 1997
Date Recorded:	December 30, 1997
Book:	1749
Page:	362
Volume:	
Instrument #:	
Docket:	

Land Record Comments: N/A

Chain 3

Type of Deed:	Deed
Title is vested in:	Vera F. Sims and Marie L. Sims
Title received from:	John M. McFarland
Date Executed:	October 22, 1981
Date Recorded:	October 27, 1981
Book:	457
Page:	234
Volume:	
Instrument #:	
Docket:	

Land Record Comments: According to county records this was a real estate contract

EDR Chain of Title

Chain 4

Type of Deed:	Deed
Title is vested in:	John M. McFarland
Title received from:	David Hobensack and Linda Hobensack
Date Executed:	March 4, 1981
Date Recorded:	April 16, 1981
Book:	436
Page:	295
Volume:	
Instrument #:	
Docket:	
Land Record Comments:	N/A

Chain 5

Type of Deed:	Deed
Title is vested in:	David Hobensack and Linda Hobensack
Title received from:	John M. McFarland
Date Executed:	January 16, 1978
Date Recorded:	January 20, 1978
Book:	302
Page:	418
Volume:	
Instrument #:	
Docket:	
Land Record Comments:	According to county records this was a real estate contract

Chain 6

Type of Deed:	Deed
Title is vested in:	John M. McFarland
Title received from:	Seattle and Northern Railway Company
Date Executed:	December 12, 1952
Date Recorded:	December 19, 1952
Book:	169
Page:	31
Volume:	
Instrument #:	
Docket:	
Land Record Comments:	N/A

EDR Chain of Title

Chain 7

Type of Deed:	Deed
Title is vested in:	Seattle and Northern Railway Company
Title received from:	Thomas Lichterman and Alice Lichterman
Date Executed:	February 14, 1935
Date Recorded:	February 23, 1935
Book:	114
Page:	9
Volume:	
Instrument #:	
Docket:	

Land Record Comments: N/A

EDR Chain of Title

DEED EXHIBIT

UNOFFICIAL DOCUMENT

Filed for Record at the Request of:
BETTS AUSTIN JOHNSON, P.L.L.C.
1616 Cornwall Avenue, Suite 209
Post Office Box 2788
Bellingham, WA 98227-2788

200304170009
Skagit County Auditor
4/17/2003 Page 1 of 7 9:05AM

Document Title: Statutory Warranty Deed
Reference No. of Documents Released/Assigned: N/A
Grantors: VSF PROPERTIES, L.L.C., a Washington Limited Liability Company, and VERN SIMS FORD, INC., a Washington Corporation
Grantee: COULTER PROPERTIES, L.L.C., a Washington Limited Liability Company

Exhibit "A"
Abbreviated Legals:
1. PTN VAC NTHRN AV BLK 11 WEST ADD TO TOWN OF . . .
2. PTN NW ¼ SW ¼ SCT 24 TWNS 35 N RNG 4 EWM . . .
3. BLK 1 TOWN OF WOOLLEY ACC TO PLAT REC . . .
4. LOTS 1 - 6 INC BLK 7 TOWN OF WOOLLEY . . .
5. LOTS 7 - 11 INC BLK 7 TOWN OF WOOLLEY . . .

Exhibit "B"
Abbreviated Legals:
1. PTN BLK 11 WEST ADD TO TOWN OF WOOLLEY . . .
2. PT BLK 1 TOWN OF WOOLLEY, ACC TO REC PLT . .
3. 2 PARCELS LAND SIT NE ¼ SW ¼ SCT 24 TWN 35 N . . .

Legal Descriptions Attached as Exhibits "A" & "B" hereto (pages 4 & 5, and pages 6 & 7).

Exhibit "A"
Assessor's Tax Parcel ID #:
1. 4176-011-005-0002
2. 4176-011-900-0107
3. 4177-001-006-0001
4. 4177-007-006-0008
5. 4177-007-011-0001

Exhibit "B"
Assessor's Tax Parcel ID #:
1. 4176-011-900-0008
2. 4177-001-011-0004
3. 350423-3-082-0200

#1806
SKAGIT COUNTY WASHINGTON
REAL ESTATE EXCISE TAX
APR 17 2003
Amount Paid $ 360.17
Skagit Co. Treasurer
By Deputy

STATUTORY WARRANTY DEED

The GRANTORS, VSF PROPERTIES, L.L.C., a Washington Limited Liability Company, and VERN SIMS FORD, INC., a Washington Corporation, for and in consideration of Ten Dollars ($10.00) and other good and valuable consideration, the Grantors hereby convey and warrant to COULTER PROPERTIES, L.L.C., a Washington Limited Liability Company, all of their interest in the following described real estate, situated in the County of Skagit, State of Washington, including any after acquired title:

Legal descriptions for the real property conveyed by VSF PROPERTIES, L.L.C. is attached hereto as Exhibit "A."

Legal descriptions for the real property conveyed by VERN SIMS FORD, INC. is attached hereto as Exhibit "B."

DATED this 15 day of April, 2003.

VSF PROPERTIES, L.L.C.

By: VERN SIMS
Its: Manager

VERN SIMS FORD, INC.

By: VERN SIMS
Its: President

STATE OF WASHINGTON)
)ss.
COUNTY OF Skagit)

I certify that I know or have satisfactory evidence that VERN SIMS is the person who appeared before me, and said person acknowledged that he signed this instrument on oath and stated that he was authorized to execute the instrument and acknowledged it as the Manager of VSF PROPERTIES, L.L.C., to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: April 15, 2003.

STATE OF WASHINGTON
WILLIAM H. JOHNSON
NOTARY
PUBLIC
COMMISSION EXPIRES
AUG. 29, 2003

Name: William H. Johnson
NOTARY PUBLIC in and for the State of Washington, residing at Burlington
My Commission Expires: 8/29/03

200304170009
Skagit County Auditor
4/17/2003 Page 2 of 7 9:05AM

UNOFFICIAL DOCUMENT

STATE OF WASHINGTON)
)ss.
COUNTY OF Skagit)

I certify that I know or have satisfactory evidence that VERN SIMS is the person who appeared before me, and said person acknowledged that he signed this instrument on oath and stated that he was authorized to execute the instrument and acknowledged it as the President of VERN SIMS FORD, INC., to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: April 15, 2003.



William H. Johnson
Name: William H. Johnson
NOTARY PUBLIC in and for the State of Washington, residing at Sedro-Woolley.
My Commission Expires: 8/29/03.

S:\MSWD COURTRAK FILES\CLIENTS\SIMS, VERN

UNOFFICIAL DOCUMENT

200304170009
Skagit County Auditor
4/17/2003 Page 3 of 7 9:05AM

UNOFFICIAL DOCUMENT

EXHIBIT "A"

Parcel "1": **4176-011-005-0002**

That portion of the vacated Northern Avenue and of Block 11 of "WEST ADDITION TO THE TOWN OF WOOLLEY, SKAGIT COUNTY, WASHINGTON", as per plat recorded in Volume 2 of Plats, page 89, records of Skagit County, Washington, described as follows:

Beginning at the Southwest corner of said Block 11; thence East along the South line thereof 210 feet to the true point of beginning; thence continue East along said South line 91.5 feet; thence North to the right-of-way of the Seattle and Northern Railway Company; thence in a Southwesterly direction along the South line of said right-of-way to a point due North of the true point of beginning; thence South to the true point of beginning.

Parcel "2": **4176-011-900-0107**

That portion of the Northwest 1/4 of the Southwest 1/4 of Section 24, Township 35 North, Range 4 East, W.M., and Lots 1 and 2, Block 1, "TOWN OF WOOLLEY", as per plat recorded in Volume 2 of Plats, page 92, records of Skagit County, Washington and of vacated streets adjoining described as follows:

Beginning at a point on the North line of Ferry Street, 361.5 feet East of the Southwest corner of Block 11, "WEST ADDITION TO THE TOWN OF WOOLLEY, SKAGIT COUNTY, WASHINGTON", according to the plat recorded in Volume 2 of Plats, page 89, records of Skagit County, Washington; thence East along the North line of Ferry Street 125 feet; thence North to the South line of the Seattle & Northern Railway right-of-way as shown on said plat; thence Southwesterly along said right-of-way line to a point due North of the place of beginning; thence South to the place of beginning.

200304170009
Skagit County Auditor
4/17/2003 Page 4 of 7 9:05AM

Parcel "3": **4177-001-006-0001**

That part of Block 1, "TOWN OF WOOLLEY", according to the plat recorded in Volume 2 of Plats, page 92, records of Skagit County, Washington, and of the vacated streets adjoining, and vacated alley through said block, that have reverted by process of law, lying within the following boundaries:

Beginning at a point on the South line of said Block 1, which is 486.5 feet East of the Southwest corner of Block 11, "WEST ADDITION TO WOOLLEY", thence East along the South line of said Block 1 to the East line of alley as platted in said Block 1, "TOWN OF WOOLLEY"; thence North at right angles from the South line of said block to the South line of the Great Northern Railroad right-of-way; thence Westerly along the South line of said right-of-way to intersect with a line running North from the point of beginning and at right angles to the South line of said block; thence South to the point of beginning.

Parcel "4": **4177-007-006-0008**

Lots 1 to 6, inclusive, Block 7, "TOWN OF WOOLLEY", according to the plat recorded in Volume 2 of Plats, page 92, records of Skagit County, Washington.

Parcel "5": **4177-007-011-0001**

Lots 7 through 11, inclusive, Block 7, "TOWN OF WOOLLEY", as per plat recorded in Volume 2 of Plats, page 92, records of Skagit County, Washington.

TOGETHER WITH the West 1/2 of that portion of vacated Eastern Avenue lying West of the Northern Pacific right-of-way and directly East of said Block 7 which has reverted to said premises upon operation of law.

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200304170009
Skagit County Auditor
4/17/2003 Page 5 of 7 9:05AM

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EXHIBIT "B"

Parcel "1": 4176-011-900-0008

That portion of Block 11, "WEST ADDITION TO THE TOWN OF WOOLLEY, SKAGIT COUNTY, WASHINGTON", as per plat recorded in Volume 2 of Plats, page 89, records of Skagit County, and of vacated Northern Avenue adjoining on the North, described as follows:

Beginning at a point 301.5 feet East of the Southwest corner of Block 11, "WEST ADDITION TO WOOLLEY"; thence East along the North line of Ferry Street 60 feet; thence North to the South line of the Seattle & Northern Railway right-of-way; thence Southwesterly along said Railway line to a point due North of the point of beginning; thence South to the point of beginning.

Parcel "2": 4177-001-011-0004

That part of Block 1 "TOWN OF WOOLLEY", according to the recorded plat thereof in the Office of the Auditor of Skagit County, Washington, in Volume 2 of Plats, page 92, and of the vacated streets adjoining and vacated alley through said block, that have reverted by process of law, lying within the following described boundaries:

Beginning at a point 586.5 feet East of the Southwest corner of Block 11, of "WEST ADDITION TO WOOLLEY, SKAGIT COUNTY, WASH.", according to the recorded plat thereof in the Office of the Auditor of Skagit County, Washington in Volume 2 of Plats, page 89, and on the South line of Block 1 of the "TOWN OF WOOLLEY"; thence running North to the South line of the right-of-way of the Seattle and Northern Railway Company; thence Easterly along the South line of said right-of-way to a point 20 feet West of the West line of the original right-of-way of Northern Pacific Railway Co.; thence South parallel to and 20 feet distant from the West line of the original right-of-way of the Northern Pacific Railway Co. to the North line of Ferry Street; thence West along the North line of Ferry Street and along the South line of Block 1 of said "TOWN OF WOOLLEY", to the place of beginning; EXCEPT that portion thereof lying West of the East line of alley as platted in Block 1, "TOWN OF WOOLLEY".

200304170009
Skagit County Auditor
4/17/2003 Page 6 of 7 9:05AM

Parcel "3": 350424-3-082-0200

Two parcels of land situated in the Northeast 1/4 of the Southwest 1/4 of Section 24, Township 35 North, Range 4 East, W.M., Sedro Woolley, Skagit County, Washington, described as follows, to-wit:

Parcel 1 of Parcel "3"

Beginning at the intersection of the North line of Ferry Street with the centerline of 40.0 foot wide Eastern Avenue, vacated by the City Council of the City of Sedro Woolley by Resolution #101, duly passed and adopted on October 27, 1930; thence Northerly along the centerline of vacated Eastern Avenue 170.0 feet, more or less, to the Southerly line of Northern Avenue, according to the official plat of Sedro-Woolley, as filed in the County Auditor's Office in Skagit County, Washington; thence Easterly along said Southerly line of Northern Avenue 20.3 feet to the Easterly line of said vacated Eastern Avenue, also being on the Westerly line of Burlington Northern Railroad Company's (formerly Northern Pacific Railway Company) 100.0 foot wide right-of-way, being a portion of the same property as described in Warranty Deed from Phillip A. Woolley and Kate Woolley dated April 18, 1890 and filed for record April 25, 1890 in Volume 10 of Deeds, page 450 of the records of said County; thence Northern along said Westerly right-of-way line 42.39 feet to the Northerly line of said Northern Avenue, and being 50.0 feet Southerly, as measured at right angles from Burlington Northern Railroad Company's (formerly Great Northern Railway Company) Main Track centerline of the Burlington to Concrete, Washington Branch Line, as originally located and constructed; thence Easterly along said Northern line of Northern Avenue 26.49 feet to a point being 25.0 feet Westerly, as measured at right angles from the centerline of said Railroad Company's 100.0 foot wide right-of-way; thence Southerly along a line drawn parallel with the centerline of said 100.0 foot wide right-of-way 220.0 feet, more or less, to the said North line of Ferry Street; thence Westerly along said North line of Ferry Street 45.69 feet to the point of beginning; also,

Parcel 2 of Parcel "3"

Beginning at the intersection of the North line of Woodworth Street with the centerline of 40.0 foot wide Eastern Avenue, vacated by the City Council of the City of Sedro Woolley by Resolution #101 duly passed and adopted on October 27, 1930; thence Northerly along the centerline of vacated Eastern Avenue 219.3 feet, more or less, to the South line of 80.0 foot wide Ferry Street; thence Easterly along said South line of Ferry Street 45.69 feet to a point being 25.0 feet Westerly, as measured at right angles from the centerline of Burlington Northern Railroad Company's (formerly Northern Pacific Railway Company) 100.0 foot wide right-of-way, being a portion of the same property as described in Warranty Deed from Phillip A. Woolley and Kate Woolley dated April 18, 1890 and filed for record April 25, 1890 in Volume 10 of Deeds, page 450 of the records of said County; thence Southerly along a line drawn parallel with the centerline of said 100.0 foot wide right-of-way 219.3 feet, more or less, to the said North line of Woodworth Street; thence Westerly along said North line of Woodworth Street 45.69 feet to the point of beginning.

200304170009
Skagit County Auditor
4/17/2003 Page 7 of 7 9:05AM

UNOFFICIAL DOCUMENT

Sims North Cascade Ford
116 W. Ferry St.
Sedro Woolley, WA 98284

Inquiry Number: 3676603.1
August 8, 2013

The EDR Chain of Title Report

EDR Environmental Data Resources Inc

440 Wheelers Farms Road
Milford, CT 06461
800.352.0050
www.edrnet.com

EDR Chain of Title

The EDR Chain of Title Report tracks a line of successive owners from the present back to 1940 of a particular parcel of property, linked together by recorded transactions which pass title. Available nationwide, this report provides a summary of a property's ownership history and is a valuable source for determining the prior uses of a property

A network of professional abstractors following established procedures, uses client s**u**pplied address Information to locate:

- Historical Chain of Title research
- Leases and Miscellaneous

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

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EDR Chain of Title

TARGET PROPERTY INFORMATION

ADDRESS

Sims North Cascade Ford
116 W. Ferry St.
Sedro Woolley, WA 98284

Research Source

Source 1:	Skagit County Recorder of Deeds
Source 2:	N/A
Examiner's Note:	Public records of Skagit County, OH were searched from January 1, 1940 to July 23, 2013, and no other deeds vesting title in the subject property were found of record during the period searched.

PROPERTY DESCRIPTION

Current Owner:	Coulter Properties, LLC
Legal Description:	See Deed Attached
Property Identifiers:	APN: P77493
General Comments:	N/A

HISTORICAL CHAIN OF TITLE

See Exhibit "A"

LEASES AND MISCELLANEOUS

No liens were found of record searching back during the time period of the attached chain. See attached deed for any restrictions , AUL's, amendments, leases or agreements.

Chain of Title

Exhibit “A”

EDR Chain of Title

HISTORICAL CHAIN OF TITLE

Chain 1

Type of Deed:	Deed
Title is vested in:	Coulter Properties, LLC
Title received from:	VSF Properties, LLC (a/k/a Vern Sims Ford, Inc.)
Date Executed:	April 15, 2003
Date Recorded:	April 17, 2003
Book:	
Page:	
Volume:	
Instrument #:	200304170009
Docket:	

Land Record Comments: N/A

Chain 2

Type of Deed:	Deed
Title is vested in:	VSF Properties, LLC (a/k/a Vern Sims Ford, Inc.)
Title received from:	Vera F. Sims and Marie L. Sims
Date Executed:	December 1, 1997
Date Recorded:	December 30, 1997
Book:	1749
Page:	362
Volume:	
Instrument #:	
Docket:	

Land Record Comments: N/A

Chain 3

Type of Deed:	Deed
Title is vested in:	Vera F. Sims and Marie L. Sims
Title received from:	John M. McFarland
Date Executed:	October 22, 1981
Date Recorded:	October 27, 1981
Book:	457
Page:	234
Volume:	
Instrument #:	
Docket:	

Land Record Comments: According to county records this was a real estate contract

EDR Chain of Title

Chain 4

Type of Deed:	Deed
Title is vested in:	John M. McFarland
Title received from:	David Hobensack and Linda Hobensack
Date Executed:	March 4, 1981
Date Recorded:	April 16, 1981
Book:	436
Page:	295
Volume:	
Instrument #:	
Docket:	
Land Record Comments:	N/A

Chain 5

Type of Deed:	Deed
Title is vested in:	David Hobensack and Linda Hobensack
Title received from:	John M. McFarland
Date Executed:	January 16, 1978
Date Recorded:	January 20, 1978
Book:	302
Page:	418
Volume:	
Instrument #:	
Docket:	
Land Record Comments:	According to county records this was a real estate contract

Chain 6

Type of Deed:	Deed
Title is vested in:	John M. McFarland
Title received from:	Richard Distretti
Date Executed:	July 18, 1962
Date Recorded:	July 24, 1962
Book:	207
Page:	999
Volume:	
Instrument #:	
Docket:	
Land Record Comments:	N/A

EDR Chain of Title

Chain 7

Type of Deed:	Deed
Title is vested in:	Richard Distretti
Title received from:	Ernest Booker and Cecelia Booker
Date Executed:	April 6, 1950
Date Recorded:	April 21, 1950
Book:	163
Page:	827
Volume:	
Instrument #:	
Docket:	
Land Record Comments:	N/A

Chain 8

Type of Deed:	Deed
Title is vested in:	Ernest Booker and Cecelia Booker
Title received from:	Jack Fritzsche and Lettie Fritzsche
Date Executed:	November 11, 1936
Date Recorded:	November 19, 1936
Book:	116
Page:	315
Volume:	
Instrument #:	
Docket:	
Land Record Comments:	N/A

EDR Chain of Title

DEED EXHIBIT

Filed for Record at the Request of:
BETTS AUSTIN JOHNSON, P.L.L.C.
1616 Cornwall Avenue, Suite 209
Post Office Box 2788
Bellingham, WA 98227-2788

200304170009
Skagit County Auditor
4/17/2003 Page 1 of 7 9:05AM

Document Title: Statutory Warranty Deed
Reference No. of Documents Released/Assigned: N/A
Grantors: VSF PROPERTIES, L.L.C., a Washington Limited Liability Company, and VERN SIMS FORD, INC., a Washington Corporation
Grantee: COULTER PROPERTIES, L.L.C., a Washington Limited Liability Company

Exhibit "A"
Abbreviated Legals:
1. PTN VAC NTHRN AV BLK 11 WEST ADD TO TOWN OF . . .
2. PTN NW ¼ SW ¼ SCT 24 TWNS 35 N RNG 4 EWM . . .
3. BLK 1 TOWN OF WOOLLEY ACC TO PLAT REC . . .
4. LOTS 1 - 6 INC BLK 7 TOWN OF WOOLLEY . . .
5. LOTS 7 - 11 INC BLK 7 TOWN OF WOOLLEY . . .

Exhibit "B"
Abbreviated Legals:
1. PTN BLK 11 WEST ADD TO TOWN OF WOOLLEY . . .
2. PT BLK 1 TOWN OF WOOLLEY, ACC TO REC PLT . .
3. 2 PARCELS LAND SIT NE ¼ SW ¼ SCT 24 TWN 35 N . . .

Legal Descriptions Attached as Exhibits "A" & "B" hereto (pages 4 & 5, and pages 6 & 7).

Exhibit "A"
Assessor's Tax Parcel ID #:
1. 4176-011-005-0002
2. 4176-011-900-0107
3. 4177-001-006-0001
4. 4177-007-006-0008
5. 4177-007-011-0001

Exhibit "B"
Assessor's Tax Parcel ID #:
1. 4176-011-900-0008
2. 4177-001-011-0004
3. 350423-3-082-0200

#1806
SKAGIT COUNTY WASHINGTON
REAL ESTATE EXCISE TAX
APR 17 2003
Amount Paid $ 36,717.00
Skagit Co. Treasurer
By BA Deputy

4

UNOFFICIAL DOCUMENT

STATUTORY WARRANTY DEED

The GRANTORS, VSF PROPERTIES, L.L.C., a Washington Limited Liability Company, and VERN SIMS FORD, INC., a Washington Corporation, for and in consideration of Ten Dollars ($10.00) and other good and valuable consideration, the Grantors hereby convey and warrant to COULTER PROPERTIES, L.L.C., a Washington Limited Liability Company, all of their interest in the following described real estate, situated in the County of Skagit, State of Washington, including any after acquired title:

Legal descriptions for the real property conveyed by VSF PROPERTIES, L.L.C. is attached hereto as Exhibit "A."

Legal descriptions for the real property conveyed by VERN SIMS FORD, INC. is attached hereto as Exhibit "B."

DATED this 15 day of April, 2003.

VSF PROPERTIES, L.L.C.

By: VERN SIMS
Its: Manager

VERN SIMS FORD, INC.

By: VERN SIMS
Its: President

STATE OF WASHINGTON)
)ss.
COUNTY OF Skagit)

I certify that I know or have satisfactory evidence that VERN SIMS is the person who appeared before me, and said person acknowledged that he signed this instrument on oath and stated that he was authorized to execute the instrument and acknowledged it as the Manager of VSF PROPERTIES, L.L.C., to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: April 15, 2003.

STATE OF WASHINGTON
WILLIAM H. JOHNSON
NOTARY PUBLIC
AUG. 29, 2003
COMMISSION EXPIRES

William H. Johnson
Name: William H. Johnson
NOTARY PUBLIC in and for the State of Washington, residing at Sumner
My Commission Expires: 8/29/03

200304170009
Skagit County Auditor
4/17/2003 Page 2 of 7 9:05AM

UNOFFICIAL DOCUMENT

STATE OF WASHINGTON)
)ss.
COUNTY OF Skagit)

I certify that I know or have satisfactory evidence that VERN SIMS is the person who appeared before me, and said person acknowledged that he signed this instrument on oath and stated that he was authorized to execute the instrument and acknowledged it as the President of VERN SIMS FORD, INC., to be the free and voluntary act of such party for the uses and purposes mentioned in the instrument.

DATED: April 15, 2003.

WILLIAM H. JOHNSON NOTARY PUBLIC STATE OF WASHINGTON COMMISSION EXPIRES AUG. 29, 2003

William H Johnson
Name: William H. Johnson
NOTARY PUBLIC in and for the State of Washington, residing at Lynden.
My Commission Expires: 8/29/03.

S:\SIMS\WD COURTESY FILES\CLIENTS\SIMS, VERN

UNOFFICIAL DOCUMENT

200304170009
Skagit County Auditor
4/17/2003 Page 3 of 7 9:05AM

EXHIBIT "A"

Parcel "1": 4176-011-005-0002

That portion of the vacated Northern Avenue and of Block 11 of "WEST ADDITION TO THE TOWN OF WOOLLEY, SKAGIT COUNTY, WASHINGTON", as per plat recorded in Volume 2 of Plats, page 89, records of Skagit County, Washington, described as follows:

Beginning at the Southwest corner of said Block 11; thence East along the South line thereof 210 feet to the true point of beginning; thence continue East along said South line 91.5 feet; thence North to the right-of-way of the Seattle and Northern Railway Company; thence in a Southwesterly direction along the South line of said right-of-way to a point due North of the true point of beginning; thence South to the true point of beginning.

Parcel "2": 4176-011-900-0107

That portion of the Northwest 1/4 of the Southwest 1/4 of Section 24, Township 35 North, Range 4 East, W.M., and Lots 1 and 2, Block 1, "TOWN OF WOOLLEY", as per plat recorded in Volume 2 of Plats, page 92, records of Skagit County, Washington and of vacated streets adjoining described as follows:

Beginning at a point on the North line of Ferry Street, 361.5 feet East of the Southwest corner of Block 11, "WEST ADDITION TO THE TOWN OF WOOLLEY, SKAGIT COUNTY, WASHINGTON", according to the plat recorded in Volume 2 of Plats, page 89, records of Skagit County, Washington; thence East along the North line of Ferry Street 125 feet; thence North to the South line of the Seattle & Northern Railway right-of-way as shown on said plat; thence Southwesterly along said right-of-way line to a point due North of the place of beginning; thence South to the place of beginning.

UNOFFICIAL DOCUMENT

200304170009
Skagit County Auditor
4/17/2003 Page 4 of 7 9:05AM

Parcel "3": 4177-001-006-0001

That part of Block 1, "TOWN OF WOOLLEY", according to the plat recorded in Volume 2 of Plats, page 92, records of Skagit County, Washington, and of the vacated streets adjoining, and vacated alley through said block, that have reverted by process of law, lying within the following boundaries:

Beginning at a point on the South line of said Block 1, which is 486.5 feet East of the Southwest corner of Block 11, "WEST ADDITION TO WOOLLEY", thence East along the South line of said Block 1 to the East line of alley as platted in said Block 1, "TOWN OF WOOLLEY"; thence North at right angles from the South line of said block to the South line of the Great Northern Railroad right-of-way; thence Westerly along the South line of said right-of-way to intersect with a line running North from the point of beginning and at right angles to the South line of said block; thence South to the point of beginning.

Parcel "4": 4177-007-006-0008

Lots 1 to 6, inclusive, Block 7, "TOWN OF WOOLLEY", according to the plat recorded in Volume 2 of Plats, page 92, records of Skagit County, Washington.

Parcel "5": 4177-007-011-0001

Lots 7 through 11, inclusive, Block 7, "TOWN OF WOOLLEY", as per plat recorded in Volume 2 of Plats, page 92, records of Skagit County, Washington.

TOGETHER WITH the West 1/2 of that portion of vacated Eastern Avenue lying West of the Northern Pacific right-of-way and directly East of said Block 7 which has reverted to said premises upon operation of law.

UNOFFICIAL DOCUMENT

200304170009
Skagit County Auditor
4/17/2003 Page 5 of 7 9:05AM

UNOFFICIAL DOCUMENT

EXHIBIT "B"

Parcel "1": 4176-011-900-0008

That portion of Block 11, "WEST ADDITION TO THE TOWN OF WOOLLEY, SKAGIT COUNTY, WASHINGTON", as per plat recorded in Volume 2 of Plats, page 89, records of Skagit County, and of vacated Northern Avenue adjoining on the North, described as follows:

Beginning at a point 301.5 feet East of the Southwest corner of Block 11, "WEST ADDITION TO WOOLLEY"; thence East along the North line of Ferry Street 60 feet; thence North to the South line of the Seattle & Northern Railway right-of-way; thence Southwesterly along said Railway line to a point due North of the point of beginning; thence South to the point of beginning.

Parcel "2": 4177-001-011-0004

That part of Block 1 "TOWN OF WOOLLEY", according to the recorded plat thereof in the Office of the Auditor of Skagit County, Washington, in Volume 2 of Plats, page 92, and of the vacated streets adjoining and vacated alley through said block, that have reverted by process of law, lying within the following described boundaries:

Beginning at a point 586.5 feet East of the Southwest corner of Block 11, of "WEST ADDITION TO WOOLLEY, SKAGIT COUNTY, WASH.", according to the recorded plat thereof in the Office of the Auditor of Skagit County, Washington in Volume 2 of Plats, page 89, and on the South line of Block 1 of the "TOWN OF WOOLLEY"; thence running North to the South line of the right-of-way of the Seattle and Northern Railway Company; thence Easterly along the South line of said right-of-way to a point 20 feet West of the West line of the original right-of-way of Northern Pacific Railway Co.; thence South parallel to and 20 feet distant from the West line of the original right-of-way of the Northern Pacific Railway Co. to the North line of Ferry Street; thence West along the North line of Ferry Street and along the South line of Block 1 of said "TOWN OF WOOLLEY", to the place of beginning; EXCEPT that portion thereof lying West of the East line of alley as platted in Block 1, "TOWN OF WOOLLEY".

200304170009
Skagit County Auditor
4/17/2003 Page 6 of 7 9:05AM

Parcel "3": 350424-3-082-0200

Two parcels of land situated in the Northeast 1/4 of the Southwest 1/4 of Section 24, Township 35 North, Range 4 East, W.M., Sedro Woolley, Skagit County, Washington, described as follows, to-wit:

Parcel 1 of Parcel "3"

Beginning at the intersection of the North line of Ferry Street with the centerline of 40.0 foot wide Eastern Avenue, vacated by the City Council of the City of Sedro Woolley by Resolution #101, duly passed and adopted on October 27, 1930; thence Northerly along the centerline of vacated Eastern Avenue 170.0 feet, more or less, to the Southerly line of Northern Avenue, according to the official plat of Sedro-Woolley, as filed in the County Auditor's Office in Skagit County, Washington; thence Easterly along said Southerly line of Northern Avenue 20.3 feet to the Easterly line of said vacated Eastern Avenue, also being on the Westerly line of Burlington Northern Railroad Company's (formerly Northern Pacific Railway Company) 100.0 foot wide right-of-way, being a portion of the same property as described in Warranty Deed from Phillip A. Woolley and Kate Woolley dated April 18, 1890 and filed for record April 25, 1890 in Volume 10 of Deeds, page 450 of the records of said County; thence Northern along said Westerly right-of-way line 42.39 feet to the Northerly line of said Northern Avenue, and being 50.0 feet Southerly, as measured at right angles from Burlington Northern Railroad Company's (formerly Great Northern Railway Company) Main Track centerline of the Burlington to Concrete, Washington Branch Line, as originally located and constructed; thence Easterly along said Northern line of Northern Avenue 26.49 feet to a point being 25.0 feet Westerly, as measured at right angles from the centerline of said Railroad Company's 100.0 foot wide right-of-way; thence Southerly along a line drawn parallel with the centerline of said 100.0 foot wide right-of-way 220.0 feet, more or less, to the said North line of Ferry Street; thence Westerly along said North line of Ferry Street 45.69 feet to the point of beginning; also,

Parcel 2 of Parcel "3"

Beginning at the intersection of the North line of Woodworth Street with the centerline of 40.0 foot wide Eastern Avenue, vacated by the City Council of the City of Sedro Woolley by Resolution #101 duly passed and adopted on October 27, 1930; thence Northerly along the centerline of vacated Eastern Avenue 219.3 feet, more or less, to the South line of 80.0 foot wide Ferry Street; thence Easterly along said South line of Ferry Street 45.69 feet to a point being 25.0 feet Westerly, as measured at right angles from the centerline of Burlington Northern Railroad Company's (formerly Northern Pacific Railway Company) 100.0 foot wide right-of-way , being a portion of the same property as described in Warranty Deed from Phillip A. Woolley and Kate Woolley dated April 18, 1890 and filed for record April 25, 1890 in Volume 10 of Deeds, page 450 of the records of said County; thence Southerly along a line drawn parallel with the centerline of said 100.0 foot wide right-of-way 219.3 feet, more or less, to the said North line of Woodworth Street; thence Westerly along said North line of Woodworth Street 45.69 feet to the point of beginning.

200304170009
Skagit County Auditor
4/17/2003 Page 7 of 7 9:05AM

ATTACHMENT D

CITY DIRECTORIES



612 S. 1st Street
Mt. Vernon, Washington 98273
TEL. 336-3424
RAINBOW reprographics
SPECIALTY PRINTING
QUICK PRINTING
PHOTOCOPIES

Bob Mann
SALE OF BUSINESS PROPERTIES - APPRAISALS
YOUR BROKER SINCE 1958
1910 Riverside Drive, No. 4, Mt. Vernon, WA 98273 Bus. 424-9090, Res. 675-9157

E FAIRHAVEN AV (R)—Contd
1700 Clark Duane R ◎ 757-0275
1712★Lucas Betty A ◎
1735 Aamot Helen ◎ 757-0272
1804 Sinnott Wm F ◎ 757-6577
1805 Robertson Claude C ◎ 757-0252
1810 Svoboda Frank ◎ 757-6405
1814★Ferguson Jim ◎
GARDNER RD INTERSECTS

15

FAIRHAVEN AV W (BURLINGTON)—FROM 100 N GARL WEST

ZIP CODE 98233
135 Skagit Valley Towing 757-2215
CLEVELAND ST INTERSECTS
225 Balda Rena Mrs ◎ 757-0190
MC KINLEY ST INTERSECTS
303★Mapes Dennis 757-4286
315 Dennis Linda A 757-4597
325 Rodgers Bess C Mrs ◎ 752-6840
KOCH ST INTERSECTS
405★Fowler Jean M
409 Porell Kath H Mrs ◎ 757-6870
415★Brenner Terry 757-6219
419 Cramer Building Corp bldg contrs 757-6624
Cramer Charles A ◎ 757-6624
Doennebink Trudy
616 Vacant

17

618 Humphrey Louis E ◎ 757-9011
620 Jolley Richd ◎

17

FAIRWAY DR (BURLINGTON)—FROM 1425 COUNTRY CLUB DR SOUTHEAST IN SEMI-CIR

ZIP CODE 98233
1431 Holston Kenneth P ◎ 757-4410
1433 Hickson Mabel E ◎ 757-0881
1435 Nightingale Herbert D ◎ 757-0305
1436 Spink Dennis G ◎ 757-6132
1439 Caviezel James G
1440 Partington Charles G 757-0862
1442 No Return
1443 Martin John W ◎ 757-0294
1445 Mc Nett James W Jr ◎ 757-0298

11

FENTON LA (BURLINGTON)

ZIP CODE 98233
961 Fenton Troy M ◎ 757-0556

15

FERN ST (BURLINGTON) FROM LA FAYETTE RD NORTH 2 EAST GARDNER RD

ZIP CODE 98233
404 Douglas John W ◎ 757-4402
405 Larson Genevieve E Mrs ◎ 757-6258
408 Davis Ivan E ◎ 757-6691

1

FERRY ST (SEDRO WOOLLEY)-FROM BNI TRACKS EAST 2 NORTH OF E STATE ST

ZIP CODE 98284
EASTERN ST INTERSECTS
100 Family Market No 343 gro 855-0100
101 Wash Rack III (Martin Oil Co) 855-1245
109 Four Aces Tavern 855-0800
118 Armstrong's TV & Appliance 855-1262
124 Gary's Gateway Chevron Service 855-0161
METCALF ST INTERSECTS
203 Independence Hall
205 Liberty Catering (Storerm)
210 Gateway Restaurant 855-0060
Cascade Room cocktail lounge 855-0188
Gas Light Room cocktail lounge
221 Skagit Valley Pharmacy Inc 855-0200
207 Genl Tel Co (Equip Sub Sta)
222 Seattle First National Bank 855-1611
MURDOCK ST INTERSECTS

STATE FARM INSURANCE
SORESTAD
KEITH AND KEN
PHONE 855-1831
820 Township St. (Sedro Woolley)

FERRY ST (S)—Contd
307 Ginger Lee's Beauty Salon 855-0640
318 Apartments
1 Johnson Melvin E ◎ 855-0355
3★Clayhorn Margt L
4 Bitonti Joe
5★Groll Karl 855-1237
339 Sedro Woolley Exxon gas sta 855-0123

3

PUGET ST INTERSECTS
402 Foss Inge A ◎ 855-0076
405 Mc Kain Clair 855-0891
420 Hodgin Albert M ◎ 855-1302
421★Reed Greg L 855-1113
N REED ST INTERSECTS
502a No Return
503★Brown James D 855-1134
504 Vacant
511★Ramon Fernando O ◎ 855-0317
516 No Return
520 Ruhl Steph J ◎ 855-0315
523 Warwick Wm P ◎ 855-0833
N HAINES ST INTERSECTS
601 No Return
602★Auffret Jean M 855-0857
607 Bohannon Eug ◎ 855-0553
608 Ridgway Emma Mrs ◎ 855-0590
612 Mc Inturff Paul R ◎ 855-0837
615 Younker Dorvin J ◎ 855-0887
617 No Return
N CENTRAL ST INTERSECTS
702 Allison Otto M Jr lwyr ◎ 855-1170
708 Nelson Fredk ◎ 855-0820
719 Immaculate Heart Of Mary Church 855-0077
★Dalton James Rev
730★Ehling Charles ◎ 855-0158
731★Myers Marjorie A 855-1884
731½ Vacant
736★Byrd Edw 855-0493
741★De Rosier Ray D ◎ 855-0748
744★Hagge Earl ◎ 855-0258
747 Mayville H N Jr ◎ 855-0994
749★Watts Earnest E ◎ 855-1902
754 Smith Wm R ◎ 855-1236
N BALL ST INTERSECTS
801 No Return
804★Haddox Richd M 855-0886
805★Shoshone Clint M
818 Jewell Harry D ◎ 855-0245
819 Bigelow Thos ◎ 855-1248
821 Splane Maurice E ◎ 855-0024
824★Day Kenneth E ◎ 855-1858
829 Muhlbeier Ida Mrs ◎ 855-0386
830 Fleck Clifford J 855-0118
832 Frietch Wyman ◎
833 Zeiger Fannie Mrs ◎ 855-0012
837 Bumgarner Ray 855-0637
841 Buggy Wheel gros 855-1407
842 No Return

13

FERRY ST S (BURLINGTON) FROM VERNON ST SOUTH 1 EAST OF S SKAGIT ST

ZIP CODE 98233
302 Francis Lester L ◎ 755-0562
310 Bisagna Donald J ◎ 755-9494
316 Benston R Dean ◎ 755-0302
318 Burger Tom R ◎ 755-0603

9

FERRY ST W (SEDRO WOOLLEY)-FROM BNI TRACKS WEST

ZIP CODE 98284
ZIP CODE 98284
100 Lentz Supply Inc garden equip 855-0311
116 Sims Vern Ford Inc new car dlr 855-1551
RITA ST INTERSECTS
201 Dooley Clifford S ◎ 855-0742
208 Davidson Court apts
2★Cakins Ferry
3★Haskill Eug R
4★Richmann Grace
5★Eckerhart Wesley
6 Rodriguez Cristobal
7 Taylor Frank 855-1871
209 Stendal John F ◎ 855-1436
220 Herb's Chevron Station 855-9907
Valley Auto Supply ret parts 855-0141
Mahala Marshall
223 Blouin Dean ◎ 855-1454
229 Vacant

WESTWOOD
OF SKAGIT VALLEY, INC. No. 3-1910 Riverside Drive Mt. Vernon, Wa. 98273
"BUILDING WITH QUALITY & SERVICE"
TEL. 424-0474

1980

SKAGIT BATTERY
Marine - Commercial - Automotive Specialists
201 N. FIRST ST., LA CONNER 98257
1364 OLD HIGHWAY 99, BURLINGTON 98233
TEL. 466-3533
TEL. 428-1989

Bob Mann
SALE OF BUSINESS PROPERTIES - APPRAISALS
YOUR BROKER SINCE 1958
1910 Riverside Drive, No. 4, Mt. Vernon, WA 98273 Bus. 424-9090, Res. 675-9157

E FAIRHAVEN AV (R)—Contd
13★Stevens Karla
14★Cummings Susan
15★Panco David 755-0338
1201 Riviera Town House
1★Shoemaker Bob 755-0745
2★Fontana Pat
3★Cortez Ramiro
4 Brady Rick 755-0620
5 Sharples Donna Mrs 755-9600
6★Robertson Kurt
1208★Wilson Robt L
1208½★Lamphere Wayne
1215 Brentwood Apartments
1215a★Waldron Betty 755-0861
1215b★Lamb Christi
1215c★Mien Debbie
1215d★Zitkovich Tom 755-0767
1219 Ketchem Dorryl
1220★Mott Earl V 755-9702
1221 Wiles Richd F ◎ 755-9116
1224 Carpenter Mervin R ◎ 755-0265
1231★Salinas Silvester 755-0746
1237 Baroness Apartments The
1 Clark Homer L ◎ 755-0860
2 Gorton Tressia 775-0817
3★Van Winkle Carol
4★Peterson Tim
1239★Tait Ronald
1251 Brunz Henry G ◎ 755-0262
1265 Hedblom Corinne Mrs ◎ 755-9281
HAWTHORNE ST INTERSECTS
1302 Peden Ben E ◎ 755-0805
1310 Vacant
1316★Vandermeulen Clarence ◎
1318 Lopez Nicasio S ◎ 755-9303
1320 Bolden Julia R Mrs ◎ 755-0968
1324 Greydanus Steve ◎ 755-9163
1341 Mc Moran Jan Mrs 755-0687
1342 Fox Paul L ◎ 755-9235
1369★Gish Dwane 755-0668
1375★Duckworth Russ ◎ 755-0118
N SECTION ST INTERSECTS
1415 Vacant
1500 Riordan Christopher ◎ 755-0840
1501 Banta Ted N ◎ 755-0875
1509 No Return
1515 Vaughan Harry ◎ 755-0585
RAINBOW DR INTERSECTS
1600 Anderson Norris K ◎ 757-6783
Dr Renovard Richd 757-0901
1601b Miller Roger
1625 King Wm V ◎ 757-6105
1630 Rowley Donald I ◎ 757-6782
1635 Nielsen Johanna M Mrs ◎ 757-6404
PIONEER DR INTERSECTS
1700 Clark Duane R ◎ 757-0275
1712 Lucas Robt ◎ 757-6104
1735 Aamot Helen ◎ 757-0272
1804 Sinnott Wm F ◎ 757-6577
1805 Robertson Claude C ◎ 757-0252
1810 Svoboda Frank ◎ 757-6405
1814 Ferguson Jim ◎
GARDNER RD INTERSECTS

15

FAIRHAVEN AV W (BURLINGTON)—FROM 100 N GARL WEST

ZIP CODE 98233
135 Skagit Valley Towing 757-4774
CLEVELAND ST INTERSECTS
225 Balda Rena Mrs ◎ 757-0190
MC KINLEY ST INTERSECTS
303 No Return
315★Sheridan Michl 757-4597
325★Rogers Bess C ◎ 757-6840
KOCH ST INTERSECTS
405★Crosby Ted
409★Lightly Janet J Mrs ◎
415 Brenner Terry 757-6219
419 Cramer Building Corp bldg contrs 757-6624
Cramer Charles A ◎ 757-6624
Doennebink Trudy 757-6544
421★Anderson Jeff R 757-6540
423★Aarstad Jon 757-6638
425★Ostlund Jeanne

17

618 Humphrey Louis E ◎ 757-6823
620 Jolley Richd ◎

17

FAIRWAY DR (BURLINGTON)—FROM 1425 COUNTRY CLUB DR SOUTHEAST IN SEMI-CIR

ZIP CODE 98233

PUBLIC UTILITY DISTRICT NO. 1
OF SKAGIT COUNTY
TEL. 424-7104
1415 FREEWAY DR. MOUNT VERNON (98273)

FAIRWAY DR (B)—Contd
1431 Holston Kenneth P ◎ 757-4410
1432★Loynd Robt ◎ 757-0594
1433 Hickson Mabel E ◎ 757-0881
1435 Nightingale Herbert D ◎ 757-0305
1436★Baker Otis ◎ 757-6191
1438★Ferlin John R ◎ 757-4271
1439★Kern A
1440 Partington Charles G 757-0862
1442★Hudson Harley
1443 Martin John W ◎ 757-0294
1445 Mc Nett James W Jr ◎ 757-0298

11

FENTON LA (BURLINGTON)

ZIP CODE 98233
960a★Hurley Walter 757-4173
960b★Okott Donald
961 Fenton Troy M ◎ 757-0556

15

FERN ST (BURLINGTON) FROM LA FAYETTE RD NORTH 2 EAST GARDNER RD

ZIP CODE 98233
404 Douglas John W ◎ 757-4402
405 Larson Genevieve E Mrs ◎ 757-6258
408 Davis Ivan E ◎ 757-6691

1

FERRY ST (SEDRO WOOLLEY)-FROM BNI TRACKS EAST 2 NORTH OF E STATE ST

ZIP CODE 98284
EASTERN ST INTERSECTS
100 Family Market No 343 gro 855-0100
101 Wash Rack III (Martin Oil Co) car wash 855-1245
109 Four Aces Tavern 855-0800
118 Armstrong's TV & Appliance 855-1262
124 Gary's Gateway Chevron Service 855-0161
METCALF ST INTERSECTS
203 Independence Hall
205 Liberty Catering (Storerm)
207 Genl Tel Co (Equip Sub Sta)
210 Gateway Restaurant 855-0060
Cascade Room cocktail lounge 855-0188
Gas Light Room cocktail lounge
221 Skagit Valley Pharmacy Inc 855-0200
222 Seattle First National Bank 855-1611
MURDOCK ST INTERSECTS
307 Ginger Lee's Beauty Salon 855-0640
318 Apartments
1 Johnson Melvin E ◎ 855-0355
3★Cowan Thad 855-1972
4 Bitonti Joe
5 Groll Karl 855-1237
339 Sedro Woolley Exxon gas sta 855-0123

3

PUGET ST INTERSECTS
402 Foss Inge A ◎ 855-0076
405 Mc Kain Clair 855-0891
420 Hodgin Albert M ◎ 855-1302
421 Reed Greg L 855-1113
N REED ST INTERSECTS
502a★Madison Genevieve R
503 Vacant
504★Snelling Arth R
511 Ramon Fernando O ◎ 855-0317
516★Wise Ronald L 855-1701
520 Ruhl Steph J ◎ 855-0315
523 Warwick Wm P ◎ 855-0833
N HAINES ST INTERSECTS
601★Murdock Lu Anna
602 Under Constn
607 Bohannon Eug ◎ 855-0553
608 Ridgway Emma A ◎ 855-0590
612 Mc Inturff Paul R ◎ 855-0837
615 Younker Dorvin J ◎ 855-0887
617★Opperman Debra J Mrs
N CENTRAL ST INTERSECTS
702 Allison Otto M Jr lwyr ◎ 855-1170
708 Nelson Fredk ◎ 855-0820
719 Immaculate Heart Of Mary Church 855-0077
Dalton James Rev
724★Ridgway Hugh R Hon ◎ 855-0095

JACK'S CHAIN SAW SERVICE
103 STATE ST.
TEL. 855-0331
(SEDRO WOOLLEY)

TWO RIVERS REALTY
755-9608
606 FAIRHAVEN
BURLINGTON 98233

SKAGIT FAMILY CENTER
TEL. 885-2244
903 METCALF ST., SEDRO WOOLLEY 98284
TEL. 755-9631
103 GARL STREET, BURLINGTON, WASHINGTON 98233

FERRY ST (S)—Contd
730 Ehling Charles ◎ 855-0158
731 Myers Marjorie A 855-1884
731½ Vacant
736 Byrd Edw 855-0493
741 De Rosier Ray D ◎ 855-0748
744 Hagge Earl ◎
747 Mayville H N Jr ◎ 855-0994
749 Watts Earnest E ◎ 855-1902
754 Smith Wm R ◎ 855-1236
N BALL ST INTERSECTS
801★Greenough Fredk F
804 Haddox Richd M 855-0886
805★Fredlund Albert W 855-2105
818 Jewell Harry D ◎ 855-0245
819 Bigelow Thos ◎ 855-1248
821 Splane Maurice E ◎ 855-0024
823★Beecher Ella ◎ 855-0059
824★Lasby Cecil F ◎ 855-1890
829 Muhlbeier Calvin ◎ 855-0386
830 Vacant
832 Frietch Wyman ◎
833 Zeiger Fannie Mrs ◎ 855-0012
837★O'Brien Alton
841 Buggy Wheel gros 855-1407
842★Kramer Patricia L

13

FERRY ST S (BURLINGTON) FROM VERNON ST SOUTH 1 EAST OF S SKAGIT ST

ZIP CODE 98233
302 Francis Lester L ◎ 755-0562
310★Hamrick Jane S ◎ 755-9684
316 Benston R Dean ◎ 755-0302
318 Burger Tom R ◎ 755-0603

9

FERRY ST W (SEDRO WOOLLEY)-FROM BNI TRACKS WEST

ZIP CODE 98284
ZIP CODE 98284
100 Lentz Supply Inc garden equip 855-0311
116 Sims Vern Ford Inc new car dlr 855-1551
RITA ST INTERSECTS
201 Dooley Clifford S ◎ 855-0742
208 Davidson Court
2 Cakins Ferry
3 Haskill Eug R
4★Daldivar Rubin
5 Eckerhart Wesley
6 Rodriguez Cristobal
7★Eckerhart Larry 855-1871
209 Stendal John F
★Ouellette Jim
220 Herb's Chevron Station 855-9907
Valley Auto Supply ret parts 855-0141
223 Blouin Dean ◎ 855-1454
229★Ambers Vernon T 855-1967

7

FIDALGO ST (SEDRO WOOLLEY)-FROM 1 WEST OF S 3D ST EAST 6 SOUTH OF E STATE ST

ZIP CODE 98284
S 3D ST INTERSECTS
300 Jensen Esther ◎ 855-0955
303 Beitler Geo H ◎ 855-0452
308 Wenrick James K ◎ 855-0494
311 Henderson Wm L 855-1009
315 Ridenhour Elfride ◎ 855-1630
320 Kelley Mary L ◎
321 Hendrickson Norma
322 Driffill Olive A Mrs ◎ 855-0469
327 No Return
S 4TH ST INTERSECTS
333 Haddock Bruce 855-0769
336 Ganske Jacque S ◎ 855-1480
405 Boone Ray
407 Intingran Marce
414 Carpenter Joe 855-1201
421★Cassidy Marvin C
428 Walley Shane A ◎ 855-1292
431 Boyle Robt F ◎ 855-0038
438 Linde Dwayne M ◎ 855-1205
S 5TH ST INTERSECTS
503 Williams Steve L ◎ 855-0437
508 Martin Danl C ◎ 855-1388
516 Mellick Miles
517 Pelland Arth
518 Steele Hubert
519★Mersmer Alton G
521 Fuller Lance ◎
533 Overby Terry ◎ 855-1063
535 Dunlap Claire I
S 6TH ST INTERSECTS
602 Van Esch Ralph ◎ 855-0078
603 Thramer Judy A ◎ 855-0035
605 Spaulding Nada 855-1377
612 Gillette Lola Mrs ◎ 855-0105
618 Ludwig Wm B ◎ 855-0817

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FIDALGO ST (S)—Contd
621 French Darrell L ◎ 855-0144
622 Clark Dale H ◎ 855-1490
625 Crapson Jane Mrs ◎
627 Deese Everette 855-1867
S 7TH ST INTERSECTS
700 Allen Robt M ◎ 855-1492
701 Nelson James ◎ 855-0541
715 Bever Lena A ◎ 855-0454
716 Colvin Gordon R
720 Syverson Wesley K ◎ 855-1374
723 Barr Clarence W ◎ 855-0168
725 Le Blane Tamar
732 Grimm Earl N 855-0426
735 Wolslegel Eldon D ◎ 855-0691
738 No Return
S 8TH ST INTERSECTS
801 Allhouse Addie Mrs ◎
802★Leigh Vivian R
808 Backstrom Robt S 855-0335
811 Nicholson Denise E ◎ 855-1226
812 Weir Chris E ◎ 855-0730
819 Wilder Donald
828 Sutton Roy
836 Knight Mary A Mrs ◎ 855-1572

5

S TOWNSHIP ST INTERSECTS
901 Viking Apartments
1 Ericson Eug
2★Inman Janice
3 Greiner John 855-0054
4★Young Grant
5 Martin Steve
6 Nelson Kevin L 855-1423
7 Wolf Paula 855-1879
8★Perry David R
902 Anderson Charles R 855-0619
910★Frizzell Chet ◎
915★Duling Jayne E 855-0428
916 Barrett Francis J ◎ 855-0792
921★Snider Wendell
931 Pells Clara A Mrs 855-1185
936 Morgan Chas 855-1544
937 Handy Wm H ◎ 855-0607
944 Oatley Esther Y ◎
945 Dillard Jack P ◎ 855-0483
946★Ebel Michl ◎
948★Roberts Leroy D ◎ 855-1632
949 Warfield Cecil E ◎ 855-1208
1006 Baxter Howard ◎ 855-1278
1007★Canter Peter 855-1020
1008 Jewell Joe S ◎ 855-0270
1009 Manhal Doreen V
1010★Wagner Ester 855-0896
1011 Couch Barbara J ◎ 855-0674
1101 Moran Dennis N ◎ 855-0491
1103★Strodtmann Randy 856-1072
1105 Vacant
1112★Bunke De Vere 855-1739
1114★Taylor Kirby 855-0379
1116 Peitersen Sharon D Mrs ◎ 855-0773

13

FILBERT LA (BURLINGTON) FROM E RIO VISTA ST NORTH

ZIP CODE 98233
Parkwood Apts
411a Cannan E
411b Sines Charles M 755-0820
413a Houck Viola A 755-0877
413b Comfort J L
415a★Byrd Teresa A Mrs
415b No Return
417a Penz Leta M 755-9253
417b Cruse Eldon F
419a Rossiter Allen F 755-9335
419b Buckner R
421a Clark Neil F 755-0263
421b★Cochran Faye R
423a★Wirth Harry G
423b Gordon G 755-9560
425a Adkins B 755-9395
425b★Mixler Dorothy F
427a No Return
427b Setsaa Egi L
429a Holland Vergie 755-0425
429b Shiflett Adam L
431a Orcutt E Roy 755-4901
431b Wendreuez Helen R
433a Winters Percy 755-0238
433b★Beebe Theresa D
501a★Bergen Kathie C Mrs
501b Fowler Velma J
503a Heise Oleah L 755-0664
503b Woods P
505a Spencer Lorraine
505b King H S 755-9114
507a★Benjamin Leif R
507b Dozier M L 755-9340

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855-0123
339 Ferry St. Sedro Woolley, WA. 98284

E FAIRHAVEN AV (B)—Contd
1224 Carpenter Mervin R ◎ 755-0265
1231 Vacant
1237 Baroness Apartments The
1 Vacant
2 Gorton Tressia 775-0817
3★Power Debbi
4★Robertson Gerri
1239★Clark Homer L
1239a Tait Ronald
1251 Brunz Henry G ◎ 755-0262
1265 Hedblom Corinne Mrs ◎ 755-9281
HAWTHORNE ST INTERSECTS
1302 Gene's Cabinet Shop & Specialty 755-0805
1310 Peden Ben E
1316 Vandermeulen Clarence ◎ 755-0195
1318 Lopez Nicasio S ◎
1320 Bolden Julia R Mrs ◎ 755-0968
1324★Swatman Gerald W ◎ 755-0717
1341 Mc Moran Jan Mrs 755-0687
1342 Fox Paul L ◎ 755-9235
1369★Sawyer Don 755-9546
1375 No Return
N SECTION ST INTERSECTS
1436 Martin Cathryn
1500 Vacant
1501 Banta Ted N ◎ 755-0875
1509 No Return
1515 Vaughan Harry ◎ 755-0585
RAINBOW DR INTERSECTS
1600 Anderson Norris K ◎ 757-6783
1601a★Renouard Richd L 757-0901
1601b Miller I G
1625★Rimmer Patk ◎ 757-8212
1630 Rowley Donald I ◎ 757-6782
1635 Nielsen Johanna M Mrs ◎ 757-6404
PIONEER DR INTERSECTS
1700★Moore Van F 757-8277
1712 Lucas Robt ◎ 757-6104
1735 Aamot Helen ◎ 757-0272
1804 Sinnott Wm F ◎ 757-6577
1805 Robertson Roxanne ◎ 757-0252
1810 Svoboda Frank ◎ 757-6405
1814 Ferguson Jim ◎
1840★Ayers Henry
GARDNER RD INTERSECTS

FAIRHAVEN AV W (BURLINGTON)—FROM [illegible] N GARL WEST

ZIP CODE 98233
135 Skagit Valley Towing 757-4774
Carman Wendell L
CLEVELAND ST INTERSECTS
225 Balda Rena Mrs ◎ 757-[illegible]
MC KINLEY ST INTERSECTS
303★Hayes Jack
315 Sheridan Michl 757-4897
325 Rogers Bess C ◎ 757-[illegible]
KOCH ST INTERSECTS
405★Allen Therase I 757-0494
409★Myers Lawrence ◎ 757-[illegible]
415 Brenner Terry 757-6219
419 Cramer Charles A ◎ 757-[illegible]
★Ploegh Ralph M
421 Vacant
423★Armstrong Paul
425 Ostlund M J 757-6074

618 Humphrey Louis E ◎ 757-6823
620 Jolley Richd ◎

FAIRWAY DR (BURLINGTON)—FROM [illegible] COUNTRY CLUB DR SOUTHEAST IN SEMI-CIR

ZIP CODE 98233
1431 Holston Kenneth P ◎ 757-4410
1432 Loynd Robt ◎ 757-0594
1433 Hickson Mabel E ◎ 757-[illegible]
1435 Nightingale Herbert D ◎ 757-0305
1436 Baker Otis ◎ 757-6191
1438 Ferlin John R ◎ 757-[illegible]
1439 Kern A 757-6750
1440 Partington Charles G 757-0862
1443 Martin John W ◎ 757-[illegible]
1445 Mc Nett James W Jr ◎ 757-0298

FENTON LA (BURLINGTON)

ZIP CODE 98233

BROWN-McMILLEN/REAL ESTATE
Phone (206) 757-6013
141 West Rio Vista Burlington, Washington 98233

FENTON LA (B)—Contd
[illegible] Hurley Walter 757-4173
[illegible] Okott Donald
[illegible] Fenton Troy M ◎ 757-0556

FERN ST (BURLINGTON) FROM LA FAYETTE RD NORTH 2 EAST GARDNER RD

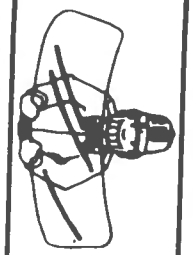
ZIP CODE 98233
[illegible] Douglas John W ◎ 757-4402
[illegible] Larson Genevieve E Mrs ◎ 757-6258
[illegible] Davis Ivan E ◎ 757-6691

FERRY ST (SEDRO WOOLLEY)-FROM BNI TRACKS EAST 2 NORTH OF E STATE ST

ZIP CODE 98284
EASTERN ST INTERSECTS
[illegible] Family Market No 343 gro 855-0100
[illegible] Wash Rack III (Martin Oil Co) car wash 855-1245
[illegible] Four Aces Tavern 855-0800
[illegible] Armstrong's TV & Appliance 855-1262
[illegible] Gary's Gateway Chevron Service 855-0161
METCALF ST INTERSECTS
[illegible] Independence Hall
[illegible] Liberty Catering (Storerm)
[illegible] Genl Tel Co (Equip Sub Sta)
[illegible] Gateway Restaurant 855-0060
Cascade Room cocktail lounge 855-0188
Gas Light Room cocktail lounge
[illegible] Skagit Valley Pharmacy Inc 855-0200
[illegible] Seattle First National Bank 855-1611
MURDOCK ST INTERSECTS
[illegible] Skagit State Bank 855-2141
307 Ginger Lee's Beauty Salon 855-0640
318 Apartments
1 Johnson Melvin E ◎ 855-0355
3 Cowan Thad
4 Bitonti Joe
5 Groll Karl 855-1237
339 Valley Tires 855-0123

PUGET ST INTERSECTS
402 Foss Inge A ◎ 855-0076
405★Day Mildred L
420 Hodgin Albert M ◎ 855-1302
421★Mc Cain Greg M 855-2161
N REED ST INTERSECTS
502a★Mayville Mike L
503 Vacant
504★Castro Mary S 855-1997
511 Ramon Fernando O ◎ 855-0317
516★Dieringer Belle M 855-0259
520 Ruhl Steph J ◎ 855-0315
523 Warwick Wm P ◎ 855-0833
N HAINES ST INTERSECTS
601 Vacant
604★Crouse Grace Mrs 855-1931
606 Vacant
607 Bohannon Eug ◎ 855-0553
608★Melder Robt C ◎ 855-1058
612★Halton Harry L ◎ 855-0837
615 No Return
617 No Return
619★Silvarter Helen 353-3500
N CENTRAL ST INTERSECTS
702 Allison Otto M Jr lwyr ◎ 855-1170
708 Nelson Fredk ◎ 855-0820
719 Immaculate Heart Of Mary Church 855-0077
Dalton James Rev
724 Ridgway Hugh R Hon ◎ 855-0095
730★Brinks Larry J ◎
731 No Return
731½★Nolden Nona L 855-0385
736 Byrd Edw 855-0493
741 De Rosier Ray D ◎ 855-0748

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424-5945
331 Pacific
Mt. Vernon, WA 98273


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INSURANCE WORK
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Mt. Vernon
MIKE PORTER
TEL. 424-9339

Cascade Electric Co.
• Residential • Industrial • Commercial
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FERRY ST (S)—Contd
744 Hagge Pearl Mrs ◎ 855-0255
745★Ross Linda 855-2158
747 Mayville H N Jr ◎ 855-0994
749 Watts Earnest E ◎ 855-1902
754 Smith Wm R ◎ 855-1236
N BALL ST INTERSECTS
801★Crandall Michl
804 Haddox Richd M 855-0886
805 No Return
818 Vacant
819 Bigelow Thos M ◎ 855-1248
821 Splane Maurice E ◎ 855-0024
823 No Return
824★Lusby Cecil F ◎ 855-1890
829 Muhlbeier Calvin ◎ 855-0386
Muhlbeier John R 855-0383
830 Vacant
832 Frietch Wyman ◎
833 Zeiger Fannie Mrs ◎ 855-0012
837★Carter Robt A 855-0006
841 Buggy Wheel gros and gas 855-1407
Morgan Gene
842 Stendal Eric K

13

FERRY ST S (BURLINGTON) FROM VERNON ST SOUTH 1 EAST OF S SKAGIT ST

ZIP CODE 98233
302 Francis Lester L ◎ 755-0562
310★De Witt Kristin 755-9566
316 Benston R Dean ◎ 755-0302
318 Burger Tom R ◎ 755-0603

9

FERRY ST W (SEDRO WOOLLEY)-FROM BNI TRACKS WEST

ZIP CODE 98284
ZIP CODE 98284
100 Lentz Supply Inc garden equip 855-0311
116 Sims Ford Inc new car dlr 855-1551

RITA ST INTERSECTS
201 Dooley Clifford S ◎
208 No Return
209 Stendal John F ◎ 855-1436
1★Mulrooney Thos
2★Pierce Horace
3★Parker James M 855-1950
220 Herb's Chevron Station 855-9907
Valley Auto Supply ret parts 855-0141
223 Blouin Dean ◎ 855-1454
229 Ambers Vernon T 855-1967

7

FIDALGO ST (SEDRO WOOLLEY)-FROM 1 WEST OF S 3D ST EAST 6 SOUTH OF E STATE ST

ZIP CODE 98284
S 3D ST INTERSECTS
300 Jensen Esther ◎ 855-0955
303 Beitler Geo H ◎ 855-0452
308 Wenrick James K ◎ 855-0404
311 No Return
315 Ridenhour Elfrida 855-0620
320 Kelley Mary L ◎
321 Hendrickson Norma ◎
322 Driffill Olive A Mrs ◎ 855-0469
327 No Return
S 4TH ST INTERSECTS
333★Johnson Steve L 855-1927
336 Ganske Jacque S ◎ 855-1401
405 Boone Ray
407 Intingran Marce
414 Carpenter Joe ◎ 855-1201
414b★Hoyle Brenda
421★Frizzell Larry L 855-0823
428 Walley Shane A ◎ 855-1201
431 Boyle Robt F ◎ 855-0038
438 Linde Dwayne M ◎ 855-1201
S 5TH ST INTERSECTS
503 Williams Steve L ◎ 855-0407
508 Martin Danl C ◎ 855-1369
516★Easter Byron F ◎ 855-1201
517 Pelland Arth
518 Steele Hubert

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COACHMEN 424-9292 COACHMEN
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FIDALGO ST (S)—Contd
No Return
★O'Leary Valerie O ◎
Overby Terry ◎ 855-1063
Dunlap Claire I
6TH ST INTERSECTS
Van Eech Jackie J Mrs ◎ 855-0078
Thramer Judy A ◎ 855-0035
Vacant
Gillette Lola Mrs ◎ 855-0105
★Pederson Robt A ◎ 855-2781
French Darrell L ◎ 855-0144
Clark Dale H ◎ 855-1490
Crapson Jane Mrs ◎
Cascade Photography 855-1867
Deese Everett 855-1867
7TH ST INTERSECTS
Allen Robt M ◎ 855-1492
Nelson James ◎
Bever Lena A ◎ 855-0454
★Blanton Rick E 855-1976
Syverson Wesley K ◎ 855-1374
Barr Clarence W ◎ 855-0168
★Johns Steve R 855-1123
Grimm Marian ◎ 855-0426
Wolsiegel Eldon D ◎ 855-0691
No Return
8TH ST INTERSECTS
Allhouse Addie Mrs ◎
Leigh Vivian R
Backstrom Robt S 855-0335
Nicholson Denise E ◎ 855-1226
Weir Chris E ◎ 855-0730
Wilder Donald
Sutton Roy
Knight Mary A Mrs ◎ 855-1572

5

TOWNSHIP ST INTERSECTS
Viking Apartments 855-2287
1★Overby Sharron L 855-2197
2 Inman Janice 855-0177
3★Grummley Everett
4★Ammons Sharron S 855-2287
5 Martin Steve
6★Self Becky N
7★Keeney Anita
8 Perry David R
902 Anderson Charles R 855-0619
910 Frizzell Ed R ◎
915 Duling Jayne E
916 Barrett Francis J ◎ 855-0792
921★Pemmant Jolene
931 Pells Clara A Mrs 855-1185
936 Morgan Chas ◎ 855-1544
937 Handy Wm H ◎ 855-0607
944 Oatley Esther Y ◎
945 Dillard Jack P ◎ 855-0483
946 Ebel Michl ◎
948 Roberts Leroy D ◎ 855-1632
949 Warfield Cecil E ◎ 855-1208
1006 Baxter Howard ◎ 855-1278
1007 Canter Pete 855-1020
1008 Jewell Joe S ◎ 855-0270
1009★Young Irma J
1010★Reiter Robt G 855-1943
1011 Couch Barbara J ◎ 855-0674
1101 Moran Dennis N ◎ 855-0491
1103 No Return
1105★Garland Vernon P ◎ 855-1074
1112 Bunke De Vere 855-1739
1114★King Gary V
1116★Petersen Sharon D Mrs ◎

13

FILBERT LA (BURLINGTON) FROM E RIO VISTA ST NORTH

ZIP CODE 98233
Parkwood Apts 755-9842
411a★Mumford Vivian 755-9565
411b★Damico Betty
413a Houck Viola A 755-0877
413b★King Charlotte 755-9416
415a★Flowers Bertha 755-0058
415b★Sparrs Margie 755-9316
417a Penz Leta M 755-9253
417b★Thomas Sylvia 755-0407
419a Rossiter Allen F 755-9335

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W FAIRHAVEN AV (B)—Contd

17

618 Humphrey Louis E ◎
620 Jolley Richd ◎

17

FAIRWAY DR (BURLINGTON)—FROM 1425 COUNTRY CLUB DR SOUTHEAST IN SEMI-CIR

ZIP CODE 98233
1431 Holston Kenneth P ◎ 757-4410
1432 Loynd Robt A ◎ 757-0594
1433 Hickson Mabel E ◎ 757-0881
1435 Nightingale Herbert D ◎ 757-0305
1436 Baker Otis ◎ 757-6191
1438 Ferlin John R ◎ 757-4271
1439 Kern Larry 757-6750
1440 Partington Charles G 757-0862
1443 Martin John W ◎ 757-0294
1445 Mc Nett James W Jr ◎ 757-0298

11

FENTON LA (BURLINGTON)

ZIP CODE 98233
960a Hurley Walter 757-4173
960b★Hineshaw Thos
961 Fenton Troy M ◎ 757-0556

15

FERN ST (BURLINGTON) FROM LA FAYETTE RD NORTH 2 EAST GARDNER RD

ZIP CODE 98233
404 Douglas John W ◎ 757-4402
405 Larson Genevieve E Mrs ◎ 757-6258
408 Davis Ivan E ◎ 757-6691

1

FERRY ST (SEDRO WOOLLEY)-FROM BNI TRACKS EAST 2 NORTH OF E STATE ST

ZIP CODE 98284
EASTERN ST INTERSECTS
100 Family Market No 343 gro 855-0100
101 Wash Rack III (Martin Oil Co) car wash 855-1245
109 Four Aces Tavern 855-0800
118 Armstrong's TV & Appliance 855-1262
124 Gary's Gateway Chevron Service 855-0161
METCALF ST INTERSECTS
205 Liberty Catering (Storerm)
207 Genl Tel Co (Equip Sub Sta)
210 Gateway Restaurant 855-0060
Cascade Room cocktail lounge 855-0188
Gas Light Room cocktail lounge
221 Skagit Valley Pharmacy Inc 855-0200
222 Seattle First National Bank 855-1611
MURDOCK ST INTERSECTS
300 Skagit State Bank 855-2141
307 Ginger Lee's Beauty Salon 855-0640
318 Apartments
1 Johnson Melvin E ◎ 855-0355
3 Cowan Thad 855-1325
4★Mead Thelma R
5★Ollin Karen
339 Les's Exxon serv sta 855-1115

3

PUGET ST INTERSECTS
402 Foss Inge A ◎ 855-0076
405★Emmerson Katherine 855-0722
420 Hodgin Albert M ◎ 855-1302
421 Mc Cain Greg M 855-2161
N REED ST INTERSECTS

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BURLINGTON, WA 98233

FERRY ST (SW)—Contd

502 Apartments
1 Vizcaya Howard 855-2255
2★Rodriguez
503★Niece Dean R
504 Castro Rogelio 855-1997
511★Buchanan John R ◎
516 Vacant
520 Ruhl Steph J ◎ 855-0315
523 Warwick Wm P ◎ 855-0833
N HAINES ST INTERSECTS
601★Schilling Tammy 855-2187
604 Crouse Grace Mrs 855-1931
606★Selby Rodney
607 Bohannon Eug ◎ 855-0553
608 Melder Robt C ◎ 855-1058
612 Halton Pearl F Mrs ◎ 855-0837
615★Younker Grace
617★Hale Christopher F ◎
N CENTRAL ST INTERSECTS
702 Allison Otto M Jr lwyr ◎ 855-1170
708 Vacant
719 Immaculate Heart Of Mary Church 855-0077
★Trippy Steph Rev
724 Ridgway Hugh R Hon ◎ 855-0095
730 Brinks Larry J ◎
731★Ferris Damone
731½ Nolden Nona L 855-0385
736 Byrd Edw 855-0493
741 De Rosier Ray D ◎ 855-0748
744 Hagge Pearl Mrs ◎ 855-0255
745★Fields Berry G
747 Mayville H N ◎ 855-0994
749 Watts Earnest E ◎ 855-1902
754 Smith Wm R ◎ 855-1236
N BALL ST INTERSECTS
801 Crandall Michl
804 Haddox Shirley D Mrs 855-0886
805★Webb L Reinell 855-0671
818★Ternsten Per O 855-0233
819 Bigelow Thos M ◎ 855-1248
821 Splane Maurice E ◎ 855-0024
823 No Return
824 Lusby Cecil F ◎ 855-1890
829 Muhlbeier Calvin ◎ 855-0386
830 Vacant
832 Frietch Wyman ◎
832½ No Return
833 Zeiger Arlyne ◎ 855-0012
837 Carter Robt A 855-0006
841 Vacant
842 Stendal Eric K 855-1608

13

FERRY ST S (BURLINGTON) FROM VERNON ST SOUTH 1 EAST OF S SKAGIT ST

ZIP CODE 98233
302 Francis Lester L ◎ 755-0562
310 No Return
316 Benston R Dean ◎ 755-0302
318 Burger Tom R ◎ 755-0603

9

FERRY ST W (SEDRO WOOLLEY)-FROM BNI TRACKS WEST

ZIP CODE 98284
ZIP CODE 98284
100 Lentz Supply Inc explosives-feed 855-0311
116 Sims Ford Inc new car dlr 855-1551
RITA ST INTERSECTS
201 Dooley Clifford S ◎ 855-0742
209 Stendal John F ◎ 855-1436
Spaces
1★Marshall Bruce
2★Willard Frank
3 Parker Melvin D 855-1950
220 Herb's Chevron Station 855-9907
Valley Auto Supply ret parts 855-0141
223 Blouin Dean ◎ 855-1454
229 Ambers Vernon T 855-1967

7

FIDALGO ST (SEDRO WOOLLEY)-FROM 1 WEST OF S 3D ST EAST 6 SOUTH OF E STATE ST

ZIP CODE 98284
S 3D ST INTERSECTS
300 Jensen Esther ◎ 855-0955
303 Beitler Geo H ◎ 855-0452
308 Wenrick James K ◎ 855-0494
311★Ince Gary
315 Ridenhour Elfrida
320 Kelley Mary L ◎
321 Hendrickson Norma ◎
322 Driffill Olive A Mrs ◎ 855-0469
327★Lovelace Nancy G

221 SOUTH GARL STREET
757-6055
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1

FERRY ST (SEDRO WOOLLEY)-FROM BNI TRACKS EAST 2 NORTH OF E STATE ST

ZIP CODE 98284
EASTERN ST INTERSECTS
100 Prairie Market gro 855-0100
101 Wash Rack III (Martin Oil Co) car wash 855-1245
109 Four Aces Tavern 855-0705
118 Armstrong's TV & Appliance 855-1262
124 Gary's Gateway Chevron Service 855-0161
METCALF ST INTERSECTS
205 Liberty Catering (Storerm)
207 Genl Tel Co (Equip Sub Sta)
210 Gateway Restaurant 855-0060
Cascade Room cocktail lounge 855-0188
Gas Light Room cocktail lounge
221 Skagit Valley Pharmacy Inc 855-0200
222 Seattle First National Bank 855-1611
MURDOCK ST INTERSECTS
300 Skagit State Bank 855-2141
307 Ginger Lee's Beauty Salon 855-0640
318 Apartments
1 Johnson Melvin E ◎ 855-0355
3 Cowan Thad 855-1325
4★Isaacson Forrest D 855-2168
5★Royston Richd
339 Sedro-Woolley Exxon serv sta 855-2287

3

PUGET ST INTERSECTS
402★Ross Inge A ◎ 855-0076
405 Emmerson Katherine 855-0722
420 Hodgin Albert M ◎ 855-1302
421★Hansen Dennis N 855-2161
N REED ST INTERSECTS
502 Apartments
1 Vacant
2 Vacant
503★Ginnett Kenneth J 855-1921
504 Vacant
511 Buchanan John R ◎
516★Clark Debbie
520 Ruhl Steph J ◎ 855-0315
523 Warwick Wm P ◎ 855-0833
N HAINES ST INTERSECTS
601 Skeen Ethel M
604 Crouse Grace Mrs 855-1931
606 Selby Rodney
607 Bohannon Eug ◎ 855-0553
608 Melder Robt C ◎ 855-1058
612★Fischer Henry ◎ 855-0837
615 Younker Grace 855-0887
617 Hale Christopher F ◎ 855-1210
N CENTRAL ST INTERSECTS
702 Allison Otto M Jr Iwyr ◎ 855-1170
708★Nelson Fred 855-0820
719 Immaculate Heart Of Mary Church 855-0077
Trippy Steph Rev
724 Ridgway Hugh R Hon ◎ 855-0095
730★Jenkins Richd ◎ 855-0262
731 No Return
736 Byrd Edw ◎ 855-0493
741★Hayes Rich ◎ 855-1547
744 Hagge Pearl Mrs ◎ 855-0255
745 Fields Berry G
747 Mayville H N ◎ 855-0994
749 Watts Earnest E ◎ 855-1902
754 Smith Wm R ◎ 855-1236
N BALL ST INTERSECTS
801 Crandall Michl
804 Vacant
805 Webb L Reinell ◎ 855-0671
818★Marshall Geo E 855-0486
819 Bigelow Thos M ◎ 855-1248
821 Splane Maurice E ◎ 855-0024
823 No Return
824 Lusby Cecil F ◎ 855-1890
829 Muhlbeier Calvin ◎ 855-0386
830 Vacant
833 Zeiger Arlyne ◎ 855-0012
837★Murray David M 855-1430

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FERRY ST (SW)—Contd
841 Vacant
842 Stendal Eric K 855-1608

13

FERRY ST S (BURLINGTON)—FROM VERNON ST SOUTH 1 EAST OF S SKAGIT ST

ZIP CODE 98233
302 Francis Lester L ◎ 755-0562
310★Tucker John
316 Benston Eudene Mrs ◎ 755-0302
318★Mizner Larry ◎

9

FERRY ST W (SEDRO WOOLLEY)-FROM BNI TRACKS WEST

ZIP CODE 98284
100 Lentz Supply Inc explosives-feed 855-0311
116 Sims Ford Inc new car dlr 855-1551
RITA ST INTERSECTS
201 Dooley Clifford S ◎ 855-0742
209 Stendal John F ◎ 855-1436
Spaces
1 No Return
2 No Return
3 Vacant
220 Herb's Chevron Station 855-9907
Valley Auto Supply ret parts 855-0141
223 Blouin Dean ◎ 855-1454
229 Ambers Vernon T ◎ 855-1967

7

FIDALGO ST (SEDRO WOOLLEY)-FROM 1 WEST OF S 3D ST EAST 6 SOUTH OF E STATE ST

ZIP CODE 98284
S 3D ST INTERSECTS
300 Jensen Esther ◎ 855-0955
303 Beitler Pauline Mrs ◎ 855-0452
308 Wenrick James K ◎ 855-0494
311★Johnston Robt S 855-0971
315 No Return
320 Kelley Mary L ◎
321 Vacant
322 Driffill Olive A Mrs ◎ 855-0469
327★Lyle J T 855-0712
S 4TH ST INTERSECTS
333 No Return
336★Walton Merrill D 855-1082
405 Boone Ray ◎ 855-0398
407★Richter Arnold R 855-1044
414 Carpenter Brenda 855-1201
421★Lewis Eleanor ◎ 855-0455
428 Walley Shane A ◎ 855-1292
431 Boyle Robt F ◎ 855-0038
438 Linde Dwayne M ◎ 855-1205
S 5TH ST INTERSECTS
500 Fidalgo Street Chapel 856-2411
503 Williams Steve L ◎ 855-0437
508 Martin Robt C ◎ 855-0286
517 Schnider Paul W ◎ 855-0224
518 No Return
519★Tracy Don R ◎ 855-0375
521 Lassinger Merle G
533★Messer Robt C 855-1028
535 Elder M A 855-0758
S 6TH ST INTERSECTS
602 Van Esch Jackie J Mrs ◎ 855-0078
603 Woods Paul W ◎ 855-1030
605 No Return
612 Gillette Lola Mrs ◎ 855-0105
621 French Darrell L ◎ 855-0144
622★Dohve Dale A ◎ 855-1982
625 Crapson June Mrs ◎ 855-1427
627 Deese Everett E ◎ 855-1573
S 7TH ST INTERSECTS
700 Allen Robt M ◎ 855-1492
701★Presnell Steve J ◎
715 Bever Marvin ◎ 855-0454
716 Joneli Richd C 856-1833
720 Syverson Wesley K ◎ 855-1374
723 Barr Clarence W ◎ 855-0168
725 Johns Steve R 855-1123
732 Grimme Marian ◎ 855-0426
735 Wolslegel Eldon D ◎ 855-0691
738 No Return
S 8TH ST INTERSECTS
801 Allhouse Addie Mrs ◎ 855-1965
802 Jones Dennis S
807 Nicholson Denise E ◎ 855-1226

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E FAIRHAVEN AV (B) –Contd
1436 Martin Willard T 755-0809
1500 Hudson Leona ◎ 755-9178
1501 Banta Ted N ◎ 755-0875
1509 Crandall Kenneth C 755-0972
1515★Vaughan Harry
RAINBOW DR INTERSECTS
1600 Anderson Norris K ◎ 757-6783
1601a★Maye Patricia A Mrs 757-7602
1601b Miller Linda G Mrs 757-6630
1625 Brandt Rodney ◎ 757-2035
1630 Rowley Donald I ◎ 757-6782
1635 Nielsen Johanna M Mrs ◎
PIONEER DR INTERSECTS
1700 Burger Beth 757-8036
1712 Lucas Robt ◎ 757-6104
1730 Allen Floyd H 757-4178
1735 Leddusire Frank E ◎ 757-4524
1804 Sinnott Wm F ◎ 757-6577
1805 Robertson Roxanne M ◎ 757-0252
1810 Tait Ronald ◎
1814 Ferguson Jim ◎
GARDNER RD INTERSECTS

15

FAIRHAVEN AV W (BURLINGTON)–FROM 100 N GARL WEST

ZIP CODE 98233
120 Bergman Paul R dentist 755-9298
135 Skagit Valley Towing 757-4774
★Meadows Dean R
CLEVELAND ST INTERSECTS
225★Gaspard Chris
MC KINLEY ST INTERSECTS
303 No Return
315 Sherfey Ronnie 757-7533
325 Rogers Bess C ◎ 757-6840
KOCH ST INTERSECTS
405 Allen Therase I 757-0494
409 Allen Edith ◎ 757-1724
415 Smith Gayle 757-1199
419 Cramer Charles A ◎ 757-6624
419b★Morman David E ◎
421★Mendelsohn Beverly 757-3628
423 No Return
425★Lorenzen Lawr

17

618 Humphrey Louis E ◎ 757-8285
620 Vacant

17

FAIRWAY DR (BURLINGTON)–FROM 1425 COUNTRY CLUB DR SOUTHEAST IN SEMI-CIR

ZIP CODE 98233
1431 Holston Ken P ◎ 757-4410
1432 Loynd Robt A ◎ 757-0594
1433 Hickson Mabel E 757-0881
1435 Nightingale Herbert D ◎ 757-0305
1436 Baker Otis ◎ 757-6191
1438 Ferlin John R ◎ 757-4271
1439 Kern Larry 757-6750
1440 Partington Charles G 757-0862
1443 Martin Jack W ◎ 757-0294
1445★Loving Cris 757-0298

11

FENTON LA (BURLINGTON)

ZIP CODE 98233
960a Hurley Walter W 757-4173
960b Swagerty Scott 757-2913
961 Fenton Troy M ◎ 757-0556

15

FERN ST (BURLINGTON) FROM LA FAYETTE RD NORTH 2 EAST GARDNER RD

ZIP CODE 98233
404 Douglas John W ◎ 757-4402

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FERN ST (B)–Contd
405 Larson Genevieve E Mrs ◎ 757-6258
408★Henderson Douglas ◎ 757-3030

1

FERRY ST (SEDRO WOOLLEY)-FROM BNI TRACKS EAST 2 NORTH OF E STATE ST

ZIP CODE 98284
EASTERN ST INTERSECTS
100 Vacant
101 Wash Rack III (Martin Oil Co) car wash 855-1245
109 Four Aces Tavern 855-0705
118 Armstrong's TV & Appliance 855-1262
124 Gary's Gateway Chevron Service 855-0161
METCALF ST INTERSECTS
205 Liberty Catering (Storerm)
207 Genl Tel Co (Equip Sub Sta)
210 Vacant
221 Skagit Valley Pharmacy Inc 855-0200
222 Seattle First National Bank 855-1611
MURDOCK ST INTERSECTS
300 Skagit State Bank 855-2141
307 Ginger Lee's Beauty Salon 855-0640
318 Apartments
2 Johnson Melvin E ◎ 855-0355
3 Cowan Thad 855-1325
4 Isaacson Forrest D 855-2168
5 Royston Richd 855-0732
339 Woolley's Deli convenience store-gas 855-2287

3

PUGET ST INTERSECTS
402 Vacant
406 Emmerson Katherine 855-0722
420 No Return
421 Hansen Dennis N 855-0409
N REED ST INTERSECTS
502 Apartments
1★Scott Rusty 856-5959
2★Hodgin Linda J Mrs 855-1564
503 Vacant
504★Nash Sam ◎ 855-2217
511 Buchanan John R ◎
516 Clark Debbie
520 Ruhl Steph J ◎ 855-0315
523 Warwick Minnie M Mrs ◎ 855-0833
N HAINES ST INTERSECTS
601 Skeen Ethel M
604 Crouse Grace Mrs 855-1931
606★Metz C E 855-1898
607 No Return
608 Melder Robt C ◎ 855-1058
612 Fischer Henry ◎ 855-0837
615 Younker Grace
617 Hale Christopher F ◎ 855-1210
N CENTRAL ST INTERSECTS
708 No Return
719 Immaculate Heart Of Mary Church 855-0077
Trippy Steph Rev
724 Ridgway Hugh R Hon ◎ 855-0095
730 Jenkins Richd ◎ 855-0262
731★Ram David
736 Byrd Edw ◎
741 Hayes Rich ◎ 855-1547
744 Hagge Pearl Mrs ◎
745 Fields Berry G
747 Mayville Jerlene Mrs ◎ 855-0994
749 Watts Earnest E ◎ 855-1902
754 Smith Wm R ◎ 855-1236
N BALL ST INTERSECTS
801 Crandall Michl
804★Cabe Brad 856-2294
805 Webb L Reinell ◎ 855-0671
818 Marshall Geo E 855-0486
819 Bigelow Thos M ◎ 855-1248
821 Splane Maurice E ◎ 855-0024
823★Mitchell Eral 855-0975
824 Lusby Cecil F ◎ 855-1890
829 Muhlbeier Calvin ◎ 855-0386

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E FAIRHAVEN AV (B) –Contd

206★Matier Gerald 755-9753
207 King Phyllis
208 Rodriguez Ralph
209 Stanek Judy
210 Parkhurst Curtis
311 Wallace Mike
312 Hill Kathie
313★Cannon Ryan 755-0540
314 Robison Melvin
315 Hyatt Ginger
1★Hoyt J 755-0480
2 De Meyer Linda
3★Colburn John 755-9240
4 Ortiz Ana B
5 Boyd Linda
6 Wright Randy Joe
1208 Black Diettrich E ◎ 755-9804
1208½ Vacant
1215 Brentwood Apartments Hildenbrand Juan E
1215a Vacant
1215b Vacant
1215c No Return
1219 Koalar Robt A
1220 Calhoun Eleanor
1221 Wiles Richd F ◎ 755-9116
1224 Carpenter Mervin R ◎ 755-0265
1231★Iversen Eric 755-0410
1237 Baroness Apartments The 755-0860
1 Lennartz Gene W
2 Speelman Harry
3 Power Debbi
4★Bates Donald 755-9084
1239 Clark Homer L 755-0860
1251 Brunz Henry G ◎ 755-0262
1265 Hedblom Corinne D Mrs ◎ 755-9281

HAWTHORNE ST INTERSECTS

1302 Peden Ben ◎ 755-0805
1310 Willns Ken 755-9484
1316★Jongema Frank ◎ 755-0706
1318★Comacho Juentino 755-0156
1324 Caine Oscar M ◎
1341 Mc Moran Jan Mrs
1342 Brester Robt J ◎ 755-9065
1369 Campbell Wm D 755-0125
1375 Mairs Roger 755-9883

N SECTION ST INTERSECTS

1436 Martin Willard T ◎ 755-0809
1500 Hudson Leona ◎ 755-9178
1501 Banta Ted N ◎ 755-0875
1509 Crandall Charles K ◎ 755-0972
1515 Vaughan Harry

RAINBOW DR INTERSECTS

1600 Anderson Norris K ◎ 757-6783
1601a Maye Patricia A Mrs 757-7602
1601b★Peterson Melody
1625 Brandt Rodney A ◎ 757-2035
1630 Rowley Donald I ◎ 757-6782
1635 Nielsen Johanna M Mrs ◎

PIONEER DR INTERSECTS

1700 Burger Beth 757-8036
1712 Lucas Robt ◎
1730 Allen Floyd H ◎ 757-4178
1735 Leddusire Frank E ◎ 757-4524
1804 Sinnott Wm F ◎ 757-6577
1805 Robertson Roxanne M ◎ 757-0252
1810 Tait Ronald ◎
1814★Eubanks Shellie D 757-1277

GARDNER RD INTERSECTS

15

FAIRHAVEN AV W (BURLINGTON)–FROM 100 N GARL WEST

ZIP CODE 98233
120 Bergman Paul R dentist 755-9298
135 Fairhaven Auto Sales auto dlrs 757-1147
Skagit Valley Towing 757-4774
Meadows Dean R ◎ 757-4774

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W FAIRHAVEN AV (B) –Contd

MC KINLEY ST INTERSECTS

303 No Return
315 Sherfey Ronnie
325★Jewett Dale 757-6555

KOCH ST INTERSECTS

405 Allen Therase I 757-0494
409★Atchley Edith ◎ 757-1724
415 Smith Gayle 757-1199
419 Cramer Charles A ◎ 757-6624
419b Morman David E ◎
421 Mendelsohn Beverly
423 No Return
425 Lorenzen Lawr

17

FAIRWAY DR (BURLINGTON)–FROM 1425 COUNTRY CLUB DR SOUTHEAST IN SEMI-CIR

ZIP CODE 98233
1431 Holston Ken P ◎
1432 Loynd Robt A ◎ 757-0594
1433 Hickson E Mabel 757-0881
1435 Nightingale Herbert D ◎ 757-0305
1436 Baker Otis ◎ 757-6191
1438★Breckenridge Marc 757-7169
1439★Horner Jos M 757-8463
1440 Partington Charles G 757-0862
1443 Martin Jack W ◎ 757-0294
1445 Loving Cris 757-0298
★Mc Nett Jas W Jr 757-0298

11

FENTON LA (BURLINGTON)

ZIP CODE 98233
[illegible] Hurley Walter W 757-4173
[illegible] Swagerty Scott 757-2913
[illegible] Fenton Troy M ◎ 757-0556

15

FERN ST (BURLINGTON) FROM LA FAYETTE RD NORTH 2 EAST GARDNER RD

ZIP CODE 98233
404 Douglas John W ◎ 757-4402
405 No Return
408 No Return

1

FERRY ST (SEDRO WOOLEY)-FROM EASTERN AV EAST TO MURDOCK ST

ZIP CODE 98284
100 Vacant
101 Wash Rack III car wash 855-1245
109 Four Aces Tavern 855-0705
118 Armstrong's TV & Appliance 855-1262
124 Gary's Gateway Chevron Service 855-0161

METCALF ST INTERSECTS

201★Dooley C S ◎ 855-0742
205 Liberty Catering (Storerm)
207 Genl Tel Co (Equip Sub Sta)
210 Jeff's Janitorial janitorial servs 855-1370
221 Skagit Valley Pharmacy Inc 855-0200
222 Seattle First National Bank 855-1611
223★Blouin D 855-1454
229 No Return

MURDOCK ST INTERSECTS

300 Skagit State Bank 855-2141
307 Vacant
318 Apartments
2 Johnson Melvin E ◎ 855-0355
3 Cowan Thad
4 Isaacson Forrest D 855-2168
5 Vacant
339 Vacant

3

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FERRY ST (SW)—Contd
PUGET ST INTERSECTS
402★Foss I 855-0076
405★Drake Ted 855-0856
420★Hodgin Albert 855-1302
421 Hansen Dennis N
N REED ST INTERSECTS
502 Apartments
1 No Return
2★Chatt Mark W 855-2248
503 Vacant
504 Nash Sam ◎
511★Eaves D ◎ 855-0085
516 Vacant
520 Ruhl Steph J ◎ 855-0315
523 Warwick Minnie M Mrs ◎ 855-0833
N HAINES ST INTERSECTS
601 Skeen Ethel M
604★Williams Maxine 855-1366
606 Metz C E 855-1898
607 No Return
608 Melder Robt C ◎ 855-1058
612★Mc Inturff Pearl F ◎ 855-0837
615 No Return
617 Hale Christopher F ◎ 855-1210
N CENTRAL ST INTERSECTS
702a Bloss T A 855-1060
702b★Azteca Ben T 855-8153
719 Immaculate Heart Of Mary Church 855-0077
★Roblec Rosalie
724 Ridgway Hugh R Hon ◎ 855-0095
730 Jenkins Richd ◎ 855-0262
731 Ram David
736★Beitler Harold G ◎ 855-0030
741 Hayes Rich ◎ 855-1547
744★Mc Rae Kathy ◎ 855-0912
745 Fields Berry G
747 Mayville Jerlene Mrs ◎ 855-0994
749 Watts Earnest E ◎ 855-1902
754 Smith Wm R ◎ 855-1236
N BALL ST INTERSECTS
801 Crandall Michl
804★Haddox Shirley D Mrs 855-0886
805 Webb L Reinell ◎ 855-0671
818 Marshall Geo E ◎ 855-0486
819 Bigelow Thos M ◎ 855-1248
821 Splane Maurice E ◎ 855-0024
823 Mitchell Eral
824 Lusby Cecil F ◎ 855-1890
829 Muhlbeier Calvin ◎ 855-0386
830 Hall Walter
833 Zeiger Arlyne ◎ 855-0012
837 Murray David M ◎ 855-1430
841 Ayon Ron 855-2284
842★Jordon H 855-0543

13

FERRY ST S (BURLINGTON)—FROM VERNON ST SOUTH 1 EAST OF S SKAGIT ST

ZIP CODE 98233
302 Francis Lester L ◎ 755-0562
310 Tucker John
316 Benston Eudene Mrs ◎ 755-0302
318 Mitzel Larry D ◎ 755-0266

9

FERRY ST W (SEDRO WOOLLEY)-FROM BNI TRACKS WEST

ZIP CODE 98284
116 Sims Ford Inc new car dlr 855-1551
RITA ST INTERSECTS
201 Dooley Gladys M Mrs ◎ 855-0742
209 Stendal John F ◎ 855-1436
Spaces
1 Pixley Ken
2 Holt Richd
3 Hart Mary
220 Valley Auto Supply whol parts 855-0141
221 Herb's Chevron Station 855-9907
223 No Return

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W FERRY ST (SW)—Contd
229 Deruischer Isaac ◎ 855-0400

7

FIDALGO ST (SEDRO WOOLLEY)-FROM 1 WEST OF S 3D ST EAST 6 SOUTH OF E STATE ST

ZIP CODE 98284
S 3D ST INTERSECTS
300 Jensen Esther ◎
303 Beitler Pauline Mrs ◎ 855-0452
308 Wenrick James K ◎ 855-0494
311 Vacant
315 Dishman Fannie ◎ 855-0296
320 Kelley Mary L ◎
321★Jacob Kip 855-0948
322 Driffill Olive A Mrs ◎
327 Vacant
S 4TH ST INTERSECTS
333★Lee David 855-1284
336 Walton Merrill D 855-1082
405 Boome Ray ◎ 855-0398
407 Vacant
414 Boze David
414½★Huff Brenda 855-0769
421 Lewis Eleanor ◎
428 Walley Shane A ◎ 855-1292
431 Boyle Robt F ◎ 855-0038
438 Linde Dwayne M ◎ 855-1205
S 5TH ST INTERSECTS
501 Church Of Christ Sedro Woolley 856-2252
503 No Return
506★Boughton Eric 855-2154
517 Schnider Paul W ◎ 855-0224
518★Gallagher Jeff 855-1675
519 Tracy Don R ◎ 855-0375
521 Vacant
533 Vacant
535 Vacant
S 6TH ST INTERSECTS
602★Gent Jackie J Mrs ◎ 855-0078
603 Woods Paul W ◎ 855-1030
605 No Return
612 Gillette Lola Mrs ◎ 855-0105
618 Moors Aleta Mrs ◎ 855-2165
621 French Darrell L ◎ 855-0144
622 Dohve Dale A ◎
625 Crapson June Mrs ◎ 855-1427
627 Deese Everett E ◎ 855-1573
S 7TH ST INTERSECTS
700 Allen Mary P Mrs ◎ 855-1492
701 Presnell Steve J ◎
715 Bever Marvin L ◎ 855-0667
716★Joneli Rick 855-0811
720 Syverson Wesley K ◎ 855-1374
723 Barr Clarence W ◎ 855-0168
725 Johns Steve R ◎ 855-1123
732 Grimm E Marian ◎ 855-0426
735 Wolslegel Eldon D ◎ 855-0691
738 Mc Cormick B
S 8TH ST INTERSECTS
801★Allshouse Addie ◎ 855-1965
802 Morgan Landy ◎ 855-1568
807 Nicholson Denise E ◎ 855-1226
808 Vacant
811★Johnson J 855-1325
812 Vacant
828 Backstron Willard
836 Knight Mary A Mrs ◎ 855-1572

5-A

S TOWNSHIP ST INTERSECTS
901 Viking Apartments
1★Foster James 855-0726
2 Gilland Gladys
3★Hamilton Richd 855-0336
4 Wyman Dwain
5 Perry David R
6★Lawrence Sharon 855-1398
7 Vacant
8 Labane Betrina
902 Anderson Charles R ◎ 855-0619
910 Jwihaft Jos
915 Colfack Arth ◎ 855-1133
916 Barrett Francis J ◎ 855-0792
921★Johnson Sue A ◎ 855-0564

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FASHION WAY (B)–Contd
212 Welcome Home Store hm interior 757-8915
216 Corning Revere Factory Store housewares 757-3757
220 Toys Unlimited toy store 757-3747
224 Prestige Fragrance & Cosmetics Inc ret 757-2026
228 Cape Isle Knitters sweater & knit top outlet 757-7023
232 Tradewinds Cafe restr 757-8675
236 Socks Galore socks ret outlet 757-7050
240 I B Diffusion Outlet womens ret outlet 757-1028
244 Evan-Picone Outlet womens ret outlet 757-2060
248 American Tourister luggagge-travel outlet 757-1042
252 Vacant
256 Leather Loft leather clo 757-2042
260 Harve Bernard clo ret outlet 757-1659
264 Hanes Activewear clo store 757-7121
268 Gitano ret fam outlet 757-7007
272 Athletic Outlet sports outlet 757-2054
276 Van Huesen fashion fam outlet 757-7018
280 Wallet Works the wallet ret outlet 757-8073
284 Ribbon Outlet the arts & crafts outlet 757-7659
288 Jindo Furs clo 757-8018
292 Maidenform lingerie outlet 757-7128
296 Izod Gant fam ret outlet 757-2033
300 Claiborne Liz Outlet Store clo ret 757-1005
312 Mikasa Factory Outlet china-crystal ret 757-7400
316 Jordache dept store 757-6100
476 Hook J G Co womens ret outlet 757-1100
478 Jones New York clo ret outlet 757-7501
480 Adolfo II clo ret outlet 757-8121
484 Wicker Factory baskets-silk flowers ret 757-3130
488 Barbizon Lingerie ret 757-7555
492 Kitchen Collection ret 757-3136
496 Argenti women's clo 757-3773

11

FENTON LA (BURLINGTON)

ZIP CODE 98233
960a Hurley Walter W 757-4173
960b Swagerty Scott 757-2913
961 Fenton Troy M ◎ 757-0556

1

FERRY ST (SEDRO–WOOLEY)-FROM EASTERN AV EAST TO MURDOCK ST

ZIP CODE 98284
100 Coast To Coast hdw store
101 Wash Rack III car wash 855-1245
109 Four Aces Tavern 855-0705
118 Armstrong's TV & Appliance 855-1262
124 Gary's Gateway Chevron Service 855-0161
METCALF ST INTERSECTS
201★Oliver Chas ◎ 855-0742
205 Liberty Catering (Storerm)
207 Genl Tel Co (Equip Sub Sta)
210 Gateway Cafe restr 856-5108
221 Skagit Valley Pharmacy Inc 855-0200
222 Seafirst National Bank 855-1611
223 Blouin Dean H ◎ 855-1454
229 No Return
MURDOCK ST INTERSECTS
300 Skagit State Bank 855-2141
307 Vacant
318 Apartments
2 Johnson Melvin E ◎ 855-0355
3★Newman Jerry
4 Isaacson Forrest D 855-2168
5★Morgan Laura

3-B

PUGET ST INTERSECTS
402 Foss I 855-0076
405 Vacant
420 Hodgin Albert 855-1302
421 Hansen Dennis N
N REED ST INTERSECTS
502 Apartments
1 No Return
2 Chatt Mark W 855-2248
503★Tronaas Donald E 855-1816
504a Nash Sam ◎
504b★Curtis
511 Eaves D ◎ 855-0085
516 Vacant
520 Ruhl Steph J ◎ 855-0315
523 Warwick Wm P ◎ 855-0833
N HAINES ST INTERSECTS
601★Sanchez Saml 855-1943
604 Vacant
606★Oravetz H 855-1916
607★Bohannon Eugene N ◎
608 Melder Robt C ◎ 855-1058
612 Mc Inturff Pearl F ◎ 855-0837
615 No Return
617 Hale Christopher F ◎ 855-1210
N CENTRAL ST INTERSECTS
702a Bloss T A 855-1060
702b Azteca Huthman W 855-8153
708a★Tipton Brian L 855-0411
708b★Tipton Blanche E
719 Immaculate Heart of Mary Church 855-0077
Roblec Rosalie
724 Ridgway Hugh R Hon ◎ 855-0095
730 Jenkins Richd ◎ 855-0262
731★Stoltz Kevin 855-2213
731½ Vacant
736★Seidel Carl ◎
741 Hayes Rich ◎ 855-1547
744 Mc Rae Kathy ◎ 855-0912
Landscaping Ryan & Son Landscaping 855-0565
745★Ryan Jerry 855-0565

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FERRY ST (SW)–Contd
747 Mayville Jerlene Mrs ◎ 855-0994
749 Watts Earnest E ◎ 855-1902
754 Smith Wm R ◎ 855-1236
N BALL ST INTERSECTS
801 Crandall Michl
804 Haddox Shirley D Mrs 855-0886
805 Webb L Reinell ◎ 855-0671
818 Marshall Geo E ◎
819 Bigelow Thos M ◎ 855-1248
821★Burmaster Charles P ◎
823 Mitchell Eral
824 Lusby Cecil F ◎ 855-1890
829 Muhlbeier Calvin ◎ 855-0386
830 Hall Walter
833 Zeiger Arlyne ◎ 855-0012
837 Murray David M ◎ 855-1430
841 Ayon Ron
842 Jordon H 855-0543

13

FERRY ST S (BURLINGTON)–FROM VERNON ST SOUTH 1 EAST OF S SKAGIT ST

ZIP CODE 98233
300★Morgan Laura
302 Francis Lester L ◎ 755-0562
310 Tucker John
316 Benston Eug Mrs ◎ 755-0302
318 Mitzel Larry D ◎ 755-0266

9

FERRY ST W (SEDRO–WOOLLEY)-FROM BNI TRACKS WEST

ZIP CODE 98284
101 Vacant
116 Sims Vern Ford Inc new car dlr 855-1551
118 Armstrong's Appliance & Television appliances hsehld-major dlrs 855-1262
124 Gary's Gateway Chevron serv sta gas & oil 855-0161
RITA ST INTERSECTS
201 Dooley Gladys M Mrs ◎ 855-0742
209★Stendal John 855-1436
210 Petro's Gateway Restaurant restr 855-2331
220 Herb's Chevron Station serv stat gas & oil 855-9907
Valley Auto Supply napa auto parts 855-0141
221 Vacant
223★Parker Deanna M
229 Deruischer Isaac ◎ 855-0400

7

FIDALGO ST (SEDRO–WOOLLEY)-FROM 1 WEST OF S 3D ST EAST 6 SOUTH OF E STATE ST

ZIP CODE 98284
S 3D ST INTERSECTS
300★Tyler Dan ◎ 855-1630
303 Beitler Pauline Mrs ◎ 855-0452
308 Wenrick James K ◎ 855-0494
311★Lanning Larry 855-1065
315 Dishman Fannie ◎ 855-0296
320 Kelley Mary L ◎
321 Jacob Kip 855-0948
322★Ganske Jack
327 Vacant
S 4TH ST INTERSECTS
333★Presnell Wes 855-1302
336 Walton Merrill D 855-1082
405 Boome Ray ◎ 855-0398
407 Vacant
414★Rohweder Rod ◎ 855-0101
414½ Beitler
421 Vacant
428 Walley Shane A ◎ 855-1292
431 Boyle Robt F ◎ 855-0038
438 Linde Dwayne M ◎ 855-1205
S 5TH ST INTERSECTS
501 Church of Christ Sedro Woolley 856-2252
503★Parberry Helen ◎ 855-0169
508★Garza Adam ◎ 855-1319
517★Ewing Iva ◎
518★Ivy Pat 855-0685
519 Tracy Donald ◎
521★Weideman Art ◎ 855-1304
524★Johnston Hazel ◎ 855-1538
533★Post Tim ◎ 855-2233
535★Carr Jim ◎
S 6TH ST INTERSECTS
602 Gent Jackie J Mrs ◎ 855-0078
603 Woods Paul W ◎ 855-1030
605★Christian Steve ◎ 855-1645
612 Gillette Lola Mrs ◎ 855-0105
618 Moors Aleta Mrs ◎ 855-2165
621 French Darrell L ◎ 855-0144
622★Powell John 855-0839
625 Crapson June E Mrs ◎ 855-1427
627 Deese Everett E ◎ 855-1573
S 7TH ST INTERSECTS
700 Allen Mary P Mrs ◎ 855-1492
701 Presnell Steve J ◎
715 Bever Marvin L ◎ 855-0667
716 Joneli Rick 855-0811
720 Syverson Wesley K ◎ 855-1374
723 Barr Clarence W ◎ 855-0168
725 Johns Steve R ◎ 855-1123
732 Grimm E Marian ◎ 855-0426
735 Wolslegel Eldon D ◎ 855-0691
738 Vacant
S 8TH ST INTERSECTS
801 Allshouse Addie ◎ 855-1965
802 Morgan Landy ◎ 855-1568
807 Nicholson Denise E ◎ 855-1226
808★Taylor Ron 855-1578
811 Johnson J 855-1325
812★Van Esch Ralph ◎ 855-0377
828 Backstron Willard
836 Knight Mary A Mrs ◎ 855-1572

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FAMILY CT –FROM 1613 MOORE'S GARDEN RD — 16-A

• ZIP CODE 98273
• MOORE'S GARDEN RD INTERSECTS
1510★Mullen Gil & Bonnie
1511★Lee Nina ⊛ 424-0351
Sherin Philip 424-0351
1515★Codlin Kenneth & Denise ⊛ 428-3750
3 HOUSEHOLDS

FASHION WAY (BURLINGTON)–FROM S BURLINGTON BLVD WEST THEN SOUTHWEST — 11

• ZIP CODE 98233
• S BURLINGTON BLVD INTERSECTS
100 PACIFIC EDGE OUTLET MALL ret outlets 757-3549
200 SHOE PAVILION shoe store outlet 757-1948
204 AILEEN womens casual wear 757-1031
208 GREETINGS 'N' MORE cards 757-4545
212 WELCOME HOME STORE hm interior 757-8915
216 CORNING REVERE FACTORY STORE housewares 757-3757
220 TOYS UNLIMITED toy store 757-3747
224 PRESTIGE FRAGRANCE & COSMETICS INC ret 757-2026
228 CAPE ISLE KNITTERS sweater & knit top outlet 757-7023
232 TRADEWINDS CAFE restr 757-8675
236 SOCKS GALORE socks ret outlet 757-7050
240 I B DIFFUSION OUTLET 757-1028
244 EVAN-PICONE OUTLET womens ret outlet 757-2060
248 AMERICAN TOURISTER luggage-travel outlet 757-1042
252 PUBLISHER'S OUTLET book outlet 757-4611
256 LEATHER LOFT leather clo 757-2042
260 HARVE BERNARD clo ret outlet 757-1659
264 CHAMPION HANES clo store 757-7121
268 GITANO ret-fam outlet 757-7007
272 SWEATSHIRT CO THE sports outlet 757-0636
276 VAN HUESEN fashion fam outlet 757-7018
280 WALLET WORKS THE wallet ret outlet 757-8073
284 RIBBON OUTLET THE arts & crafts outlet 757-7659
288 ROYAL DOULTON china outlet 757-6660
292 MAIDENFORM lingerie outlet 757-7128
296 IZOD GANT fam ret outlet 757-2033
300 CLAIBORNE LIZ OUTLET STORE clo-ret 757-1005
312 MIKASA FACTORY OUTLET china-crystal ret 757-7400
316 JORDACHE dept store 757-6100
476 CHICAGO CUTLERY ETC hse furnishings-ret 757-8878
478 JONES NEW YORK clo ret outlet 757-7501
480 ADOLFO II clo ret outlet 757-8121
484 WICKER FACTORY baskets-silk flowers ret 757-3130
488 BARBIZON LINGERIE ret 757-7555
492 KITCHEN COLLECTION ret 757-3136
496 J H COLLECTIBLES women's clo 757-3773
36 BUSINESSES

FENTON LA (BURLINGTON)–FROM LILA LA SOUTH — 11

• ZIP CODE 98233
• LILA LA INTERSECTS
960a Hurley Walter W & Eliz A [9]+ 757-4173
960b Swagerty Scott & Kymberli [6] 757-2913
961 Fenton Troy M & Lamina D [9]+ ⊛ 757-0556
Fenton Donald L 757-0556
3 HOUSEHOLDS

FERRY ST (SEDRO–WOOLEY)-FROM EASTERN AV EAST TO MURDOCK ST — 1

• ZIP CODE 98284
• EASTERN AV INTERSECTS
100 COAST TO COAST hdw store 855-1601
101 WASH RACK III car wash 855-1245
109 FOUR ACES TAVERN 855-0705
118 ARMSTRONG'S TV & APPLIANCE 855-1262
• METCALF ST INTERSECTS
204 KIDS AT HEART 855-1776
205 LIBERTY CATERING (STORERM)
207 GENL TEL CO (EQUIP SUB STA)
210 PETRO'S GATEWAY CAFE 856-5108
221 SKAGIT VALLEY PHARMACY INC 855-0200
222 SEAFIRST NATIONAL BANK 855-1611
• MURDOCK ST INTERSECTS
300 SKAGIT STATE BANK 855-2141
307 Vacant
318 Apartments
2 Johnson Melvin E & Bernice N [9]+ ⊛ 855-0355
3★Mason David
4★Windish Leif
5★Ashley Francis

• PUGET ST INTERSECTS — 3-B
402 Foss Ingea [3] 855-0076
405-420 Not Verified (2 Hses)
421 Hansen Dennis N [6] 855-0127
• N REED ST INTERSECTS
502 Apartments
1 Not Verified
2 Chatt Mark W [3] 855-2248
503 Tronaas Donald E & Alice J [2] 855-1816
504a Wilson [2]
504b Curtis [2]
511 Eaves D [3] ⊛ 855-0085
516 Not Verified
520 Ruhl Steph J & Janet M [9]+ ⊛ 855-0315
Ruhl Ryan 855-0315
523 Warwick Wm P & Minnie M [9]+ ⊛ 855-0833
• HAINES ST INTERSECTS
601 Sanchez Saml & Claudia [2] 855-1943
604★Roughton Tressa E 855-2397
606★Taylor Pearl L 855-0976
607 Bohannon Eugene & Thelma I [2] ⊛ Bohannon Gregory E
608 Melder Robt C & Ann J [9]+ ⊛ 855-1058
612 Mc Inturff Pearl F [3] ⊛ 855-0837
Fisher Henry 855-0837
615★Mc Caleb L O
617 Hale Christopher F & Julie L [6] ⊛ 855-1210
• CENTRAL ST INTERSECTS
702a Bloss T A [3] 855-1060
★Dickey Keith rd constn
702b Not Verified
708a Tipton Brian L & Cecile O [2] 855-0411
708b Tipton Blanche E [2]
719 IMMACULATE HEART OF MARY CHURCH 855-0077
Roblec Rosalie [3]
724 Ridgway Hugh R Hon & Kathleen C [9]+ ⊛ 855-0095
730 Jenkins Richd & Betty [6] ⊛ 855-0262
731 Not Verified
731½ Vacant
736 Seidel Carl E & Samantha [2] ⊛ 855-1250
741 Hayes Rich & Annette [6] ⊛
744★Miller Lori E ⊛ Landscaping RYAN & SON LANDSCAPING 855-0565
745 Ryan Jerry & Annie [2] 855-0565
747 Mayville Jerlene [9]+ ⊛ 855-0994
749 Watts Earnest E & Euvone E [9]+ ⊛ 855-1902
754 Smith Wm R & Linda K [9]+ ⊛ 855-1236
• N BALL ST INTERSECTS
801★Stanton Stephen R 855-1898
Rothenbuhler De Anne 855-1898
804 Haddox Shirley D [3] 855-0886
Clorvet Lori 855-0886
Macomber Kelly 855-0886
805 Webb L Reineli [8] ⊛ 855-0671
Canaday Trina 855-0671
818 Marshall Geo E & Cheryl L [6] ⊛
819 Bigelow Thos M & Jean [9]+ ⊛ 855-1248
BIGELOW'S CAR FARM
821★Pierce Doran D & Loria ⊛ 855-2698
823 Mitchell Eral [4]
824 Not Verified
829 Muhlbeier Calvin [9]+ ⊛ 855-0386
Muhlbeier John 855-0386
830 Hall Walter [4]
833 Zeiger Arlyne [9]+ ⊛ 855-0012
837★Reiss Roanld G & Laurie D ⊛ 855-1897
841★Hinds Emerson L 855-2154
Bartholomaus Eyleen 855-2154
842 Jordon H [3] 855-0543
• TOWNSHIP ST INTERSECTS
53 HOUSEHOLDS
11 BUSINESSES

FERRY ST S (BURLINGTON)–FROM VERNON ST SOUTH 1 EAST OF S SKAGIT ST — 13

• ZIP CODE 98233
• VERNON ST INTERSECTS
302 Francis Lester L & Colleen [9]+ ⊛ 755-0562
310★Morby Robt J & Ronda 755-9293
316 Benston Eug [9]+ ⊛ 755-0302
318 Mitzel Larry D [4] ⊛ 755-0266
4 HOUSEHOLDS

FERRY ST W (SEDRO–WOOLLEY)-FROM BNI TRACKS WEST — 9

• ZIP CODE 98284
116 SIMS VERN FORD INC new car dlr 855-1551
• RITA ST INTERSECTS
209 Stendal John F & Delores [2]
1 Not Verified
2★Stone Jack E & Debra A
3 Not Verified
220 HERB'S CHEVRON STATION serv stat gas & oil 855-9907
VALLEY AUTO SUPPLY napa auto parts 855-0141
223 Parker Rick D & Deanna M [2] 855-1454
229 Not Verified
6 HOUSEHOLDS
3 BUSINESSES

FIDALGO ST (SEDRO–WOOLLEY)-FROM 1400 3D ST EAST — 7

• ZIP CODE 98284
• 3D ST INTERSECTS
300 Not Verified
303 Beitler Pauline [9]+ ⊛ 855-0452
308 Wenrick James K & Sharon L [9]+ ⊛ 855-0494
311 Lanning Larry & Nancy [2] 855-1065
315★Wenrick Kelly R
320 Kelley Mary L [9]+ ⊛
321 Jacob Kip & Julie [3] 855-0948
322 Ganske Jack [2] 855-0175
327★Stiles Brock D & Katherine M 855-1429
• 4TH ST INTERSECTS
333★Garcia Nicki Kempton Jerry
336 Walton Merrill D & Shirley [6] 855-1082
405 Not Verified
407 THOMAS ROOFING 855-0967
★Thomas Ozzie & Marcie 855-0967
414★Beitler Harold ⊛ 855-0030
421 Not Verified
428★Dills Scott ⊛ 855-0972
431 Boyle Robt F [9]+ ⊛ 855-0038
438 Linde Dwayne M [9]+ ⊛ 855-1205
• 5TH ST INTERSECTS
501 CHURCH OF CHRIST SEDRO WOOLLEY 856-2252
503 Parberry Helen T [2] ⊛ 855-0169
508 Garza Adam & Lisa [2] ⊛ 855-1319
517 Ewing Iva [2] ⊛
518 Not Verified
519 Tracy Donald R & Annie K [6] ⊛ 855-0375
521 Weldeman Art [2] ⊛ 855-1304
524 Johnston Hazel [2] ⊛ 855-1538
533 POST CONTRUCTION 856-2233
Post Tim & Carmen [2] ⊛ 855-2233
535 Carr Jim [2] ⊛
• 6TH ST INTERSECTS
602 Gent Jackie J [3] ⊛ 855-0078
Vanech Vanessa M 855-0078
603 Woods Paul W [8] ⊛ 855-1030
605 Christian Cherie M [2] ⊛ 855-1645
612 Gillette Lola [9]+ ⊛ 855-0105
618 Moors Aleta [4] ⊛ 855-2165
Moors Joy 855-2165
Hernandez Hipolto 855-2165
621 French Darrell L & Maryann [9]+ ⊛ 855-0144
622 Powell John A & Annette J [2] 855-0839
625★Ringhouse June E ⊛ 855-1427

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FASHION WAY *cont'd*

492 KITCHEN COLLECTION misc hmfrnshngs str 757-3136
496 JH COLLECTIBLES misc rtl strs 757-6400
BUSINESSES 45 HOUSEHOLDS 5

FAWN LN (MOUNT VERNON)-
· ZIP CODE 98273 CAR-RT R004
1437 Not Verified
1441 Blaine Kelly J [9]+ 856-5163
Blaine Monica A 856-5163
HOUSEHOLDS 2

FEATHER LN (SEDRO WOOLLEY)-
· ZIP CODE 98284 CAR-RT R008
2202 Hogan Declan L Jr & Tina [2] 856-0108
2204(N) Hockett Michael 856-5226
2205 Brumley Betty J [5] 856-5666
Brumley James P 856-5666
2206 Baith Michael H [9]+
2207 Not Verified
2208(N) Garcia Venedo L
2209 Sargent Paul [6] 856-1141
Sargent Elvira B 856-1141
2212 Not Verified
2216 Smith Brian K [3]
Smith Priscilla A
2219 Fleissner Mitchell W [3]
Fleissner Sharon A
2222 Blakeslee Paul D [9]+
Blakeslee Deborah K
2223 Gambrell Edwin E [5]
24044 Hogan Declan [2]
Hogan Tina L
24076 Not Verified
24109(N) Sargent Elvira B
24234 Not Verified
HOUSEHOLDS 16

FENTON LN (BURLINGTON)-
· ZIP CODE 98233 CAR-RT C007
960 A Ronsse Vanessa R [3]
961 Fenton Donald L [9]+ 757-0556
HOUSEHOLDS 2

FERNHAVEN RD (SEDRO WOOLLEY)-FROM 667 CAIN LAKE RD NORTH
· ZIP CODE 98284 CAR-RT R002
722 Conour Matthew H [4]
725 Espinoza Ruben [5]
726 Genest Steven H [2]
738 Vaders Michelle L [4]
756(N) Ensley Donald W
771 Langley Karen A [4]
794 Shaffer James E [6] 595-2084
Shaffer Suzanne 595-2084
HOUSEHOLDS 7

FERRY ST (BURLINGTON)-
· ZIP CODE 98233 CAR-RT C006
302 Francis Lester L & Colleen [9]+ 755-0562
310 Not Verified
316 Benston Dean [9]+ 755-0302
318 Mitzel Larry D [9]+ 755-0266
HOUSEHOLDS 4

FERRY ST (SEDRO WOOLLEY)-
· ZIP CODE 98284 CAR-RT C002
100 COAST TO COAST hardware 855-1601
+ W FERRY ST BEGINS
101 MARTIN OIL gas stations 855-1245
(N) Wash Rack 855-1245
109 FOUR ACES TAVERN drinking places 855-0705
118 ARMSTRONG TV & APPLIANCES electronics 855-1262
+ EASTERN AVE INTERSECTS
+ METCALF ST INTERSECTS
209(N) McCann William R 855-1521
B(N) Johnson Susan 855-0555
C(N) Daniels Dorothy 855-1207
C(N) Daniels Rich 855-1207
209 A MC CANN WM R legal svcs 855-1521
210 Not Verified
222 BANK OF AMERICA NORTHWEST NA natl commrcl banks 855-1611
+ MURDOCK ST INTERSECTS
· ZIP CODE 98284 CAR-RT C001
300 SKAGIT STATE BANK state commrcl banks 855-2141
318(N) Johnson B 855-0355
(N) Wright Christopher D
1-4 Not Verified (2 Apts)
+ PUGET AVE INTERSECTS
402 Foss Inge A [9]+ 855-0076
405 Not Verified
420(N) Andrews Karen E

FERRY ST *cont'd*

Andrews Marie E
(N) Gorman A V
421(N) Hubbard David 855-3316
+ REED AVE INTERSECTS
502(N) Chatt Mark W 855-2248
503(N) Tronaas Don 855-1816
504 B Not Verified
504 A Ebbs Carol L [4]
511 Eaves Dorothy T [9]+ 855-0085
516 Quisenberry Mabel I & Roy [9]+ 855-1856
520 Ruhl Stephen J & Janet [9]+ 855-0315
523(N) Schneidermnan Michael 855-0158
+ HAINES AVE INTERSECTS
601(N) De La Torre Tomas 855-0449
604(N) Wahl Marylou L 855-3324
606 Not Verified
608 Melder Robert C & Ann [9]+ 855-1058
612(N) McLnturff Pearl 855-0837
615 Not Verified
617 Benedict William C Jr & Patti [9]+ 855-2937
+ CENTRAL AVE INTERSECTS
· ZIP CODE 98284 CAR-RT C005
702 Bloss Tor A [9]+ 855-1060
K D ROAD CONSTRUCTION hwy str constr 855-1060
708 Tipton Brian L [9]+ 855-0411
719 CORP CATHOLIC ARCHBISHOP religious orgs 855-0077
(N) Holland J M 855-1716
SAINT VINCENT DE PAUL SOCIETY indvdl family svcs 855-1937
724 Ridgway Kathleen C [9]+
730(N) Jenkins Richard 855-0262
(N) Scofield Heather 855-0348
731 Maxwell Judy A [4]
736 Not Verified
741(N) Coull David T 855-1776
744 Johnson Susan E [9]+
745 Carruthers Terry E [9]+
747(N) Mayville Jerlene 855-0994
749 Watts Ricky N [9]+ 855-1902
Watts Earnest E 855-1902
WATTS LOGGING logging 855-1902
754 Coleman Duane R [9]+ 855-0836
Coleman Lia M 855-0836
+ BALL ST INTERSECTS
801(N) Eng S 855-9744
804 Haddox Richard M [9]+ 855-0886
NORTHWEST BRUSH MOWING lawn garden svcs 855-2669
805 Webb Lorna R [9]+ 855-0671
818 Marshall George E & Cheryl [9]+ 855-0486
819 Bigelow Thomas M [9]+ 855-1248
821 Not Verified
824 Lusby Neil [9]+ 855-1890
829 Muhlbeier John R [9]+ 855-0386
830(N) Melton David 855-0799
832 Not Verified
833(N) Zeiger Karl 855-0012
837 Not Verified
842(N) Bainton M 855-9896
+ TOWNSHIP ST INTERSECTS
BUSINESSES 12 HOUSEHOLDS 57

W FERRY ST (SEDRO WOOLLEY)-
+ FERRY ST BEGINS
· ZIP CODE 98284 CAR-RT C003
116 SIMS VERN FORD new used car dlrs 855-1551
+ RITA ST BEGINS
201 Dooley Gladys M [9]+ 855-0742
(N) Oliver Chuck 855-0742
209 Stendal John F [9]+ 855-1436
220 Dillon James R [5]
HERBS CHEVRON gas stations 855-9907
VALLEY AUTO SUPPLY mtr vhcl spls prts 855-0141
223 Blouin Eela G [5]
Blouin Ella G
229 Not Verified
+ RAILROAD CROSSES
+ BORSETH ST INTERSECTS
+ STATE ST INTERSECTS
BUSINESSES 3 HOUSEHOLDS 6

FIDALGO ST (SEDRO WOOLLEY)-FROM 1499 3RD ST EAST
· ZIP CODE 98284 CAR-RT C004
303(N) Beitler Brian 855-0452
308 Wenrick James K [9]+ 855-0494
311 Not Verified
315(N) Brown Debbie 855-0895
320 Lindbloom Robert L [5] 855-0578
321 Jacob Kip J [9]+ 855-0948

FIDALGO ST *cont'd*

322 Ganske Jack G [6] 855-0171
327 Not Verified
333 Crawford Jeffrey S [3]
336 Cronkrite Pamela K [4]
+ 4TH ST INTERSECTS
405 Not Verified
407(N) Hanks John 855-0212
SKAGIT VALLEY CMPT SOLUTIONS cstm cmplr prgmg sv 855-0212
414(N) Rohweder Rod 855-0101
421 Wyndham Stefanie C [3]
428 Dills Christopher S [7]
431 Not Verified
438(N) Linde Dwayne M 855-1205
+ 5TH ST INTERSECTS
500 Abernathy Bonnie L [9]+
501 FIDALGO plstrng dwall instl 595-0594
503(N) Wells Daniel 855-1205
508 Garza Adam G [7]
516 Easter Byron F [9]+
517 Ewing Iva M [9]+
518 Not Verified
519 Tracy Donald R [9]+ 855-0225
521 Weideman Arthur J [9]+ 855-1304
524(N) Stevens Ronald S 855-9602
533 Not Verified
535(N) Sutherland Darrin 855-0206
+ 6TH ST INTERSECTS
603(N) Burns Charlotte 855-1020
605 Christian Cherie M [9]+
612(N) Gillette Ed 855-0102
618 Moors Aleta M [9]+
Moors Vyonne D
621 French Darrell L [9]+ 855-0144
622 ANNIES DAY CARE child day care svcs 855-0830
Powell Jon A [7] 855-0830
625 Ringhouse June E [9]+ 855-1407
627 Hyatt Cheri L [4]
+ 7TH ST INTERSECTS
700 Allen Robert M [9]+ 855-1400
701 ALL FRESH CLEAN CARPETS floor coverings 855-1300
715(N) Bever Marvin L 855-0401
716 Griffith Patrick A [4] 855-1220
720 Syverson Wesley K [9]+ 855-1374
723 Barr James F [9]+ 855-0100
725 Johns Sherri L [9]+
732 Not Verified
735(N) Burke Jody R
738 Not Verified
+ 8TH ST INTERSECTS
801 Not Verified
802(N) Morgan Landy 855-1500
807 DIGGIN IT YARD MAINTENANCE lawn garden svcs 855-2201
Turley Alia L [4]
808(N) Griggs Jo L
811 Knutzen Viola A [3]
812(N) Van Esch Ralph 855-0377
815 Spreckelmeyer Wade J [2]
817 Royal Richard A [3] 855-2800
Royal Jessica L 855-2800
836 Johnson Ellen L [4]
+ TOWNSHIP ST INTERSECTS
901 Hyler Gladys A [2] 855-0778
(N) Wailand Craig 855-1470
3-8 Not Verified (5 Apts)
902 Anderson Charles [9]+ 855-0814
910 Forcier Bill J [7] 855-1120
915(N) Colfack Arthur 855-1100
918 Browning Tracey E & Carolyn [5]
921(N) Baker William R
924 Jordan Nancy R [3] 855-1800
931(N) Feeney Darrel 855-1544
936 Morgan Charlie & Shelley [9]+ 855-2400
937 Handy William H [9]+ 855-2342
944(N) Sutton Keith 855-1200
945-948 Not Verified (2 Hses) 855-1200
949 Warfield Cecil E [9]+ 855-1270
1006 Baxter Howard E [9]+ 855-1000
1008 Franklin Michael D [8]
1009 Cocke Paul C [5]
1010 Spoelstra Aaron J [4]
1011 Wilson Richard J [3]
1101 Padilla Jesus C [7]
Padilla Manuel R 855-2440
1103(N) Perkins J 855-1000
1105 Brown Douglass M [9]+
Brown Tena J
1112 Shoop Gay L [3] 855-2700
1114 Miller Robert P & Dorothy [9]+ 855-0700
1116 Dillon James R & Sharon [9]+

FERRY ST (S W) *cont'd*

(N)Warren Kristen M
· ZIP CODE 98284 CAR-RT C001
918 (N)Jameson B 855-9316
(N)Johnson B 855-0355
Sawyer Gertrude L [3]
4 Windish Leif E [9]+
+ PUGET AVE INTERSECTS
402 Foss Inge A [9]+ ☗ 855-0076
405 (N)Cypher Brian E
420 Andrews Karen E [2]
Andrews Marie E
421 (N)Hubbard David 855-3316
+ REED AVE INTERSECTS
502 (N)Chatt Mark W 855-2248
Layman Thomas [5] ☗
503 Tronaas Donald E [3] 855-1816
Tronaas Alice J 855-1816
504 A Eggen Rick L [2]
A Eggen Shirley P
B Not Verified
511 Eaves Dorothy T [9]+ ☗ 855-0085
516 Quisenberry Mabel I & Roy [9]+ ☗ 855-1856
520 QUIET COVE CONSULTING SERVICE busn consltng 855-0315
Ruhl Stephen J & Janet [9]+ ☗ 855-0315
523 Schneiderman Michael A [3] ☗ 855-0158
Schneiderman Barbara A 855-0158
+ HAINES AVE INTERSECTS
601 (N)De La Torre Tomas 855-0449
604 Wahl Marylou L & Arnold [2] 855-3324
606 Tingley James S [9]+ ☗
Tingley Mildred O
607 Johnson Charles B [2] ☗
Johnson Robin A
608 Melder Robert C & Ann [9]+ ☗ 855-1058
612 McInturff Pearl F [9]+ ☗ 855-0837
615 Phelps Cheri L [9]+ ☗
617 Benedict Ruth M [9]+ ☗
Benedict Patti J
+ CENTRAL AVE INTERSECTS
702 Bloss Tor A [9]+ ☗ 855-1060
Dickey Keith A [9]+ ☗
K D ROAD CONSTRUCTION hwy str constr 855-1060
708 Tipton Brian L [9]+ ☗ 855-0411
Tipton Blanche E 855-0411
VICTORIANA used merch stores 855-0411
719 CATHOLIC ARCHBISHOP religious orgs 855-0077
Holland John M [6] 855-1716
ST VINCENT DEPAUL SOCIETY indvdl family svcs 856-1937
724 Ridgway Kathleen C [9]+ ☗
730 Jenkins Richard D [9]+ ☗ 855-0262
Jenkins Bette L 855-0262
731 Carrell James M [3] ☗
Carrell Judith A
736 (N)Marchand William D
744 McRae Kathy [9]+ ☗
745 Carruthers Terry E & Susan [9]+ ☗
747 Mayville Jerlene [9]+ ☗ 855-0994
Mayville Henry N Jr 855-0994
749 (N)Watts Earnest 855-1902
WATTS LOGGING logging 855-1902
754 (N)Slabodnik Robert J 855-3397
+ BALL ST INTERSECTS
801 (N)Eng S 855-9744
804 (N)Haddox S D 855-0886
NORTHWEST BRUSH MOWING lawn garden svcs 855-2669
805 Webb Lorna R [9]+ ☗ 855-0671
818 Marshall George E & Cheryl [9]+ ☗ 855-0486
819 Bigelow Thomas M [9]+ ☗ 855-1248
821 Prentice Chad R [2]
824 Lusby Neil C [9]+ ☗ 855-1890
Lusby Cecil F 855-1890
829 Muhlbeier John R [9]+ ☗ 855-0386
Muhlbeier Calvin 855-0386
830 (N)Doran Karen R
(N)Monaghan Linda L
833 Zeiger Arlyne I [9]+ ☗ 855-0012
Zeiger Karl 855-0012
837 Hughes Robert S [2] ☗ 855-2640
Hughes Victoria L 855-2640
842 (N)Ryan Matt 855-2052
+ TOWNSHIP ST INTERSECTS
BUSINESSES 17 HOUSEHOLDS 58

W FERRY ST (SEDRO WOOLLEY)-
+ FERRY ST BEGINS
· ZIP CODE 98284 CAR-RT C003

116 Ford Vern S [6]

W FERRY ST (S W) *cont'd*

SIMS VERN FORD new used car dlrs 855-1551
+ RITA ST BEGINS
201 Dooley Gladys M [9]+ ☗ 855-0742
209 Stendal John F [9]+ ☗ 855-1436
220 Dillon James R [6] ☗
HERBS CHEVRON gas stations 855-9907
VALLEY AUTO SUPPLY mtr vhcl spls prts 855-0141
223 Blouin Ella G [9]+ ☗
229 (N)Squires Connie M
+ RAILROAD CROSSES
+ BORSETH ST INTERSECTS
+ STATE ST INTERSECTS
BUSINESSES 3 HOUSEHOLDS 6

FERRY TERMINAL RD (ANACORTES)-
· ZIP CODE 98221 CAR-RT C008

2100 WASHINGTON STATE FERRIES rgltn admn trnsprt 293-8166
2100 b FOOD SERVICE UNIT mgmt svcs 299-0430
5300 (N)Marriott Corp 299-0430
5316 Greathouse Glenn E Jr [9]+ ☗
Kane Kandy M [8] ☗
SHIP HARBOR BICYCLE RENTALS 293-5177
3-11 Not Verified (2 Apts)
5320 (N)Compass Rose 293-6600
Lett James B [2] 299-8263
Paul Carol R [3]
5405 ESPRESSO HUT eating places 293-7140
5407 Converse Kimberly A [4]
(N)Davey Diana E
5614 CHARLIES eating places 293-7377
5616 Kiesser Cory J [3]
BUSINESSES 5 HOUSEHOLDS 11

FIDALGO AVE (ANACORTES)-
· ZIP CODE 98221 CAR-RT C005

619 Hoxie Robert N & Deana [6] ☗
620 Baer James M [3] ☗ 299-9009
709 Hanks Michael D [9]+ ☗
Hanks Lisa E
710 (N)Rios Cheryl L
711 Main Willis D [9]+ ☗ 293-5046
717 Smith Harry W [9]+ ☗ 293-2877
+ R AVE INTERSECTS
801 Erholm Stuart T & Barbara [9]+ ☗ 293-6137
804 Townsend Robert T [2] ☗ 293-8588
Townsend Debby A 293-8588
814 Mason Ruth W [9]+ ☗ 293-9226
819 Greenfield Gregory R [9]+ ☗
Greenfield Dawn D
+ Q AVE ENDS
901 Sleeper Richard E [9]+ ☗ 293-2068
Sleeper Shawn 293-2068
919 Bridge Jane E [4] 293-4043
Sullenger Jane E [6]
B Not Verified
+ COMMERCIAL AVE INTERSECTS
1003 (N)Winden John ☗ 293-4321
1018 McKenna Michael D [4] 299-1181
1019 Schultz Charles M [9]+ ☗ 293-3098
+ O AVE INTERSECTS
HOUSEHOLDS 17

FIDALGO DR (BURLINGTON)-
· ZIP CODE 98233 CAR-RT C004

1020 Zahn Lyle L & Erma [6] ☗ 757-4204
1028 (N)Muff Nicholas S ☗
1036 Hartin Winifred L [3] ☗ 757-1810
Hartin Fred 757-1810
HOUSEHOLDS 3

FIDALGO ST (SEDRO WOOLLEY)-FROM 1499 3RD ST EAST
· ZIP CODE 98284 CAR-RT C002

300 Conrad Warren E [2]
303 Beitler Brian L [6] ☗ 855-0452
308 Wenrick James K [9]+ ☗ 855-0494
Wenrick Dwayne A 855-0494
311 West Della [9]+ ☗
West Claude J
315 (N)Dreyer Becky L ☗
Dreyer Garrett
320 Lindbloom Robert L [6] ☗ 855-0578
321 Jacob Kip J & Julie [9]+ ☗ 855-0948
322 Ganske Jack G [9]+ ☗ 855-0175
327 Riefkohl Frank J [5] ☗
333 (N)Bowman Ronald T
(N)Sampson Christophe J

FIDALGO ST (S W) *cont'd*

Sampson Lissa D
336 Cronkrite Pamela K [5] ☗
+ 4TH ST INTERSECTS
405 Boome Raymond D [9]+ ☗
407 (N)Hanks John 855-0313
SKAGIT VALLEY COMPUTER SOLUTIONS cslm cmptr prgmg sv 855-0313
414 (N)Rohweder Rod 855-0101
421 (N)Silvester Jaqulyn D
121 Wyndham Jay N [5]
121 Wyndham Stephanie C
428 Dills Christopher S [8] ☗
431 Dixon Meryl D [9]+ ☗
Dixon Jeannette D
438 Linde Dwayne M [9]+ ☗ 855-1205
+ 5TH ST INTERSECTS
500 Abernathy Bonnie L [9]+ ☗
501 FIDALGO DRYWALL plstrng dwall instl 895-0559
Koogle Edward Q [5]
503 Wells Daniel J [4] 855-1226
Wells Rhonda D 855-1226
508 Garza Adam G [8] ☗
Garza Lisa C
516 (N)Houvener Paul R ☗
517 (N)Van Etten Don 355-0482
518 Sapien Christopher C [7]
519 (N)Tracey Don
521 Weideman Arthur J [9]+ ☗ 855-1304
Weideman Cynthia R 855-1304
524 Stevens Ronald S & Ruthie [9]+ ☗ 855-9605
533 Davis Kim R [2] ☗ 855-0170
Mendenhall Linda M [2] ☗
535 Sutherland Darrin E [9]+ ☗ 855-0296
+ 6TH ST INTERSECTS
602 Abell Allie M [2] ☗ 855-2808
Abell David C 855-2808
· ZIP CODE 98284 CAR-RT C004
603 Burns C [2] 855-1030
605 Christian Cherrie M [9]+ ☗
612 (N)Gillette Ed 855-0105
618 Moors Aleta M [9]+ ☗
621 French Maryanne A [9]+ ☗ 855-0144
French Danielle R 855-0144
622 ANNIE'S DAY CARE child day care svcs 855-0839
(N)Powell Jon 855-0839
625 Ringhouse June E [9]+ ☗ 855-1427
627 Shope Michael R [8] ☗
Shope Cheri L
(N)Sweet Pea 855-0509
+ 7TH ST INTERSECTS
700 Allen Robert M & Mary [9]+ ☗ 855-1492
701 ALL FRESH CLEAN CARPETS floor coverings 855-1365
Burns George S & Jody [9]+ ☗
715 Bever Marvin L [9]+ ☗ 855-0667
716 (N)Lewis Melanie S 855-2651
720 Syverson Wesley K & Myrtle [9]+ ☗ 855-1374
723 Barr James F [9]+ ☗ 855-0168
Barr Mary H 855-0168
725 Not Verified
732 Grimm Evonne L [9]+ ☗ 856-5940
735 Dekiewiet Judith J [2] ☗
738 Bassler Thomson S [9]+
+ 8TH ST INTERSECTS
801 Allhouse Addie [9]+ ☗
802 Morgan Landy [9]+ ☗ 855-1568
Morgan Barbara C 855-1568
807 DIGGIN IT YARD MAINTENANCE lawn garden svcs 855-2251
Matheson Kelvin A [4] ☗
808 Taylor Cheryl [9]+
815 (N)Kelley Lynn M ☗
Myers Julie A [5]
Spreckelmeyer Wade J [3]
Spreckelmeyer Julie A
15 Screckelmeyer Wade J [3]
817 (N)McCormick April C
828 (N)Taylor William 855-9661
836 Broome Albert E [3] ☗ 855-9722
Broome Ellen L 855-9722
+ TOWNSHIP ST INTERSECTS
901 Knuth William M [2]
1 Martin Rody M [2]
1 Martin Victoria L
3 Not Verified
4 Blanton Jennifer L [2]
5 Mitchell Daniel E [9]+ ☗
6 (N)Allen Trisha L
7-8 Not Verified (2 Apts)
902 Anderson Charles R [9]+ ☗ 855-0619

960 a Tucherov Vanya Y [2]
961 Fenton Launa D [9]+ ☗ 757-0556
Fenton Donald L 757-0556
+ *ANDIS RD INTERSECTS*
HOUSEHOLDS 4

FERNHAVEN RD (SEDRO WOOLLEY)-FROM 3042 MINK LN NORTHEAST
+ *SUMMERSET WAY INTERSECTS*
· ZIP CODE 98284 CAR-RT R002

722-725 Not Verified (2 Hses)
726 Genest Steven H [4] ☗
Genest Kami J
737 Hagan Douglas W [2] 855-2845
738 Vaders Michelle L [6] ☗
+ *JERNS RD INTERSECTS*
753 Smithturner Chris M [2]
756 Ensley Donald W [5] ☗
771 Not Verified
+ *CAIN LAKE RD CONTINUES*
+ *JERNS RD ENDS*
794 Shaffer James E [9]+ ☗
HOUSEHOLDS 9

FERRY ST (BURLINGTON)-FROM 1299 E VERNON AVE SOUTH
· ZIP CODE 98233 CAR-RT C006

302 Francis Colleen C [9]+ ☗ 755-0562
Francis Katherine T 755-0562
310 Not Verified
316Ⓝ Pardue Todd 755-5033
318 Mitzel Larry D [9]+ ☗ 755-0266
HOUSEHOLDS 4

FERRY ST (SEDRO WOOLLEY)-
· ZIP CODE 98284 CAR-RT C003

100 COAST TO COAST hardware 855-1601
101 MARTIN OIL gas stations 855-1245
ⓃWash Rack III 855-1245
109Ⓝ Gloria Jeans 855-9344
118 ARMSTRONG'S electronics 855-1262
+ *METCALF ST INTERSECTS*
206 SAFE PLACE indvdl family svcs 855-9089
208 FERRY STREET GRILL AND BAR eating places 855-2210
209 Daniels Rich [2] 855-1207
ⓃStendal John 855-1436
C FEDERAL CERTIF HEARING N OFF misc rtl strs 855-1207
209 a MCCANN WILLIAM R legal svcs 855-1521
210 CASCADE medical clinic 856-4216
222 BANK OF AMERICA NA natl commrcl banks 855-1611
+ *RAILROAD CROSSES*
+ *MURDOCK ST INTERSECTS*
· ZIP CODE 98284 CAR-RT C001
300 SKAGIT STATE BANK state commrcl banks 855-2141
318Ⓝ Jameson B 855-9316
1 Johnson Bernice N [9]+ ☗ 855-0355
4 Not Verified
339 WHIDBEY ISLAND BANK state commrcl banks 855-0875
+ *PUGET AVE INTERSECTS*
402 Foss Inge A [9]+ ☗ 855-0076
405 Not Verified
420Ⓝ Cole Jermey
421 Brown Shawn L [3] 855-9675
ⓃHubbard David 855-3316
+ *REED AVE INTERSECTS*
502 Chatt Suzanne F [9]+ ☗ 855-2248
503 Tronaas Don [4] 855-1816
504Ⓝ Elicerio Miguel 855-1084
A-B Not Verified (2 Apts)
511 Eaves Dorothy T [9]+ ☗ 855-0085
516 Quisenberry Mabel I & Roy [9]+ ☗ ... 855-1856
520 QUIET COVE CONSULTING SERVICE busn consltng 855-0315
Ruhl Stephen J & Janet [9]+ ☗ 855-0315
523 Schneiderman Michael A [4] ☗ 855-0158
Schneiderman Barbara A 855-0158
+ *HAINES AVE INTERSECTS*
601Ⓝ De La Torre Tomas 855-0449
604 Wahl Marylou L & Arnold [3] 855-3324
606 Tingley James S [9]+ ☗
607 Johnson Charles B [3] ☗
Johnson Robin A
608 Not Verified
612Ⓝ McLnturff Pearl 855-0837
Hinds Amy M
+ *CENTRAL AVE INTERSECTS*
702Ⓝ Bloss T A 855-1060
K D ROAD CONSTRUCTION hwy str constr 855-1060
708 Tipton Brian L [9]+ ☗ 855-0411
Tipton Blanche E 855-0411
VICTORIANA used merch stores 855-0411
719 SAINT LUTHERAN CHURCH religious orgs 855-0077
SAINT VINCENT DE PAUL SOCIETY indvdl family svcs 855-1937
724 Ridgway Kathleen C [9]+ ☗ 856-4898
730 Scofield Heather M [3]
Scofield Bette L
731 Maxwell Judy A [6] ☗
736 Seidel Rogene G [9]+ ☗
Seidel Emma
741Ⓝ Sieg B 855-0207
744 Not Verified
745 Carruthers Terry E [9]+ ☗
747 Mayville Jerlene [9]+ ☗ 855-0994
Mayville Henry N Jr 855-0994
749 Watts Earnest [9]+ ☗ 855-1902
Watts Euvone E 855-1902
WATTS LOGGING logging 855-1902
754 Slabodnik Robert J [2] ☗ 855-3397
+ *BALL ST INTERSECTS*
801 Wright Anthony W [4] ☗
804 Haddox Richard M [9]+ ☗ 855-0886
Haddox Shirley D 855-0886
NORTHWEST BRUSH MOWING lawn garden svcs 855-2669
805 Webb Lorna R [9]+ ☗ 855-0671
818 Marshall George E & Cheryl [9]+ ☗ 855-0486
819 Bigelow Thomas M [9]+ ☗ 855-1248
Bigelow Teresa L 855-1248
824 Lusby Neil C [9]+ ☗ 855-1890
Lusby Cecil F 855-1890
829 Muhlbeier John R [9]+ ☗ 855-0386
Muhlbeier Calvin 855-0386
830 Not Verified
833 Zeiger Arlyne I [9]+ ☗ 855-0012
Zeiger Karl 855-0012
837 Hughes Robert S [3] ☗
842 Ryan Matt [2] 855-2052
+ *TOWNSHIP ST INTERSECTS*
BUSINESSES 18 HOUSEHOLDS 51

W FERRY ST (SEDRO WOOLLEY)-
· ZIP CODE 98284 CAR-RT C003

116 SIMS VERN FORD new used car dlrs 855-1551
201 Dooley Gladys M [9]+ ☗ 855-0742
209Ⓝ Presler Robert 855-9296
220 HERB'S CHEVRON gas stations 855-9907
VALLEY AUTO SUPPLY mtr vhcl spls prts 855-0141
223 Blouin Dean H [9]+ ☗
Blouin Ella G
BUSINESSES 3 HOUSEHOLDS 3

FERRY TERMINAL RD (ANACORTES)-
· ZIP CODE 98221 CAR-RT C009

2100 WASHINGTON STATE FERRIES rgltn admn trnsprt 293-8166
2100 b FOOD SERVICE UNIT mgmt svcs 299-0430
5316 Kane Kandy M [9]+ ☗
SHIP HARBOR BICYCLE RENTALS 293-5177
3-11 Not Verified (2 Apts)
5320Ⓝ Compass Rose 293-6600
ⓃLett C 299-8263
5405 ESPRESSO HUT eating places 293-7140
5407 CHARLIES eating places 293-7377
5616 Not Verified
+ *OAKES AVE ENDS*
BUSINESSES 5 HOUSEHOLDS 6

FIDALGO AVE (ANACORTES)-
· ZIP CODE 98221 CAR-RT C005

619Ⓝ Winsauer Tina L
620 Baer James M & Susan [4] ☗
709 Hanks Michael D [9]+ ☗
Hanks Christopher
710 Rios Cheryl L [2]
711 Main Willis D [9]+ ☗
717 Smith Harry W [9]+ ☗ 293-2877
801 Erholm Stuart T & Barbara [9]+ ☗ ... 293-6[illegible]
804 Townsend Robert T [3] ☗ ..... 293-6[illegible]
Townsend Debby A ..... 293-6[illegible]
814 Mason Ruth W [9]+ ☗ ..... 293-9[illegible]
819Ⓝ Moshier Steve D ☗
+ *Q AVE ENDS*
901 Sleeper Richard E [9]+ ☗ ..... 293-2[illegible]
919 Bridge Jane E [5] ..... 293-4[illegible]
Bridge Shaun M ..... 293-4[illegible]
B Not Verified
+ *COMMERCIAL AVE INTERSECTS*
1003 Winden John [2] ☗ ..... 293-4[illegible]
1018 McKenna Michael D [5] ..... 299-1[illegible]
1019 Schultz Charles M [9]+ ☗ ..... 293-3[illegible]
+ *O AVE INTERSECTS*
HOUSEHOLDS [illegible]

FIDALGO DR (BURLINGTON)-
· ZIP CODE 98233 CAR-RT C004

ⓃMussetter Jerry L & Constance ☗ ..... 757-[illegible]
ⓃMussetternowak Traci A
1020 Zahn Lyle L & Erma [7] ☗ ..... 757-[illegible]
1026 Hartin Winifred L [2] ☗
1027 Meldner Mary L [2] ☗
1028 Not Verified
1036Ⓝ Keefe James F ..... 757-[illegible]
1052Ⓝ Hagen Norman ☗ ..... 757-[illegible]
1075Ⓝ Thompson Lois G ☗ ..... 707-[illegible]
ⓃWallcae Elizabeth
1076Ⓝ Holmes Charles W & Louella ☗ .... 707-[illegible]
1092Ⓝ Manley Richard A ☗ ..... 757-[illegible]
Manley Kami L ..... 757-[illegible]
1116 Caseri Robert L & Doris [2] ☗ ..... 757-[illegible]
1123 Tate Raymond W [2] ☗
HOUSEHOLDS [illegible]

FIDALGO ST (SEDRO WOOLLEY)-FROM 1499 3RD ST EAST
· ZIP CODE 98284 CAR-RT C002

303 Beitler Brian L [7] ☗ ..... 855-[illegible]
308 Dreyer Becky L [2] ☗ ..... 855-[illegible]
Dreyer Garrett ..... 855-[illegible]
ⓃWenrick James ..... 855-[illegible]
311 West Claude J [9]+ ☗
315Ⓝ Curnutt Steven C & Kathleen ☗ ..... 855-[illegible]
320 Lindbloom Robert L [7] ☗ ..... 855-[illegible]
321 Jacob Kip J & Julie [9]+ ☗ ..... 855-[illegible]
322 Ganske Jack G [9]+ ☗ ..... 855-[illegible]
Ganske Karen J ..... 855-[illegible]
327 Girotti Jason [6] ☗ ..... 855-[illegible]
336 Cronkrite Pamela K [6] ☗ ..... 855-[illegible]
+ *4TH ST INTERSECTS*
405 Boome Raymond D [9]+ ☗
407Ⓝ Hanks John ..... 855-[illegible]
SKAGIT VALLEY COMPUTER SOLUTIONS cstm cmptr prgmg sv ..... 855-[illegible]
414 Caldwell Joseph W [6] ☗ ..... 855-[illegible]
Caldwell Teresa M ..... 855-[illegible]
ⓃRohweder Rod ..... 855-[illegible]
421 121 Wyndham Stefanie C [5]
428 Dills Christopher S [9]+ ☗
431 Dixon Jeannette D [9]+ ☗
Dixon Meryl D
438 Linde Dwayne M [9]+ ☗ ..... 855-[illegible]
+ *5TH ST INTERSECTS*
500 Abernathy Bonnie L [9]+ ☗
503 Not Verified
508 Garza Adam G [9]+ ☗ ..... 855-[illegible]
Garza Lisa C ..... 855-[illegible]
516 Not Verified
517Ⓝ Van Etten Don ..... 855-[illegible]
519 Guffie Kristine A [9]+ ☗ ..... 855-[illegible]
521 Weideman Arthur J [9]+ ☗ ..... 855-[illegible]
Weideman Cynthia R ..... 855-[illegible]
524 Stevens Ronald S & Ruthie [9]+ ☗ ... 855-[illegible]
533 Davis Kim R [3] ☗ ..... 855-[illegible]
535 Sutherland Darrin E [9]+ ☗ ..... 855-[illegible]
+ *6TH ST INTERSECTS*
602 Abell David C [3] ☗
· ZIP CODE 98284 CAR-RT C004
603 Burns C [3] ..... 855-[illegible]
605 Christian Cherie M [9]+ ☗ ..... 855-[illegible]
612 Gillette Ed [9]+ ☗ ..... 855-[illegible]
618 Moors Aleta M [9]+ ☗
Moors Vyonne D
620 Baer Robert [2] ..... 855-[illegible]
621Ⓝ Taylor William ..... 855-[illegible]
622 ANNIES DAY CARE child day care svcs ..... 855-[illegible]

2001

24044 Hogan Declan L & Tina [8] 856-0108
24053 Brumley James P [8] 856-5666
Brumley Betty J 856-5666
24076 Stafford Melody W [3] 856-0242
24079 Holloman Andrea L [6]
Holloman Theresa M
24102 Garcia Venedo L [5]
24106 McCauley Michael S [2]
24109 Sargent Paul [9]+ 856-1141
Sargent Elvira B 856-1141
+ TALON CT BEGINS
24178 Smith Brian K [6]
Smith Priscilla A
24197 Fleissner Mitchell W [6]
Fleissner Sharon A
24211 Not Verified
24234 Blakeslee Paul D [6]
Blakeslee Deborah K
24249 Gambrell Edwin E & Laura [6] 856-0051
WESTERN WASHINGTON COMMERICAL PEST MANAGEMENT 647-2093
+ AERIE LN INTERSECTS
BUSINESSES 1 HOUSEHOLDS 13

FENTON LN (BURLINGTON)-FROM 305 LILA LN SOUTH
· ZIP CODE 98233 CAR-RT C007

960 Flaton Dawn [2] 757-1839
A Ronsse Vanessa R [6]
B Carbone Gennaro M [4]
B Carbone Katherine M
960 a ABSOULTE HEALTH MASSAGE massage parlor 757-3974
961 Fenton Launa D [9]+ 757-0556
Fenton Donald L 757-0556
+ ANDIS RD INTERSECTS
BUSINESSES 1 HOUSEHOLDS 4

FERRY ST (BURLINGTON)-FROM 1299 E VERNON AVE SOUTH
· ZIP CODE 98233 CAR-RT C006

302 Francis Colleen C [9]+ 755-0562
310(N)Francis Jamie N
316(N)Pardue Todd 755-5033
318 Mitzel Larry D [9]+ 755-0266
HOUSEHOLDS 4

FERRY ST (SEDRO WOOLLEY)-
· ZIP CODE 98284 CAR-RT C003

100 VAN SWEDEN'S HARDWARE hdw stores 855-1601
101 MARTIN OIL gas serv sta 855-1245
109 GLORIA JEAN'S tavern 855-9344
118 ARMSTRONG'S electl hsehold appl re 855-1262
+ EASTERN AVE INTERSECTS
+ METCALF ST INTERSECTS
+ RITA ST BEGINS
201 Dooley G M [2] 855-0742
206 SAFE PLACE THE 855-9089
208 FERRY STREET GRILL & BAR 855-2210
209 BELTONE FEDERAL CERTIFIED HEARING AID hearing aids 855-1207
Eddings Donna L [2] 855-9197
MC CANN WILLIAM R atty 855-1521
McCann William R [2] 855-1521
MC CANN WILLIAM R 856-5134
WAMER COOKIE LMP 855-9197
210 CASCADE PHYSICAL THERAPY & SPORTS CLINIC phys 856-4216
Vonbergen Harold [2] 856-4216
222 BANK OF AMERICA NA bank 855-1611
+ MURDOCK ST INTERSECTS
+ RAILROAD CROSSES
+ BORSETH ST INTERSECTS
· ZIP CODE 98284 CAR-RT C001
300 SKAGIT STATE BANK bank 855-2141
318 Johnson Bee [2] 855-0355
339 WHIDBEY ISLAND BANK 855-0875
+ PUGET AVE INTERSECTS
+ STATE ROUTE 20 INTERSECTS
402 Foss Inge A [9]+ 855-0076
405(N)Chapman Ralph L 855-1093
420 Not Verified
421 Hubbard David [5] 855-3316
502 Chatt Mark W & Suzanne [9]+ 855-2248
503 Tronaas Don [8] 855-1816
504 Eggen Bonnie [2] 855-3317
Garcia Sonia [2] 855-9455
504 a Ebbs Carol L [7]
511(N)Eaves D 855-0085
516 Quisenberry Mabel I & Roy [9]+ 855-1856
520 QUIET COVE CONSULTING SER busn consit 855-0315
Ruhl Stephen J & Janet [9]+ 855-0315
523(N)Schneiderman Mike 855-0158
+ HAINES AVE INTERSECTS
601 Delatorre Tomas [4] 855-0449
604(N)Rocke Gladys A
606 Not Verified
607 Johnson Charles B [7]
Johnson Robin A
608 Melder Robert [2] 855-1058
Shoop Dick & Sharon [9]+ 855-1925
612 McInturff Pearl F [9]+ 855-0837
617 Hinds Robert L [2]
Hinds Amy M
+ CENTRAL AVE INTERSECTS
702 Bloss Tor A [9]+ 855-1060
708 Tipton Brian L [9]+ 855-0411
Tipton Blanche E 855-0411
VICTORIANA antiques 855-0411
719 SEATTLE IMMACULATE CATHOLIC CHURCH religious orgn 855-0077
SAINT VINCENT DEPAUL SOCIETY individual'fam serv 855-1937
724 Ridgway Kathleen C [9]+
730 Scofield Heather M [4]
Scofield Bette L
731 Carrell James M [5]
Carrell Judith A
SHUKSAN GRAPHICS computer graphics serv 855-2166
736 Seidel Chrislopher L & Rogene [6]
741 Not Verified
744 McRae Kathleen J [9]+
745 Beuse Jeffrey D [9]+ 855-1747
Beuse Christopher K 855-1747
747 Mayville Jerlene [9]+ 855-0994
Mayville Henry N Jr 855-0994
749 Watts Earnest [9]+ 855-1902
Watts Euvone E 855-1902
754 Not Verified
+ BALL ST INTERSECTS
801 Wright Anthony W [5] 855-1194
Wright Samantha 855-1194
804 Haddox Richard M [9]+ 855-0886
NORTHWEST BRUSH MOWING INCORPORATED mowing serv 855-2669
805 Webb Lorna R [9]+ 855-0671
818(N)Marshall George 855-0486
819 Bigelow Thomas M [9]+ 855-2869
Bigelow Teresa L 855-2869
824 Lusby Neil C [9]+ 855-1890
Lusby Cecil F 855-1890
829 Muhlbeier Calvin [9]+ 855-0386
Muhlbeier John R 855-0386
832(N)Russell Tracy L 855-1236
Russell Tarcy 855-1236
833 Zeiger Arlyne I [9]+ 855-0012
Zeiger Karl 855-0012
837 Hughes Robert S [5] 855-2640
842 Not Verified
+ TOWNSHIP ST INTERSECTS
BUSINESSES 20 HOUSEHOLDS 49

W FERRY ST (SEDRO WOOLLEY)-
· ZIP CODE 98284 CAR-RT C003

116 OAKHILL MANAGEMENT automobiles 310-8109
SIMS VERN FORD autos new used 855-1551
201 Oliver Charles L [9]+ 855-0742
Oliver Sandy J 855-0742
209 LEE JOHNSON & SONS CONSTRUCTION spl trade contr 855-9104
220 HERB'S MUFFLER & TUNE-UP gas serv sta 855-9907
VALLEY AUTO SUPPLY auto sup parts 855-0141
223 Blouin Dean H & Ella [9]+

FERRY TERMINAL RD (ANACORTES)-
· ZIP CODE 98221 CAR-RT C009

2100 b MARRIOTT INTERNATIONAL management serv 299-0430
M B I A INCORPORATED eating places 223-1889
5300 MARRIOTT HOTELS hotel franchised 774-8744
5316 Greathouse Glenn E Jr [9]+
Greathouse Kandy M
SHIP HARBOR BICYCLE RENTALS motel 293-5177
5405 ESPRESSO HUT coffee shop 293-7140
5407 CHARLIE'S restr 293-7377
+ OAKES AVE ENDS
BUSINESSES 6 HOUSEHOLDS 1

FIDALGO AVE (ANACORTES)-FROM 3999 HILLCREST DR WEST
· ZIP CODE 98221 CAR-RT C005

619 Winsauer Tina L [2]
620 Baer Virginia M [6] 299-9009
Baer Susan T 299-9009
709 Hanks Michael D [9]+
Hanks Christopher
710 Rios Cheryl L [3]
711 Main Willis D [9]+
717 Smith Harry W [9]+ 293-2877
+ R AVE INTERSECTS
801 Erholm Stuart T & Barbara [9]+ 293-6137
804 Townsend Robert T [4] 293-8588
Townsend Deborah A 293-8588
814 Mason Ruth W [9]+ 293-9226
819 Not Verified
+ Q AVE ENDS
901 Sleeper Richard E [9]+ 293-2068
919 Bridge Jane E [6]
Bridge Shaun M
+ COMMERCIAL AVE INTERSECTS
1003 Winden John K [9]+
1018 McKenna Michael D [6] 299-1181
1019 Schultz Charles M [9]+ 293-3098
+ O AVE INTERSECTS
HOUSEHOLDS 15

FIDALGO DR (BURLINGTON)-
· ZIP CODE 98233 CAR-RT C004

Mussetter Jerry L & Constance [2] 757-0289
1020 Zahn Lyle L & Erma [8] 757-4984
1027 Meldner Mary L [3]
1028 Muff Nicholas S [3]
1036 Keefe James F [6] 757-9615
Keefe Virginia L 757-9615
1043(N)Paulino Jose 707-5822
1051 May Frank G [4]
1052 Hagen Norman [2] 757-2973
1059 Anderson Edward C & Allison [5]
1060(N)Williams Richard J 757-2081
1075 Thompson Lois G [2] 707-5775
Wallace Elizabeth [2]
1076 Holmes Louella C & Charles [2] 707-0243
1083(N)Williams Michael P 757-8792
Williams Terrill L 757-8792
1084 Syltebo Leah T [2]
1092 Manley Richard A [8] 757-6272
Manley Kami L 757-6272
1107(N)Boschma Phyllis C
1116 Caseri Robert L & Doris [3]
1123 Tate Bernice L [6]
Tate Raymond W
HOUSEHOLDS 19

FIDALGO ST (SEDRO WOOLLEY)-FROM 1499 3RD ST EAST
· ZIP CODE 98284 CAR-RT C002

303 Hawkes Jeffrey A [5]
Hawkes Senora M
308 Wenrick James K [9]+ 855-0494
Wenrick Dwayne A 855-0494
311 West Claude J [5]
315 Curnutt Steven C & Kathleen [2] 855-0390
320 Lindbloom Robert L [8] 855-0578

APPENDIX C

BORING AND WELL INSTALLATION LOGS



Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.01	**GP01**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**5/6/12 to 5/6/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**10.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**68%**	**GP**	**1**				*0.0 to 0.3 feet: ASPHALT.*
									0.3 to 1.0 feet: GRAVELLY SAND (SW); dark yellowish brown; 5% fines; 65% sand, medium, loose; 30% gravel, sub-angular, fine to medium, gray; moist.
2									*1.0 to 3.4 feet: SILTY SAND (SM); very dark gray; 40% fines, low plasticity; 60% sand, fine, medium density; petroleum-like odor, sheen 2.7 to 3.4 feet; damp to moist.*
3				**GRAB**		**GP1-S-2.5 PID = 513.6 ppm**			*@1.8 to 2.7 feet: Wood debris and gravel, petroleum-like odor, black staining.*
4									*3.4 to 5.0 feet: No recovery.*
5									
6	▼		**34%**	**GP**	**2**				*5.0 to 6.7 feet: SILTY SAND (SM); very dark gray; 40% fines, low plasticity; 60% sand, fine, medium density; petroleum-like odor, sheen; wet.*
									@5.0 feet: 0.2-foot-thick wood debris with black staining.
7						**PID = 34.4 ppm**			*6.7 to 10.0 feet: No recovery.*
8				**GW**		**GP1-W-7.5**			
9									
10									*Total boring depth: 10.0 ft bgs.*

NOTES:
1) ft bgs = feet below ground surface.
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Advanced a second boring in order to obtain an adequate sample volume.
4) Collected groundwater from 5 to 10 ft bgs using a temporary 5-foot-long, 1-inch-diameter PVC (polyvinyl chloride) screen. Recharge was very slow.
5) Soil grab sample interval from 1.0 to 3.4 ft bgs.

▼ **Water level 5.50 ft bgs with screened interval from 5 to 10 ft bgs.**

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Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.01	**GP02**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**5/6/12 to 5/6/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**15.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**44%**	**GP**	**1**				*0.0 to 2.2 feet: SILTY SAND (SM); dark olive brown; 40% fines, non-plastic; 60% sand, fine, medium density; trace coarse gravel and medium sand at surface; damp to moist.*
2				**GRAB**		**GP2-S-1.1**			
3									*2.2 to 5.0 feet: No recovery.*
4									
5									
6	▽		**56%**	**GP**	**2**				*5.0 to 6.8 feet: SILTY SAND (SM); very dark gray; 40% fines, non-plastic; 60% sand, fine, medium dense; wet.*
7									*6.8 to 7.8 feet: SAND (SP); very dark gray; 5% fines; 95% sand, coarse, loose; orange staining 7.1 to 7.8 feet; wet.*
8									*7.8 to 10.0 feet: No recovery.*
9									
10				**GP**	**3**	**GP2-W-10**			*10.0 to 15.0 feet: SAND (SP); dark yellowish brown to dark gray; 5% fines, 95% sand, coarse, loose; trace gravel; wet.*
11				**GW**					*Pushed 2-inch core without macrocore sampler from 10.0 to 15.0 feet bgs; therefore, no recovery data for this interval.*
12									
13									
14									
15									*Total boring depth: 15.0 ft bgs.*

NOTES:
1) ft bgs = feet below ground surface.
2) Collected groundwater from 5 to 15 ft bgs using a temporary 10-foot-long, 1-inch-diameter PVC (polyvinyl chloride) screen.
3) Borehole back-filled with bentonite chips hydrated with potable water.
4) 4 inches of concrete at surface.
5) Soil grab sample interval from 0 to 2.2 ft bgs.

▽ ***Water level 5.80 ft bgs with screened interval from 5 to 15 ft bgs.***

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Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.01	**GP03**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**5/6/12 to 5/6/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**10.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**54%**	**GP**	**1**				*0.0 to 1.3: GRAVELLY SAND (SW); gray; 5% fines; 55% sand, medium to coarse, loose; 40% gravel, sub-angular to sub-rounded, fine to coarse; damp.*
2						**GP3-S-2**			*1.3 to 2.7 feet: SILTY SAND (SM); dark gray; 40% fines, non-plastic; 60% sand, fine, stiff; black staining; orange mottling 2.0 to 2.7 feet; damp to moist.*
3									*2.7 to 5.0 feet: No recovery.*
4									
5									
6			**58%**	**GP**	**2**				*5.0 to 7.9 feet: SILTY SAND (SM); dark gray; 40% fines, non-plastic; 60% sand, fine, stiff; wet.*
7									*@7.1 feet: 0.5-foot lens of coarse sand with orange staining.*
8									*7.9 to 10.0 feet: No recovery.*
9									
10									*Total boring depth: 10.0 ft bgs.*

NOTES: *1) ft bgs = feet below ground surface.*
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Sweet odor wafting from paint department of car service shop.
4) Soil grab sample interval from 1.3 to 2.7 ft bgs.

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Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.01	**GP04**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**5/7/12 to 5/7/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**12.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1				**GP**	**1**	**PID = 0.0 ppm**			*0.0 to 4.0 feet: SAND with SILT (SW-SM); dark reddish brown; 10% fines; 85% sand, fine to coarse, loose; 5% gravel, sub-angular to sub-rounded; trace woody debris; damp.*
2									
3									
4			**60%**	**GP**	**2**				*@3.7 feet: micaceous, dark reddish brown, stiff, silty sand.*
5									*4.0 to 6.4 feet: SILTY SAND (SM); very dark gray; 20% fines, non-plastic; 80% sand, fine, medium dense; orange spotty staining; wet.*
6									
7	▼								*6.4 to 8.0 feet: No recovery.*
8			**100%**	**GP**	**3**	**PID = 0.0 ppm**			*8.0 to 9.9 feet: SILTY SAND (SM); very dark gray; 20% fines, non-plastic; 80% sand, fine, medium dense; orange spotty staining; wet.*
9									
10				**GW**		**PID = 0.0 ppm GP4-W-10**			*9.9 to 12.0 feet: SILTY SAND (SM); 40% fines, medium plasticity; 60% sand, fine, medium dense; trace woody debris; wet.*
11									
12									*Total boring depth: 12.0 ft bgs.*

NOTES:
1) ft bgs = feet below ground surface.
2) Collected groundwater from 8 to 12 ft bgs using a temporary 5-foot-long, 1-inch-diameter stainless steel screen.
3) Borehole back-filled with bentonite chips hydrated with potable water.
4) Used 4-foot rods to gain access with a low ceiling clearance.
5) Sweet odor wafting from paint department of car service bay.

▼ ***Water level 6.58 ft bgs with screened interval from 8 to 12 ft bgs.***

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Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.01	**GP05**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**5/8/12 to 5/8/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**15.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**52%**	**GP**	**1**				*0.0 to 1.5 feet: GRAVELLY SAND (SW); very dark grayish brown; 15% fines; 60% sand, fine to coarse, medium dense; 25% gravel, fine to coarse, angular; dry to damp.*
2				**GRAB**		**GP5-S-2**			*@0.8 feet: granular, black, coal-like material.*
									1.5 to 2.6 feet: COAL; 15% fines, non-plastic; 85% sand, fine to medium, medium dense; trace woody debris, 2-mm chunks vitreous coal-like material and porous white material; damp.
3									*2.6 to 5.0 feet: No recovery.*
4									
5									
6	▼		**74%**	**GP**	**2**				*5.0 to 8.7 feet: CLAYEY SILT (ML-CL); grayish brown; 90% fines, low plasticity, stiff; 10% sand, fine; trace orange mottling; medium to wet.*
				GRAB		**GP5-S-5.6**			
7									
8									
9									*8.7 to 10.0 feet: No recovery.*
10			**80%**	**GP GW**	**3**	**GP5-W-10**			*10.0 to 13.7 feet: CLAYEY SILT (ML-CL); dark gray; 100% fines, medium plasticity, firm; trace woody debris; wet.*
11									
12									*@11.4 to 11.7 feet: 2-mm pale brown and dark gray laminations.*
13									
14									*13.7 to 15.0 feet: SILTY SAND (SM); dark gray; 20% fines, low plasticity; 80% sand, fine; damp.*
15									*@13.7 to 13.8 feet: brownish orange staining.*
									Total boring depth: 15.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Collected groundwater from 8 to 12 ft bgs using a temporary 4-foot-long, 1-inch-diameter stainless steel screen.
3) Borehole back-filled with bentonite chips hydrated with potable water.
4) Soil grab sample intervals from 1.5 to 2.6 ft bgs and 5.0 to 6.3 ft bgs.

▼ ***Water level 6.15 ft bgs (and rising) with screened interval from 8 to 12 ft bgs.***

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.01	**GP06**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**5/8/12 to 5/8/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**15.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**72%**	**GP**	**1**				*0.0 to 1.6 feet: GRAVELLY SAND with SILT (SW-SM); dark grayish brown; 10% fines; 75% sand, fine to coarse, dense; 15% gravel, sub-rounded, fine; damp.*
2									*1.6 to 2.8 feet: SILTY SAND (SM); dark brown to black; 40% fines, low plasticity; 60% sand, fine to dense; trace white chalk-like material; damp.*
3				**GRAB**		**GP6-S-2.9**			*@1.9 to 2.3 feet: 2-4 mm chunks of black coal-like material and fine gravel.*
4									*2.8 to 3.6 feet: SILTY SAND (SM); dark grayish brown; 15% fines, non-plastic; 85% sand, fine, dense; trace orange mottling; damp.*
5									*3.6 to 5.0 feet: No recovery.*
6	▽		**94%**	**GP**	**2**				*5.0 to 7.4 feet: SILTY SAND (SM); dark grayish brown; 15% fines, non-plastic; 85% sand, fine, medium dense; orange mottling; moist to wet.*
7									
8									*7.4 to 9.7 feet: CLAYEY SILT (ML-CL); dark grayish brown; 75% fines, low to medium plasticity, firm; 25% sand, fine; orange mottling; wet.*
9				**GW**		**GP6-W-9**			
10									*9.7 to 10.0 feet: No recovery.*
11			**100%**	**GP**	**3**				*10.0 to 12.4 feet: CLAYEY SILT (ML-CL); dark grayish brown; 75% fines, low to medium plasticity, firm; 25% sand, fine; orange mottling; wet.*
12									
13									*12.4 to 15.0 feet: SAND (SW); 5% fines; 95% sand, medium to coarse, loose; wet.*
14									*@14.0 feet: 0.4 foot lens of dark gray silty sand with orange mottling.*
15									*Total boring depth: 15.0 ft bgs.*

NOTES:
1) ft bgs = feet below ground surface.
2) Collected groundwater from 7 to 11 ft bgs using a temporary 4-foot-long, 1-inch-diameter stainless steel screen.
3) Borehole back-filled with bentonite chips hydrated with potable water.
4) Soil grab sample interval from 2.3 to 3.6 ft bgs.

▽ ***Water level 5.45 ft bgs with screened interval from 7 to 11 ft bgs.***

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.01	**GP07**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**5/8/12 to 5/8/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**10.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**74%**	**GP**	**1**				*0.0 to 2.1 feet: GRAVELLY SAND with SILT (SW-SM); very dark gray; 10% fines; 75% sand, medium to coarse, loose; 15% gravel, fine to medium, sub-angular to sub-rounded; trace white chalk-like material; black staining from 1.7 to 2.1; dry to damp.*
2									
3				**GRAB**		**GP7-S-2.9**			*2.1 to 3.7 feet: SILTY SAND (SM); dark reddish brown to dark grayish brown; 15% fines, non-plastic; 85% sand, fine, dense; orange mottling; damp to moist.*
4									*3.7 to 5.0 feet: No recovery.*
5	▽		**92%**	**GP**	**2**				*5.0 to 6.7 feet: CLAYEY SILT (ML-CL); dark grayish brown; 75% fines, low to medium plasticity, firm; 25% sand, fine; orange mottling; wet.* *@6.0 feet: 0.1-foot lens of fine, micaceous sand.*
6									
7									*6.7 to 9.6 feet: SAND (SW); 5% fines; 95% sand, medium to coarse, loose; orange staining, petroleum-like odor in stained area; wet.*
8				**GW**		**GP7-W-8**			
9									
10									*9.6 to 10.0 feet: No recovery.*

Total boring depth: 10.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Collected groundwater from 6 to 10 ft bgs using a temporary 4-foot-long, 1-inch-diameter stainless steel screen.
3) Borehole back-filled with bentonite chips hydrated with potable water.
4) Soil grab sample interval from 2.2 to 3.7 ft bgs.

▽ ***Water level 5.03 ft bgs with screened interval from 6 to 10 ft bgs.***

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.01	**GP08**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**5/8/12 to 5/8/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**10.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**70%**	**GP**	**1**				*0.0 to 1.1 feet: GRAVELLY SAND with SILT (SW-SM); very dark gray; 15% fines; 65% sand, medium to coarse, dense; 20% gravel, fine to medium; dry to damp.*
2									*1.1 to 3.5 feet: SILTY SAND (SM); dark reddish brown to dark grayish brown; 15% fines, non-plastic; 85% sand, fine, dense; trace orange mottling; damp to moist.*
3				**GRAB**		**PID = 1.3 ppm** **GP8-S-2.8**			*@1.3 feet: black staining.* *@2.0 feet: black, fine-grained material.*
4									*3.5 to 5.0 feet: No recovery.*
5	▼								
6			**92%**	**GP**	**2**				*5.0 to 6.2 feet: SILTY SAND (SM); dark reddish brown to dark grayish brown; 15% fines, non-plastic; 85% sand, fine, dense; trace orange mottling; damp to moist.*
7									*6.2 to 8.6 feet: SAND (SW); 5% fines; 95% sand, medium to coarse, loose; orange staining from 6.8 to 8.6 feet; wet.*
8				**GW**		**GP8-W-8**			
9									*8.6 to 9.6 feet: SILTY CLAYEY SAND (SC); dark gray; 20% fines, medium plasticity; 80% sand, fine, medium dense; clay content decreases with depth; wet.*
10									*9.6 to 10.0 feet: No recovery.*
									Total boring depth: 10.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Collected groundwater from 6 to 10 ft bgs using a temporary 4-foot-long, 1-inch-diameter stainless steel screen.
3) Borehole back-filled with bentonite chips hydrated with potable water.
4) Soil grab sample interval from 2.1 to 3.5 ft bgs.

▼ **Water level 4.86 ft bgs with screened interval from 6 to 10 ft bgs.**

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.01	**GP09**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**5/8/12 to 5/8/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**15.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**60%**	**GP**	**1**				*0.0 to 1.2 feet: GRAVELLY SAND with SILT (SW-SM); very dark grayish brown; 10% fines; 70% sand, medium to coarse, dense; 20% gravel, fine to coarse, sub-angular; dry.*
2				**GRAB**		**GP9-S-2**			*1.2 to 1.8 feet: Coal-like material; black; 5% fines; 85% sand, medium to coarse, dense; 10% gravel, fine to coarse, sub-angular; trace vitreous black fragments, orange staining, white staining; dry to damp.*
3									*1.8 to 2.3 feet: SILTY SAND (SM); dark grayish brown; 20% fines, non-plastic; 80% sand, fine to dense; damp.*
4									*2.3 to 2.7 feet: COAL; black; 5% fines; 85% sand, medium to coarse, dense; 10% gravel, fine to coarse, sub-angular; damp to moist.*
5									*2.7 to 3.0 feet: CLAY (CL); grayish brown; 100% fines, high plasticity, stiff; moist.*
									3.0 to 5.0 feet: No recovery.
6			**80%**	**GP**	**2**				*5.0 to 5.6 feet: CLAY (CL); grayish brown; 100% fines, high plasticity, stiff; moist.*
7				**GRAB**		**GP9-S-5.9**			*5.6 to 8.5 feet: SILTY SAND (SM); dark reddish brown to dark grayish brown; 20% fines, non-plastic; 80% sand, fine, medium dense; orange mottling; moist to wet.*
8									
9									*8.5 to 9.5 feet: SAND (SP); dark reddish brown; 5% fines; 95% sand, fine, loose; orange staining; moist.*
10	▽								*9.0 to 10.0 feet: No recovery.*
11			**92%**	**GP GW**	**3**	**GP9-W-10**			*10.0 to 11.6 feet: SAND (SP); dark grayish brown; 5% fines; 95% sand, fine, medium dense; wet.*
12									*11.6 to 14.1 feet: SILTY CLAY (ML-CL); pale brown to dark gray; 100% fines, high plasticity, firm; moist.*
13									
14									
15									*14.1 to 15.0: No recovery.*

Total boring depth: 15.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Collected groundwater from 8 to 12 ft bgs using a temporary 4-foot-long, 1-inch-diameter stainless steel screen.
3) Borehole back-filled with bentonite chips hydrated with potable water.
4) Soil grab sample intervals from 1.1 to 3.0 ft bgs and 5.0 to 6.2 ft bgs.

▽ ***Water level 9.40 ft bgs with screened interval from 8 to 12 ft bgs.***

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Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	GP10	1 of 1

Project Name	VSF Properties, LLC - North Cascade Ford	TOC Elevation (feet)	
Project Location	116 W. Ferry St., Sedro-Woolley, WA	Surface Elevation (feet)	
Start/End Date	12/3/12 to 12/3/12	Northing	
Driller/Equipment	Cascade Drilling, LP/Geoprobe 6600	Easting	
Geologist/Engineer	H. Hirsch	Hole Depth	20.0-feet
Sample Method		Outer Hole Diam	2-inch

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			80%	GP	1				0.0 to 1.3 feet: SAND (SP); dark brown to dark gray; 5% fines; 95% sand, fine, loose; trace coarse sand; dry.
2				GRAB		GP10-S-2.0			1.3 to 2.8 feet: SAND with SILT (SP-SM); dark brown to black; 10% fines; 90% sand, fine, medium dense; trace organic matter; trace gravel, subangular, fine; trace orange mottles; damp.
3									2.8 to 4.0 feet: SAND with SILT (SP-SM); brown; 15% fines; 85% sand, fine, medium dense; damp.
4									4.0 to 5.0 feet: No recovery.
5			92%	GP	2				5.0 to 9.0 feet: SAND with SILT (SP-SM); dark gray; 15% fines; 85% sand, fine, medium dense; wet.
6	▼								
7									
8				GW		GP10-W-7.5			@ 7.1 to 8.1 feet: reddish-brown staining.
9	▼								
10									9.0 to 9.6 feet: SAND with SILT (SP-SM); dark gray; 10% fines; 90% sand, medium, loose; wet. 9.6 to 10.0 feet: No recovery.
11			92%	GP	3				10.0 to 11.8 feet: SAND with SILT (SP-SM); dark gray; 10% fines; 90% sand, medium, loose; trace organic matter; wet.
12									11.8 to 14.1 feet: SILT with SAND (ML); dark gray; 85% fines, medium plasticity, soft; 15% sand, fine; trace wood chunks; trace organic matter; moist.
13									
14									14.1 to 14.6 feet: SAND (SP); dark gray; 5% fines; 95% sand, fine, loose; moist.
15			84%	GP	4				@ 14.4 feet: 2-inch wood chunk. 14.6 to 15.0 feet: No recovery.
16									15.0 to 16.3 feet: SAND (SP); dark gray; 5% fines; 95% sand, fine, loose; moist. @ 16.3 feet: wood chunk.
17				GW		GP10-W-16.5			16.3 to 18.8 feet: CLAY with SAND (CL); dark gray; 80% fines, high plasticity, soft; 20% sand, fine; wet. @ 16.7 to 16.9 feet: sand, fine, loose.
18									
19									18.8 to 19.2 feet: SAND (SP); dark gray; 5% fines; 95% sand, fine, loose; moist.
20									19.2 to 20.0 feet: No recovery. Total boring depth: 20.0 ft bgs.

NOTES:
1) Collected groundwater from 5 to 10 ft bgs and 14 to 19 ft bgs using a temporary 5-foot-long, 1-inch-diameter PVC (polyvinyl chloride) screen.
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Soil grab sample interval from 1.3 to 2.8 ft bgs.
4) 4 inches of concrete at surface.
5) ft bgs = feet below ground surface.

▼ **Water level 5.83 ft bgs with screened interval from 5 to 10 ft bgs.**

▼ **Water level 9.07 ft bgs with screened interval from 14 to 19 ft bgs.**

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	GP11	1 of 1

Project Name	VSF Properties, LLC - North Cascade Ford	TOC Elevation (feet)	
Project Location	116 W. Ferry St., Sedro-Woolley, WA	Surface Elevation (feet)	
Start/End Date	12/2/12 to 12/2/12	Northing	
Driller/Equipment	Cascade Drilling, LP/Geoprobe 6600	Easting	
Geologist/Engineer	H. Hirsch	Hole Depth	20.0-feet
Sample Method		Outer Hole Diam	2-inch

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			42%	GP	1				0.0 to 1.1 feet: SAND (SW); dark brown; 5% fines; 95% sand, fine to medium, dense; trace medium to coarse sand and gravel; petroleum-like odor; dry.
				GRAB		GP11-S-1.25			@ 1.0 to 1.2 feet: black staining.
2									1.1 to 2.1 feet: GRAVELLY SAND (SW); dark gray; 5% fines; 70% sand, fine to coarse, loose; 25% gravel, sub-rounded, fine to medium; petroleum-like odor; dry.
3									2.1 to 5.0 feet: No recovery.
4									
5			78%	GP	2				5.0 to 6.0 feet: GRAVELLY SAND (SW); dark gray; 5% fines; 70% sand, fine to coarse, loose; 25% gravel, sub-rounded, fine to medium; dry to damp.
6									6.0 to 8.0 feet: SILT (ML); dark gray; 90% fines, medium plasticity, stiff; 10% sand, fine; trace woody debris; petroleum-like odor; wet.
7									
8				GRAB		GP11-S-7.5			8.0 to 8.9 feet: WOODY DEBRIS.
9									8.9 to 10.0 feet: No recovery.
10	▼		58%	GP	3				10.0 to 11.0 feet: SILT (ML); dark gray; 90% fines, medium plasticity, stiff; 10% sand, fine; trace woody debris; petroleum-like odor; wet.
11									11.0 to 12.9 feet: SAND (SP); dark gray; 5% fines; 95% sand, fine, loose; petroleum-like odor; wet.
12									
13									12.9 to 15.0 feet: No recovery.
14									
15			84%	GP	4				15.0 to 19.2 feet: SAND (SP); dark gray; 5% fines; 95% sand, fine, loose; wet.
16									
17									
18				GW		GP11-W-17.5			
19									
20									19.2 to 20.0 feet: No recovery. Total boring depth: 20.0 ft bgs.

NOTES: 1) ft bgs = feet below ground surface. 2) Borehole back-filled with bentonite chips hydrated with potable water. 3) 4 inches of concrete at surface. 4) Collected groundwater from 6 to 11 ft bgs and 15 to 20 ft bgs using a temporary 5-foot-long, 1-inch-diameter PVC (polynvinyl chloride) screen. 5) 20 ft bgs is the maximum boring depth obtainable due to overhead obstructions. 6) Soil grab sample intervals from 0.5 to 2.0 ft bgs and 6.0 to 9.0 ft bgs.

▼ **Water level 10.03 ft bgs with screened interval from 6 to 11 ft bgs and 15 to 20 ft bgs.**

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP12**	**1 of 2**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/2/12 to 12/2/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**35.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
0			**74%**	**GP**	**1**				*0.0 to 0.3 feet: ASPHALT.*
1									*0.3 to 2.0 feet: SAND with SILT and GRAVEL (SW-SM); dark brown; 10% fines; 80% sand, fine to coarse, medium dense; 10% gravel, subangular, fine to medium; trace woody debris; damp.*
2									*@ 1.3 feet: 0.2-foot reddish-brown brick fragments.*
									2.0 to 2.9 feet: SAND with SILT (SP-SM); gray; 15% fines; 85% sand, fine, medium dense; trace orange mottles; damp.
3									*2.9 to 3.7 feet: SAND (SP); gray; 5% fines; 95% sand, fine, medium dense; damp.*
4									*3.7 to 5.0 feet: No recovery.*
5			**74%**	**GP**	**2**				*5.0 to 6.0 feet: SAND (SP); dark gray; 5% fines; 95% sand, medium, loose; damp.*
6									*6.0 to 8.6 feet: SILTY SAND (SM); gray; 25% fines, medium plasticity; 75% sand, fine, loose; wet.*
7									
8	▼			**GW**		**GP12-W-7.5**			
9									*8.6 to 10.0 feet: No recovery.*
10			**72%**	**GP**	**3**				*10.0 to 13.6 feet: SILTY SAND (SM); gray; 25% fines, medium plasticity; 75% sand, fine, loose; wet.*
11									
12				**GRAB**		**GP12-S-12.0**			
13									
14									*13.6 to 15.0 feet: No recovery.*
15	▽		**80%**	**GP**	**4**				*15.0 to 19.0 feet: SILTY SAND (SM); dark gray; 30% fines, medium plasticity; 70% sand, fine, loose; petroleum-like odor; wet.*
16									
17									
18									
19									*19.0 to 20.0 feet: No recovery.*
20									

NOTES: *1) Collected groundwater from 10 to 15 ft bgs and 23 to 28 ft bgs using a temporary 5-foot-long, 1-inch-diameter PVC (polyvinyl chloride) screen. Recharge was very slow for the 10 to 15 ft bgs interval. 2) Advanced a second boring in order to screen the shallow interval for a groundwater sample. 3) Borehole back-filled with bentonite chips hydrated with potable water.*
4) Soil grab sample interval from 10 to 14 ft bgs.
5) ft bgs = feet below ground surface.

▼ ***Water level 7.95 ft bgs (and rising) with screened interval from 10 to 15 ft bgs.***

▽ ***Water level 14.60 ft bgs with screened interval from 23 to 28 ft bgs.***

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	GP12	2 of 2

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
21			100%	GP	5				20.0 to 25.0 feet: SILTY SAND (SM); dark gray; 30% fines, medium plasticity; 70% sand, fine, loose; petroleum-like odor; wet.
22									
23									
24									
25			72%	GP	6				25.0 to 28.6 feet: SAND (SW); dark gray; 5% fines; 95% sand, fine to medium, loose; wet.
26				GW		GP12-W-25.5			
27									
28									
29									28.6 to 30.0 feet: No recovery.
30			58%	GP	7				30.0 to 32.9 feet: SAND (SW); dark gray; 5% fines; 95% sand, fine to medium, loose; wet.
31									
32									
33									@ 32.6 feet: 2.0-inch-thick woody debris.
									32.9 to 35.0 feet: No recovery.
34									
35									Total boring depth: 35.0 ft bgs.

NOTES: 1) Collected groundwater from 10 to 15 ft bgs and 23 to 28 ft bgs using a temporary 5-foot-long, 1-inch-diameter PVC (polyvinyl chloride) screen. Recharge was very slow for the 10 to 15 ft bgs interval. 2) Advanced a second boring in order to screen the shallow interval for a groundwater sample. 3) Borehole back-filled with bentonite chips hydrated with potable water.
4) Soil grab sample interval from 10 to 14 ft bgs.
5) ft bgs = feet below ground surface.

▼ **Water level 7.95 ft bgs (and rising) with screened interval from 10 to 15 ft bgs.**

▼ **Water level 14.60 ft bgs with screened interval from 23 to 28 ft bgs.**

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP13**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/2/12 to 12/2/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**10.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**54%**	**GP**	**1**				*0.0 to 0.5 feet: GRAVELLY SAND (SW); reddish-brown; 5% fines; 75% sand, fine to coarse, loose; 20% gravel, sub-rounded to round, fine to medium; dry.*
2				**GRAB**		**GP13-S-1.6**			*0.5 to 2.7 feet: SILTY SAND (SM); reddish brown to dark gray (grades to gray with depth); 25% fines, non-plastic; 75% sand, fine, medium dense; trace orange mottles; trace sub-rounded gravel; damp.*
3									*2.7 to 5.0 feet: No recovery.*
4									
5									
6	▼		**80%**	**GP**	**2**				*5.0 to 9.0 feet: SILTY SAND (SM); reddish brown to dark gray (grades to gray with depth); 25% fines, non-plastic; 75% sand, fine, medium dense; trace orange mottles; trace sub-rounded gravel; damp to wet.*
7									*@ 7.0 to 7.3 feet: sand, medium, loose.*
8									
9									*9.0 to 10.0 feet: No recovery.*
10									*Total boring depth: 10.0 ft bgs.*

NOTES: *1) ft bgs = feet below ground surface.*
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) 4 inches of concrete at surface.
4) Soil grab sample interval from 0.5 to 2.7 ft bgs.

▼ ***Water level approximately 6 ft bgs with 10-foot total boring depth.***

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP14**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/3/12 to 12/3/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**10.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**72%**	**GP**	**1**				*0.0 to 2.3 feet: GRAVELLY SAND (SW); dark brown; 5% fines; 80% sand, fine to medium, medium dense; 15% gravel; trace organic matter; damp.*
2									*@ 1.9 to 2.3 feet: black staining.*
3									*2.3 to 3.6 feet: SILTY SAND (SM); dark brown; 20% fines, non-plastic; 80% sand, fine, dense; trace orange mottles; moist.*
4									*3.6 to 5.0 feet: No recovery.*
5		▽	**38%**	**GP**	**2**				*5.0 to 6.7 feet: SILTY SAND (SM); dark brown; 20% fines, non-plastic; 80% sand, fine, dense; trace orange mottles; wet.*
6									
7									*6.7 to 6.9 feet: CLAY with SAND (CL); dark brown; 80% fines, high plasticity, soft; 20% sand, fine; wet.*
8				**GW**		**GP14-W-7.5**			*6.9 to 10.0 feet: No recovery.*
9									
10									*Total boring depth: 10.0 ft bgs.*

NOTES: *1) ft bgs = feet below ground surface.*
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Collected groundwater from 5 to 10 ft bgs using a temporary 5-foot-long, 1-inch-diameter PVC (polyvinyl chloride) screen.

▽ ***Water level 5.18 ft bgs with screened interval from 5 to 10 ft bgs.***

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP15**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/3/12 to 12/3/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**10.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**76%**	**GP**	**1**				*0.0 to 2.5 feet: GRAVELLY SAND (SW); dark brown; 5% fines; 80% sand, fine to medium, dense; 15% gravel, sub-rounded, fine to coarse; damp.*
2									*@ 1.4 to 1.5 feet: sandy silt, dark brown, stiff.* *@ 1.5 to 2.5 feet: dark reddish-brown staining.*
3									*@ 2.4 to 2.5 feet: sandy silt, dark brown, stiff.* *2.5 to 3.8 feet: SAND with SILT (SP-SM); dark brown; 10% fines; 90% sand, fine, dense; trace orange staining; moist.*
4									*3.8 to 5.0 feet: No recovery.*
5			**82%**	**GP**	**2**				*5.0 to 7.2 feet: SAND with SILT (SP-SM); dark brown; 10% fines; 90% sand, fine, dense; trace orange staining; wet.*
6	▼								
7									
8				**GW**		**GP15-W-7.5**			*7.2 to 9.1 feet: SAND with SILT (SP-SM); dark gray; 10% fines; 90% sand, medium, loose; wet.*
9									*@ 8.4 to 8.5 feet: reddish-brown staining.*
10									*9.1 to 10.0 feet: No recovery.*

Total boring depth: 10.0 ft bgs.

NOTES: *1) ft bgs = feet below ground surface.*
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Collected groundwater from 5 to 10 ft bgs using a temporary 5-foot-long, 1-inch-diameter PVC (polyvinyl chloride) screen.

▼ ***Water level 5.88 ft bgs with screened interval from 5 to 10 ft bgs.***

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP16**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/2/12 to 12/2/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**20.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**72%**	**GP**	**1**				*0.0 to 1.2 feet: GRAVELLY SAND with SILT (SW-SM); dark gray; 10% fines, non-plastic; 70% sand, fine to coarse, loose; 20% gravel, sub-rounded, fine to medium; dry.*
2									*@ 1.0 to 1.2 feet: red brick fragments.*
3									*1.2 to 3.6 feet: SAND with SILT (SP-SM); reddish brown; 10% fines, non-plastic to low plasticity; 90% sand, fine, dense; trace black organic matter; dry to damp.*
4									*@ 1.4 to 1.6 feet: dark brown staining.*
5									*3.6 to 5.0 feet: No recovery.*
6			**70%**	**GP**	**2**				*5.0 to 8.5 feet: SAND with SILT (SP-SM); reddish brown to dark gray; 10% fines, non-plastic to low plasticity; 90% sand, fine, dense; trace black organic matter; trace orange mottles; wet.*
7									
8									
9									*8.5 to 10.0 feet: No recovery.*
10	▼		**56%**	**GP**	**3**				*10.0 to 11.9 feet: SAND with SILT (SP-SM); dark gray; 10% fines, non-plastic to low plasticity; 90% sand, fine, dense; trace black organic matter; trace orange mottles; wet.*
11									
12									*11.9 to 12.8 feet: SAND with SILT (SW-SM); dark gray; 10% fines, non-plastic; 90% sand, fine to medium, dense; wet.*
13									*12.8 to 15.0 feet: No recovery.*
14									
15			**0%**	**GP**	**4**				*15.0 to 20.0 feet: No recovery (loose sand).*
16									
17									
18				**GW**		**GP16-W-17.5**			
19									
20									*Total boring depth: 20.0 ft bgs.*

NOTES: *1) ft bgs = feet below ground surface.*
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Collected groundwater from 15 to 20 ft bgs using a temporary 5-foot-long, 1-inch-diameter PVC (polyvinyl chloride) screen.

▼ ***Water level 9.58 ft bgs with screened interval from 15 to 20 ft bgs.***

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP17**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/3/12 to 12/3/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**15.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**76%**	**GP**	**1**				*0.0 to 0.9 feet: GRAVELLY SAND with SILT (SW-SM); dark gray to dark brown; 10% fines, non-plastic; 70% sand, fine to medium, dense; 20% gravel, sub-rounded, fine to medium; dry.*
2									*0.9 to 1.9 feet: SILTY SAND (SM); dark brown to black; 20% fines, low plasticity; 80% sand, fine, dense; dry.*
3									*1.9 to 3.8 feet: SAND (SP); brown; 5% fines; 95% sand, fine, dense; dry.*
4									*3.8 to 5.0 feet: No recovery.*
5			**72%**	**GP**	**2**				*5.0 to 6.4 feet: SAND (SP); brown; 5% fines; 95% sand, fine, dense; dry.*
6									*6.4 to 7.9 feet: SAND (SP); dark gray; 5% fines; 95% sand, medium, loose; damp.*
7									*@ 7.0 to 7.9 feet: reddish-brown staining.*
8									*7.9 to 8.6 feet: SILT (ML); dark gray; 95% fines, medium plasticity, soft; 5% sand, fine; trace orange mottles; trace organic material; petroleum-like odor; damp.*
9	▼								*8.6 to 10.0 feet: No recovery.*
10				**GRAB**		**GP17-S-9.5**			
11			**78%**	**GP**	**3**				*10.0 to 11.3 feet: SILT (ML); dark gray; 95% fines, medium plasticity, soft; 5% sand, fine; trace orange mottles; trace organic material; petroleum-like odor, sheen; damp.*
12									*11.3 to 12.0 feet: SAND with SILT (SP-SM); dark gray; 15% fines, non-plastic; 85% sand, fine, medium dense; wet.*
13				**GW**		**GP17-W-12.5**			*12.0 to 13.9 feet: SILT (ML); dark gray; 95% fines, medium plasticity, soft; 5% sand, fine; trace laminated organic matter; petroleum-like odor; wet.*
14									*13.9 to 15.0 feet: No recovery.*
15									

Total boring depth: 15.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Collected groundwater from 10 to 15 ft bgs using a temporary 5-foot-long, 1-inch-diameter PVC (polyvinyl chloride) screen.
4) Soil grab sample interval from 8 to 11 ft bgs.

▼ ***Water level 8.84 ft bgs with screened interval from 10 to 15 ft bgs.***

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP18**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/3/12 to 12/3/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**80%**	**GP**	**1**				*0.0 to 1.4 feet: GRAVELLY SAND with SILT (SW-SM); dark brown; 10% fines; 70% sand, fine to coarse, loose; 20% gravel, sub-rounded, fine to coarse; dry.*
2				**GRAB**		**GP18-S-1.9**			*1.4 to 2.4 feet: COAL; black; 10% fines; 30% sand, fine to coarse; 60% gravel, sub-rounded, fine to medium, loose; dry.* *@ 1.9 to 2.1 feet: gravelly sand.*
3									*2.4 to 2.9 feet: GRAVELLY SAND with SILT (SW-SM); dark brown to dark gray; 10% fines; 70% sand, fine to coarse, loose; 20% gravel, sub-rounded, fine to coarse; dry.*
4									*2.9 to 4.0 feet: SILT with SAND (ML); dark brown; 70% fines, low plasticity, stiff; 30% sand, fine; trace orange mottles; black staining from 2.9 to 3.0 feet; damp to moist.*
5									*4.0 to 5.0 feet: No recovery.*

Total boring depth: 5.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Groundwater not encountered.
4) Soil grab sample interval from 1.4 to 2.4 ft bgs.

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP19**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/3/12 to 12/3/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**64%**	**GP**	**1**				*0.0 to 0.3 feet: SANDY GRAVEL with SILT (GW-GM); dark gray; 10% fines; 30% sand, fine to coarse; 60% gravel, sub-angular, fine to medium, loose; dry.*
				GRAB		**GP19-S-0.7**			*0.3 to 3.1 feet: COAL; black; 10% fines; 30% sand, fine to coarse; 60% gravel, sub-rounded, fine to medium, loose; dry.*
2									*@ 0.7 to 2.1 feet: reddish-white coal.*
3									*3.1 to 3.2 feet: SANDY SILT (ML); dark brown; 70% fines, low plasticity, stiff; 30% sand, fine; trace gravel, sub-angular, medium; damp to moist.*
4									*3.2 to 5.0 feet: No recovery.*
5									*Total boring depth: 5.0 ft bgs.*

NOTES:
1) ft bgs = feet below ground surface.
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Groundwater not encountered.
4) Soil grab sample interval from 0.3 to 3.1 ft bgs.

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP20**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/3/12 to 12/3/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**62%**	**GP**	**1**				*0.0 to 1.2 feet: SANDY GRAVEL with SILT (GW-GM); dark gray; 10% fines; 30% sand, fine to coarse; 60% gravel, sub-angular, fine to medium, loose; dry.*
2				**GRAB**		**GP20-S-1.5**			*1.2 to 1.8 feet: COAL; black; 10% fines; 30% sand, fine to coarse; 60% gravel, sub-rounded, fine to medium, loose; dry.*
3									*1.8 to 3.1 feet: SANDY SILT (ML); dark brown; 70% fines, low plasticity, stiff; 30% sand, fine; trace orange mottles; damp to moist.*
4									*@ 2.2 to 2.3 feet: coal-like material.*
5									*3.1 to 5.0 feet: No recovery.*

Total boring depth: 5.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Groundwater not encountered.
4) Soil grab sample interval from 1.2 to 1.8 ft bgs.

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Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP21**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/3/12 to 12/3/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**64%**	**GP**	**1**				*0.0 to 0.6 feet: SANDY GRAVEL with SILT (GW-GM); dark gray; 10% fines; 30% sand, fine to coarse; 60% gravel, sub-angular, fine to medium, loose; dry.*
2				**GRAB**		**GP21-S-1.4**			*0.6 to 2.1 feet: COAL; black; 10% fines; 30% sand, fine to coarse; 60% gravel, sub-rounded, fine to medium, loose; dry.*
3									*2.1 to 3.2 feet: SANDY SILT (ML); dark brown; 70% fines, low plasticity, stiff; 30% sand, fine; damp to moist.*
4									*3.2 to 5.0 feet: No recovery.*
5									

Total boring depth: 5.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Groundwater not encountered.
4) Soil grab sample interval from 0.6 to 2.1 ft bgs.

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP22**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/3/12 to 12/3/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**56%**	**GP**	**1**				*0.0 to 1.3 feet: SANDY GRAVEL with SILT (GW-GM); dark gray; 10% fines; 30% sand, fine to coarse; 60% gravel, sub-angular, fine to medium, loose; dry.*
2				**GRAB**		**GP22-S-1.8**			*1.3 to 2.3 feet: COAL; black; 10% fines; 30% sand, fine to coarse; 60% gravel, sub-rounded, fine to medium, loose; dry.* *@ 1.8 feet: reddish-brown woody debris.*
3									*2.3 to 2.8 feet: SANDY GRAVEL with SILT (GW-GM); dark gray; 10% fines; 30% sand, fine to coarse; 60% gravel, sub-angular, fine to medium, loose; trace woody debris; dry.*
4									*2.8 to 5.0 feet: No recovery.*
5									

Total boring depth: 5.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Groundwater not encountered.
4) Soil grab sample interval from 1.3 to 2.3 ft bgs.

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP23**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/3/12 to 12/3/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**64%**	**GP**	**1**				*0.0 to 1.6 feet: SANDY GRAVEL with SILT (GW-GM); dark brown to black; 10% fines; 25% sand, fine to coarse; 65% gravel, sub-angular to sub-rounded, fine to medium, loose; dry.*
2				**GRAB**		**GP23-S-0.9**			*@ 0.8 to 1.2 feet: dark brown to black staining.*
3									*1.6 to 3.2 feet: SILTY SAND (SM); 20% fines, non-plastic; 80% sand, fine, medium dense; trace orange mottles; dry.*
4									*@ 1.6 to 1.7 feet: woody debris.*
5									*3.2 to 5.0 feet: No recovery.*

Total boring depth: 5.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Groundwater not encountered.
4) Soil grab sample interval from 0.4 to 1.4 ft bgs.

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP24**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/3/12 to 12/3/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**76%**	**GP**	**1**				*0.0 to 0.5 feet: SANDY GRAVEL with SILT (GW-GM); dark brown to black; 10% fines; 25% sand, fine to coarse; 65% gravel, sub-angular to sub-rounded, fine to medium, loose; dry.*
				GRAB		**GP24-S-0.8**			*0.5 to 1.0 feet: COAL; black; 10% fines; 30% sand, fine to coarse; 60% gravel, sub-rounded, fine to medium, loose; dry.*
2									*1.0 to 3.8 feet: SILTY SAND (SM); gray to brown; 30% fines, non-plastic; 70% sand, fine, medium dense; trace black organic material; dry to moist.*
3									*@ 1.6 to 1.8 feet: brick fragments.*
									@ 2.0 to 2.2 feet: gray, coarse sand.
4									*3.8 to 5.0 feet: No recovery.*
5									*Total boring depth: 5.0 ft bgs.*

NOTES: *1) ft bgs = feet below ground surface.*
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Groundwater not encountered.
4) Soil grab sample interval from 0.3 to 1.2 ft bgs.

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP25**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/3/12 to 12/3/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**76%**	**GP**	**1**				*0.0 to 0.9 feet: SANDY GRAVEL with SILT (GW-GM); dark brown to black; 10% fines; 30% sand, fine to coarse; 60% gravel, sub-angular to sub-rounded, fine to medium, loose; dry.*
2				**GRAB**		**GP25-S-1.1**			*0.9 to 1.6 feet: GRAVELLY COAL; black; 60% sand, fine to coarse, loose; 40% gravel, sub-angular, medium; dry.*
3									*1.6 to 1.7 feet: SANDY GRAVEL with SILT (GW-GM); dark brown to black; 10% fines; 30% sand, fine to coarse; 60% gravel, sub-angular to sub-rounded, fine to medium, loose; dry.*
4									*1.7 to 2.8 feet: SILTY SAND (SM); reddish-brown; 40% fines, non-plastic; 60% sand, fine, very dense; trace orange mottles; trace organic material; dry.*
5									*2.8 to 3.8 feet: SAND with SILT (SP-SM); gray to brown; 10% fines; 90% sand, fine, loose; damp.*
									3.8 to 5.0 feet: No recovery.

Total boring depth: 5.0 ft bgs.

NOTES: *1) ft bgs = feet below ground surface.*
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Groundwater not encountered.
4) Soil grab sample interval from 0.6 to 1.6 ft bgs.

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP26**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/4/12 to 12/4/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**74%**	**GP**	**1**				*0.0 to 1.1 feet: SANDY GRAVEL with SILT (GW-GM); dark brown to dark gray; 15% fines; 35% sand, fine to coarse; 50% gravel, sub-angular to sub-rounded, fine to medium, loose; dry.*
2				**GRAB**		**GP26-S-1.7**			*1.1 to 2.4 feet: COAL; black; 60% sand, fine to coarse; 40% gravel, sub-rounded, fine to medium, loose; dry.*
3									*@ 2.2 to 2.3 feet: woody debris.*
4									*2.4 to 3.7 feet: SAND (SP); dark brown; 5% fines; 95% sand, fine, loose; trace orange mottles; damp.*
5									*3.7 to 5.0 feet: No recovery.*

Total boring depth: 5.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Groundwater not encountered.
4) Soil grab sample interval from 1.1 to 2.4 ft bgs.

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP27**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/4/12 to 12/4/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**72%**	**GP**	**1**				*0.0 to 1.3 feet: SANDY GRAVEL with SILT (GW-GM); dark brown to dark gray; 15% fines; 35% sand, fine to coarse; 50% gravel, sub-angular to sub-rounded, fine to medium, loose; dry.*
2				**GRAB**		**GP27-S-1.5**			*1.3 to 1.9 feet: COAL; black; 60% sand, fine to coarse; 40% gravel, sub-rounded, fine to medium, loose; dry.*
									@ 1.6 to 1.8 feet: whitish-gray, sandy gravel.
3									*1.9 to 3.6 feet: SAND (SP); dark brown; 5% fines; 95% sand, fine, loose; trace orange mottles; damp.*
4									*3.6 to 5.0 feet: No recovery.*
5									

Total boring depth: 5.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Groundwater not encountered.
4) Soil grab sample interval from 1.0 to 1.9 ft bgs.

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP28**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/4/12 to 12/4/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**58%**	**GP**	**1**				*0.0 to 1.7 feet: GRAVELLY SAND with SILT (SW-SM); dark brown; 15% fines, non-plastic; 50% sand, fine to coarse, loose; 35% gravel, sub-angular to sub-rounded, fine to medium; dry to damp.*
2				**GRAB**		**GP28-S-1.5**			*1.7 to 2.2 feet: SILTY SAND (SM); dark brown; 30% fines, non-plastic; 70% sand, fine to coarse; dry to damp.*
3									*2.2 to 2.9 feet: GRAVELLY SAND with SILT (SW-SM); dark brown; 15% fines, non-plastic; 50% sand, fine to coarse, loose; 35% gravel, sub-angular to sub-rounded, fine to medium; dry to damp.*
4									*2.9 to 5.0 feet: No recovery.*
5									

Total boring depth: 5.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Groundwater not encountered.
4) Soil grab sample interval from 0.5 to 2.5 ft bgs.

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP29**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/4/12 to 12/4/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**66%**	**GP**	**1**				*0.0 to 1.1 feet: GRAVELLY SAND with SILT (SW-SM); dark brown; 10% fines; 60% fine to coarse, loose; 30% sub-angular to sub-rounded, fine to coarse; dry.*
				GRAB		**GP29-S-1.0**			*@ 1.0 feet: 0.25-foot cobble; coal fragments.*
2									*1.1 to 3.0 feet: SAND with SILT (SP-SM); dark reddish brown to dark brown; 10% fines; 90% sand, fine, loose; trace orange mottles; dry to damp.*
3									*3.0 to 3.3 feet: SANDY SILT (ML); dark brown; 80% fines, medium plasticity, soft; 20% sand, fine; trace orange mottles; damp.*
4									*3.3 to 5.0 feet: No recovery.*
5									

Total boring depth: 5.0 ft bgs.

NOTES: *1) ft bgs = feet below ground surface.*
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Groundwater not encountered.
4) Soil grab sample interval from 0.5 to 1.5 ft bgs.

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP30**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/4/12 to 12/4/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**76%**	**GP**	**1**				0.0 to 0.8 feet: GRAVELLY SAND (SW); dark gray to dark brown; 5% fines; 60% sand, fine to coarse, loose; 35% gravel, sub-angular to sub-rounded, fine to medium; dry.
				GRAB		**GP30-S-0.8**			
2									0.8 to 2.0 feet: COAL; black; 95% sand, fine to coarse, loose; 5% gravel, sub-angular, fine to medium; dry.
3									2.0 to 2.5 feet: SILTY SAND (SM); dark brown; 30% fines, non-plastic; 70% sand, fine, medium dense; dry to damp. 2.5 to 3.8 feet: SAND (SP); dark gray; 5% fines; 95% sand, fine, loose; damp. @ 2.5 to 2.8 feet: reddish-brown staining.
4									3.8 to 5.0 feet: No recovery.
5									Total boring depth: 5.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Groundwater not encountered.
4) Soil grab sample interval from 0.5 to 2.1 ft bgs.

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP31**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/4/12 to 12/4/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**70%**	**GP**	**1**				*0.0 to 0.4 feet: GRAVELLY SAND (SW); dark gray to black; 5% fines; 60% sand, fine to coarse, loose; 35% gravel, sub-angular to sub-rounded, fine to medium; dry.*
				GRAB		**GP31-S-0.9**			*0.4 to 1.3 feet: COAL; black; 95% sand, fine to coarse, loose; 5% gravel, sub-angular, fine to medium; dry.*
2									*@ 0.9 to 1.1 feet: reddish-brown, fine, sand.*
									1.3 to 3.5 feet: SAND with SILT (SP-SM); dark reddish brown to dark brown; 10% fines; 90% sand, fine, loose; trace orange mottles; damp.
3									
4									*3.5 to 5.0 feet: No recovery.*
5									

Total boring depth: 5.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Groundwater not encountered.
4) Soil grab sample interval from 0.4 to 1.3 ft bgs.

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.02	**GP32**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**12/4/12 to 12/4/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe 6600**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**5.0-feet**
Sample Method		Outer Hole Diam	**2-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**66%**	**GP**	**1**				*0.0 to 0.8 feet: GRAVELLY SAND (SW); dark brown to black; 5% fines; 60% sand, fine to coarse, loose; 35% gravel, sub-angular to sub-rounded, fine to medium; dry.*
2				**GRAB**		**GP31-S-1.2**			*0.8 to 1.2 feet: SILTY SAND (SM); dark reddish brown; 35% fines, non-plastic; 65% sand, fine, medium dense; dry.*
3									*1.2 to 1.5 feet: COAL; black; 95% sand, fine to coarse, loose; 5% gravel, sub-angular, fine to medium; dry.*
4									*1.5 to 3.3 feet: SAND (SP); dark brown; 5% fines; 95% sand, fine, loose; trace orange mottles; damp.*
5									*3.3 to 5.0 feet: No recovery.*

Total boring depth: 5.0 ft bgs.

NOTES:
1) ft bgs = feet below ground surface.
2) Borehole back-filled with bentonite chips hydrated with potable water.
3) Groundwater not encountered.
4) Soil grab sample interval from 0.8 to 1.5 ft bgs.

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.01	**MW01**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**5/7/12 to 5/7/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**15.0-feet**
Sample Method		Outer Hole Diam	**3.5-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**60%**	**GP**	**1**	**PID = 0.5 ppm**			*0.0 to 1.2 feet: GRAVELLY SAND with SILT (SW-SM); very dark gray; 10% fines; 70% sand, fine to coarse, medium dense; 20% gravel, fine to medium, sub-angular; damp.*
2									*1.2 to 5.0 feet: SILTY SAND (SM); dark reddish brown; 30% fines; 70% sand, fine, dense; damp.*
3				**GRAB**		**MW1-S-3.1**			
4									
5			**44%**	**GP**	**2**				*5.0 to 6.7 feet: SILTY SAND (SM); dark gray; 20% fines, non-plastic; 80% sand, fine to medium, medium dense; petroleum-like odor, sheen; moist to wet.*
6	▽								
7									*@6.7: 2-inch wood chunk.*
									6.7 to 7.2 feet: SAND (SW); dark gray; 5% fines; 95% sand, fine to medium, loose; free product, petroleum-like odor; wet.
8									*7.2 to 10.0 feet: No recovery.*
9									
10			**100%**	**GP**	**3**				*10.0 to 10.5 feet: SAND (SW); dark gray; 5% fines; 95% sand, fine to medium, loose; free product, petroleum-like odor; wet.*
11									*10.5 to 11.6 feet: SILTY CLAY (ML-CL); dark gray; 100% fines, medium plasticity to high plasticity, firm; petroleum-like odor; wet.*
12									*11.6 to 13.9 feet: SAND (SP); dark gray; 5% fines; 95% sand, fine, medium dense; free product, sheen; wet.*
13									
14									*13.9 to 15.0 feet: SILT with SAND (ML); dark gray; 90% fines, non-plastic, firm; 10% sand, fine; trace organics; free product, petroleum-like odor; wet.*
15									

Total boring depth: 15.0 ft bgs.

Borehole Completion Details

0.0 to 15.0 feet bgs: 3.5-inch borehole.
0.0 to 1.0 feet bgs: Concrete.
1.0 to 3.0 feet bgs: Bentonite chips hydrated with potable water.
3.0 to 14.0 feet bgs: Filter pack sand.
14.0 to 15.0 feet bgs: Slough.

Well Completion Details

0.0 to 1.0 feet bgs: Flush monument.
0.4 to 3.45 feet bgs: 2-inch-diameter, PVC, schedule 40, flush threaded, blank riser.
3.45 to 13.45 feet bgs: 2-inch-diameter, PVC, schedule 40, flush threaded, 0.010-inch machine slotted, pre-pack well screen.
13.45 to 14.0 feet bgs: 2-inch-diameter, PVC, schedule 40, flush threaded, end cap.

NOTES: *1) ft bgs = feet below ground surface.*
2) Soil grab sample interval from 1.2 to 5.0 ft bgs.
3) PVC = polyvinyl chloride.

▽ ***Water level 5.90 ft bgs with borehole depth 10 ft bgs.***

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.01	**MW02**	**1 of 2**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**5/7/12 to 5/7/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**15.0-feet**
Sample Method		Outer Hole Diam	**3.5-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**62%**	**GP**	**1**				*0.0 to 1.4 feet: GRAVELLY SAND with SILT (SW-SM); gray; 10% fines; 60% sand, fine to coarse, medium dense; 30% gravel, sub-rounded, fine to medium; dry.*
2									*1.4 to 2.2 feet: SILTY SAND (SM); dark reddish brown to black; 40% fines; 60% sand, fine, dense; dry.*
				GRAB		**MW2-S-2**			
3									*2.2 to 3.1 feet: SAND with SILT (SP-SM); dark reddish gray; 10% fines; 90% sand, fine, loose; dry.*
4									*3.1 to 5.0 feet: No recovery.*
5									
6			**78%**	**GP**	**2**				*5.0 to 6.8 feet: SAND with SILT (SP); dark reddish brown; 10% fines; 90% sand, fine, loose; petroleum-like odor, no sheen; dry to damp.*
7									*6.8 to 7.8 feet: SILTY SAND (SM); dark reddish brown; 30% fines; 70% sand, fine, medium dense; petroleum-like odor, sheen; moist to wet.*
8									*@7.1 feet: 0.1-ft coarse sand lens.*
9									*7.8 to 8.8 feet: SAND (SP); dark gray; 5% fines; 95% sand, medium, medium dense; petroleum-like odor, sheen; wet.*
10									*8.8 to 10.0 feet: No recovery.*
11			**92%**	**GP**	**3**				*10.0 to 14.6 feet: SAND (SP); dark gray; 5% fines; 95% sand, medium, medium dense; petroleum-like odor, sheen; wet.*
12									
13									
14									
15									*14.6 to 15.0 feet: CLAY with SILT (ML-CL); gray to dark gray; 100% fines, medium plasticity, stiff; trace woody debris; petroleum-like odor; moist.*

Total boring depth: 15.0 ft bgs.

Borehole Completion Details
0.0 to 15.0 feet bgs: 3.5-inch borehole.
0.0 to 1.0 feet bgs: Concrete.
1.0 to 3.0 feet bgs: Bentonite chips hydrated with potable water.
3.0 to 14.3 feet bgs: Filter pack sand.
14.3 to 15.0 feet bgs: Slough.

Well Completion Details
0.0 to 1.0 feet bgs: Flush monument.
0.0 to 3.85 feet bgs: 2-inch-diameter, PVC, schedule 40, flush threaded, blank riser.

NOTES: *1) ft bgs = feet below ground surface.*
2) Soil grab sample interval from 1.2 to 2.7 ft bgs.
3) PVC = polyvinyl chloride.

▽ ***Water level 7.40 ft bgs with borehole depth 10 ft bgs.***

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Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.01	**MW02**	**2 of 2**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
									3.85 to 13.85 feet bgs: 2-inch-diameter, PVC, schedule 40, flush threaded, 0.010-inch machine slotted, pre-pack well screen. *13.85 to 14.3 feet bgs: 2-inch-diameter, PVC, schedule 40, flush threaded, end cap.*

NOTES: *1) ft bgs = feet below ground surface.*
2) Soil grab sample interval from 1.2 to 2.7 ft bgs.
3) PVC = polyvinyl chloride.

▽ ***Water level 7.40 ft bgs with borehole depth 10 ft bgs.***

GBLWC W:\GINT\GINTW\PROJECTS\0747.01.01\GP01 TO GP09_MW01 TO MW03.GPJ 8/26/15

Maul Foster & Alongi, Inc.

Geologic Borehole Log/Well Construction

Project Number	Well Number	Sheet
0747.01.01	**MW03**	**1 of 1**

Project Name	**VSF Properties, LLC - North Cascade Ford**	TOC Elevation (feet)	
Project Location	**116 W. Ferry St., Sedro-Woolley, WA**	Surface Elevation (feet)	
Start/End Date	**5/7/12 to 5/7/12**	Northing	
Driller/Equipment	**Cascade Drilling, LP/Geoprobe**	Easting	
Geologist/Engineer	**H. Hirsch**	Hole Depth	**15.0-feet**
Sample Method		Outer Hole Diam	**3.5-inch**

Depth (feet, BGS)	Well Details	Sample Data: Interval	Percent Recovery	Collection Method	Number	Name (Type)	Blows/6"	Lithologic Column	Soil Description
1			**62%**	**GP**	**1**				*0.0 to 1.2 feet: GRAVELLY SAND with SILT (SW-SM); reddish gray; 15% fines, non-plastic; 60% sand, fine to coarse, dense; 25% gravel, sub-angular, fine to medium; dry.*
2				**GRAB**		**MW3-S-1.9**			*1.2 to 2.1 feet: SILTY SAND (SM); dark reddish brown; 40% fines, non-plastic; 60% sand, fine, dense; trace black organics; damp.*
3									*2.1 to 3.1 feet: SAND with SILT (SP-SM); dark gray with orange mottling; 15% fines, non-plastic; 85% sand, fine, medium dense; damp to moist.*
4									*3.1 to 5.0 feet: No recovery.*
5			**96%**	**GP**	**2**				*5.0 to 7.3 feet: SAND with SILT (SP-SM); dark reddish brown; 15% fines, non-plastic; 85% sand, fine, medium dense; wet.*
6									
7									*7.3 to 10.0 feet: SILTY SAND (SM); dark gray; 20% fines, non-plastic; 80% sand, fine, medium dense; petroleum-like odor, slight sheen; wet.*
8									
9									
10			**100%**	**GP**	**3**				*10.0 to 12.1 feet: SAND with SILT (SW-SM); dark gray; 10% fines; 90% sand, fine to medium, medium dense; trace woody debris; petroleum-like odor; wet.*
11									
12									*12.1 to 15.0 feet: CLAY (CL); dark gray; 100% fines, high plasticity, soft; trace woody debris; moist.*
13									
14									*@14.2 feet: 0.3-foot fine sand lens, wood chunk, wet.*
15									

Total boring depth: 15.0 ft bgs.

Borehole Completion Details

0.0 to 15.0 feet bgs: 3.5-inch borehole.
0.0 to 1.0 feet bgs: Concrete.
1.0 to 3.0 feet bgs: Bentonite chips hydrated with potable water.
3.0 to 14.0 feet bgs: Filter pack sand.
14.0 to 15.0 feet bgs: Slough.

Well Completion Details

0.0 to 1.0 feet bgs: Flush monument.
0.0 to 3.89 feet bgs: 2-inch-diameter, PVC, schedule 40, flush threaded, blank riser.
3.89 to 13.89 feet bgs: 2-inch-diameter, PVC, schedule 40, flush threaded, 0.010-inch machine slotted, pre-pack well screen.
13.89 to 14.0 feet bgs: 2-inch-diameter, PVC, schedule 40, flush threaded, end cap.

NOTES:
1) ft bgs = feet below ground surface.
2) Soil grab sample interval from 1.5 to 2.3 ft bgs.
3) Two boring attempts. First attempt resulted in no recovery; second attempt located within one foot.
4) PVC = polyvinyl chloride.

GBLWC W:\GINT\GINTW\PROJECTS\0747.01.01\GP01 TO GP09_MW01 TO MW03.GPJ 8/26/15

APPENDIX D

GROUNDWATER ELEVATION CONTOUR MAPS

Figure 1
Groundwater Elevation Contours — May 2012

North Cascade Ford Property
Sedro-Woolley, Washington

MW01
50.56 ft

MW02
50.08 ft

MW03
50.87 ft

50.6
50.5
50.4
50.3
50.2
50.1
50.7
50.8

Legend

- Monitoring Well (Groundwater Elevation, feet)
- Property Parcels
- Skagit County Parcels
- Groundwater Elevation Contour (feet NAVD 88)
- Groundwater Flow Direction

Notes:
1. Monitoring well locations were surveyed by Wilson Engineering, LLC on May 15, 2012.
2. Water levels were measured on May 15, 2012.
3. NAVD 88 = North American Vertical Datum of 1988.

0 20 40
Feet

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps; parcels obtained from Skagit County GIS Department.

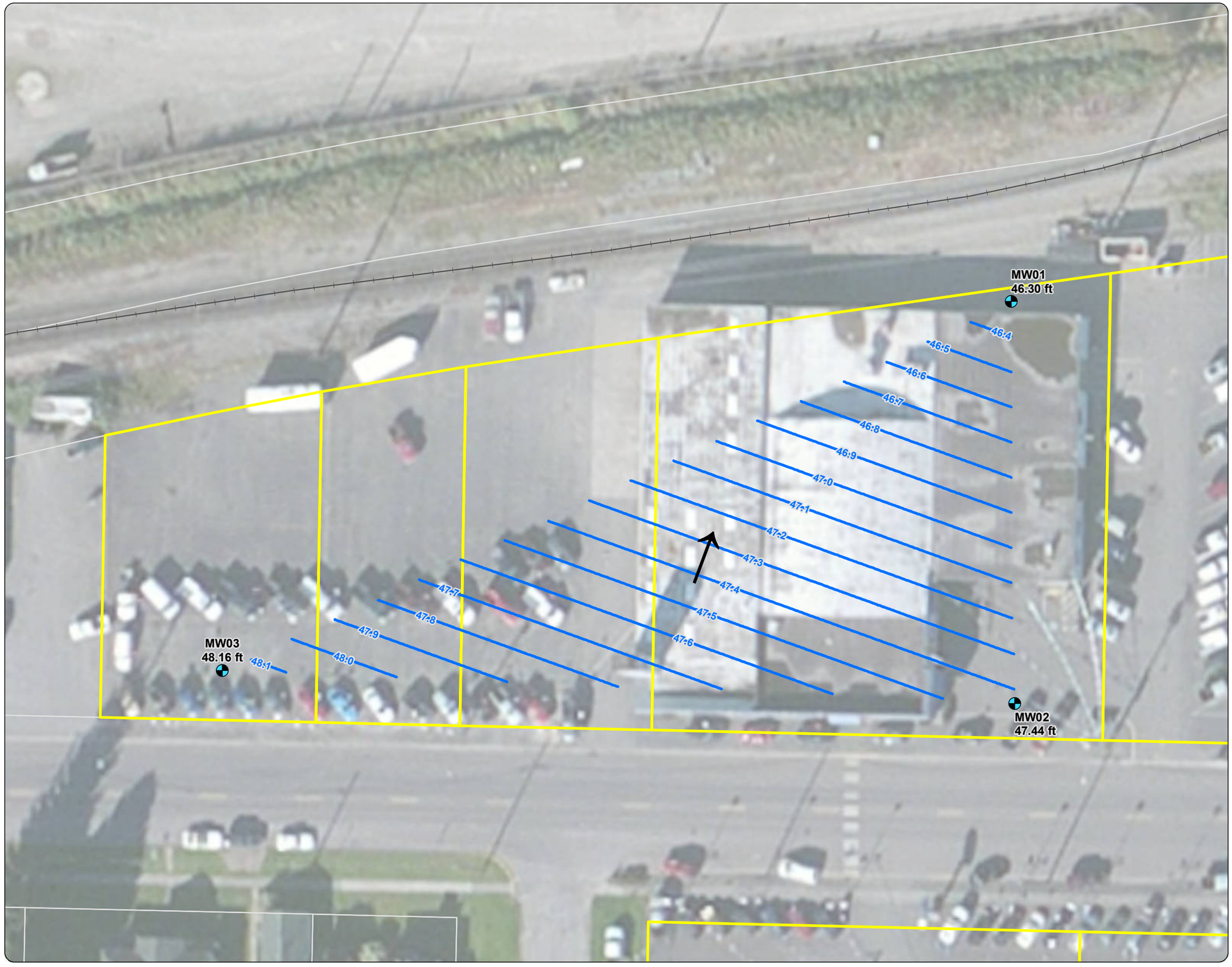
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Path: X:\0747.01\Projects\05\Preliminary RIFS\Fig1_Groundwater Elevation Contours_2012_05.mxd
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Approved By: H. Good
Produced By: apadilla
Project: 0747.01.05/03

Figure 2
Groundwater Elevation Contours — October 2012

North Cascade Ford Property
Sedro-Woolley, Washington



Legend

- Monitoring Well (Groundwater Elevation, feet)
- Property Parcels
- Skagit County Parcels
- Groundwater Elevation Contour (feet NAVD 88)
- Groundwater Flow Direction

Notes:
1. Monitoring well locations were surveyed by Wilson Engineering, LLC on May 15, 2012.
2. Water levels were measured on October 9, 2012.
3. NAVD 88 = North American Vertical Datum of 1988.

0 20 40
Feet

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps; parcels obtained from Skagit County GIS Department.

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Project: 0747.01.05/03

Figure 3
Groundwater Elevation Contours — December 2012

North Cascade Ford Property
Sedro-Woolley, Washington

MW01
49.21 ft

MW02
48.28 ft

MW03
50.99 ft

50.7
50.5
50.3
50.1
49.9
49.7
49.5
49.3
49.1
48.9
48.7
48.5
48.3

Legend

- Monitoring Well (Groundwater Elevation, feet)
- Property Parcels
- Skagit County Parcels
- Groundwater Elevation Contour (feet NAVD 88)
- Groundwater Flow Direction

Notes:
1. Monitoring well locations were surveyed by Wilson Engineering, LLC on May 15, 2012.
2. Water levels were measured on December 3, 2012.
3. NAVD 88 = North American Vertical Datum of 1988.

0 20 40
Feet

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps; parcels obtained from Skagit County GIS Department.

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Project: 0747.01.05/03

Figure 4
Groundwater Elevation Contours — June 2014

North Cascade Ford Property
Sedro-Woolley, Washington

MW01
50.08 ft

MW02
49.75 ft

MW03
50.40 ft

50.1

50.1

50.0

50.2

50.3

49.9

49.8

P77492

P77493

Legend

- Monitoring Well (Groundwater Elevation, feet)
- Property Parcels
- Groundwater Elevation Contour (feet NAVD 88)
- Skagit County Parcels
- Groundwater Flow Direction

Notes
1. Monitoring well locations were surveyed by Wilson Engineering, LLC on May 15, 2012.
2. Water levels were measured on June 18, 2014.
3. NAVD 88 = North American Vertical Datum of 1988.

0 20 40
Feet

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps; parcels obtained from Skagit County GIS Department.

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Figure 5
Groundwater Elevation Contours — September 2014

North Cascade Ford Property
Sedro-Woolley, Washington

MW01
48.43 ft*

MW02
48.36 ft

MW03
49.33 ft

49.3
49.2
49.1
49.0
48.9
48.8
48.7
48.6
48.5
48.4

Legend

- Monitoring Well (Groundwater Elevation, feet)
- Property Parcels
- Skagit County Parcels
- Groundwater Elevation Contour (feet NAVD 88)
- Groundwater Flow Direction

Notes:
1. Monitoring well locations were surveyed by Wilson Engineering, LLC on May 15, 2012.
2. Water levels were measured on September 10, 2014.
3. NAVD 88 = North American Vertical Datum of 1988.

*Free product was observed coating the probe and tubing, but a measurable quantity was not present.

0 20 40
Feet

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps; parcels obtained from Skagit County GIS Department.

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Print Date: 8/25/2015
Approved By: H. Good
Produced By: apadilla
Project: 0747.01.05/03

Figure 6
Groundwater Elevation Contours — December 2014

North Cascade Ford Property
Sedro-Woolley, Washington

MW01
50.09 ft*

MW02
49.62 ft

MW03
51.17 ft

51.1
51.0
50.9
50.8
50.7
50.6
50.5
50.4
50.3
50.2
50.1
50.0
49.9
49.8
49.7

Legend

- Monitoring Well (Groundwater Elevation, feet)
- Property Parcels
- Skagit County Parcels
- Groundwater Elevation Contour (feet NAVD 88)
- Groundwater Flow Direction

Notes:
1. Monitoring well locations were surveyed by Wilson Engineering, LLC on May 15, 2012.
2. Water levels were measured on December 10, 2014.
3. NAVD 88 = North American Vertical Datum of 1988.

*Water level corrected for the presence of free product.

0 20 40
Feet

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps; parcels obtained from Skagit County GIS Department.

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Approved By: H. Good
Produced By: apadilla
Project: 0747.01.05\03

APPENDIX E

WELL DEVELOPMENT FORMS

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MW01

Well Development Form

Project No.:	0747.01.01	Date:	5/14/2012		
Site Location:	North Cascade Ford	Well:	MW01		
Name:	H. Hirsch	Initial DTB:	13.45	Final DTB:	13.45
Development Method:	Bailer / Peristaltic Pump	Initial DTW:	5.49	Final DTW:	5.6
Total Water Removed:	20 gallons	Pore Volume:	1.3 gallon		
Water Contained?	Yes	Casing Diameter:	2-inch		
Estimated Specific Capacity:		Meter No.:	YSI 556 MPS		

Time	Cum. Vol. Removed	Turbidity NTU	pH	Conductivity (uS/cm)	Temp °C	DO (%)	Eh	Comments
12:48	12	761	6.51	500	12.66			DO (dissolved oxygen) not calibrating. Cloudy, sheen, petroleum-like odor.
12:57	15	1.2	6.48	493	12.21			
13:04	17	1.9	6.49	485	12.23			Clear, slight sheen and petroleum-like odor.
13:08	19	1.2	6.49	498	12.32			

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MW02

Well Development Form

Project No.:	0747.01.01	Date:	5/15/2012		
Site Location:	North Cascade Ford	Well:	MW02		
Name:	H. Hirsch	Initial DTB:	13.85	Final DTB:	13.84
Development Method:	Bailer / Peristaltic Pump	Initial DTW:	6.61	Final DTW:	6.63
Total Water Removed:	22.5 gallons (6 removed with bailer)	Pore Volume:	1.2 gallon		
Water Contained?	Yes	Casing Diameter:	2-inch		
Estimated Specific Capacity:		Meter No.:	YSI 556 MPS		

Time	Cum. Vol Removed	Turbidity NTU	pH	Conductivity (uS/cm)	Temp °C	DO (%)	Eh	Comments
8:50	6.5	943	6.34	255	15.17	84.9		Brown, highly turbid, sheen, petroleum-like odor.
9:05	9	272	6.4	252	14.93	82.7		Cloudy, sheen, petroleum-like odor.
9:18	10.5	159	6.38	249	15.55	No reading		Cloudy, sheen, petroleum-like odor.
9:45	12	64.4	6.4	249	15.77	62		Slightly cloudy, sheen, petroleum-like odor.
10:00	14	24.1	6.42	248	15.39	88.7		Clear, slight sheen, petroleum-like odor.
10:22	16.5	22.3	6.44	248	15.55	53.5		Clear, slight sheen, petroleum-like odor.
10:43	18.5	12.1	6.43	246	15.53	75.6		Clear, slight sheen, petroleum-like odor.
10:55	20.5	5.48	6.45	246	15.76	40.7		Clear, very slight sheen, slight petroleum-like odor.
11:05	22	4.93	6.46	246	15.21	47.4		Clear, very slight sheen, slight petroleum-like odor.

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MW03

Well Development Form

Project No.:	0747.01.01	Date:	5/14/2012		
Site Location:	North Cascade Ford	Well:	MW03		
Name:	H. Hirsch	Initial DTB:	13.89	Final DTB:	13.89
Development Method:	Bailer / Peristaltic Pump	Initial DTW:	5.35	Final DTW:	5.36
Total Water Removed:	20 gallons	Pore Volume:	1.4 gallon		
Water Contained?	Yes	Casing Diameter:	2-inch		
Estimated Specific Capacity:		Meter No.:	YSI 556 MPS		

Time	Cum. Vol Removed	Turbidity NTU	pH	Conductivity (uS/cm)	Temp °C	DO* (%)	Eh	Comments
14:38	6	560	6.39	192	14.81	2.9		
14:57	9	437	6.36	195	14.8	2.9		Cloudy, slight sheen, petroleum-like odor.
15:36	12	16.31	6.38	192	14.04	2.9		Clear, slight petroleum-like odor.
15:51	14	13.03	6.36	191	13.68	2.8		Clear, slight petroleum-like odor.
16:09	16	9.02	6.36	184	13.4	3.4		Clear, slight petroleum-like odor.
16:22	18	7.36	6.38	183	13.57	2.8		Clear, slight petroleum-like odor.
16:30	20	4.76	6.36	202	13.4	2.8		Clear, slight petroleum-like odor.

*DO (dissolved oxygen) would not calibrate.

APPENDIX F

FIELD SAMPLING DATA SHEETS



Maul Foster & Alongi, Inc.

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	GP10
Project #	0747.01.02	**Sampler**	H. Hirsch
Project Name	North Cascade Ford	**Sampling Date**	12/3/2012
Sampling Event	December 2012	**Sample Name**	GP10-W-7.5
Sub Area		**Sample Depth**	7.5
FSDS QA:	TJS 8/20/2015	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
12/3/2012	10:17	10		5.83		4.17	

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump									
Final Field Parameters	10:22:00 AM			9.18	13.5	363	1.9	-11.9	129.6

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Turbid.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	10:30:00 AM	VOA-Glass	10	No
			Amber Glass	8	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	18	

General Sampling Comments

Screened interval from 5 to 10 feet below ground surface. Field duplicate sample name is GPDUP-W-7.5, collected at this location. (9 bottles). Dissolved oxygen (DO) reading is percentage.

Signature _____

Maul Foster & Alongi, Inc.

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	GP10
Project #	0747.01.02	**Sampler**	H. Hirsch
Project Name	North Cascade Ford	**Sampling Date**	12/3/2012
Sampling Event	December 2012	**Sample Name**	GP10-W-16.5
Sub Area		**Sample Depth**	16.5
FSDS QA:	TJS 8/20/2015	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
12/3/2012	11:08	20		9.07		10.93	

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump									
Final Field Parameters	11:16:00 AM			7.04	12.45	391	1.2	-85	96.4

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Very turbid.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	11:20:00 AM	VOA-Glass	5	No
			Amber Glass	4	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	9	

General Sampling Comments Screened interval from 14 to 19 feet below ground surface. Dissolved oxygen (DO) reading is percentage. DO did not stabilize.

Signature _____

Maul Foster & Alongi, Inc.

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	GP11
Project #	0747.01.02	**Sampler**	H. Hirsch
Project Name	North Cascade Ford	**Sampling Date**	12/2/2012
Sampling Event	December 2012	**Sample Name**	GP11-W-17.5
Sub Area		**Sample Depth**	17.5
FSDS QA:	TJS 8/20/2015	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
12/2/2012	13:40	20		10.1		9.9	

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump									
Final Field Parameters	2:35:00 PM			6.86	14.13	984	0.33	-106	203

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Turbid, hydrocarbon-like odor.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	2:45:00 PM	VOA-Glass	5	No
			Amber Glass	4	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	9	

General Sampling Comments

Screened interval from 15 to 20 feet below ground surface. Dissolved oxygen (DO) reading is percentage.

Signature _____

Maul Foster & Alongi, Inc.

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	GP12
Project #	0747.01.02	**Sampler**	H. Hirsch
Project Name	North Cascade Ford	**Sampling Date**	12/2/2012
Sampling Event	December 2012	**Sample Name**	GP12-W-7.5
Sub Area		**Sample Depth**	7.5
FSDS QA:	TJS 8/20/2015	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
12/2/2012	11:46	15		7.95		7.05	

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump									
Final Field Parameters	12:00:00 PM			6.67	10.9	222	3.58	40.8	72.2

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Turbid.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	12:30:00 PM	VOA-Glass	5	No
			Amber Glass	4	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	9	

General Sampling Comments Screened interval from 5 to 10 feet below ground surface. Dissolved oxygen (DO) reading is percentage. pH, temperature, and conductivity measured with the Oakton. DO and oxidation reduction (ORP) measured with YSI.

Signature _____

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	GP12		
Project #	0747.01.02	**Sampler**	H. Hirsch		
Project Name	North Cascade Ford	**Sampling Date**	12/2/2012		
Sampling Event	December 2012	**Sample Name**	GP12-W-25.5		
Sub Area		**Sample Depth**	25.5		
FSDS QA:	TJS 8/20/2015	**Easting**		**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
12/2/2012	10:45	35		14.6		20.4	

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump									
Final Field Parameters	11:00:00 AM			6.9	11.2	412	2.33	-10.5	701

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Turbid, petroleum-like odor.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	11:10:00 AM	VOA-Glass	5	No
			Amber Glass	4	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	9	

General Sampling Comments

Screened interval from 23 to 28 feet below ground surface. Dissolved oxygen (DO) reading is percentage. pH, temperature, and conductivity measured with the Oakton. DO and oxidation reduction (ORP) measured with YSI.

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	GP14
Project #	0747.01.02	**Sampler**	H. Hirsch
Project Name	North Cascade Ford	**Sampling Date**	12/3/2012
Sampling Event	December 2012	**Sample Name**	GP14-W-7.5
Sub Area		**Sample Depth**	7.5
FSDS QA:	TJS 8/20/2015	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
12/3/2012	12:02	10		5.18		4.82	

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump									
Final Field Parameters	12:07:00 PM			6.32	12.06	209	5.05	64.5	864

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Turbid.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	12:00:00 PM	VOA-Glass		
			Amber Glass	2	
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	2	

General Sampling Comments

Screened interval from 5 to 10 feet below ground surface. Dissolved oxygen (DO) reading is percentage.

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	GP15
Project #	0747.01.02	**Sampler**	H. Hirsch
Project Name	North Cascade Ford	**Sampling Date**	12/3/2012
Sampling Event	December 2012	**Sample Name**	GP15-W-7.5
Sub Area		**Sample Depth**	7.5
FSDS QA:	TJS 8/20/2015	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
12/3/2012	12:33	10		5.88		4.12	

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump									
Final Field Parameters	12:42:00 PM			6.36	12.56	160	2.82	78.7	960

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Turbid.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	12:45:00 PM	VOA-Glass		
			Amber Glass	2	
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	2	

General Sampling Comments

Screened interval from 5 to 10 feet below ground surface. Dissolved oxygen (DO) reading is percentage.

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	GP16
Project #	0747.01.02	**Sampler**	H. Hirsch
Project Name	North Cascade Ford	**Sampling Date**	12/2/2012
Sampling Event	December 2012	**Sample Name**	GP16-W-17.5
Sub Area		**Sample Depth**	17.5
FSDS QA:	TJS 8/20/2015	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
12/2/2012	16:12	20		9.58		10.42	

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump									
Final Field Parameters				6.94	14.2	362	0.23	-42.2	448

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Turbid.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	4:20:00 PM	VOA-Glass	5	No
			Amber Glass	4	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly	1	Yes
			Total Bottles	10	

General Sampling Comments

Screened interval from 15 to 20 feet below ground surface. Dissolved oxygen (DO) reading is percentage.

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	GP17
Project #	0747.01.02	**Sampler**	H. Hirsch
Project Name	North Cascade Ford	**Sampling Date**	12/3/2012
Sampling Event	December 2012	**Sample Name**	GP17-W-12.5
Sub Area		**Sample Depth**	12.5
FSDS QA:	TJS 8/20/2015	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
12/3/2012	9:15	15		8.84		6.16	

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump									
Final Field Parameters	9:30:00 AM			6.34	12.89	338	1.85	2.5	725

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Turbid.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	9:40:00 AM	VOA-Glass	5	No
			Amber Glass	4	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly	1	Yes
			Total Bottles	10	

General Sampling Comments

Screened interval from 10 to 15 feet below ground surface. Dissolved oxygen (DO) reading is percentage.

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW01				
Project #	0747.01.01	**Sampler**	H. Hirsch				
Project Name	North Cascade Ford	**Sampling Date**	5/15/2012				
Sampling Event	First Phase Site Investigation	**Sample Name**	MW1-W-8.5				
Sub Area		**Sample Depth**	8.5				
FSDS QA:	TJS 8/20/2015	**Easting**		**Northing**		**TOC**	

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
5/15/2012	11:38	13.44		5.61		7.83	1.28

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump	12:07:00 PM	1	0.25	6.37	11.99	498	153.3		1.16
	12:12:00 PM	1.5	0.2	6.37	12.11	495	94.6		0.87
	12:17:00 PM	2	0.2	6.37	12.13	493	74.2		0.86
	12:22:00 PM	2.5	0.2	6.37	12.15	493	65.4		0.7
Final Field Parameters	12:27:00 PM	3	0.2	6.37	12.17	493	63.4		0.71

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Clear. Slight petroleum-like odor and sheen.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	12:30:00 PM	VOA-Glass	10	No
			Amber Glass	12	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly	2	Yes
			Total Bottles	24	

General Sampling Comments Field duplicate collected at this location at 12:35 (12 bottles). Sample ID is Field Duplicate. Begin purging at 11:57. Paint smell coming from car painting department during sampling. Dissolved oxygen (DO) reading is percentage. DO would not calibrate.

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW02
Project #	0747.01.01	**Sampler**	H. Hirsch
Project Name	North Cascade Ford	**Sampling Date**	5/16/2012
Sampling Event	First Phase Site Investigation	**Sample Name**	MW2-W-9
Sub Area		**Sample Depth**	9
FSDS QA:		**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
5/16/2012	12:00	13.85		6.65		7.2	1.2

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump	12:50:00 PM	1	0.25	6.27	15.14	282	4.1		10.35
	12:55:00 PM	1.5	0.2	6.27	15.22	282	4.9		5.25
	1:03:00 PM	2	0.15	6.27	15.14	281	5.1		4.02
	1:08:00 PM	2.5	0.25	6.28	15.24	282	4.3		5.25
	1:18:00 PM	3	0.25	6.27	15.14	281	3.9		4.57
	1:23:00 PM	3.5	0.25	6.27	15.05	281	3.9		4.44
Final Field Parameters	1:28:00 PM	4	0.25	6.27	15.03	282	4.2		4.6

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Clear. Strong petroleum-like odor, slight sheen.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	1:30:00 PM	VOA-Glass	5	No
			Amber Glass	6	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly	1	Yes
			Total Bottles	12	

General Sampling Comments

Begin purging at 12:40. Dissolved oxygen (DO) reading is percentage.

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW03
Project #	0747.01.01	**Sampler**	H. Hirsch
Project Name	North Cascade Ford	**Sampling Date**	5/15/2012
Sampling Event	First Phase Site Investigation	**Sample Name**	MW3-W-9
Sub Area		**Sample Depth**	9
FSDS QA:		**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
5/15/2012		13.85		5.4		8.45	1.4

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump	2:25:00 PM	1	0.25	6.28	13.09	186	36.4		18.27
	2:30:00 PM	1.5	0.25	6.29	13.24	190	32.8		3.75
	2:35:00 PM	2	0.25	6.31	12.96	197	33.2		3.78
	2:40:00 PM	2.5	0.25	6.29	13.1	194	39.9		3.54
	2:45:00 PM	3	0.25	6.3	13.12	192	36.9		3.15
Final Field Parameters	2:50:00 PM	3.5	0.25	6.29	13.36	204	38		3.16

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Clear. Slight petroleum-like odor and sheen.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	2:55:00 PM	VOA-Glass	5	No
			Amber Glass		
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly	1	Yes
			Total Bottles	6	

General Sampling Comments

Begin purging at 14:15. Meter YSI 556 MPS. Dissolved oxygen (DO) reading is percentage. DO would not calibrate.

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW01
Project #	0747.01.02	**Sampler**	H. Hirsch
Project Name	North Cascade Ford	**Sampling Date**	10/9/2012
Sampling Event	October 2012	**Sample Name**	MW01-GW-121009
Sub Area		**Sample Depth**	12
FSDS QA:	TJS 8/20/2015	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
10/9/2012	13:33	13.44		9.87		3.57	0.6

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump	1:48:00 PM	0.2	0.3	6.15	14.35	534	2.9	-74.5	10.66
	1:51:00 PM	0.3	0.2	6.19	14.3	528	1.4	-84.8	7.7
	1:55:00 PM	0.6	0.2	6.23	14.31	525	1.3	-86.8	5.92
	2:00:00 PM	0.8	0.2	6.23	14.32	523	0.9	-84.6	4.86
	2:05:00 PM	1	0.2	6.2	14.3	519	0.8	-84	4.33
Final Field Parameters	2:09:00 PM	1.25	0.2	6.2	14.29	515	0.6	-84.1	3.68

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Clear and colorless. Petroleum-like odor.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	2:15:00 PM	VOA-Glass		
			Amber Glass	4	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		Yes
			Total Bottles	4	

General Sampling Comments

Signature _____

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW02
Project #	0747.01.02	**Sampler**	H. Hirsch
Project Name	North Cascade Ford	**Sampling Date**	10/9/2012
Sampling Event	October 2012	**Sample Name**	MW02-GW-121009
Sub Area		**Sample Depth**	11.5
FSDS QA:	TJS 8/20/2015	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
10/9/2012	9:54	13.84		9.29		4.55	0.74

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump	10:26:00 AM	0.5	0.3	6.2	17.11	291	4.5	-33.5	3.01
	10:32:00 AM	1	0.3	6.2	17.12	280	1.6	-44.5	1.65
	10:36:00 AM	1.5	0.3	6.2	17.05	280	1.7	-51	1.31
	10:40:00 AM	2	0.3	6.19	17.07	279	1.3	-56.2	1.36
	10:45:00 AM	2.5	0.3	6.19	16.82	280	1.2	-58.9	1.37
Final Field Parameters	10:50:00 AM	3	0.3	6.19	16.82	280	1.2	-58.9	1.37

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Clear and colorless. Petroleum-like odor.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	10:55:00 AM	VOA-Glass		
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	2	

General Sampling Comments Begin purging at 10:15. Dissolved oxygen (DO) reading is percentage.

Signature _____

Maul Foster & Alongi, Inc.

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW03		
Project #	0747.01.02	**Sampler**	H. Hirsch		
Project Name	North Cascade Ford	**Sampling Date**	10/9/2012		
Sampling Event	October 2012	**Sample Name**	MW03-GW-121009		
Sub Area		**Sample Depth**	9.5		
FSDS QA:	TJS 8/20/2015	**Easting**		**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
10/9/2012	11:26	13.85		5.11		8.74	1.42

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump	11:41:00 AM	0.25	0.3	6.15	16.2	196	2.7	-45.1	2.34
	11:45:00 AM	0.5	0.3	6.13	16.25	193	2.5	-51.9	2.38
	11:49:00 AM	0.6	0.3	6.13	16.24	192	1.3	-50.2	1.73
	11:53:00 AM	0.7	0.3	6.13	16.29	192	2.8	-52.1	1.81
	11:57:00 AM	0.9	0.3	6.13	16.29	192	0.9	-56.5	2.24
Final Field Parameters	12:03:00 PM	1.2	0.3	6.14	16.3	193	0.8	-56.8	1.91

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Clear and colorless. Petroleum-like odor.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	12:05:00 PM	VOA-Glass	10	No
			Amber Glass	8	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly	2	Yes
			Total Bottles	20	

General Sampling Comments Begin purging at 11:37. Dissolved oxygen (DO) reading is percentage. Field duplicate sample collected at this location. Sample identification for duplicate is FD-GW-121009 (9 bottles), collected at 12:15.

Signature _____

Maul Foster & Alongi, Inc.

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW01				
Project #	0747.01.03	**Sampler**	H. Hirsch				
Project Name	North Cascade Ford	**Sampling Date**	4/10/2014				
Sampling Event	First Quarter 2014	**Sample Name**	MW01				
Sub Area		**Sample Depth**	12.5				
FSDS QA:		**Easting**		**Northing**	0	**TOC**	

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
4/10/2014							

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump	10:32:00 AM		0.5	7.02	10.79	446	0.52	-26.9	
	11:06:00 AM		0.1	6.62	10.7	459	0.2	-27.5	16.89
	11:15:00 AM		0.1	6.6	10.74	463	0.15	-26.2	12.67
	11:25:00 AM		0.1	6.62	10.78	464	0.12	-24.9	10.87
	11:31:00 AM		0.1	6.58	10.79	465	0.16	-21.1	9.41
	11:38:00 AM		0.1	6.57	10.83	465	0.1	-19.5	7.58
Final Field Parameters	11:48:00 AM	4	0.1	6.57	10.9	465	0.09	-17.3	6.99

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Clear, sheen, hydrocarbon-like odor, free-product on tubing.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	11:45:00 AM	VOA-Glass	10	No
			Amber Glass	6	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	16	

General Sampling Comments

Low flow sampling. Depth to water not measured due to product in well and did not have depth to water probe. Set tubing at about 12.5 feet below ground surface. Collected field duplicate (MWDUP) sample at this location (8 bottles).

Signature _____

Maul Foster & Alongi, Inc.

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW02
Project #	0747.01.03	**Sampler**	H. Hirsch
Project Name	North Cascade Ford	**Sampling Date**	4/10/2014
Sampling Event	First Quarter 2014	**Sample Name**	MW02
Sub Area		**Sample Depth**	10.5
FSDS QA:	ENH 5/6/2014	**Easting**	**Northing** 0 **TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
4/10/2014	12:52	13.81		6.12		7.69	1.25

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pH	Temp (C)	E Cond (uS/cm)	DO (mg/L)	ORP	Turbidity
(2) Peristaltic Pump	1:14:00 PM		0.15	6.95	13.85	307	0.36	-24.9	33.8
	1:30:00 PM		0.1	6.69	14.45	300	0.11	-38.2	17.1
	1:38:00 PM		0.1	6.65	14.51	299	0.06	-46.4	17.1
	1:51:00 PM		0.1	6.63	14.77	289	0.03	-58.5	9.11
	1:58:00 PM		0.1	6.61	14.8	294	0.03	-62.3	9.95
	2:07:00 PM		0.1	6.55	14.69	286	0.06	-67.8	9.2
Final Field Parameters	2:15:00 PM	2	0.1	6.58	14.94	287	0.03	-67.9	8.37

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Clear, no sheen, hydrocarbon-like odor.

Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	2:20:00 PM	VOA-Glass		
			Amber Glass	4	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	4	

General Sampling Comments

Low flow sampling. Turbidity not stabilized in sample well, but purging took place over an hour.

Signature _____

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW03
Project #	0747.01.03	**Sampler**	H. Hirsch
Project Name	North Cascade Ford	**Sampling Date**	4/10/2014
Sampling Event	First Quarter 2014	**Sample Name**	MW03
Sub Area		**Sample Depth**	10
FSDS QA:	ENH 5/6/2014	**Easting**	**Northing** 0 **TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
4/10/2014	14:52	13.85		5		8.85	1.4

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pH	Temp (C)	E Cond (uS/cm)	DO (mg/L)	ORP	Turbidity
(2) Peristaltic Pump	3:08:00 PM		0.15	6.45	12.38	578	1.04	51.7	50.9
	3:21:00 PM		0.1	6.3	12.75	536	0.8	39.6	24.4
	3:30:00 PM		0.1	6.29	12.87	515	0.7	36.8	21
	3:36:00 PM		0.1	6.25	12.71	478	0.6	36.3	18
	3:42:00 PM		0.1	6.28	12.62	451	0.59	27.9	16.7
	3:52:00 PM		0.1	6.3	12.58	423	0.5	22.8	13.54
Final Field Parameters	3:58:00 PM	2	0.1	6.32	12.58	404	0.46	18.4	11.09

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Clear, slight hydrocarbon-like odor.

Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	4:00:00 PM	VOA-Glass		
			Amber Glass	6	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	6	

General Sampling Comments

Low flow sampling with peristaltic pump. Turbidity not stabilized in sample well, but purging took about an hour.

Signature _____

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW01
Project #	0747.01.03	**Sampler**	R. Degens
Project Name	North Cascade Ford	**Sampling Date**	6/18/2014
Sampling Event	June 2014 Dx Sampling	**Sample Name**	MW01-GW-140618
Sub Area		**Sample Depth**	8.5
FSDS QA:	RD 6/25/2014	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
6/18/2014	11:11	13.45		6.09		7.36	1.2

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump	11:11:00 AM		0.4						
	11:16:00 AM	0.53	0.4	6.2	14.28	502	0.67	-43.3	2.6
	11:21:00 AM	1.06	0.4	6.18	14.27	496	0.38	-53.3	2.54
	11:26:00 AM	1.59	0.4	6.21	14.27	497	0.21	-60.5	2.42
	11:31:00 AM	2.12	0.4	6.21	14.23	499	0.21	-56.9	2.14
Final Field Parameters	11:36:00 AM	2.65	0.4	6.22	14.23	499	0.22	-60.3	2.17

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Clear, slight petroleum hydrocarbon-like odor.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	11:36:00 AM	VOA-Glass		
			Amber Glass	4	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	4	

General Sampling Comments Low flow sampling with peristaltic pump. No NAPL present in purge water. Collected field duplicate (FD-GW-140618) sample at this location (2 bottles).

Signature _____

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW02
Project #	0747.01.03	**Sampler**	R. Degens
Project Name	North Cascade Ford	**Sampling Date**	6/18/2014
Sampling Event	June 2014 Dx Sampling	**Sample Name**	MW02-GW-140618
Sub Area		**Sample Depth**	10.3
FSDS QA:	RD 6/25/2014	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
6/18/2014	13:05	13.8		6.98		6.82	1.11

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump	1:10:00 PM	0.66	0.5	6.28	15.89	235	1.08	-18.7	5.4
	1:15:00 PM	1.32	0.5	6.19	15.65	233	1.22	-15.7	4.63
	1:20:00 PM	1.98	0.5	6.21	15.48	230	1.03	-20.8	1.63
	1:25:00 PM	2.64	0.5	6.21	15.46	228	0.86	-29.3	1.6
	1:30:00 PM	3.3	0.5	6.2	15.5	229	0.84	-27	1.27
Final Field Parameters	1:35:00 PM	3.96	0.5	6.19	15.5	230	0.83	-28	1.46

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Clear, slight petroleum hydrocarbon-like odor.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	1:40:00 PM	VOA-Glass		
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	2	

General Sampling Comments

Low flow sampling with peristaltic pump.

Signature _____

Maul Foster & Alongi, Inc.

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW03
Project #	0747.01.03	**Sampler**	R. Degens
Project Name	North Cascade Ford	**Sampling Date**	6/18/2014
Sampling Event	June 2014 Dx Sampling	**Sample Name**	MW03-GW-140618
Sub Area		**Sample Depth**	9.8
FSDS QA:	RD 6/25/2014	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
6/18/2014	14:18	13.83		5.87		7.96	1.3

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump	2:30:00 PM	0.53	0.4	6.5	15.2	195	2.19	37.1	1.81
	2:35:00 PM	1.06	0.4	6.2	13.98	191	1.46	24.7	1.24
	2:40:00 PM	1.59	0.4	6.17	13.8	187	0.92	26.2	1.62
	2:45:00 PM	2.12	0.4	6.16	13.78	189	0.87	22.2	1.4
Final Field Parameters	2:50:00 PM	2.65	0.4	6.18	13.76	190	0.88	21.4	1.37

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Clear. Little to no odor.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	2:55:00 PM	VOA-Glass		
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	2	

General Sampling Comments Low flow sampling with peristaltic pump.

Signature _____

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW01
Project #	0747.01.03	**Sampler**	H. Hirsch
Project Name	North Cascade Ford	**Sampling Date**	9/10/2014
Sampling Event	September 2014	**Sample Name**	MW01-GW-091014
Sub Area		**Sample Depth**	10.5
FSDS QA:	ENH 9/12/2014	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
9/10/2014	9:27	13.44		7.74		5.7	0.93

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump	10:22:00 AM	0.25	0.25	5.68	17.07	577	0.34	-47	
	10:31:00 AM	0.4	0.1	5.74	17.05	573	0.22	-34.5	5.13
	10:36:00 AM	0.75	0.1	5.79	17.08	574	0.34	-30.7	5.62
	10:42:00 AM	1	0.1	5.8	17.03	576	0.17	-23.2	4.68
	10:46:00 AM	1.2	0.1	5.82	17.03	577	0.15	-18.6	3.95
Final Field Parameters	10:49:00 AM	1.3	0.1	5.82	17.04	578	0.14	-16	3.22

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Clear. No sheen. Hydrocarbon-like odor. No product observed in sample.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	10:51:00 AM	VOA-Glass		
			Amber Glass	4	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	4	

General Sampling Comments

Product coating tubing, but no measurable thickness. Collected field duplicate (FD-091014) sample at this location (2 bottles).

Signature _____

Maul Foster & Alongi, Inc.

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Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW02		
Project #	0747.01.03	**Sampler**	H. Hirsch		
Project Name	North Cascade Ford	**Sampling Date**	9/10/2014		
Sampling Event	September 2014	**Sample Name**	MW02-GW-091014		
Sub Area		**Sample Depth**	11.1		
FSDS QA:	ENH 9/12/2014	**Easting**		**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
9/10/2014	11:42	13.84		8.37		5.47	0.89

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump	12:01:00 PM	0.1	0.1	5.77	21.18	234	0.35	56.2	18.53
	12:08:00 PM	0.2	0.1	5.84	21.3	229	0.17	53.1	3.46
	12:15:00 PM	0.2	0.1	5.89	21.45	228	0.13	42.8	2.53
	12:21:00 PM	0.3	0.1	5.96	21.57	229	0.12	38.8	0.83
	12:25:00 PM	0.4	0.1	5.9	21.25	230	0.12	41	1.61
Final Field Parameters	12:28:00 PM	0.5	0.1	5.88	21.32	230	0.09	40	2.02

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Clear. Hydrocarbon-like odor. No sheen.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	12:32:00 PM	VOA-Glass		
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	2	

General Sampling Comments

Very small amount of iron-reducing bacteria present during beginning of purge.

Signature _____

Maul Foster & Alongi, Inc.

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW03
Project #	0747.01.03	**Sampler**	C. Wise
Project Name	North Cascade Ford	**Sampling Date**	9/10/2014
Sampling Event	September 2014	**Sample Name**	MW03-GW-091014
Sub Area		**Sample Depth**	10.4
FSDS QA:	ENH 9/12/2014	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
9/10/2014	13:55	13.85		6.94		6.91	1.13

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump	2:11:00 PM	0.1	0.15	5.87	19.39	191	1.55	21	2.4
	2:16:00 PM	0.1	0.15	5.86	20.43	191	1.08	20.2	
	2:23:00 PM	0.2	0.1	5.85	20.42	193	1.06	18.7	1.2
	2:27:00 PM	0.3	0.1	5.93	20.36	195	0.69	14.8	1.04
	2:32:00 PM	0.4	0.1	5.88	20.22	195	0.53	18.8	1.16
Final Field Parameters	2:36:00 PM	0.5	0.1	5.88	20.4	195	0.42	16.1	0.92

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Clear. Hydrocarbon-like odor.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	2:45:00 PM	VOA-Glass		
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	2	

General Sampling Comments Began purging at 14:03.

Signature _____

Maul Foster & Alongi, Inc.

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW01
Project #	0747.01.03	**Sampler**	C. Wise
Project Name	North Cascade Ford	**Sampling Date**	12/10/2014
Sampling Event	December 2014	**Sample Name**	MW01-GW-121014
Sub Area		**Sample Depth**	10
FSDS QA:	R. Degens 3/9/2015	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
12/10/2014	11:30	13.46	6.1	6.09	0.01	7.37	1.2

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	Time	Purge Vol (gal)	Flowrate l/min	pH	Temp (C)	E Cond (uS/cm)	DO (mg/L)	ORP	Turbidity
(2) Peristaltic Pump	12:19:00 PM	0.2	0.2	5.53	13.7	588	0.53	-56.6	5.99
	12:22:00 PM	0.3	0.2	5.58	13.66	575	0.35	-47.9	4.53
	12:28:00 PM	0.4	0.2	5.64	13.59	572	0.36	-41.6	3.42
	12:32:00 PM	0.5	0.2	5.71	13.48	568	0.29	-43.5	3.85
Final Field Parameters	12:36:00 PM	0.6	0.1	5.73	13.37	562	0.24	-45.9	2.76

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations: Clear. Some sheen observed. Hydrocarbon-like odor. No product observed in sample.

Sample Information

Sampling Method	Sample Type	Sampling Time	Container Code/Preservative	#	Filtered
(2) Peristaltic Pump	Groundwater	12:40:00 PM	VOA-Glass		
			Amber Glass	4	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	4	

General Sampling Comments Product coated tubing and probe. Collected field duplicate (FD-121014) sample at this location (2 bottles).

Signature _____

Maul Foster & Alongi, Inc.

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW02
Project #	0747.01.03	**Sampler**	C. Wise
Project Name	North Cascade Ford	**Sampling Date**	12/10/2014
Sampling Event	December 2014	**Sample Name**	MW02-GW-121014
Sub Area		**Sample Depth**	10.5
FSDS QA:	R. Degens 3/9/2015	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
12/10/2014	13:40	13.85		7.11		6.74	1.1

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump	1:57:00 PM	0.2	0.1	5.93	15.29	180	0.38	60.6	7.45
	2:02:00 PM	0.3	0.1	5.75	15.16	181	0.31	66.3	5.08
	2:08:00 PM	0.4	0.1	5.78	14.85	181	0.26	63.6	4.63
	2:13:00 PM	0.5	0.1	5.79	14.81	181	0.23	62.9	3.37
Final Field Parameters	2:16:00 PM	0.6	0.1	5.81	14.81	184	0.23	61.8	3.33

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Clear. Hydrocarbon-like odor.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	2:22:00 PM	VOA-Glass		
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	2	

General Sampling Comments

Began purging at 13:50. Very small amount of iron-reducing bacteria present at beginning of purge.

Signature _____

Maul Foster & Alongi, Inc.

400 E. Mill Plain Blvd, Suite 400, Vancouver, WA 98660 (360) 694-2691 Fax. (360) 906-1958

Water Field Sampling Data Sheet

Client Name	VSF Properties, LLC	**Sample Location**	MW03
Project #	0747.01.03	**Sampler**	C. Wise
Project Name	North Cascade Ford	**Sampling Date**	12/10/2014
Sampling Event	December 2014	**Sample Name**	MW03-GW-121014
Sub Area		**Sample Depth**	9.5
FSDS QA:	R. Degens 3/9/2015	**Easting**	**Northing**	**TOC**

Hydrology/Level Measurements

					(Product Thickness)	(Water Column)	(Gallons/ft x Water Column)
Date	**Time**	**DT-Bottom**	**DT-Product**	**DT-Water**	**DTP-DTW**	**DTB-DTW**	**Pore Volume**
12/10/2014	15:05	13.84		5.1		8.74	1.42

(0.75" = 0.023 gal/ft) (1" = 0.041 gal/ft) (1.5" = 0.092 gal/ft) (2" = 0.163 gal/ft) (3" = 0.367 gal/ft) (4" = 0.653 gal/ft) (6" = 1.469 gal/ft) (8" = 2.611 gal/ft)

Water Quality Data

Purge Method	**Time**	**Purge Vol (gal)**	**Flowrate l/min**	**pH**	**Temp (C)**	**E Cond (uS/cm)**	**DO (mg/L)**	**ORP**	**Turbidity**
(2) Peristaltic Pump	3:21:00 PM	0.2	0.1	5.88	14.18	228	0.74	64.8	13.61
	3:24:00 PM	0.3	0.1	5.88	14.02	225	0.38	59.3	14.76
	3:28:00 PM	0.4	0.1	5.81	13.75	223	0.31	59.1	10.91
	3:35:00 PM	0.5	0.1	5.82	13.47	226	0.25	49.2	13.58
	3:39:00 PM	0.6	0.1	5.83	13.42	228	0.22	46.5	14.28
Final Field Parameters	3:43:00 PM	0.65	0.1	5.84	13.42	228	0.21	45.8	13.59

Methods: (1) Submersible Pump (2) Peristaltic Pump (3) Disposable Bailer (4) Vacuum Pump (5) Dedicated Bailer (6) Inertia Pump (7) Other (specify)

Water Quality Observations:

Clear. Hydrocarbon-like odor.

Sample Information

Sampling Method	**Sample Type**	**Sampling Time**	**Container Code/Preservative**	**#**	**Filtered**
(2) Peristaltic Pump	Groundwater	3:46:00 PM	VOA-Glass		
			Amber Glass	2	No
			White Poly		
			Yellow Poly		
			Green Poly		
			Red Total Poly		
			Red Dissolved Poly		
			Total Bottles	2	

General Sampling Comments

Began purging at 15:15. Very small amount of iron-reducing bacteria observed at beginning of purge.

Signature _____

APPENDIX G

LABORATORY ANALYTICAL RESULTS

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12/31/2012
Ms. Kerry Gallagher
Maul Foster and Alongi Inc.
2001 NW 19th Ave
Suite 200
Portland OR 97209

Project Name: Sims-N.Cascade Ford
Project #: 0747.01.02
Workorder #: 1212187A

Dear Ms. Kerry Gallagher

The following report includes the data for the above referenced project for sample(s) received on 12/10/2012 at Air Toxics Ltd.

The data and associated QC analyzed by Modified TO-15 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kelly Buettner

Project Manager

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WORK ORDER #: 1212187A

Work Order Summary

CLIENT:	Ms. Kerry Gallagher Maul Foster and Alongi Inc. 2001 NW 19th Ave Suite 200 Portland, OR 97209	**BILL TO:**	Accounts Payable Maul Foster and Alongi Inc. 400 E. Mill Plain Blvd Suite 400 Vancouver, WA 98660
PHONE:	971-544-2139	**P.O. #**	
FAX:	971-544-2140	**PROJECT #**	0747.01.02 Sims-N.Cascade Ford
DATE RECEIVED:	12/10/2012	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	12/30/2012		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SV01-121204	Modified TO-15	2.0 "Hg	5 psi
02A(cancelled)	Ambient-Indoor-24HR-121204	Modified TO-15	3.0 "Hg	5 psi
03A	Lab Blank	Modified TO-15	NA	NA
04A	CCV	Modified TO-15	NA	NA
05A	LCS	Modified TO-15	NA	NA
05AA	LCSD	Modified TO-15	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 12/31/12

Technical Director

Certfication numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NY NELAP - 11291,
TX NELAP - T104704434-12-5, UT NELAP CA009332012-3, WA NELAP - C935
Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2011, Expiration date: 10/17/2012.
Eurofins Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified TO-15
Maul Foster and Alongi Inc.
Workorder# 1212187A

Two 6 Liter Summa Canister (100% Certified) samples were received on December 10, 2012. The laboratory performed analysis via modified EPA Method TO-15 using GC/MS in the full scan mode.

This workorder was independently validated prior to submittal using 'USEPA National Functional Guidelines' as generally applied to the analysis of volatile organic compounds in air. A rules-based, logic driven, independent validation engine was employed to assess completeness, evaluate pass/fail of relevant project quality control requirements and verification of all quantified amounts.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***TO-15***	***ATL Modifications***
Initial Calibration	</=30% RSD with 2 compounds allowed out to < 40% RSD	</=30% RSD with 4 compounds allowed out to < 40% RSD
Blank and standards	Zero Air	UHP Nitrogen provides a higher purity gas matrix than zero air

Receiving Notes

Samples were placed on hold per client request.

Sample SV01-121204 was removed from 'Hold' status and placed on 'Active' status on 12/19/2012.

Sample Ambient-Indoor-24HR-121204 was cancelled per client request on 12/19/2012.

Analytical Notes

As per project specific client request the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit. All the canisters used for this project have been certified to the Reporting Limit for the target analytes included in this workorder. Concentrations that are below the level at which the canister was certified may be false positives.

The reported CCV for each daily batch may be derived from more than one analytical file due to the client's request for non-standard compounds.

Non-standard compounds may have different acceptance criteria than the standard TO-14A/TO-15 compound list as per contract or verbal agreement.

Definition of Data Qualifying Flags

Eight qualifiers may have been used on the data analysis sheets and indicates as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the reporting limit.
UJ- Non-detected compound associated with low bias in the CCV and/or LCS.
N - The identification is based on presumptive evidence.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

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Summary of Detected Compounds
MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

Client Sample ID: SV01-121204

Lab ID#: 1212187A-01A

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	0.14	0.14	0.30	0.28
Carbon Disulfide	0.72	0.18 J	2.2	0.55 J
Methylene Chloride	0.29	0.090 J	1.0	0.31 J
2-Butanone (Methyl Ethyl Ketone)	0.72	0.95	2.1	2.8
Benzene	0.14	0.19	0.46	0.61
Toluene	0.14	4.0	0.54	15
Ethyl Benzene	0.14	0.32	0.62	1.4
m,p-Xylene	0.14	1.1	0.62	4.9
o-Xylene	0.14	0.40	0.62	1.8
Cumene	0.14	1.1	0.71	5.5
Propylbenzene	0.14	0.12 J	0.71	0.57 J
1,3,5-Trimethylbenzene	0.14	0.11 J	0.71	0.54 J
1,2,4-Trimethylbenzene	0.14	0.31	0.71	1.5

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Client Sample ID: SV01-121204

Lab ID#: 1212187A-01A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a122610**	**Date of Collection: 12/4/12 1:05:00 PM**	
Dil. Factor:	**1.44**	**Date of Analysis: 12/26/12 03:35 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	0.14	0.14	0.30	0.28
Bromomethane	0.72	Not Detected	2.8	Not Detected
Carbon Disulfide	0.72	0.18 J	2.2	0.55 J
Methylene Chloride	0.29	0.090 J	1.0	0.31 J
2-Butanone (Methyl Ethyl Ketone)	0.72	0.95	2.1	2.8
cis-1,2-Dichloroethene	0.14	Not Detected	0.57	Not Detected
Benzene	0.14	0.19	0.46	0.61
1,2-Dichloroethane	0.14	Not Detected	0.58	Not Detected
1,2-Dichloropropane	0.14	Not Detected	0.66	Not Detected
Toluene	0.14	4.0	0.54	15
Chlorobenzene	0.14	Not Detected	0.66	Not Detected
Ethyl Benzene	0.14	0.32	0.62	1.4
m,p-Xylene	0.14	1.1	0.62	4.9
o-Xylene	0.14	0.40	0.62	1.8
Cumene	0.14	1.1	0.71	5.5
Propylbenzene	0.14	0.12 J	0.71	0.57 J
1,3,5-Trimethylbenzene	0.14	0.11 J	0.71	0.54 J
1,2,4-Trimethylbenzene	0.14	0.31	0.71	1.5
1,4-Dichlorobenzene	0.14	Not Detected	0.86	Not Detected
1,2-Dichlorobenzene	0.14	Not Detected	0.86	Not Detected
1,2,4-Trichlorobenzene	0.72	Not Detected	5.3	Not Detected
Naphthalene	0.72	Not Detected	3.8	Not Detected
1,2,3-Trichloropropane	0.72	Not Detected	4.3	Not Detected

J = Estimated value.

Container Type: 6 Liter Summa Canister (100% Certified)

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	117	70-130
Toluene-d8	97	70-130
4-Bromofluorobenzene	100	70-130

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Client Sample ID: Lab Blank

Lab ID#: 1212187A-03A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a122609a**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/26/12 02:41 PM**	

Compound	Rpt. Limit (ppbv)	Amount (ppbv)	Rpt. Limit (ug/m3)	Amount (ug/m3)
Chloromethane	0.10	Not Detected	0.21	Not Detected
Bromomethane	0.50	Not Detected	1.9	Not Detected
Carbon Disulfide	0.50	0.034 J	1.6	0.10 J
Methylene Chloride	0.20	Not Detected	0.69	Not Detected
2-Butanone (Methyl Ethyl Ketone)	0.50	Not Detected	1.5	Not Detected
cis-1,2-Dichloroethene	0.10	Not Detected	0.40	Not Detected
Benzene	0.10	Not Detected	0.32	Not Detected
1,2-Dichloroethane	0.10	Not Detected	0.40	Not Detected
1,2-Dichloropropane	0.10	Not Detected	0.46	Not Detected
Toluene	0.10	Not Detected	0.38	Not Detected
Chlorobenzene	0.10	Not Detected	0.46	Not Detected
Ethyl Benzene	0.10	Not Detected	0.43	Not Detected
m,p-Xylene	0.10	Not Detected	0.43	Not Detected
o-Xylene	0.10	Not Detected	0.43	Not Detected
Cumene	0.10	Not Detected	0.49	Not Detected
Propylbenzene	0.10	Not Detected	0.49	Not Detected
1,3,5-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,2,4-Trimethylbenzene	0.10	Not Detected	0.49	Not Detected
1,4-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
1,2-Dichlorobenzene	0.10	Not Detected	0.60	Not Detected
1,2,4-Trichlorobenzene	0.50	Not Detected	3.7	Not Detected
Naphthalene	0.50	Not Detected	2.6	Not Detected
1,2,3-Trichloropropane	0.50	Not Detected	3.0	Not Detected

J = Estimated value.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	109	70-130
Toluene-d8	95	70-130
4-Bromofluorobenzene	102	70-130

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Client Sample ID: CCV

Lab ID#: 1212187A-04A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a122602**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/26/12 08:48 AM**	

Compound	%Recovery
Chloromethane	92
Bromomethane	116
Carbon Disulfide	96
Methylene Chloride	93
2-Butanone (Methyl Ethyl Ketone)	92
cis-1,2-Dichloroethene	96
Benzene	96
1,2-Dichloroethane	112
1,2-Dichloropropane	97
Toluene	99
Chlorobenzene	102
Ethyl Benzene	103
m,p-Xylene	108
o-Xylene	106
Cumene	117
Propylbenzene	107
1,3,5-Trimethylbenzene	103
1,2,4-Trimethylbenzene	99
1,4-Dichlorobenzene	106
1,2-Dichlorobenzene	97
1,2,4-Trichlorobenzene	104
Naphthalene	83
1,2,3-Trichloropropane	101

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	106	70-130
Toluene-d8	99	70-130
4-Bromofluorobenzene	115	70-130

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Client Sample ID: LCS

Lab ID#: 1212187A-05A

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a122604**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/26/12 10:34 AM**	

Compound	%Recovery
Chloromethane	105
Bromomethane	125
Carbon Disulfide	131 Q
Methylene Chloride	105
2-Butanone (Methyl Ethyl Ketone)	107
cis-1,2-Dichloroethene	111
Benzene	106
1,2-Dichloroethane	121
1,2-Dichloropropane	107
Toluene	108
Chlorobenzene	110
Ethyl Benzene	110
m,p-Xylene	113
o-Xylene	112
Cumene	119
Propylbenzene	109
1,3,5-Trimethylbenzene	125
1,2,4-Trimethylbenzene	95
1,4-Dichlorobenzene	106
1,2-Dichlorobenzene	98
1,2,4-Trichlorobenzene	111
Naphthalene	119
1,2,3-Trichloropropane	Not Spiked

Q = Exceeds Quality Control limits.

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	112	70-130
Toluene-d8	98	70-130
4-Bromofluorobenzene	104	70-130

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Client Sample ID: LCSD

Lab ID#: 1212187A-05AA

MODIFIED EPA METHOD TO-15 GC/MS FULL SCAN

File Name:	**a122605**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/26/12 11:18 AM**	

Compound	%Recovery
Chloromethane	104
Bromomethane	118
Carbon Disulfide	130
Methylene Chloride	106
2-Butanone (Methyl Ethyl Ketone)	107
cis-1,2-Dichloroethene	112
Benzene	106
1,2-Dichloroethane	121
1,2-Dichloropropane	108
Toluene	109
Chlorobenzene	112
Ethyl Benzene	110
m,p-Xylene	116
o-Xylene	113
Cumene	121
Propylbenzene	113
1,3,5-Trimethylbenzene	105
1,2,4-Trimethylbenzene	99
1,4-Dichlorobenzene	107
1,2-Dichlorobenzene	99
1,2,4-Trichlorobenzene	106
Naphthalene	116
1,2,3-Trichloropropane	Not Spiked

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
1,2-Dichloroethane-d4	105	70-130
Toluene-d8	100	70-130
4-Bromofluorobenzene	106	70-130

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12/27/2012
Ms. Kerry Gallagher
Maul Foster and Alongi Inc.
2001 NW 19th Ave
Suite 200
Portland OR 97209

Project Name: Sims-N.Cascade Ford
Project #: 0747.01.02
Workorder #: 1212187B

Dear Ms. Kerry Gallagher

The following report includes the data for the above referenced project for sample(s) received on 12/10/2012 at Air Toxics Ltd.

The data and associated QC analyzed by Modified ASTM D-1946 are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Air Toxics Ltd. for your air analysis needs. Air Toxics Ltd. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Kelly Buettner at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Kelly Buettner

Project Manager

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WORK ORDER #: 1212187B

Work Order Summary

CLIENT:	Ms. Kerry Gallagher Maul Foster and Alongi Inc. 2001 NW 19th Ave Suite 200 Portland, OR 97209	**BILL TO:**	Accounts Payable Maul Foster and Alongi Inc. 400 E. Mill Plain Blvd Suite 400 Vancouver, WA 98660
PHONE:	971-544-2139	**P.O. #**	
FAX:	971-544-2140	**PROJECT #**	0747.01.02 Sims-N.Cascade Ford
DATE RECEIVED:	12/10/2012	**CONTACT:**	Kelly Buettner
DATE COMPLETED:	12/27/2012		

FRACTION #	NAME	TEST	RECEIPT VAC./PRES.	FINAL PRESSURE
01A	SV01-121204	Modified ASTM D-1946	2.0 "Hg	5 psi
02A(cancelled)	Ambient-Indoor-24HR-121204	Modified ASTM D-1946	3.0 "Hg	5 psi
03A	Lab Blank	Modified ASTM D-1946	NA	NA
04A	LCS	Modified ASTM D-1946	NA	NA
04AA	LCSD	Modified ASTM D-1946	NA	NA

CERTIFIED BY: Heidi Hayes DATE: 12/27/12

Technical Director

Certfication numbers: AZ Licensure AZ0775, CA NELAP - 12282CA, NY NELAP - 11291,
TX NELAP - T104704434-12-5, UT NELAP CA009332012-3, WA NELAP - C935
Name of Accrediting Agency: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program)
Accreditation number: CA300005, Effective date: 10/18/2011, Expiration date: 10/17/2012.
Eurofins Air Toxics Ltd. certifies that the test results contained in this report meet all requirements of the NELAC standards

This report shall not be reproduced, except in full, without the written approval of Eurofins Air Toxics, Inc.

180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 9563
(916) 985-1000 . (800) 985-5955 . FAX (916) 985-1020

LABORATORY NARRATIVE
Modified ASTM D-1946
Maul Foster and Alongi Inc.
Workorder# 1212187B

Two 6 Liter Summa Canister (100% Certified) samples were received on December 10, 2012. The laboratory performed analysis via Modified ASTM Method D-1946 for Helium in air using GC/TCD. The method involves direct injection of 1.0 mL of sample.

Method modifications taken to run these samples are summarized in the table below. Specific project requirements may over-ride the ATL modifications.

Requirement	***ASTM D-1946***	***ATL Modifications***
Calibration	A single point calibration is performed using a reference standard closely matching the composition of the unknown.	A 3-point calibration curve is performed. Quantitation is based on a daily calibration standard which may or may not resemble the composition of the associated samples.
Reference Standard	The composition of any reference standard must be known to within 0.01 mol % for any component.	The standards used by ATL are blended to a >/= 95% accuracy.
Sample Injection Volume	Components whose concentrations are in excess of 5 % should not be analyzed by using sample volumes greater than 0.5 mL.	The sample container is connected directly to a fixed volume sample loop of 1.0 mL on the GC. Linear range is defined by the calibration curve. Bags are loaded by vacuum.
Normalization	Normalize the mole percent values by multiplying each value by 100 and dividing by the sum of the original values. The sum of the original values should not differ from 100% by more than 1.0%.	Results are not normalized. The sum of the reported values can differ from 100% by as much as 15%, either due to analytical variability or an unusual sample matrix.
Precision	Precision requirements established at each concentration level.	Duplicates should agree within 25% RPD for detections > 5 X's the RL.

Receiving Notes

Samples were placed on hold per client request.

Sample SV01-121204 was removed from 'Hold' status and placed on 'Active' status on 12/19/2012.

Sample Ambient-Indoor-24HR-121204 was cancelled per client request on 12/19/2012.

Analytical Notes

As per project specific client request the laboratory has reported estimated values for target compound hits that are below the Reporting Limit but greater than the Method Detection Limit.

Definition of Data Qualifying Flags

Seven qualifiers may have been used on the data analysis sheets and indicate as follows:
B - Compound present in laboratory blank greater than reporting limit.
J - Estimated value.
E - Exceeds instrument calibration range.
S - Saturated peak.
Q - Exceeds quality control limits.
U - Compound analyzed for but not detected above the detection limit.
M - Reported value may be biased due to apparent matrix interferences.
File extensions may have been used on the data analysis sheets and indicates as follows:
a-File was requantified
b-File was quantified by a second column and detector
r1-File was requantified for the purpose of reissue

eurofins | Air Toxics

Summary of Detected Compounds
NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

Client Sample ID: SV01-121204

Lab ID#: 1212187B-01A

Compound	Rpt. Limit (%)	Amount (%)
Helium	0.072	0.13

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Client Sample ID: SV01-121204

Lab ID#: 1212187B-01A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9122022**	**Date of Collection: 12/4/12 1:05:00 PM**	
Dil. Factor:	**1.44**	**Date of Analysis: 12/20/12 09:18 PM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.072	0.13

Container Type: 6 Liter Summa Canister (100% Certified)

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Client Sample ID: Lab Blank

Lab ID#: 1212187B-03A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9122004b**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/20/12 11:48 AM**	

Compound	**Rpt. Limit (%)**	**Amount (%)**
Helium	0.050	Not Detected

Container Type: NA - Not Applicable

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Client Sample ID: LCS

Lab ID#: 1212187B-04A

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9122002**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/20/12 10:51 AM**	

Compound	%Recovery
Helium	102

Container Type: NA - Not Applicable

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Client Sample ID: LCSD

Lab ID#: 1212187B-04AA

NATURAL GAS ANALYSIS BY MODIFIED ASTM D-1946

File Name:	**9122026**	**Date of Collection: NA**	
Dil. Factor:	**1.00**	**Date of Analysis: 12/21/12 07:27 AM**	

Compound	%Recovery
Helium	100

Container Type: NA - Not Applicable

Analytical Resources, Incorporated
Analytical Chemists and Consultants

8 May 2012

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: Sims-N Cascade Ford, 0747.01.01
ARI Job No.: UT25

Dear Heather:

Please find enclosed the original Chain-of-Custody (COC) record and the final results for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted two soil samples on May 7, 2012. The samples were analyzed for NWTPH-HCID as requested. (The data for the remaining samples will be mailed under separate cover.)

These analyses proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file UT25

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: UT25	Turn-around Requested: NWTPH-HCID = 48 HR TAT, others = Standard	Page: 2 of 2	
ARI Client Company: Maul Foster & Alongi	Phone: 360-927-1309	Date: 5/6/12	Ice Present? Y
Client Contact: Heather Hirsch		No. of Coolers: 1	Cooler Temps: 5.8, 2.0
Client Project Name: SIMS - N. CASCADE FORD			
Client Project #: 0747.01.01	Samplers: H. Hirsch / A. Hughes		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: NWTPH-VPH	TCLP for Metals	NWTPH-HCID	Notes/Comments
GP1-S-2.5	5/6/12	1100	SOIL	3	X	X	—	Hold = Analysis
GP2-S-1.1	↓	1250	SOIL	1	—	—	X	will depend on
GP3-S-2	↓	1600	SOIL	1	—	—	X	HCID results
								X = Analyze
								— = Do not analyze

Comments/Special Instructions	Relinquished by:	Received by:	Relinquished by:	Received by:
edd's in Equis format; pdf lab report (no hard copy)	(Signature)	(Signature)	(Signature)	(Signature)
	Printed Name: Heather Hirsch	Printed Name: Rachel Pelle	Printed Name:	Printed Name:
	Company: Maul Foster & Alongi	Company: ARI	Company:	Company:
	Date & Time: 5/7/12 0900	Date & Time: 5/7/12 8:30	Date & Time:	Date & Time:

UT25 : SOGS

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Maul, Foster & Alongi
Project Name: SMS - N. Cascade Ford
COC No(s): _____ (NA)
Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____
Assigned ARI Job No: UT25
Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	(YES)	NO
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry): 3.8 2.0 ___ ___
If cooler temperature is out of compliance fill out form 00070F
Temp Gun ID#: 90877952

Cooler Accepted by: JM (for RR) Date: 5/7/12 Time: 830

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? ... Bubble Wrap (Wet Ice) Gel Packs (Baggies) Foam Block Paper Other: _____			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	(NA)	YES	NO
Were all VOC vials free of air bubbles?	(NA)	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

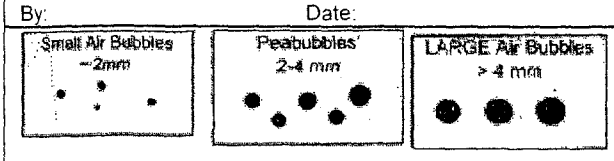
Samples Logged by: JM Date: 5/7/12 Time: 1046

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

UT25 : 00003

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: UT25
Client: Maul, Foster & Alongi
Project Event: 0747.01.01
Project Name: SIMS - N Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	GP2-S-1.1	UT25A	12-8177	Soil	05/06/12 12:50	05/07/12 08:30
2.	GP3-S-2	UT25B	12-8178	Soil	05/06/12 16:00	05/07/12 08:30

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPH-HCID Method by GC/FID
Page 1 of 1
Matrix: Soil

QC Report No: UT25-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Data Release Authorized: MW
Reported: 05/08/12

ARI ID	Sample ID	Extraction Date	Analysis Date	DL	Range	Result
MB-050712	Method Blank	05/07/12	05/08/12	1.0	Gas	< 20 U
12-8177					Diesel	< 50 U
					Oil	< 100 U
					o-Terphenyl	95.2%
UT25A	GP2-S-1.1	05/07/12	05/08/12	1.0	Gas	< 20 U
12-8177	HC ID: ---				Diesel	< 50 U
					Oil	< 100 U
					o-Terphenyl	94.5%
UT25B	GP3-S-2	05/07/12	05/08/12	1.0	Gas	< 20 U
12-8178	HC ID: ---				Diesel	< 50 U
					Oil	< 100 U
					o-Terphenyl	101%

Reported in mg/kg (ppm)

Gas value based on total peaks in the range from Toluene to C12.
Diesel value based on the total peaks in the range from C12 to C24.
Oil value based on the total peaks in the range from C24 to C38.

ANALYTICAL RESOURCES INCORPORATED

HCID SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT25-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	O-TER	TOT OUT
050712MB	95.2%	0
GP2-S-1.1	94.5%	0
GP3-S-2	101%	0

	LCS/MB LIMITS	QC LIMITS
(O-TER) = o-Terphenyl	(68-122)	(50-150)

Prep Method: SW3550B
Log Number Range: 12-8177 to 12-8178

ANALYTICAL RESOURCES INCORPORATED

TOTAL HCID RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: UT25
Matrix: Soil — Project: SIMS - N Cascade Ford
Date Received: 05/07/12 — 0747.01.01

ARI ID	Client ID	Sample Amt	Final Vol	Basis	Prep Date
12-8177-050712MB	Method Blank	10.0 g	5.00 mL	-	05/07/12
12-8177-UT25A	GP2-S-1.1	7.87 g	5.00 mL	D	05/07/12
12-8178-UT25B	GP3-S-2	8.24 g	5.00 mL	D	05/07/12

Basis: D=Dry Weight W=As Received

Analytical Resources, Incorporated
Analytical Chemists and Consultants

22 May 2012

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: Sims-N Cascade Ford, 0747.01.01
ARI Job No.: UT30

Dear Heather:

Please find enclosed a copy of the original Chain-of-Custody (COC) records and the final results for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted six soil samples, two water samples and one trip blank on May 7, 2012. The samples were analyzed for VOAs, NWTPH-G, VPH, SVOAs, SIM-PAHs, PCBs, NWTPH-Dx, EPH and total and TCLP metals as requested. (The data for the HCID analyses were mailed under separate cover.)

The percent recoveries for several compounds were not within control limits following the VOA analyses of the LCSs/LCSDs associated with these samples. Since none of these target compounds were detected in any of the sample associated with these LCSs/LCSDs, the high biases do not compromise any RLs. No corrective actions were taken.

A matrix spike (MS) and a matrix spike duplicate (MSD) were extracted and analyzed for SVOAs in conjunction with sample GP1-S-2.5. The areas for two internal standards (ISs) were not within control limits following the initial analyses of the MS/MSD. Since the results replicated one another, it was concluded that the sample matrix was the cause of the poor IS recoveries. No corrective actions were taken.

The percent recovery for the surrogate, d14-p-terphenyl, was low following the initial SVOA analysis of sample GP1-W-7.5. This sample was re-analyzed. Similar results were obtained for the re-analysis. It was concluded that the sample matrix was the cause of the low surrogate recovery. No further corrective actions were taken. The results for the original analysis only have been submitted.

An MS/MSD were extracted and analyzed for SIM-PAHs in conjunction with sample GP1-S-2.5. The percent recovery for the surrogate, d10-2-methylnaphthalene, was high following the initial analysis of the MSD. Since the percent recoveries for both surrogates were within established QC limits for the native sample, no corrective actions were taken.

The percent recoveries for the surrogate, DCBP, were not within control limits following the initial PCB analyses of the method blank and the LCS/LCSD associated with water sample. Since the percent recoveries for the spiked Aroclors were within established QC Limits for the LCS/LCSD and no target compounds were detected in the method blank, no corrective actions were taken.

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Hirsch, Maul, Foster, Alongi, Inc.
Sims-N Cascade Ford, 0747.01.01
UT30
Soil/Water

22 My 2012

An MS was prepared and analyzed for total metals in conjunction with sample GP-2-S-1.1. The percent recoveries for barium and lead were not within control limits following the analysis of the MS. Since the percent recoveries for all elements were within acceptable QC limits for the corresponding LCS, it was concluded that the sample matrix was the cause of the low recoveries. No corrective actions were taken.

A matrix duplicate (MD) was prepared and analyzed for total metals in conjunction with sample GP-2-S-1.1. The RPDs for arsenic, barium and lead were high following the analysis of the MD. Since the percent recoveries for all elements were within acceptable QC limits for the corresponding LCS, it was concluded that a lack of sample homogeneity was the cause of the high RPDs. No corrective actions were taken.

The remaining analyses proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file UT30

MDH/mdh

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: UT30	Turn-around Requested: NWTPH-HCID = 48 HR TAT, Others = Standard
ARI Client Company: Maul Foster & Alongi	Phone: 360-927-1309
Client Contact: Heather Hirsch	
Client Project Name: SIMS - N. CASCADE FORD	
Client Project #: 0747.01.01	Samplers: H. Hirsch / A. Hughes

Page: 1 of 2	
Date: 5/6/12	Ice Present? 4
No. of Coolers: 2	Cooler Temps: 3.8, 2.0

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested: NWTPH-Gx	NWTPH-Dx	Metals (RCRA 8 by 6020)	VOCs (low level 8260B)	SVOCs (8270C)	PAHs (8270SIM)	PCBs (8082)	NWTPH-EPH	Notes/Comments
GP1-S-2.5	5/6/12	1100	SOIL	9	X	X	X	X	X	X	X	X	Hold = Analysis
GP2-S-1.1		1250	SOIL	8	Hold	Hold	X	Hold	Hold	Hold	Hold	—	will depend on HCID
GP3-S-2		1600	SOIL	8	Hold	Hold	X	Hold	Hold	Hold	Hold	—	results
GP1-W-7.5		1130	WATER	14	X	X	X	X	X	X	X	—	X = Analyze
GP2-W-10	↓	1400	WATER	10	X	X	X	X	—	X	—	—	- = Do not
TRIP BLANK	4/30/12		WATER	3									analyze

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by: (Signature)	Received by: (Signature)
edd's in Equis format; pdf lab report (no hard copy)				
	Printed Name: Heather Hirsch	Printed Name: Rachel Relle	Printed Name	Printed Name
	Company: Maul Foster & Alongi	Company: ARI	Company	Company
	Date & Time: 5/7/12 0900	Date & Time: 5/7/12 8:30	Date & Time	Date & Time

UT30:00003

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: UT30	Turn-around Requested: NWTPH-HCID = 48 HR TAT, others = Standard	Page: 2 of 2	
ARI Client Company: Maul Foster & Alongi	Phone: 360-927-1309	Date: 5/6/12	Ice Present? Y
Client Contact: Heather Hirsch		No. of Coolers: 2	Cooler Temps: 3.8, 2.0
Client Project Name: SIMS - N. CASCADE FORD			
Client Project #: 0747.01.01	Samplers: H. Hirsch / A. Hughes		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: NWTPH-VPH	TCLP for metals	NWTPH-HCID						Notes/Comments
GP1-S-2.5	5/6/12	1100	SOIL	3	X	X	—						Hold = Analysis
GP2-S-1.1	↓	1250	SOIL	1	—	—	X						will depend on
GP3-S-2	↓	1600	SOIL	1	—	—	X						HCID results
													X = Analyze
													— = Do not analyze

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by: (Signature)	Received by (Signature)
edd's in Equis format; pdf lab report (no hard copy)	Printed Name: Heather Hirsch	Printed Name: Rachel Pelle	Printed Name:	Printed Name:
	Company: Maul Foster & Alongi	Company: ARI	Company:	Company:
	Date & Time: 5/7/12 0900	Date & Time: 5/7/12 8:30	Date & Time	Date & Time

UT30 : 00004

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client Maul, Foster & Alongi
Project Name SIM 3 - N. Cascade Ford
COC No(s) _____ (NA)
Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____
Assigned ARI Job No. UT30
Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	(YES)	NO
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc)	(YES)	NO
Temperature of Cooler(s) (°C) (recommended 2.0-6 0 °C for chemistry)	3.8 2.0	
If cooler temperature is out of compliance fill out form 00070F	Temp Gun ID#: 90877952	

Cooler Accepted by JM (for RR) Date: 5/7/12 Time: 830

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used?	(Bubble Wrap) (Wet Ice) Gel Packs Baggies Foam Block Paper Other:		
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	(YES)	NO
Were all VOC vials free of air bubbles?	NA	YES	(NO)
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI.	NA	4/30/12	

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by JM Date: 5/7/12 Time: 1259

** ***Notify Project Manager of discrepancies or concerns*** **

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

Trip Blank = sm in 3 of 3

Metals for waters logged as diss, Field filtered written on bottles.

By: JM Date: 5/7/12

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm
• •	• • •	• • •

Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: UT30
Client: Maul, Foster & Alongi
Project Event: 0747.01.01
Project Name: SIMS - N Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	GP1-S-2.5	UT30A	12-8200	Soil	05/06/12 11:00	05/07/12 08:30
2.	GP2-S-1.1	UT30B	12-8201	Soil	05/06/12 12:50	05/07/12 08:30
3.	GP3-S-2	UT30C	12-8202	Soil	05/06/12 16:00	05/07/12 08:30
4.	GP1-S-2.5	UT30D	12-8203	Soil	05/06/12 11:00	05/07/12 08:30
5.	GP1-W-7.5	UT30E	12-8204	Water	05/06/12 11:30	05/07/12 08:30
6.	GP2-W-10	UT30F	12-8205	Water	05/06/12 14:00	05/07/12 08:30
7.	Trip Blank	UT30G	12-8206	Water	05/06/12	05/07/12 08:30
8.	Trip Blank	UT30H	12-8334	Water	05/06/12	05/07/12 08:30

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Duplicate RPD is not within established control limits
B	Reported value is less than the CRDL but ≥ the Reporting Limit
N	Matrix Spike recovery not within established control limits
NA	Not Applicable, analyte not spiked
H	The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
L	Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Flagged value is not within established control limits
B	Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
J	Estimated concentration when the value is less than ARI's established reporting limits
D	The spiked compound was not detected due to sample extract dilution
E	Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

UT30 : 00007

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

Geotechnical Data

A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F Samples were frozen prior to particle size determination

SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots was below the level required for accurate weighting

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP1-S-2.5**
Page 1 of 2 **SAMPLE**

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Instrument/Analyst: NT9/PAB
Date Analyzed: 05/17/12 15:36

Sample Amount: 60.7 mg-dry-wt
Purge Volume: 5.0 mL
Moisture: 25.1%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	82	< 82	U
74-83-9	**Bromomethane**	**82**	**34**	**J**
75-01-4	Vinyl Chloride	82	< 82	U
75-00-3	Chloroethane	82	< 82	U
75-09-2	**Methylene Chloride**	**160**	**200**	
67-64-1	**Acetone**	**410**	**350**	**J**
75-15-0	Carbon Disulfide	82	< 82	U
75-35-4	1,1-Dichloroethene	82	< 82	U
75-34-3	1,1-Dichloroethane	82	< 82	U
156-60-5	trans-1,2-Dichloroethene	82	< 82	U
156-59-2	cis-1,2-Dichloroethene	82	< 82	U
67-66-3	Chloroform	82	< 82	U
107-06-2	1,2-Dichloroethane	82	< 82	U
78-93-3	2-Butanone	410	< 410	U
71-55-6	1,1,1-Trichloroethane	82	< 82	U
56-23-5	Carbon Tetrachloride	82	< 82	U
108-05-4	Vinyl Acetate	410	< 410	U
75-27-4	Bromodichloromethane	82	< 82	U
78-87-5	1,2-Dichloropropane	82	< 82	U
10061-01-5	cis-1,3-Dichloropropene	82	< 82	U
79-01-6	Trichloroethene	82	< 82	U
124-48-1	Dibromochloromethane	82	< 82	U
79-00-5	1,1,2-Trichloroethane	82	< 82	U
71-43-2	Benzene	82	< 82	U
10061-02-6	trans-1,3-Dichloropropene	82	< 82	U
110-75-8	2-Chloroethylvinylether	410	< 410	U
75-25-2	Bromoform	82	< 82	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	410	< 410	U
591-78-6	2-Hexanone	410	< 410	U
127-18-4	Tetrachloroethene	82	< 82	U
79-34-5	1,1,2,2-Tetrachloroethane	82	< 82	U
108-88-3	Toluene	82	< 82	U
108-90-7	**Chlorobenzene**	**82**	**2,900**	
100-41-4	Ethylbenzene	82	< 82	U
100-42-5	Styrene	82	< 82	U
75-69-4	Trichlorofluoromethane	82	< 82	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	160	< 160	U
179601-23-1	m,p-Xylene	82	< 82	U
95-47-6	o-Xylene	82	< 82	U
95-50-1	**1,2-Dichlorobenzene**	**82**	**91**	
541-73-1	**1,3-Dichlorobenzene**	**82**	**140**	
106-46-7	**1,4-Dichlorobenzene**	**82**	**1,800**	
107-02-8	Acrolein	4,100	< 4,100	U
74-88-4	**Methyl Iodide**	**82**	**42**	**J**
74-96-4	Bromoethane	160	< 160	U
107-13-1	Acrylonitrile	410	< 410	U
563-58-6	1,1-Dichloropropene	82	< 82	U
74-95-3	Dibromomethane	82	< 82	U
630-20-6	1,1,1,2-Tetrachloroethane	82	< 82	U
96-12-8	1,2-Dibromo-3-chloropropane	410	< 410	U
96-18-4	1,2,3-Trichloropropane	160	< 160	U
110-57-6	trans-1,4-Dichloro-2-butene	410	< 410	U
108-67-8	**1,3,5-Trimethylbenzene**	**82**	**100**	

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP1-S-2.5**
 SAMPLE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Date Analyzed: 05/17/12 15:36

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
95-63-6	**1,2,4-Trimethylbenzene**	**82**	**270**	
87-68-3	Hexachlorobutadiene	410	< 410	U
106-93-4	Ethylene Dibromide	82	< 82	U
74-97-5	Bromochloromethane	82	< 82	U
594-20-7	2,2-Dichloropropane	82	< 82	U
142-28-9	1,3-Dichloropropane	82	< 82	U
98-82-8	**Isopropylbenzene**	**82**	**100**	
103-65-1	**n-Propylbenzene**	**82**	**350**	
108-86-1	Bromobenzene	82	< 82	U
95-49-8	2-Chlorotoluene	82	< 82	U
106-43-4	4-Chlorotoluene	82	< 82	U
98-06-6	tert-Butylbenzene	82	< 82	U
135-98-8	**sec-Butylbenzene**	**82**	**390**	
99-87-6	**4-Isopropyltoluene**	**82**	**410**	
104-51-8	**n-Butylbenzene**	**82**	**510**	
120-82-1	1,2,4-Trichlorobenzene	410	< 410	U
91-20-3	**Naphthalene**	**410**	**140**	**J**
87-61-6	1,2,3-Trichlorobenzene	410	< 410	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	100%
Bromofluorobenzene	114%
d4-1,2-Dichlorobenzene	104%

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-051712A**
 METHOD BLANK

Lab Sample ID: MB-051712A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT9/PAB
Date Analyzed: 05/17/12 11:34

Sample Amount: 100 mg-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	50	< 50	U
74-83-9	Bromomethane	50	< 50	U
75-01-4	Vinyl Chloride	50	< 50	U
75-00-3	Chloroethane	50	< 50	U
75-09-2	Methylene Chloride	100	< 100	U
67-64-1	Acetone	250	< 250	U
75-15-0	Carbon Disulfide	50	< 50	U
75-35-4	1,1-Dichloroethene	50	< 50	U
75-34-3	1,1-Dichloroethane	50	< 50	U
156-60-5	trans-1,2-Dichloroethene	50	< 50	U
156-59-2	cis-1,2-Dichloroethene	50	< 50	U
67-66-3	Chloroform	50	< 50	U
107-06-2	1,2-Dichloroethane	50	< 50	U
78-93-3	2-Butanone	250	< 250	U
71-55-6	1,1,1-Trichloroethane	50	< 50	U
56-23-5	Carbon Tetrachloride	50	< 50	U
108-05-4	Vinyl Acetate	250	< 250	U
75-27-4	Bromodichloromethane	50	< 50	U
78-87-5	1,2-Dichloropropane	50	< 50	U
10061-01-5	cis-1,3-Dichloropropene	50	< 50	U
79-01-6	Trichloroethene	50	< 50	U
124-48-1	Dibromochloromethane	50	< 50	U
79-00-5	1,1,2-Trichloroethane	50	< 50	U
71-43-2	Benzene	50	< 50	U
10061-02-6	trans-1,3-Dichloropropene	50	< 50	U
110-75-8	2-Chloroethylvinylether	250	< 250	U
75-25-2	Bromoform	50	< 50	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	250	< 250	U
591-78-6	2-Hexanone	250	< 250	U
127-18-4	Tetrachloroethene	50	< 50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	< 50	U
108-88-3	Toluene	50	< 50	U
108-90-7	Chlorobenzene	50	< 50	U
100-41-4	Ethylbenzene	50	< 50	U
100-42-5	Styrene	50	< 50	U
75-69-4	Trichlorofluoromethane	50	< 50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	100	< 100	U
179601-23-1	m,p-Xylene	50	< 50	U
95-47-6	o-Xylene	50	< 50	U
95-50-1	1,2-Dichlorobenzene	50	< 50	U
541-73-1	1,3-Dichlorobenzene	50	< 50	U
106-46-7	1,4-Dichlorobenzene	50	< 50	U
107-02-8	Acrolein	2,500	< 2,500	U
74-88-4	Methyl Iodide	50	< 50	U
74-96-4	Bromoethane	100	< 100	U
107-13-1	Acrylonitrile	250	< 250	U
563-58-6	1,1-Dichloropropene	50	< 50	U
74-95-3	Dibromomethane	50	< 50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	< 50	U
96-12-8	1,2-Dibromo-3-chloropropane	250	< 250	U
96-18-4	1,2,3-Trichloropropane	100	< 100	U
110-57-6	trans-1,4-Dichloro-2-butene	250	< 250	U
108-67-8	1,3,5-Trimethylbenzene	50	< 50	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-051712A**
 METHOD BLANK

Lab Sample ID: MB-051712A QC Report No: UT30-Maul, Foster & Alongi
LIMS ID: 12-8200 Project: SIMS - N Cascade Ford
Matrix: Soil 0747.01.01
Date Analyzed: 05/17/12 11:34

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	50	< 50	U
87-68-3	Hexachlorobutadiene	250	< 250	U
106-93-4	Ethylene Dibromide	50	< 50	U
74-97-5	Bromochloromethane	50	< 50	U
594-20-7	2,2-Dichloropropane	50	< 50	U
142-28-9	1,3-Dichloropropane	50	< 50	U
98-82-8	Isopropylbenzene	50	< 50	U
103-65-1	n-Propylbenzene	50	< 50	U
108-86-1	Bromobenzene	50	< 50	U
95-49-8	2-Chlorotoluene	50	< 50	U
106-43-4	4-Chlorotoluene	50	< 50	U
98-06-6	tert-Butylbenzene	50	< 50	U
135-98-8	sec-Butylbenzene	50	< 50	U
99-87-6	4-Isopropyltoluene	50	< 50	U
104-51-8	n-Butylbenzene	50	< 50	U
120-82-1	1,2,4-Trichlorobenzene	250	< 250	U
91-20-3	Naphthalene	250	< 250	U
87-61-6	1,2,3-Trichlorobenzene	250	< 250	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	98.5%
Bromofluorobenzene	94.6%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-051712A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-051712A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/22/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT9/PAB
LCSD: NT9/PAB
Date Analyzed LCS: 05/17/12 10:51
LCSD: 05/17/12 11:12

Sample Amount LCS: 100 mg-dry-wt
LCSD: 100 mg-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	2380		2500	95.2%	2460		2500	98.4%	3.3%
Bromomethane	2090		2500	83.6%	2070		2500	82.8%	1.0%
Vinyl Chloride	2670		2500	107%	2710		2500	108%	1.5%
Chloroethane	3750	Q	2500	150%	3290	Q	2500	132%	13.1%
Methylene Chloride	2150		2500	86.0%	2190		2500	87.6%	1.8%
Acetone	11000		12500	88.0%	11600		12500	92.8%	5.3%
Carbon Disulfide	2760		2500	110%	2820		2500	113%	2.2%
1,1-Dichloroethene	2480		2500	99.2%	2570		2500	103%	3.6%
1,1-Dichloroethane	2360		2500	94.4%	2460		2500	98.4%	4.1%
trans-1,2-Dichloroethene	2320		2500	92.8%	2380		2500	95.2%	2.6%
cis-1,2-Dichloroethene	2270		2500	90.8%	2360		2500	94.4%	3.9%
Chloroform	2280		2500	91.2%	2320		2500	92.8%	1.7%
1,2-Dichloroethane	2270		2500	90.8%	2340		2500	93.6%	3.0%
2-Butanone	9600		12500	76.8%	10900		12500	87.2%	12.7%
1,1,1-Trichloroethane	2320		2500	92.8%	2380		2500	95.2%	2.6%
Carbon Tetrachloride	2460		2500	98.4%	2580		2500	103%	4.8%
Vinyl Acetate	2130		2500	85.2%	2410		2500	96.4%	12.3%
Bromodichloromethane	2410		2500	96.4%	2510		2500	100%	4.1%
1,2-Dichloropropane	2270		2500	90.8%	2390		2500	95.6%	5.2%
cis-1,3-Dichloropropene	2400		2500	96.0%	2500		2500	100%	4.1%
Trichloroethene	2260		2500	90.4%	2380		2500	95.2%	5.2%
Dibromochloromethane	2370		2500	94.8%	2480		2500	99.2%	4.5%
1,1,2-Trichloroethane	2210		2500	88.4%	2330		2500	93.2%	5.3%
Benzene	2290		2500	91.6%	2380		2500	95.2%	3.9%
trans-1,3-Dichloropropene	2440		2500	97.6%	2540		2500	102%	4.0%
2-Chloroethylvinylether	2030		2500	81.2%	2120		2500	84.8%	4.3%
Bromoform	2300		2500	92.0%	2400		2500	96.0%	4.3%
4-Methyl-2-Pentanone (MIBK)	11100		12500	88.8%	12400		12500	99.2%	11.1%
2-Hexanone	11300		12500	90.4%	12800		12500	102%	12.4%
Tetrachloroethene	2300		2500	92.0%	2390		2500	95.6%	3.8%
1,1,2,2-Tetrachloroethane	2130		2500	85.2%	2270		2500	90.8%	6.4%
Toluene	2250		2500	90.0%	2380		2500	95.2%	5.6%
Chlorobenzene	2220		2500	88.8%	2320		2500	92.8%	4.4%
Ethylbenzene	2310		2500	92.4%	2460		2500	98.4%	6.3%
Styrene	2420		2500	96.8%	2560		2500	102%	5.6%
Trichlorofluoromethane	4210	Q	2500	168%	3600	Q	2500	144%	15.6%
1,1,2-Trichloro-1,2,2-trifluoroetha	2420		2500	96.8%	2510		2500	100%	3.7%
m,p-Xylene	4860		5000	97.2%	5060		5000	101%	4.0%
o-Xylene	2430		2500	97.2%	2540		2500	102%	4.4%
1,2-Dichlorobenzene	2230		2500	89.2%	2300		2500	92.0%	3.1%
1,3-Dichlorobenzene	2260		2500	90.4%	2320		2500	92.8%	2.6%
1,4-Dichlorobenzene	2220		2500	88.8%	2280		2500	91.2%	2.7%
Acrolein	11200		12500	89.6%	12100		12500	96.8%	7.7%
Methyl Iodide	2270		2500	90.8%	2370		2500	94.8%	4.3%
Bromoethane	2470		2500	98.8%	2510		2500	100%	1.6%
Acrylonitrile	2140		2500	85.6%	2340		2500	93.6%	8.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-051712A**

LAB CONTROL SAMPLE

Lab Sample ID: LCS-051712A
LIMS ID: 12-8200
Matrix: Soil

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,1-Dichloropropene	2340	2500	93.6%	2440	2500	97.6%	4.2%
Dibromomethane	2220	2500	88.8%	2320	2500	92.8%	4.4%
1,1,1,2-Tetrachloroethane	2350	2500	94.0%	2440	2500	97.6%	3.8%
1,2-Dibromo-3-chloropropane	2330	2500	93.2%	2600	2500	104%	11.0%
1,2,3-Trichloropropane	2070	2500	82.8%	2220	2500	88.8%	7.0%
trans-1,4-Dichloro-2-butene	2250	2500	90.0%	2460	2500	98.4%	8.9%
1,3,5-Trimethylbenzene	2370	2500	94.8%	2460	2500	98.4%	3.7%
1,2,4-Trimethylbenzene	2380	2500	95.2%	2470	2500	98.8%	3.7%
Hexachlorobutadiene	2200	2500	88.0%	2350	2500	94.0%	6.6%
Ethylene Dibromide	2220	2500	88.8%	2360	2500	94.4%	6.1%
Bromochloromethane	2260	2500	90.4%	2290	2500	91.6%	1.3%
2,2-Dichloropropane	2320	2500	92.8%	2390	2500	95.6%	3.0%
1,3-Dichloropropane	2240	2500	89.6%	2320	2500	92.8%	3.5%
Isopropylbenzene	2370	2500	94.8%	2460	2500	98.4%	3.7%
n-Propylbenzene	2370	2500	94.8%	2440	2500	97.6%	2.9%
Bromobenzene	2170	2500	86.8%	2220	2500	88.8%	2.3%
2-Chlorotoluene	2290	2500	91.6%	2360	2500	94.4%	3.0%
4-Chlorotoluene	2280	2500	91.2%	2340	2500	93.6%	2.6%
tert-Butylbenzene	2380	2500	95.2%	2480	2500	99.2%	4.1%
sec-Butylbenzene	2410	2500	96.4%	2490	2500	99.6%	3.3%
4-Isopropyltoluene	2460	2500	98.4%	2550	2500	102%	3.6%
n-Butylbenzene	2560	2500	102%	2620	2500	105%	2.3%
1,2,4-Trichlorobenzene	2420	2500	96.8%	2480	2500	99.2%	2.4%
Naphthalene	2260	2500	90.4%	2450	2500	98.0%	8.1%
1,2,3-Trichlorobenzene	2340	2500	93.6%	2420	2500	96.8%	3.4%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	99.2%	100%
d8-Toluene	98.1%	99.0%
Bromofluorobenzene	97.1%	98.3%
d4-1,2-Dichlorobenzene	101%	101%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-051712A	Method Blank	Med	106%	98.5%	94.6%	102%	0
LCS-051712A	Lab Control	Med	99.2%	98.1%	97.1%	101%	0
LCSD-051712A	Lab Control Dup	Med	100%	99.0%	98.3%	101%	0
UT30A	GP1-S-2.5	Med	100%	100%	114%	104%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260C	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	79-121	76-120	75-152	69-120
(TOL) = d8-Toluene	80-120	80-120	82-115	80-120
(BFB) = Bromofluorobenzene	80-120	80-120	64-120	76-128
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-120	80-120	80-120

Log Number Range: 12-8200 to 12-8200

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP1-W-7.5**
Page 1 of 2 **SAMPLE**

Lab Sample ID: UT30E
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/16/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/11/12 20:02

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**4.6**	**J**
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	**cis-1,2-Dichloroethene**	**0.2**	**0.1**	**J**
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	**1,2-Dichloroethane**	**0.2**	**0.2**	**J**
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	**1,2-Dichloropropane**	**0.2**	**0.2**	
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	**Benzene**	**0.2**	**1.7**	
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	**Toluene**	**0.2**	**0.6**	
108-90-7	**Chlorobenzene**	**0.2**	**310**	**E**
100-41-4	**Ethylbenzene**	**0.2**	**1.1**	
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	**m,p-Xylene**	**0.4**	**0.3**	**J**
95-47-6	**o-Xylene**	**0.2**	**1.2**	
95-50-1	**1,2-Dichlorobenzene**	**0.2**	**1.7**	
541-73-1	**1,3-Dichlorobenzene**	**0.2**	**3.4**	
106-46-7	**1,4-Dichlorobenzene**	**0.2**	**50**	

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP1-W-7.5**
 SAMPLE

Lab Sample ID: UT30E
LIMS ID: 12-8204
Matrix: Water
Date Analyzed: 05/11/12 20:02

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	**1,2,3-Trichloropropane**	**0.5**	**0.4**	**J**
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	**1,3,5-Trimethylbenzene**	**0.2**	**2.2**	
95-63-6	**1,2,4-Trimethylbenzene**	**0.2**	**2.8**	
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	**Isopropylbenzene**	**0.2**	**6.0**	
103-65-1	**n-Propylbenzene**	**0.2**	**11**	
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	**2-Chlorotoluene**	**0.2**	**0.8**	
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	**tert-Butylbenzene**	**0.2**	**0.6**	
135-98-8	**sec-Butylbenzene**	**0.2**	**4.9**	
99-87-6	**4-Isopropyltoluene**	**0.2**	**3.4**	
104-51-8	**n-Butylbenzene**	**0.2**	**2.8**	
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	**Naphthalene**	**0.5**	**1.1**	
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	99.9%
Bromofluorobenzene	117%
d4-1,2-Dichlorobenzene	85.7%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP1-W-7.5**
Page 1 of 2 **DILUTION**

Lab Sample ID: UT30E
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/16/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/14/12 21:17

Sample Amount: 1.00 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	5.0	< 5.0	U
74-83-9	Bromomethane	10	< 10	U
75-01-4	Vinyl Chloride	2.0	< 2.0	U
75-00-3	Chloroethane	2.0	< 2.0	U
75-09-2	Methylene Chloride	10	< 10	U
67-64-1	Acetone	50	< 50	U
75-15-0	Carbon Disulfide	2.0	< 2.0	U
75-35-4	1,1-Dichloroethene	2.0	< 2.0	U
75-34-3	1,1-Dichloroethane	2.0	< 2.0	U
156-60-5	trans-1,2-Dichloroethene	2.0	< 2.0	U
156-59-2	cis-1,2-Dichloroethene	2.0	< 2.0	U
67-66-3	Chloroform	2.0	< 2.0	U
107-06-2	1,2-Dichloroethane	2.0	< 2.0	U
78-93-3	2-Butanone	50	< 50	U
71-55-6	1,1,1-Trichloroethane	2.0	< 2.0	U
56-23-5	Carbon Tetrachloride	2.0	< 2.0	U
108-05-4	Vinyl Acetate	2.0	< 2.0	U
75-27-4	Bromodichloromethane	2.0	< 2.0	U
78-87-5	1,2-Dichloropropane	2.0	< 2.0	U
10061-01-5	cis-1,3-Dichloropropene	2.0	< 2.0	U
79-01-6	Trichloroethene	2.0	< 2.0	U
124-48-1	Dibromochloromethane	2.0	< 2.0	U
79-00-5	1,1,2-Trichloroethane	2.0	< 2.0	U
71-43-2	**Benzene**	**2.0**	**1.6**	**J**
10061-02-6	trans-1,3-Dichloropropene	2.0	< 2.0	U
110-75-8	2-Chloroethylvinylether	10	< 10	U
75-25-2	Bromoform	2.0	< 2.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	50	< 50	U
591-78-6	2-Hexanone	50	< 50	U
127-18-4	Tetrachloroethene	2.0	< 2.0	U
79-34-5	1,1,2,2-Tetrachloroethane	2.0	< 2.0	U
108-88-3	Toluene	2.0	< 2.0	U
108-90-7	**Chlorobenzene**	**2.0**	**340**	
100-41-4	Ethylbenzene	2.0	< 2.0	U
100-42-5	Styrene	2.0	< 2.0	U
75-69-4	Trichlorofluoromethane	2.0	< 2.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	< 2.0	U
179601-23-1	m,p-Xylene	4.0	< 4.0	U
95-47-6	o-Xylene	2.0	< 2.0	U
95-50-1	**1,2-Dichlorobenzene**	**2.0**	**1.3**	**J**
541-73-1	**1,3-Dichlorobenzene**	**2.0**	**2.4**	
106-46-7	**1,4-Dichlorobenzene**	**2.0**	**42**	

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP1-W-7.5**
 DILUTION

Lab Sample ID: UT30E
LIMS ID: 12-8204
Matrix: Water
Date Analyzed: 05/14/12 21:17

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	50	< 50	U
74-88-4	Methyl Iodide	10	< 10	U
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	10	< 10	U
563-58-6	1,1-Dichloropropene	2.0	< 2.0	U
74-95-3	Dibromomethane	2.0	< 2.0	U
630-20-6	1,1,1,2-Tetrachloroethane	2.0	< 2.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	< 5.0	U
110-57-6	trans-1,4-Dichloro-2-butene	10	< 10	U
108-67-8	**1,3,5-Trimethylbenzene**	**2.0**	**1.7**	**J**
95-63-6	**1,2,4-Trimethylbenzene**	**2.0**	**2.3**	
87-68-3	Hexachlorobutadiene	5.0	< 5.0	U
106-93-4	Ethylene Dibromide	2.0	< 2.0	U
74-97-5	Bromochloromethane	2.0	< 2.0	U
594-20-7	2,2-Dichloropropane	2.0	< 2.0	U
142-28-9	1,3-Dichloropropane	2.0	< 2.0	U
98-82-8	**Isopropylbenzene**	**2.0**	**3.8**	
103-65-1	**n-Propylbenzene**	**2.0**	**7.0**	
108-86-1	Bromobenzene	2.0	< 2.0	U
95-49-8	2-Chlorotoluene	2.0	< 2.0	U
106-43-4	4-Chlorotoluene	2.0	< 2.0	U
98-06-6	tert-Butylbenzene	2.0	< 2.0	U
135-98-8	**sec-Butylbenzene**	**2.0**	**2.8**	
99-87-6	**4-Isopropyltoluene**	**2.0**	**2.3**	
104-51-8	**n-Butylbenzene**	**2.0**	**1.8**	**J**
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
91-20-3	Naphthalene	5.0	< 5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	113%
d8-Toluene	104%
Bromofluorobenzene	99.8%
d4-1,2-Dichlorobenzene	98.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP2-W-10**
Page 1 of 2 **SAMPLE**

Lab Sample ID: UT30F
LIMS ID: 12-8205
Matrix: Water
Data Release Authorized:
Reported: 05/16/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/14/12 21:45

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP2-W-10**
 SAMPLE

Lab Sample ID: UT30F
LIMS ID: 12-8205
Matrix: Water
Date Analyzed: 05/14/12 21:45

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	110%
d8-Toluene	97.1%
Bromofluorobenzene	96.6%
d4-1,2-Dichlorobenzene	98.9%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: Trip Blank**
Page 1 of 2 **SAMPLE**

Lab Sample ID: UT30G
LIMS ID: 12-8206
Matrix: Water
Data Release Authorized:
Reported: 05/16/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/11/12 20:55

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: Trip Blank**
 SAMPLE

Lab Sample ID: UT30G
LIMS ID: 12-8206
Matrix: Water
Date Analyzed: 05/11/12 20:55

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	110%
d8-Toluene	97.2%
Bromofluorobenzene	98.4%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-051112A**
 METHOD BLANK

Lab Sample ID: MB-051112A
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/16/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/11/12 11:29

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-051112A**
 METHOD BLANK

Lab Sample ID: MB-051112A QC Report No: UT30-Maul, Foster & Alongi
LIMS ID: 12-8204 Project: SIMS - N Cascade Ford
Matrix: Water 0747.01.01
Date Analyzed: 05/11/12 11:29

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	**Hexachlorobutadiene**	**0.5**	**0.1**	**J**
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	**1,2,4-Trichlorobenzene**	**0.5**	**0.1**	**J**
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	**1,2,3-Trichlorobenzene**	**0.5**	**0.2**	**J**

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	114%
d8-Toluene	103%
Bromofluorobenzene	100%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-051412A**
 METHOD BLANK

Lab Sample ID: MB-051412A
LIMS ID: 12-8205
Matrix: Water
Data Release Authorized:
Reported: 05/16/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/14/12 17:54

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

Lab Sample ID: MB-051412A
LIMS ID: 12-8205
Matrix: Water
Date Analyzed: 05/14/12 17:54

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	**Hexachlorobutadiene**	**0.5**	**0.2**	**J**
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	**1,2,4-Trichlorobenzene**	**0.5**	**0.2**	**J**
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	**1,2,3-Trichlorobenzene**	**0.5**	**0.3**	**J**

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	101%
Bromofluorobenzene	115%
d4-1,2-Dichlorobenzene	103%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-051112A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-051112A
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/16/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PKC
LCSD: NT2/PKC
Date Analyzed LCS: 05/11/12 10:36
LCSD: 05/11/12 11:02

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	11.0		10.0	110%	11.2		10.0	112%	1.8%
Bromomethane	12.4	Q	10.0	124%	12.9	Q	10.0	129%	4.0%
Vinyl Chloride	11.4		10.0	114%	12.0		10.0	120%	5.1%
Chloroethane	12.4	Q	10.0	124%	12.9	Q	10.0	129%	4.0%
Methylene Chloride	10.8		10.0	108%	11.2		10.0	112%	3.6%
Acetone	53.8		50.0	108%	53.7		50.0	107%	0.2%
Carbon Disulfide	10.9		10.0	109%	11.4		10.0	114%	4.5%
1,1-Dichloroethene	10.6		10.0	106%	11.1		10.0	111%	4.6%
1,1-Dichloroethane	10.6		10.0	106%	11.0		10.0	110%	3.7%
trans-1,2-Dichloroethene	10.6		10.0	106%	11.2		10.0	112%	5.5%
cis-1,2-Dichloroethene	10.8		10.0	108%	11.1		10.0	111%	2.7%
Chloroform	10.6		10.0	106%	10.8		10.0	108%	1.9%
1,2-Dichloroethane	10.5		10.0	105%	10.1		10.0	101%	3.9%
2-Butanone	54.9		50.0	110%	51.7		50.0	103%	6.0%
1,1,1-Trichloroethane	11.0		10.0	110%	11.6		10.0	116%	5.3%
Carbon Tetrachloride	10.5		10.0	105%	11.0		10.0	110%	4.7%
Vinyl Acetate	10.2		10.0	102%	9.9		10.0	99.0%	3.0%
Bromodichloromethane	10.5		10.0	105%	10.3		10.0	103%	1.9%
1,2-Dichloropropane	10.3		10.0	103%	10.2		10.0	102%	1.0%
cis-1,3-Dichloropropene	11.0		10.0	110%	10.3		10.0	103%	6.6%
Trichloroethene	10.1		10.0	101%	10.2		10.0	102%	1.0%
Dibromochloromethane	10.2		10.0	102%	9.9		10.0	99.0%	3.0%
1,1,2-Trichloroethane	10.1		10.0	101%	9.7		10.0	97.0%	4.0%
Benzene	10.4		10.0	104%	10.4		10.0	104%	0.0%
trans-1,3-Dichloropropene	11.2		10.0	112%	10.2		10.0	102%	9.3%
2-Chloroethylvinylether	9.1	Q	10.0	91.0%	8.3	Q	10.0	83.0%	9.2%
Bromoform	10.4		10.0	104%	10.0		10.0	100%	3.9%
4-Methyl-2-Pentanone (MIBK)	56.4		50.0	113%	53.7		50.0	107%	4.9%
2-Hexanone	57.1		50.0	114%	50.0		50.0	100%	13.3%
Tetrachloroethene	9.2		10.0	92.0%	9.1		10.0	91.0%	1.1%
1,1,2,2-Tetrachloroethane	10.1		10.0	101%	9.7		10.0	97.0%	4.0%
Toluene	10.5		10.0	105%	10.4		10.0	104%	1.0%
Chlorobenzene	10.2		10.0	102%	10.0		10.0	100%	2.0%
Ethylbenzene	10.8		10.0	108%	10.7		10.0	107%	0.9%
Styrene	11.2		10.0	112%	10.9		10.0	109%	2.7%
Trichlorofluoromethane	11.4		10.0	114%	11.8		10.0	118%	3.4%
1,1,2-Trichloro-1,2,2-trifluoroetha	11.1		10.0	111%	11.4		10.0	114%	2.7%
m,p-Xylene	22.4		20.0	112%	22.3		20.0	112%	0.4%
o-Xylene	11.0		10.0	110%	11.0		10.0	110%	0.0%
1,2-Dichlorobenzene	10.1		10.0	101%	10.1		10.0	101%	0.0%
1,3-Dichlorobenzene	10.4		10.0	104%	10.0		10.0	100%	3.9%
1,4-Dichlorobenzene	10.1		10.0	101%	10.0		10.0	100%	1.0%
Acrolein	51.5		50.0	103%	51.4		50.0	103%	0.2%
Methyl Iodide	10.6		10.0	106%	11.2		10.0	112%	5.5%
Bromoethane	10.6		10.0	106%	11.2		10.0	112%	5.5%
Acrylonitrile	10.8		10.0	108%	10.8		10.0	108%	0.0%
1,1-Dichloropropene	10.8		10.0	108%	10.7		10.0	107%	0.9%
Dibromomethane	10.5		10.0	105%	10.2		10.0	102%	2.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-051112A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-051112A QC Report No: UT30-Maul, Foster & Alongi
LIMS ID: 12-8204 Project: SIMS - N Cascade Ford
Matrix: Water 0747.01.01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,1,1,2-Tetrachloroethane	10.2	10.0	102%	10.4	10.0	104%	1.9%
1,2-Dibromo-3-chloropropane	10.0	10.0	100%	10.4	10.0	104%	3.9%
1,2,3-Trichloropropane	10.3	10.0	103%	10.0	10.0	100%	3.0%
trans-1,4-Dichloro-2-butene	11.2	10.0	112%	10.5	10.0	105%	6.5%
1,3,5-Trimethylbenzene	11.2	10.0	112%	11.0	10.0	110%	1.8%
1,2,4-Trimethylbenzene	11.4	10.0	114%	11.0	10.0	110%	3.6%
Hexachlorobutadiene	9.6 B	10.0	96.0%	9.7 B	10.0	97.0%	1.0%
Ethylene Dibromide	10.8	10.0	108%	9.9	10.0	99.0%	8.7%
Bromochloromethane	10.5	10.0	105%	10.6	10.0	106%	0.9%
2,2-Dichloropropane	11.7	10.0	117%	12.6	10.0	126%	7.4%
1,3-Dichloropropane	10.0	10.0	100%	9.5	10.0	95.0%	5.1%
Isopropylbenzene	11.2	10.0	112%	10.9	10.0	109%	2.7%
n-Propylbenzene	11.0	10.0	110%	10.6	10.0	106%	3.7%
Bromobenzene	10.3	10.0	103%	9.8	10.0	98.0%	5.0%
2-Chlorotoluene	10.6	10.0	106%	10.4	10.0	104%	1.9%
4-Chlorotoluene	10.9	10.0	109%	10.4	10.0	104%	4.7%
tert-Butylbenzene	11.0	10.0	110%	10.9	10.0	109%	0.9%
sec-Butylbenzene	11.0	10.0	110%	11.0	10.0	110%	0.0%
4-Isopropyltoluene	11.3	10.0	113%	11.1	10.0	111%	1.8%
n-Butylbenzene	11.3	10.0	113%	11.0	10.0	110%	2.7%
1,2,4-Trichlorobenzene	10.5 B	10.0	105%	10.7 B	10.0	107%	1.9%
Naphthalene	9.1	10.0	91.0%	9.4	10.0	94.0%	3.2%
1,2,3-Trichlorobenzene	10.2 B	10.0	102%	10.4 B	10.0	104%	1.9%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	104%	103%
d8-Toluene	102%	103%
Bromofluorobenzene	101%	100%
d4-1,2-Dichlorobenzene	99.8%	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-051412A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-051412A
LIMS ID: 12-8205
Matrix: Water
Data Release Authorized:
Reported: 05/16/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PKC
LCSD: NT2/PKC
Date Analyzed LCS: 05/14/12 17:00
LCSD: 05/14/12 17:27

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	11.3		10.0	113%	9.6		10.0	96.0%	16.3%
Bromomethane	13.3		10.0	133%	12.2		10.0	122%	8.6%
Vinyl Chloride	12.0		10.0	120%	11.5		10.0	115%	4.3%
Chloroethane	13.4		10.0	134%	12.6		10.0	126%	6.2%
Methylene Chloride	10.0		10.0	100%	8.5		10.0	85.0%	16.2%
Acetone	50.0		50.0	100%	44.8		50.0	89.6%	11.0%
Carbon Disulfide	10.9		10.0	109%	9.4		10.0	94.0%	14.8%
1,1-Dichloroethene	10.6		10.0	106%	9.2		10.0	92.0%	14.1%
1,1-Dichloroethane	10.2		10.0	102%	9.3		10.0	93.0%	9.2%
trans-1,2-Dichloroethene	10.4		10.0	104%	9.0		10.0	90.0%	14.4%
cis-1,2-Dichloroethene	10.1		10.0	101%	9.4		10.0	94.0%	7.2%
Chloroform	10.7		10.0	107%	10.1		10.0	101%	5.8%
1,2-Dichloroethane	10.9		10.0	109%	10.2		10.0	102%	6.6%
2-Butanone	43.9		50.0	87.8%	49.5		50.0	99.0%	12.0%
1,1,1-Trichloroethane	11.3		10.0	113%	10.9		10.0	109%	3.6%
Carbon Tetrachloride	13.0		10.0	130%	11.5		10.0	115%	12.2%
Vinyl Acetate	8.9		10.0	89.0%	9.0		10.0	90.0%	1.1%
Bromodichloromethane	10.7		10.0	107%	10.3		10.0	103%	3.8%
1,2-Dichloropropane	10.1		10.0	101%	9.6		10.0	96.0%	5.1%
cis-1,3-Dichloropropene	9.4		10.0	94.0%	10.2		10.0	102%	8.2%
Trichloroethene	10.5		10.0	105%	10.4		10.0	104%	1.0%
Dibromochloromethane	10.7		10.0	107%	10.0		10.0	100%	6.8%
1,1,2-Trichloroethane	9.8		10.0	98.0%	10.0		10.0	100%	2.0%
Benzene	10.2		10.0	102%	9.7		10.0	97.0%	5.0%
trans-1,3-Dichloropropene	9.5		10.0	95.0%	9.6		10.0	96.0%	1.0%
2-Chloroethylvinylether	8.0	Q	10.0	80.0%	8.8	Q	10.0	88.0%	9.5%
Bromoform	10.7		10.0	107%	10.7		10.0	107%	0.0%
4-Methyl-2-Pentanone (MIBK)	55.8		50.0	112%	53.0		50.0	106%	5.1%
2-Hexanone	49.5		50.0	99.0%	50.1		50.0	100%	1.2%
Tetrachloroethene	10.6		10.0	106%	10.0		10.0	100%	5.8%
1,1,2,2-Tetrachloroethane	9.4		10.0	94.0%	9.8		10.0	98.0%	4.2%
Toluene	9.8		10.0	98.0%	9.6		10.0	96.0%	2.1%
Chlorobenzene	9.9		10.0	99.0%	9.7		10.0	97.0%	2.0%
Ethylbenzene	10.7		10.0	107%	10.4		10.0	104%	2.8%
Styrene	11.1		10.0	111%	11.2		10.0	112%	0.9%
Trichlorofluoromethane	13.2		10.0	132%	12.1		10.0	121%	8.7%
1,1,2-Trichloro-1,2,2-trifluoroetha	11.2		10.0	112%	9.6		10.0	96.0%	15.4%
m,p-Xylene	22.6		20.0	113%	21.2		20.0	106%	6.4%
o-Xylene	11.8		10.0	118%	11.0		10.0	110%	7.0%
1,2-Dichlorobenzene	9.9		10.0	99.0%	9.9		10.0	99.0%	0.0%
1,3-Dichlorobenzene	10.0		10.0	100%	9.9		10.0	99.0%	1.0%
1,4-Dichlorobenzene	9.7		10.0	97.0%	9.6		10.0	96.0%	1.0%
Acrolein	49.0		50.0	98.0%	42.5		50.0	85.0%	14.2%
Methyl Iodide	11.1		10.0	111%	9.5		10.0	95.0%	15.5%
Bromoethane	11.0		10.0	110%	9.3		10.0	93.0%	16.7%
Acrylonitrile	9.9		10.0	99.0%	9.0		10.0	90.0%	9.5%
1,1-Dichloropropene	11.3		10.0	113%	10.7		10.0	107%	5.5%
Dibromomethane	10.1		10.0	101%	9.8		10.0	98.0%	3.0%

Lab Sample ID: LCS-051412A QC Report No: UT30-Maul, Foster & Alongi
LIMS ID: 12-8205 Project: SIMS - N Cascade Ford
Matrix: Water 0747.01.01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,1,1,2-Tetrachloroethane	12.2	10.0	122%	10.8	10.0	108%	12.2%
1,2-Dibromo-3-chloropropane	11.3	10.0	113%	10.8	10.0	108%	4.5%
1,2,3-Trichloropropane	10.8	10.0	108%	9.9	10.0	99.0%	8.7%
trans-1,4-Dichloro-2-butene	8.8	10.0	88.0%	8.4	10.0	84.0%	4.7%
1,3,5-Trimethylbenzene	12.1	10.0	121%	10.9	10.0	109%	10.4%
1,2,4-Trimethylbenzene	11.6	10.0	116%	11.3	10.0	113%	2.6%
Hexachlorobutadiene	11.3 B	10.0	113%	11.4 B	10.0	114%	0.9%
Ethylene Dibromide	9.7	10.0	97.0%	9.6	10.0	96.0%	1.0%
Bromochloromethane	10.7	10.0	107%	9.5	10.0	95.0%	11.9%
2,2-Dichloropropane	12.7	10.0	127%	11.8	10.0	118%	7.3%
1,3-Dichloropropane	9.1	10.0	91.0%	9.0	10.0	90.0%	1.1%
Isopropylbenzene	11.2	10.0	112%	11.2	10.0	112%	0.0%
n-Propylbenzene	10.6	10.0	106%	10.4	10.0	104%	1.9%
Bromobenzene	9.8	10.0	98.0%	9.7	10.0	97.0%	1.0%
2-Chlorotoluene	11.0	10.0	110%	10.3	10.0	103%	6.6%
4-Chlorotoluene	10.1	10.0	101%	10.0	10.0	100%	1.0%
tert-Butylbenzene	10.8	10.0	108%	11.6	10.0	116%	7.1%
sec-Butylbenzene	11.0	10.0	110%	10.8	10.0	108%	1.8%
4-Isopropyltoluene	11.4	10.0	114%	11.3	10.0	113%	0.9%
n-Butylbenzene	11.3	10.0	113%	11.1	10.0	111%	1.8%
1,2,4-Trichlorobenzene	11.6 B	10.0	116%	11.6 B	10.0	116%	0.0%
Naphthalene	11.5	10.0	115%	11.4	10.0	114%	0.9%
1,2,3-Trichlorobenzene	11.5 B	10.0	115%	11.4 B	10.0	114%	0.9%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	102%	101%
d8-Toluene	102%	97.6%
Bromofluorobenzene	103%	105%
d4-1,2-Dichlorobenzene	103%	102%

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt9.i Injection Date: 17-MAY-2012 10:06
Lab File ID: 0500517.d Init. Cal. Date(s): 09-MAY-2012 09-MAY-2012
Analysis Type: SOIL Init. Cal. Times: 11:34 15:04
Lab Sample ID: CC0517 Quant Type: ISTD
Method: /chem1/nt9.i/17MAY12.b/VO050912S.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 Dichlorodifluoromethane	0.60690	0.58083	0.100	-4.29625	20.00000	Averaged	
2 Chloromethane	1.14497	1.08080	0.100	-5.60391	20.00000	Averaged	
3 Vinyl Chloride	0.94372	0.97959	0.100	3.80119	20.00000	Averaged	
4 Bromomethane	0.66458	0.54392	0.100	-18.15598	20.00000	Averaged	
5 Chloroethane	0.31781	0.41198	0.080	29.63183	20.00000	Averaged	<-
6 Trichlorofluoromethane	0.64890	1.03514	0.100	59.52241	20.00000	Averaged	<-
7 1,1-Dichloroethene	0.69181	0.69823	0.100	0.92767	20.00000	Averaged	
8 Carbon Disulfide	2.47430	2.78610	0.010	12.60167	20.00000	Averaged	
9 112Trichloro122Trifluoroeth	0.77947	0.78627	0.010	0.87303	20.00000	Averaged	
10 Iodomethane	0.75711	0.68405	0.010	-9.64975	20.00000	Averaged	
11 Bromoethane	0.52116	0.54302	0.100	4.19390	20.00000	Averaged	
12 Acrolein	0.11793	0.12323	0.000	4.49230	20.00000	Averaged	
13 Methylene Chloride	0.84113	0.79407	0.010	-5.59558	20.00000	Averaged	
14 Acetone	0.19597	0.20091	0.001	2.52181	20.00000	Averaged	
15 Trans-1,2-Dichloroethene	0.81763	0.81586	0.010	-0.21705	20.00000	Averaged	
16 Methyl tert butyl ether	2.01552	1.95448	0.100	-3.02832	20.00000	Averaged	
17 1,1-Dichloroethane	1.45586	1.52856	0.100	4.99371	20.00000	Averaged	
18 Acrylonitrile	0.25484	0.26036	0.001	2.16464	20.00000	Averaged	
19 Vinyl Acetate	1.28055	1.25905	0.010	-1.67934	20.00000	Averaged	
20 Cis-1,2-Dichloroethene	0.81966	0.82000	0.010	0.04175	20.00000	Averaged	
22 2,2-Dichloropropane	1.12647	1.12699	0.010	0.04649	20.00000	Averaged	
23 Bromochloromethane	0.36693	0.36047	0.050	-1.75995	20.00000	Averaged	
24 Chloroform	1.29660	1.30769	0.100	0.85475	20.00000	Averaged	
25 Carbon Tetrachloride	0.38592	0.41248	0.100	6.88164	20.00000	Averaged	
$ 27 Dibromofluoromethane	0.77395	0.74601	0.100	-3.61069	20.00000	Averaged	
26 1,1,1-Trichloroethane	1.18472	1.18682	0.100	0.17736	20.00000	Averaged	
28 1,1-Dichloropropene	0.42901	0.43270	0.010	0.86077	20.00000	Averaged	
29 2-Butanone	0.07681	0.07295	0.001	-5.01691	20.00000	Averaged	
30 Benzene	1.32438	1.32798	0.100	0.27137	20.00000	Averaged	
$ 32 d4-1,2-Dichloroethane	0.79670	0.79624	0.010	-0.05810	20.00000	Averaged	
33 1,2-Dichloroethane	0.38332	0.38438	0.100	0.27780	20.00000	Averaged	
34 Trichloroethene	0.32616	0.32326	0.100	-0.89028	20.00000	Averaged	
37 Dibromomethane	0.15987	0.15917	0.010	-0.43732	20.00000	Averaged	
38 1,2-Dichloropropane	0.33489	0.33695	0.100	0.61477	20.00000	Averaged	
39 Bromodichloromethane	0.37765	0.39708	0.100	5.14712	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt9.i Injection Date: 17-MAY-2012 10:06
Lab File ID: 0500517.d Init. Cal. Date(s): 09-MAY-2012 09-MAY-2012
Analysis Type: SOIL Init. Cal. Times: 11:34 15:04
Lab Sample ID: CC0517 Quant Type: ISTD
Method: /chem1/nt9.i/17MAY12.b/VO050912S.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
40 2-Chloroethyl Vinyl Ether	0.05826	0.05578	0.000	-4.24897	20.00000	Averaged
41 Cis 1,3-dichloropropene	0.48137	0.50671	0.100	5.26274	20.00000	Averaged
$ 42 d8-Toluene	1.32144	1.31264	0.010	-0.66609	20.00000	Averaged
43 Toluene	0.89752	0.87734	0.100	-2.24773	20.00000	Averaged
44 Tetrachloroethene	0.34903	0.34029	0.100	-2.50357	20.00000	Averaged
45 4-Methyl-2-Pentanone	0.10871	0.11623	0.000	6.92290	20.00000	Averaged
46 Trans 1,3-Dichloropropene	0.42851	0.46566	0.010	8.66915	20.00000	Averaged
47 1,1,2-Trichloroethane	0.25241	0.25202	0.100	-0.15799	20.00000	Averaged
48 Chlorodibromomethane	0.26301	0.27677	0.100	5.23200	20.00000	Averaged
49 1,3-Dichloropropane	0.43377	0.43067	0.100	-0.71558	20.00000	Averaged
50 1,2-Dibromoethane	0.24526	0.24660	0.010	0.54598	20.00000	Averaged
51 2-Hexanone	0.19034	0.21078	0.010	10.73783	20.00000	Averaged
53 Chlorobenzene	0.96353	0.93522	0.300	-2.93840	20.00000	Averaged
54 Ethyl Benzene	1.66920	1.68695	0.100	1.06301	20.00000	Averaged
55 1,1,1,2-Tetrachloroethane	0.29419	0.30376	0.010	3.25321	20.00000	Averaged
56 m,p-xylene	0.63649	0.66400	0.100	4.32343	20.00000	Averaged
57 o-Xylene	0.59123	0.62195	0.100	5.19638	20.00000	Averaged
58 Styrene	0.98816	1.03567	0.100	4.80861	20.00000	Averaged
59 Bromoform	0.34105	0.36554	0.100	7.17999	20.00000	Averaged
60 Isopropyl Benzene	3.22942	3.34123	0.010	3.46204	20.00000	Averaged
$ 62 4-Bromofluorobenzene	0.47526	0.45785	0.200	-3.66308	20.00000	Averaged
63 Bromobenzene	0.78559	0.75338	0.010	-4.09970	20.00000	Averaged
64 N-Propyl Benzene	3.93024	4.00390	0.010	1.87412	20.00000	Averaged
65 1,1,2,2-Tetrachloroethane	0.60910	0.60906	0.300	-0.00726	20.00000	Averaged
66 2-Chloro Toluene	2.33682	2.29142	0.010	-1.94264	20.00000	Averaged
67 1,3,5-Trimethyl Benzene	2.65871	2.76655	0.010	4.05637	20.00000	Averaged
68 1,2,3-Trichloropropane	0.20691	0.20721	0.010	0.14630	20.00000	Averaged
69 Trans-1,4-Dichloro 2-Butene	0.21080	0.21964	0.001	4.19742	20.00000	Averaged
70 4-Chloro Toluene	2.39234	2.35290	0.010	-1.64848	20.00000	Averaged
71 T-Butyl Benzene	2.31455	2.42804	0.010	4.90321	20.00000	Averaged
72 1,2,4-Trimethylbenzene	2.65537	2.75175	0.010	3.62960	20.00000	Averaged
73 S-Butyl Benzene	3.63756	3.81384	0.010	4.84608	20.00000	Averaged
74 4-Isopropyl Toluene	2.83184	3.01898	0.010	6.60838	20.00000	Averaged
75 1,3-Dichlorobenzene	1.54815	1.51490	0.100	-2.14753	20.00000	Averaged
77 1,4-Dichlorobenzene	1.58787	1.53209	0.100	-3.51315	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt9.i
Lab File ID: 0500517.d
Analysis Type: SOIL
Lab Sample ID: CC0517
Method: /chem1/nt9.i/17MAY12.b/VO050912S.m

Injection Date: 17-MAY-2012 10:06
Init. Cal. Date(s): 09-MAY-2012 09-MAY-2012
Init. Cal. Times: 11:34 15:04
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
78 N-Butyl Benzene	2.67407	2.87904	0.010	7.66545	20.00000	Averaged
$ 79 d4-1,2-Dichlorobenzene	0.92859	0.94633	0.010	1.91037	20.00000	Averaged
80 1,2-Dichlorobenzene	1.43223	1.40607	0.100	-1.82616	20.00000	Averaged
81 1,2-Dibromo 3-Chloropropane	0.09259	0.10606	0.010	14.54182	20.00000	Averaged
82 Hexachloro 1,3-Butadiene	0.57158	0.56101	0.010	-1.84995	20.00000	Averaged
83 1,2,4-Trichlorobenzene	0.91858	0.93162	0.010	1.41912	20.00000	Averaged
84 Naphthalene	1.87670	2.00257	0.010	6.70704	20.00000	Averaged
85 1,2,3-Trichlorobenzene	0.84178	0.85197	0.010	1.21089	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i
Lab File ID: cc0511.d
Analysis Type: WATER
Lab Sample ID: CC0511
Method: /chem3/nt2.i/20120511.b/82600507L.m

Injection Date: 11-MAY-2012 10:09
Init. Cal. Date(s): 07-MAY-2012 07-MAY-2012
Init. Cal. Times: 10:49 13:56
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 Dichlorodifluoromethane	0.62473	0.73873	0.73873	0.010	18.24780	20.00000	Averaged	
2 Chloromethane	1.01677	1.18411	1.18411	0.100	16.45872	20.00000	Averaged	
3 Vinyl Chloride	0.87762	1.02224	1.02224	0.100	16.47891	20.00000	Averaged	
4 Bromomethane	0.35988	0.44029	0.44029	0.100	22.34466	20.00000	Averaged	<-
5 Chloroethane	13.04842	10.00000	0.59941	0.010	30.48422	20.00000	Quadratic	<-
6 Trichlorofluoromethane	0.85588	1.01309	1.01309	0.010	18.36728	20.00000	Averaged	
7 1,1-Dichloroethene	0.61396	0.67384	0.67384	0.100	9.75269	20.00000	Averaged	
8 Carbon Disulfide	2.54596	2.92601	2.92601	0.010	14.92736	20.00000	Averaged	
9 112Trichloro122Trifluoroeth	0.65934	0.78039	0.78039	0.010	18.35980	20.00000	Averaged	
10 Iodomethane	0.99124	1.10794	1.10794	0.010	11.77338	20.00000	Averaged	
11 Bromoethane	0.49352	0.55160	0.55160	0.100	11.76798	20.00000	Averaged	
12 Acrolein	0.06965	0.07376	0.07376	0.000	5.90043	20.00000	Averaged	
13 Methylene Chloride	0.71485	0.81008	0.81008	0.010	13.32142	20.00000	Averaged	
14 Acetone	0.12742	0.13913	0.13913	0.001	9.19507	20.00000	Averaged	
15 Trans-1,2-Dichloroethene	0.65583	0.72205	0.72205	0.010	10.09758	20.00000	Averaged	
17 Methyl tert butyl ether	1.70734	1.87711	1.87711	0.100	9.94386	20.00000	Averaged	
18 1,1-Dichloroethane	1.35657	1.48820	1.48820	0.200	9.70268	20.00000	Averaged	
19 Acrylonitrile	0.16718	0.17842	0.17842	0.001	6.72285	20.00000	Averaged	
20 Vinyl Acetate	0.72387	0.65784	0.65784	0.010	-9.12170	20.00000	Averaged	
22 Cis-1,2-Dichloroethene	0.64364	0.70001	0.70001	0.010	8.75864	20.00000	Averaged	
23 2,2-Dichloropropane	0.77695	0.91736	0.91736	0.010	18.07201	20.00000	Averaged	
24 Bromochloromethane	0.26881	0.28617	0.28617	0.050	6.45842	20.00000	Averaged	
25 Chloroform	1.19119	1.28971	1.28971	0.200	8.27048	20.00000	Averaged	
26 Carbon Tetrachloride	0.53549	0.58379	0.58379	0.100	9.02027	20.00000	Averaged	
$ 27 Dibromofluoromethane	0.57130	0.62540	0.62540	0.100	9.46922	20.00000	Averaged	
28 1,1,1-Trichloroethane	0.98123	1.13317	1.13317	0.100	15.48505	20.00000	Averaged	
29 2-Butanone	0.17852	0.17846	0.17846	0.001	-0.03192	20.00000	Averaged	
30 1,1-Dichloropropene	0.57362	0.61883	0.61883	0.010	7.88119	20.00000	Averaged	
31 Benzene	1.61832	1.69350	1.69350	0.500	4.64558	20.00000	Averaged	
$ 33 d4-1,2-Dichloroethane	0.68359	0.72564	0.72564	0.010	6.15144	20.00000	Averaged	
34 1,2-Dichloroethane	0.49852	0.50360	0.50360	0.100	1.01924	20.00000	Averaged	
36 Trichloroethene	0.35084	0.35287	0.35287	0.100	0.57749	20.00000	Averaged	
38 Dibromomethane	0.17823	0.18483	0.18483	0.010	3.70047	20.00000	Averaged	
39 1,2-Dichloropropane	0.39871	0.39438	0.39438	0.100	-1.08569	20.00000	Averaged	
40 Bromodichloromethane	0.48055	0.50007	0.50007	0.100	4.06319	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i
Lab File ID: cc0511.d
Analysis Type: WATER
Lab Sample ID: CC0511
Method: /chem3/nt2.i/20120511.b/82600507L.m

Injection Date: 11-MAY-2012 10:09
Init. Cal. Date(s): 07-MAY-2012 07-MAY-2012
Init. Cal. Times: 10:49 13:56
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
41 2-Chloroethyl Vinyl Ether	0.13619	0.10189	0.10189	0.000	-25.18865	20.00000	Averaged	<-
42 Cis 1,3-dichloropropene	0.50817	0.51716	0.51716	0.200	1.76959	20.00000	Averaged	
$ 43 d8-Toluene	1.25266	1.28095	1.28095	0.010	2.25831	20.00000	Averaged	
44 Toluene	0.88068	0.90582	0.90582	0.400	2.85458	20.00000	Averaged	
45 4-Methyl-2-Pentanone	0.10274	0.10715	0.10715	0.000	4.29267	20.00000	Averaged	
46 Tetrachloroethene	0.42379	0.38158	0.38158	0.200	-9.96023	20.00000	Averaged	
47 Trans 1,3-Dichloropropene	0.43669	0.44475	0.44475	0.010	1.84551	20.00000	Averaged	
48 1,1,2-Trichloroethane	0.22552	0.21881	0.21881	0.100	-2.97397	20.00000	Averaged	
49 Chlorodibromomethane	0.28473	0.27493	0.27493	0.100	-3.44097	20.00000	Averaged	
50 1,3-Dichloropropane	0.48264	0.44676	0.44676	0.100	-7.43458	20.00000	Averaged	
51 1,2-Dibromoethane	0.20462	0.20906	0.20906	0.010	2.16950	20.00000	Averaged	
52 2-Hexanone	0.18745	0.19413	0.19413	0.010	3.56668	20.00000	Averaged	
54 Chlorobenzene	0.99480	0.99826	0.99826	0.500	0.34734	20.00000	Averaged	
55 Ethyl Benzene	0.52606	0.55292	0.55292	0.100	5.10588	20.00000	Averaged	
56 1,1,1,2-Tetrachloroethane	0.36508	0.38385	0.38385	0.010	5.14132	20.00000	Averaged	
57 m,p-xylene	0.63282	0.69312	0.69312	0.300	9.52913	20.00000	Averaged	
58 o-Xylene	0.64016	0.68941	0.68941	0.300	7.69232	20.00000	Averaged	
59 Styrene	1.02763	1.10834	1.10834	0.300	7.85472	20.00000	Averaged	
60 Bromoform	0.28710	0.27751	0.27751	0.010	-3.34290	20.00000	Averaged	
61 Isopropyl Benzene	2.88949	3.04121	3.04121	0.010	5.25077	20.00000	Averaged	
$ 62 4-Bromofluorobenzene	0.57329	0.57290	0.57290	0.200	-0.06672	20.00000	Averaged	
63 Bromobenzene	0.68461	0.64793	0.64793	0.010	-5.35812	20.00000	Averaged	
64 N-Propyl Benzene	3.62636	3.74110	3.74110	0.010	3.16420	20.00000	Averaged	
65 1,1,2,2-Tetrachloroethane	0.59063	0.55785	0.55785	0.100	-5.55018	20.00000	Averaged	
66 2-Chloro Toluene	2.57567	2.61404	2.61404	0.010	1.48979	20.00000	Averaged	
67 1,3,5-Trimethyl Benzene	2.54207	2.77525	2.77525	0.010	9.17302	20.00000	Averaged	
68 1,2,3-Trichloropropane	0.16771	0.16091	0.16091	0.010	-4.05821	20.00000	Averaged	
69 Trans-1,4-Dichloro 2-Butene	0.16641	0.17984	0.17984	0.001	8.07468	20.00000	Averaged	
70 4-Chloro Toluene	2.30735	2.33892	2.33892	0.010	1.36809	20.00000	Averaged	
71 T-Butyl Benzene	2.11454	2.24005	2.24005	0.010	5.93570	20.00000	Averaged	
72 1,2,4-Trimethylbenzene	2.54514	2.76475	2.76475	0.010	8.62865	20.00000	Averaged	
73 S-Butyl Benzene	3.25284	3.47853	3.47853	0.010	6.93811	20.00000	Averaged	
74 4-Isopropyl Toluene	2.56340	2.78347	2.78347	0.010	8.58515	20.00000	Averaged	
75 1,3-Dichlorobenzene	1.40842	1.39901	1.39901	0.600	-0.66814	20.00000	Averaged	
77 1,4-Dichlorobenzene	1.44409	1.42476	1.42476	0.500	-1.33905	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i
Lab File ID: cc0511.d
Analysis Type: WATER
Lab Sample ID: CC0511
Method: /chem3/nt2.i/20120511.b/82600507L.m

Injection Date: 11-MAY-2012 10:09
Init. Cal. Date(s): 07-MAY-2012 07-MAY-2012
Init. Cal. Times: 10:49 13:56
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
78 N-Butyl Benzene	2.60347	2.84544	2.84544	0.010	9.29416	20.00000	Averaged
$ 79 d4-1,2-Dichlorobenzene	0.89483	0.90736	0.90736	0.010	1.39970	20.00000	Averaged
80 1,2-Dichlorobenzene	1.32112	1.31395	1.31395	0.400	-0.54278	20.00000	Averaged
81 1,2-Dibromo 3-Chloropropane	0.09885	0.09661	0.09661	0.010	-2.27413	20.00000	Averaged
83 Hexachloro 1,3-Butadiene	0.48037	0.45694	0.45694	0.010	-4.87724	20.00000	Averaged
84 1,2,4-Trichlorobenzene	0.80337	0.81711	0.81711	0.010	1.71121	20.00000	Averaged
85 Naphthalene	8.61369	10.00000	1.19903	0.010	-13.86309	20.00000	Linear
86 1,2,3-Trichlorobenzene	0.65366	0.63139	0.63139	0.010	-3.40670	20.00000	Averaged

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-051112A	Method Blank	10	114%	103%	100%	104%	0
LCS-051112A	Lab Control	10	104%	102%	101%	99.8%	0
LCSD-051112A	Lab Control Dup	10	103%	103%	100%	101%	0
UT30E	GP1-W-7.5	10	115%	99.9%	117%	85.7%	0
UT30EDL	GP1-W-7.5	10	113%	104%	99.8%	98.3%	0
MB-051412A	Method Blank	10	112%	101%	115%	103%	0
LCS-051412A	Lab Control	10	102%	102%	103%	103%	0
LCSD-051412A	Lab Control Dup	10	101%	97.6%	105%	102%	0
UT30F	GP2-W-10	10	110%	97.1%	96.6%	98.9%	0
UT30G	Trip Blank	10	110%	97.2%	98.4%	103%	0

SW8260C	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-120)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 12-8204 to 12-8206

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Matrix: Soil

Data Release Authorized:
Reported: 05/10/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

ARI ID	Client ID	Analysis Date	Basis	Range	Result
MB-050912	Method Blank	05/09/12	Dry	Gasoline	< 5.0 U
12-8200		PID1		HC ID	---
				Trifluorotoluene	95.7%
				Bromobenzene	96.5%
UT30A	GP1-S-2.5	05/09/12	Dry	**Gasoline**	**1400**
12-8200		PID1		HC ID	GRO
				Trifluorotoluene	89.2%
				Bromobenzene	93.7%

Gasoline values reported in mg/kg (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-050912
LAB CONTROL SAMPLE

Lab Sample ID: LCS-050912
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized: MW
Reported: 05/10/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 05/09/12 11:23
LCSD: 05/09/12 12:21
Instrument/Analyst LCS: PID1/MH
LCSD: PID1/MH

Purge Volume: 5.0 mL

Sample Amount LCS: 100 mg-dry-wt
LCSD: 100 mg-dry-wt

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	48.4	50.0	96.8%	52.2	50.0	104%	7.6%

Reported in mg/kg (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	96.1%	97.5%
Bromobenzene	93.7%	95.3%

ANALYTICAL RESOURCES INCORPORATED

TPHG SOIL SURROGATE RECOVERY SUMMARY

ARI Job: UT30
Matrix: Soil

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01

Client ID	BFB	TFT	BBZ	TOT OUT
MB-050912	NA	95.7%	96.5%	0
LCS-050912	NA	96.1%	93.7%	0
LCSD-050912	NA	97.5%	95.3%	0
GP1-S-2.5	NA	89.2%	93.7%	0

	LCS/MB LIMITS	QC LIMITS
(BFB) = Bromofluorobenzene	(70-130)	(70-130)
(TFT) = Trifluorotoluene	(80-120)	(66-123)
(BBZ) = Bromobenzene	(80-120)	(62-130)

Log Number Range: 12-8200 to 12-8200

Data File: /chem3/pid1.i/vpcc050912-1.b/0509a005.d

Date : 09-MAY-2012 11:23

Client ID:

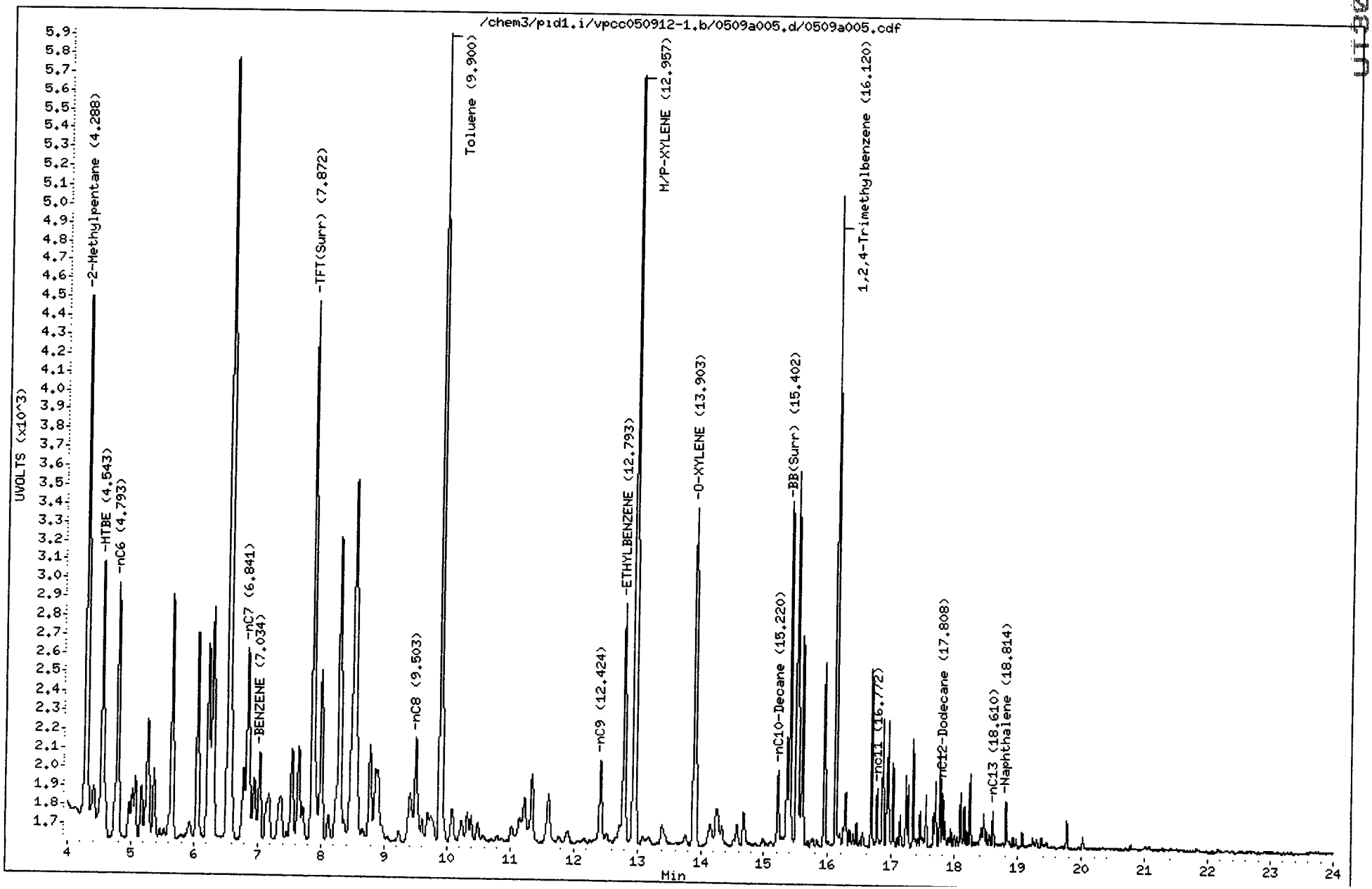
Sample Info: LCSD0509

Column phase: RTX 502-2 FID

Instrument: pid1.i

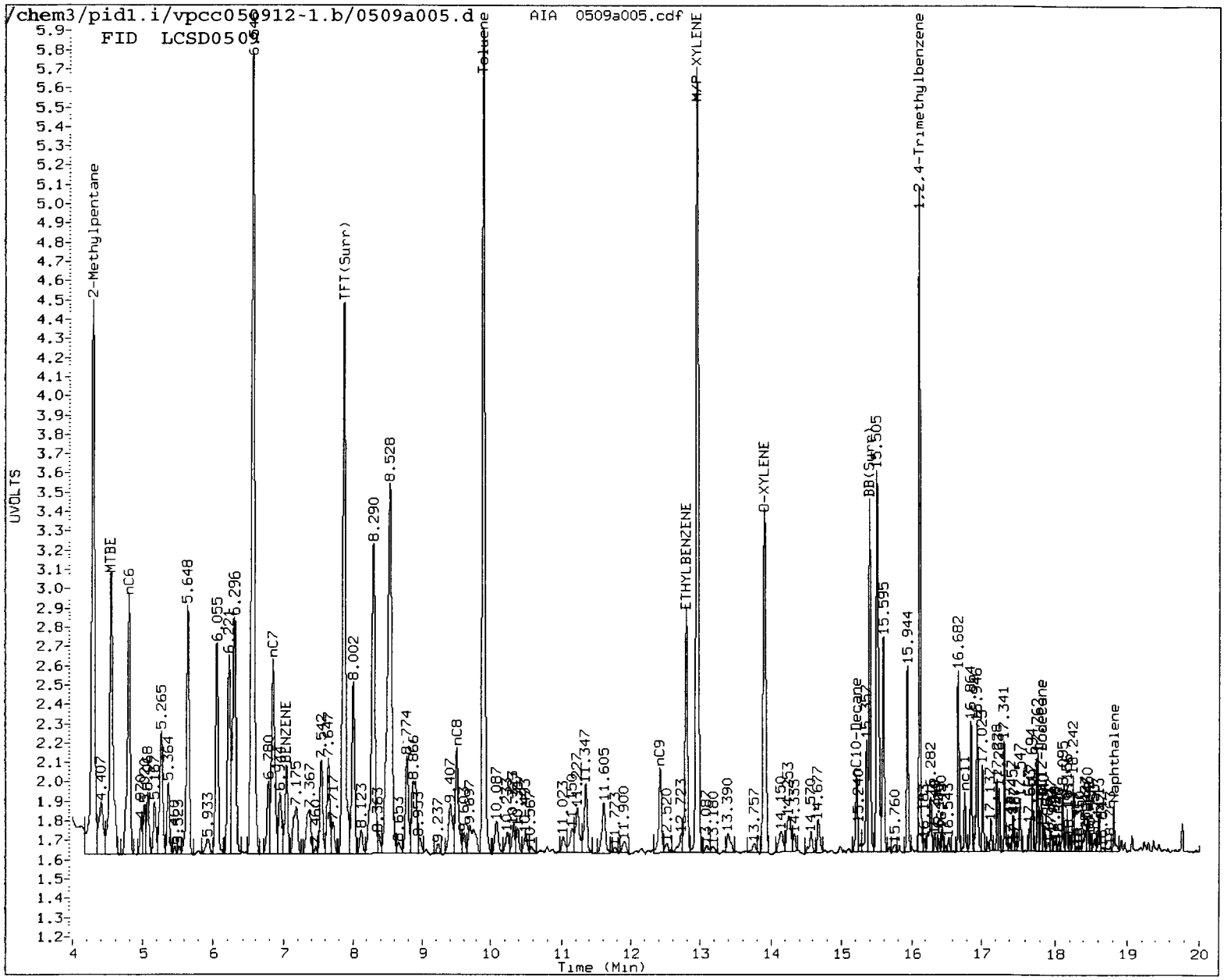
Operator: JW

Column diameter: 0.18



Data File: /chem3/pid1.i/vpcc050912-1.b/0509a005.d/0509a005.cdf
Injection Date: 09-MAY-2012 11:23
Instrument: pid1.i
Client Sample ID:

MH
5/10/12



MANUAL INTEGRATION

X Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/10/12

Data File: /chem3/pid1.i/vpcc050912-1.b/0509a007.d

Date : 09-MAY-2012 12:21

Client ID:

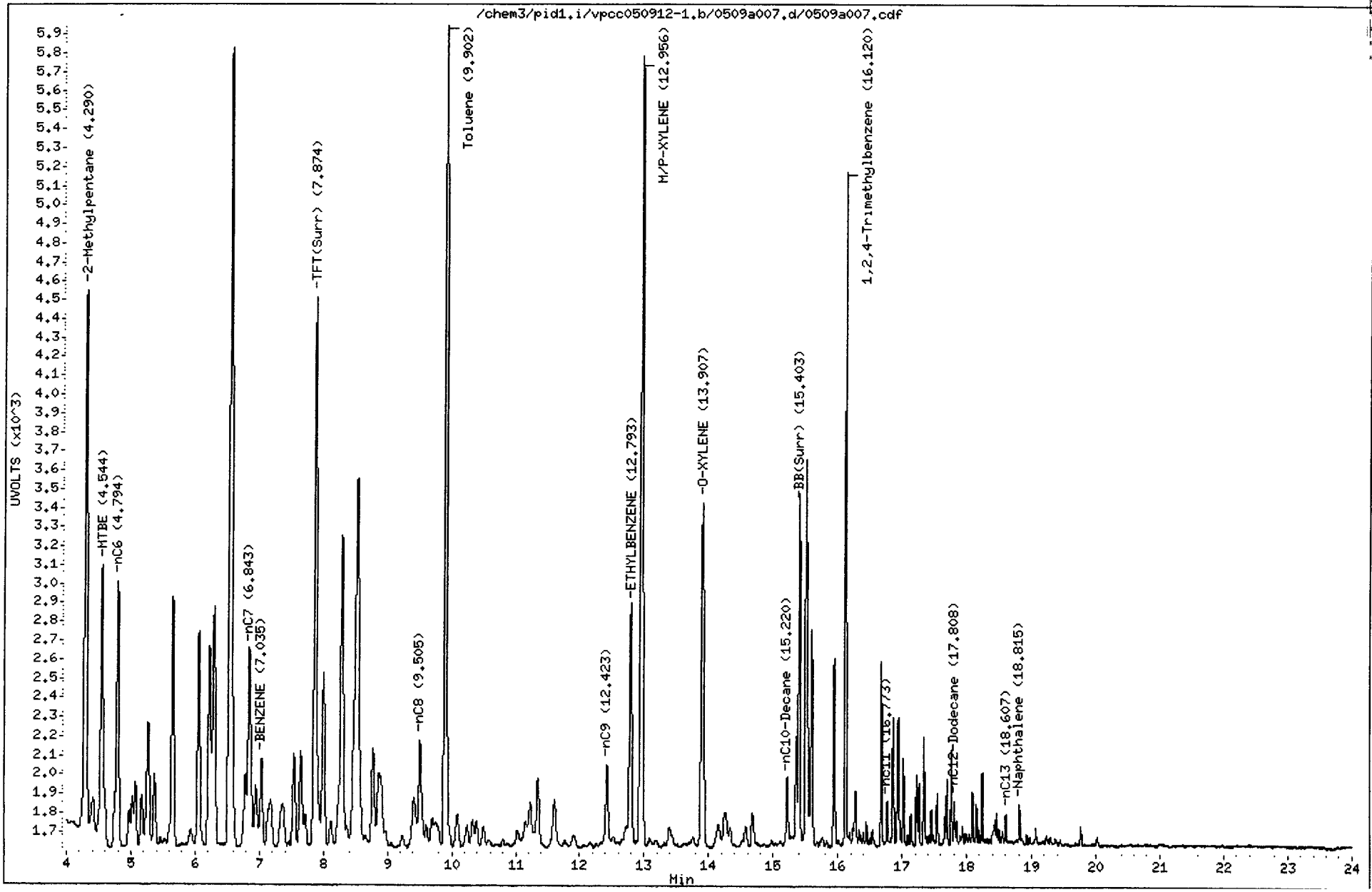
Sample Info: LCS0509

Instrument: pid1.i

Operator: JW

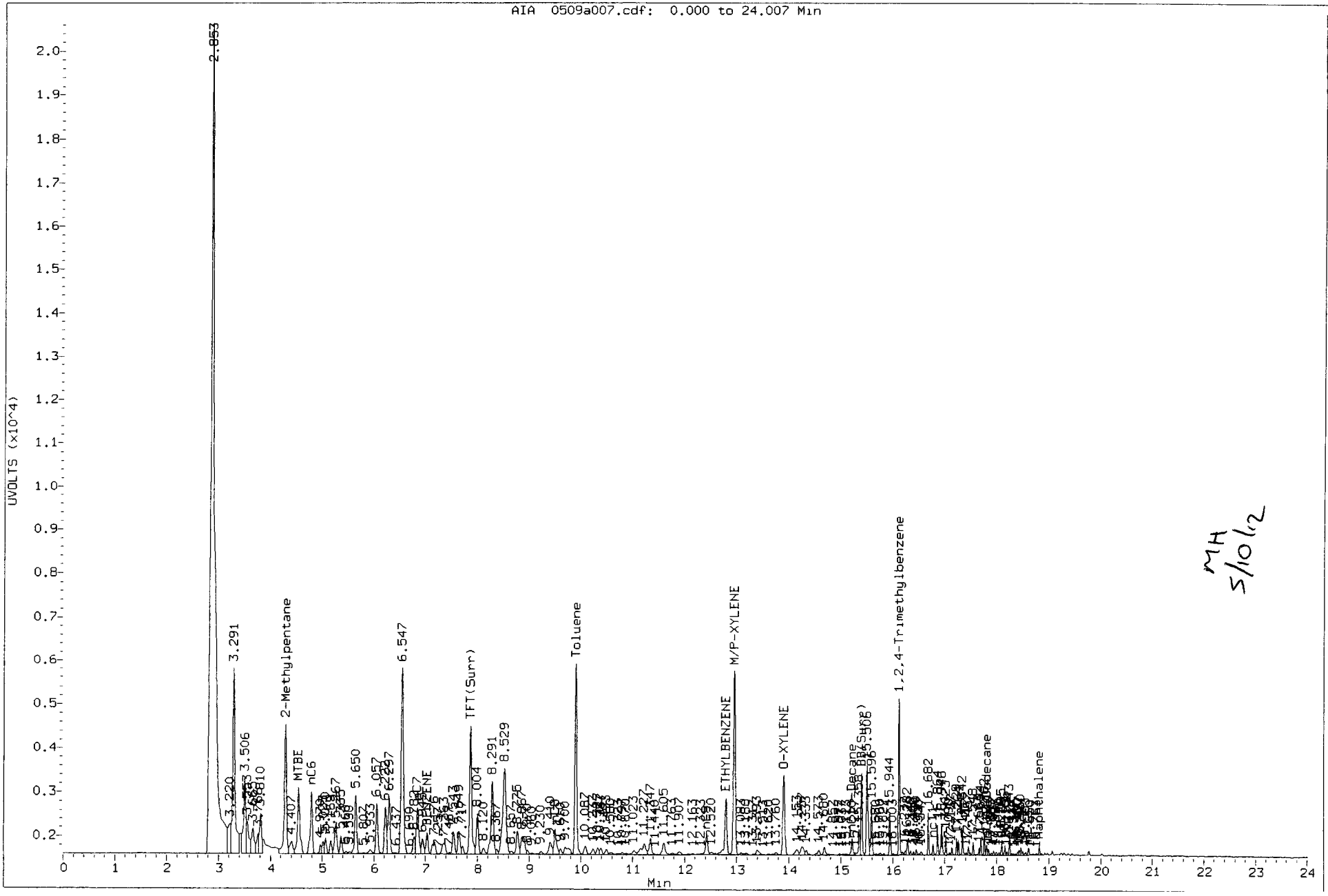
Column phase: RTX 502-2 FID

Column diameter: 0.18



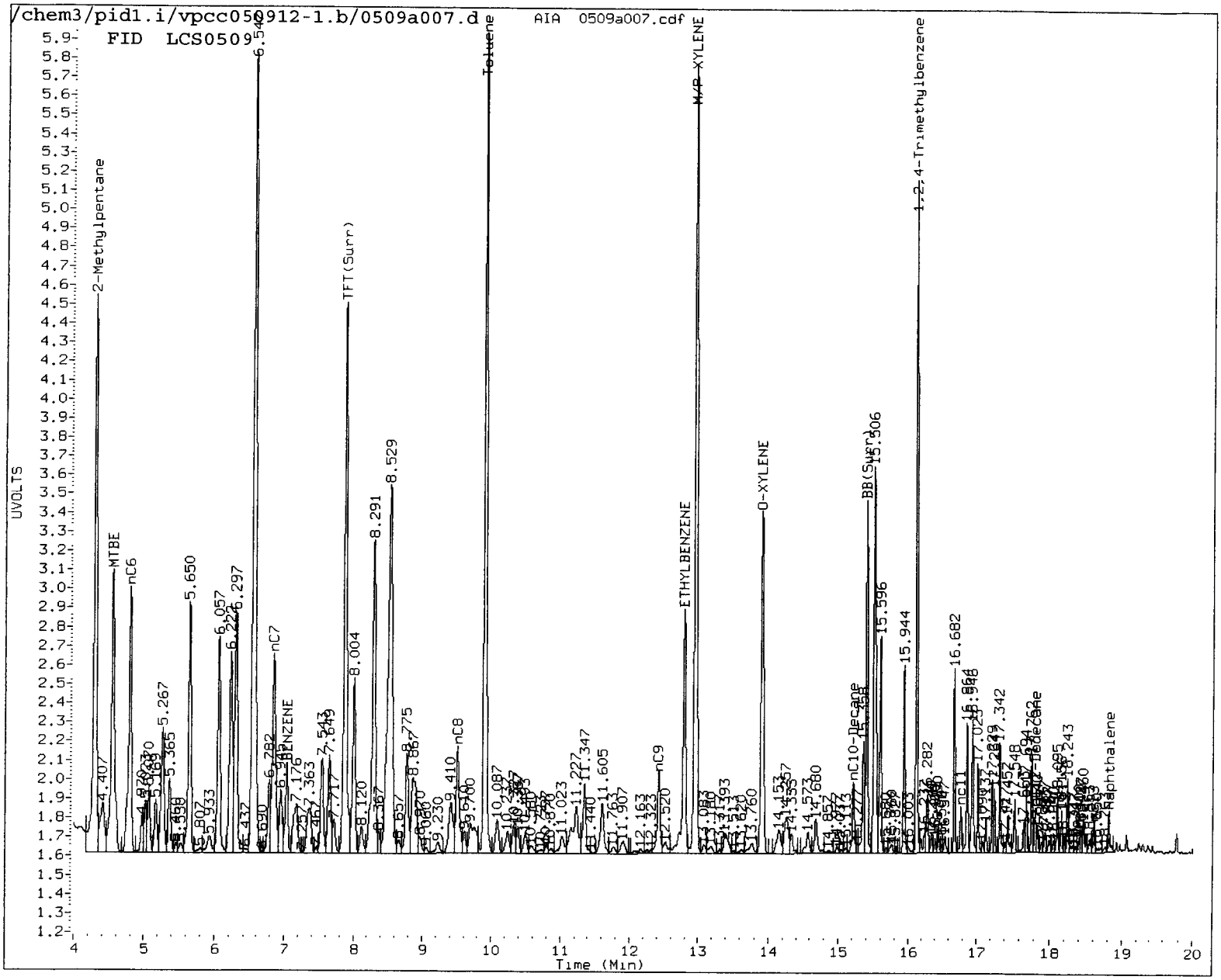
UT20:000046

Data File: /chem3/pid1.i/vpcc050912-1.b/0509a007.d/0509a007.cdf
Injection Date: 09-MAY-2012 12:21
Instrument: pid1.i
Client Sample ID:



MH 5/10/12

UT30:00017



MANUAL INTEGRATION

- [x] 1. Baseline correction
- [ ] 2. Poor chromatography
- [ ] 3. Peak not found
- [ ] 4. Totals calculation

5. Other _____

Analyst: MH Date: 5/10/12

Data File: /chem3/pid1.i/vpcc050912-1.b/0509a006.d

Date : 09-MAY-2012 11:52

Client ID:

Sample Info: MB0509

Column phase: RTX 502-2 FID

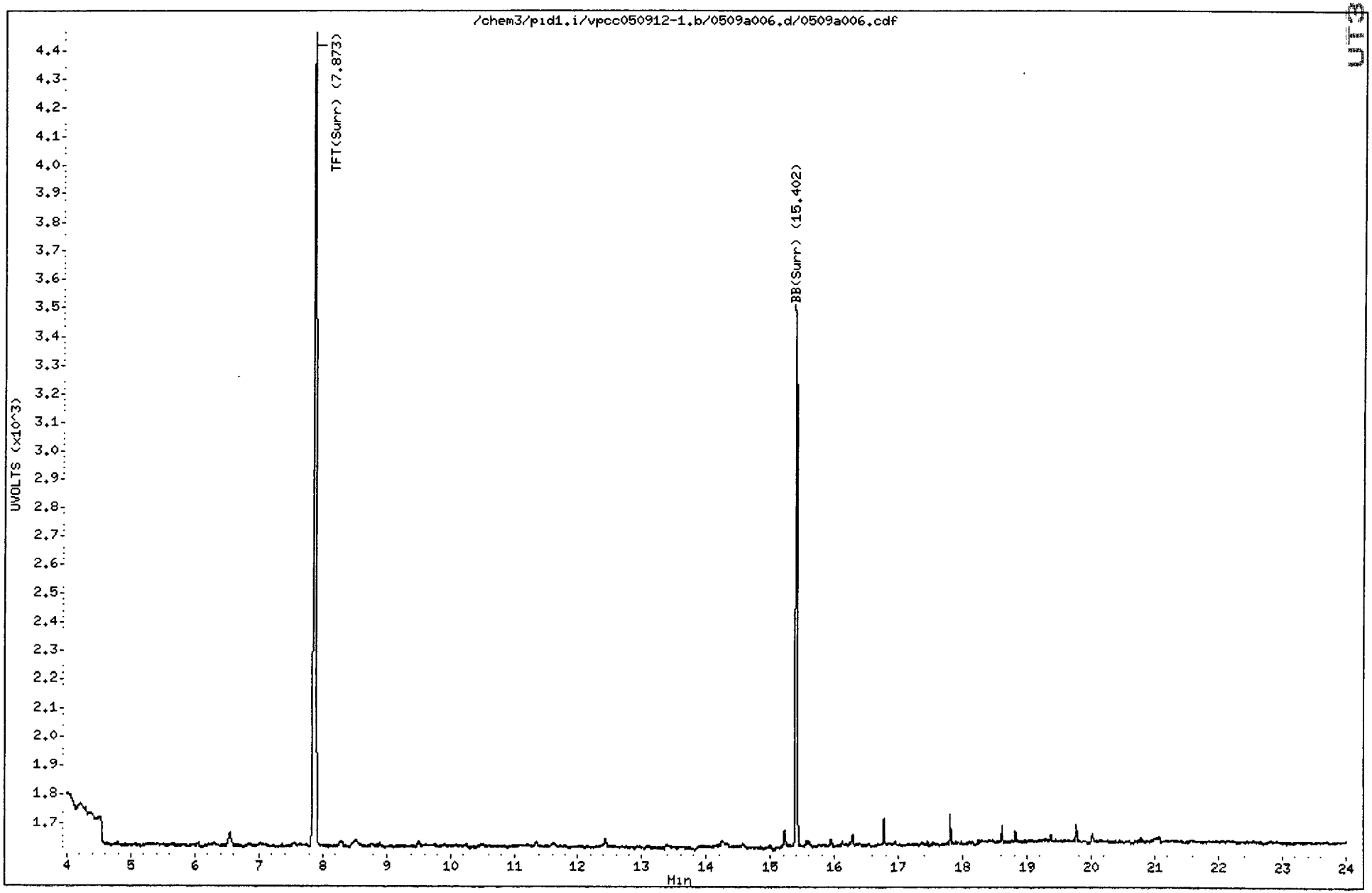
Instrument: pid1.i

Operator: JW

Column diameter: 0.18

UT30 0509 0006

/chem3/pid1.i/vpcc050912-1.b/0509a006.d/0509a006.cdf



Data File: /chem3/pid1.i/vpcc050912-1.b/0509a030.d

Date : 09-MAY-2012 23:47

Client ID: GP1-S-2.5

Sample Info: UT30A,10

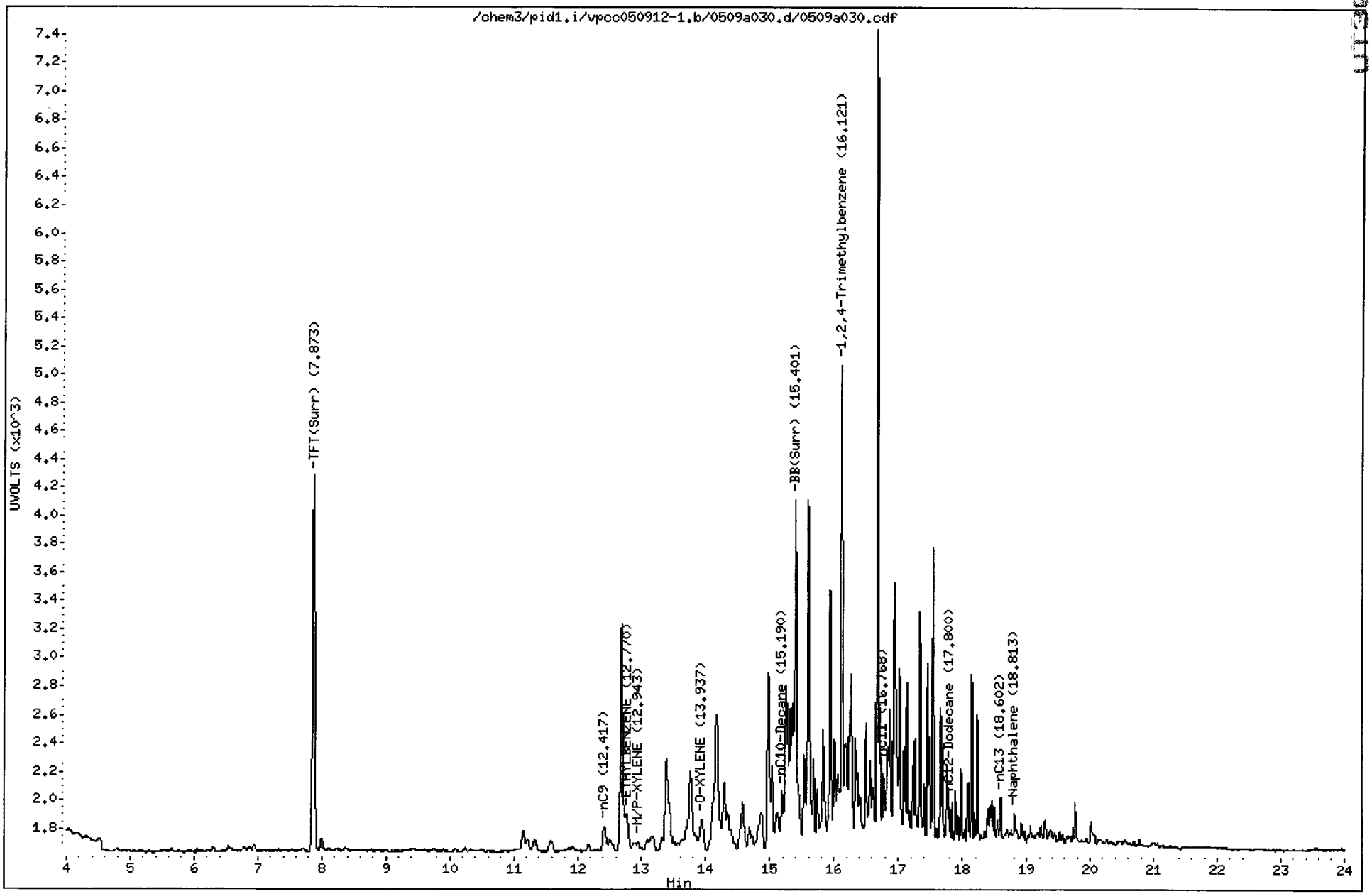
Column phase: RTX 502-2 FID

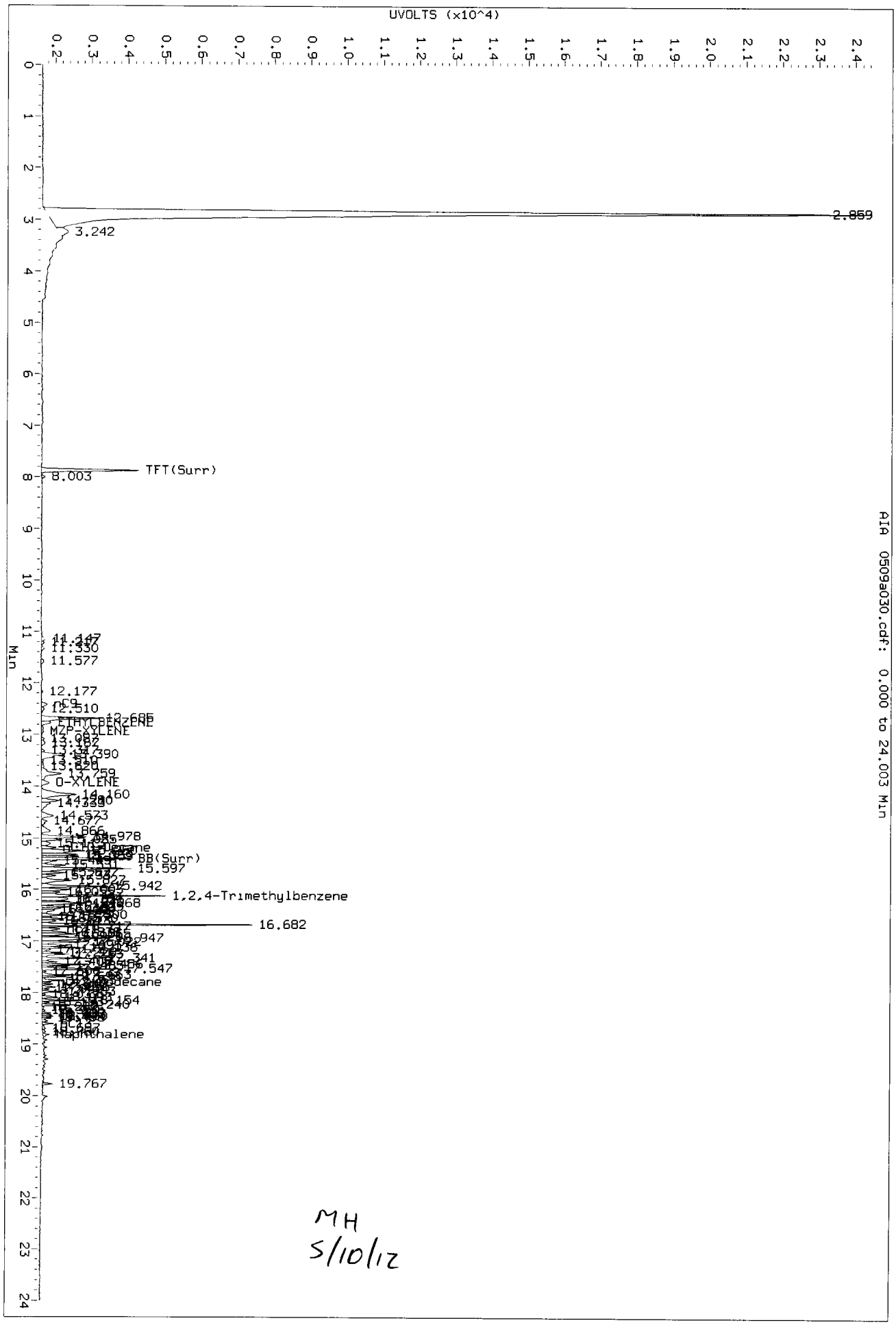
Instrument: pid1.i

Operator: JW

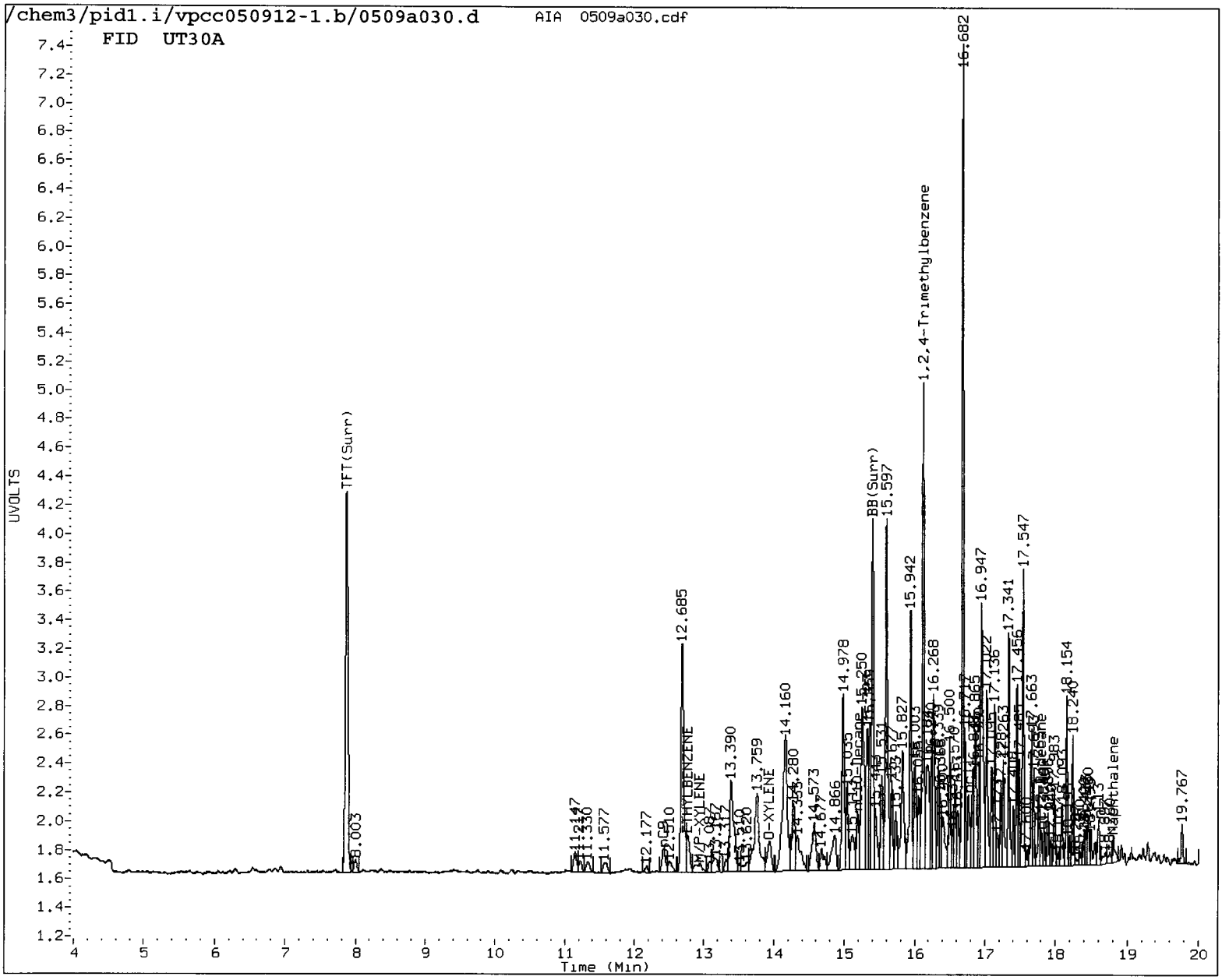
Column diameter: 0.18

UT30 : 00059




Data File: /chem3/pid1.i/vpcc050912-1.b/0509a030.d/0509a030.cdf
Injection Date: 09-MAY-2012 23:47
Instrument: pid1.i
Client Sample ID: GP1-S-2.5
UVOLTS (x10^4)
Min
AIA 0509a030.cdf: 0.000 to 24.003 Min
2.859
3.242
TFT(Surr)
8.003
11.577
12.177
ETHYLBENZENE
M,P-XYLENE
O-XYLENE
BB(Surr)
15.597
1,2,4-Trimethylbenzene
16.682
Naphthalene
19.767

MH
5/10/12



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/10/12

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Matrix: Water

Data Release Authorized:
Reported: 05/09/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

ARI ID	Client ID	Analysis Date	DL	Range	Result
UT30E	GP1-W-7.5	05/08/12	1.0	**Gasoline**	**1.8**
12-8204		PID1		HC ID	GRO
				Trifluorotoluene	96.9%
				Bromobenzene	97.4%
UT30F	GP2-W-10	05/08/12	1.0	Gasoline	< 0.25 U
12-8205		PID1		HC ID	---
				Trifluorotoluene	96.1%
				Bromobenzene	97.2%
MB-050812	Method Blank	05/08/12	1.0	Gasoline	< 0.25 U
12-8206		PID1		HC ID	---
				Trifluorotoluene	97.8%
				Bromobenzene	98.8%
UT30G	Trip Blank	05/08/12	---	Gasoline	< 0.25 U
12-8206		PID1		HC ID	---
				Trifluorotoluene	96.6%
				Bromobenzene	97.8%

Gasoline values reported in mg/L (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-050812
LAB CONTROL SAMPLE

Lab Sample ID: LCS-050812
LIMS ID: 12-8206
Matrix: Water
Data Release Authorized: MH
Reported: 05/09/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 05/08/12 11:11
LCSD: 05/08/12 11:41
Instrument/Analyst LCS: PID1/MH
LCSD: PID1/MH

Purge Volume: 5.0 mL
Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	0.97	1.00	97.0%	1.08	1.00	108%	10.7%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	89.1%	98.1%
Bromobenzene	86.3%	96.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-050812
LAB CONTROL SAMPLE

Lab Sample ID: LCS-050812
LIMS ID: 12-8206
Matrix: Water
Data Release Authorized:
Reported: 05/09/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 05/08/12 11:11
LCSD: 05/08/12 11:41
Instrument/Analyst LCS: PID1/MH
LCSD: PID1/MH

Purge Volume: 5.0 mL
Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	0.97	1.00	97.0%	1.08	1.00	108%	10.7%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	89.1%	98.1%
Bromobenzene	86.3%	96.3%

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: UT30
Matrix: Water

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01

Client ID	TFT	BBZ	TOT OUT
GP1-W-7.5	96.9%	97.4%	0
GP2-W-10	96.1%	97.2%	0
MB-050812	97.8%	98.8%	0
LCS-050812	89.1%	86.3%	0
LCSD-050812	98.1%	96.3%	0
Trip Blank	96.6%	97.8%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 12-8204 to 12-8206

FORM II TPHG

UT30:00056

Data File: /chem3/pid1.i/vpcc050812-1.b/0508a004.d

Date : 08-MAY-2012 11:11

Client ID:

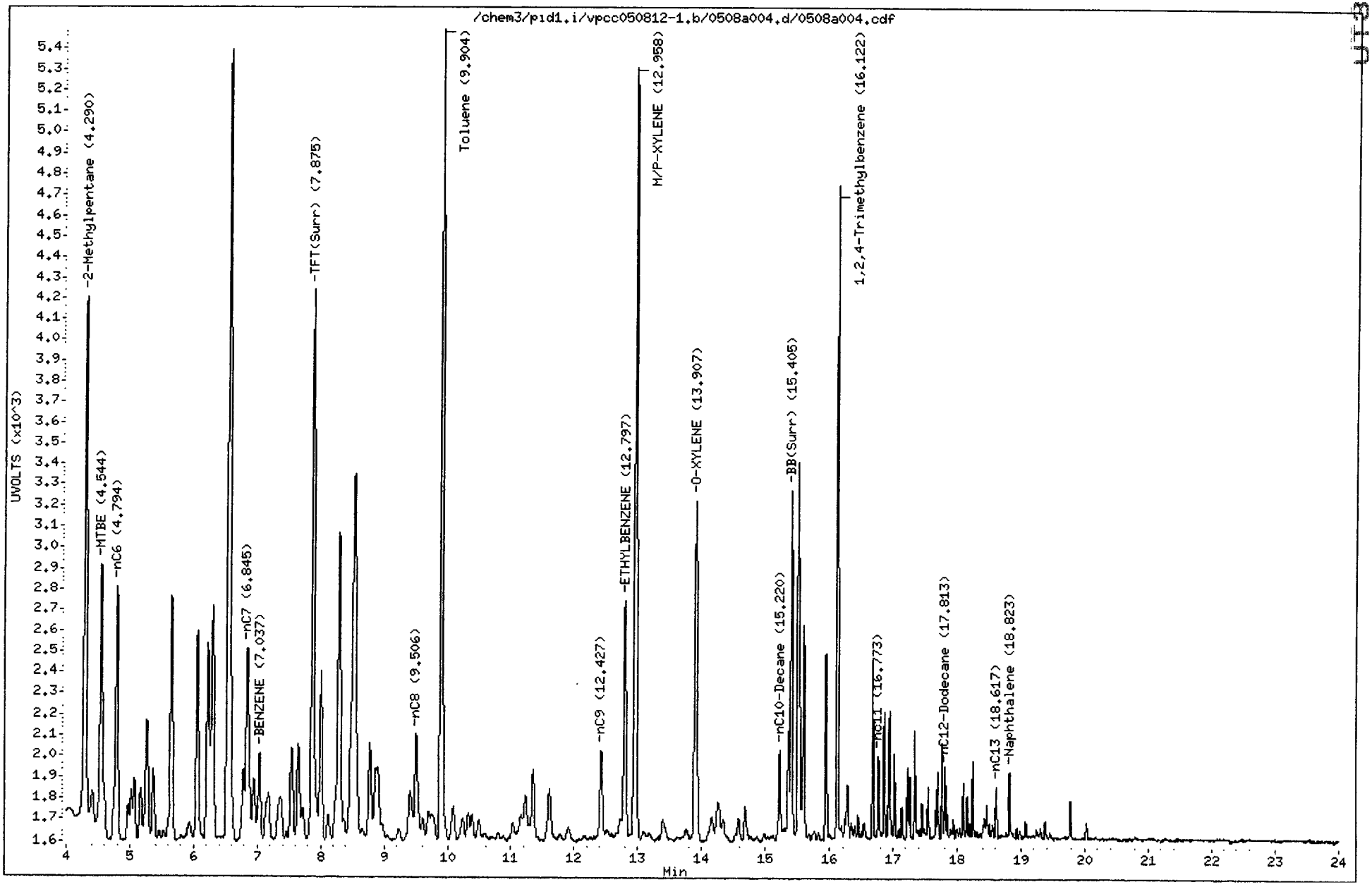
Sample Info: LCS0508

Column phase: RTX 502-2 FID

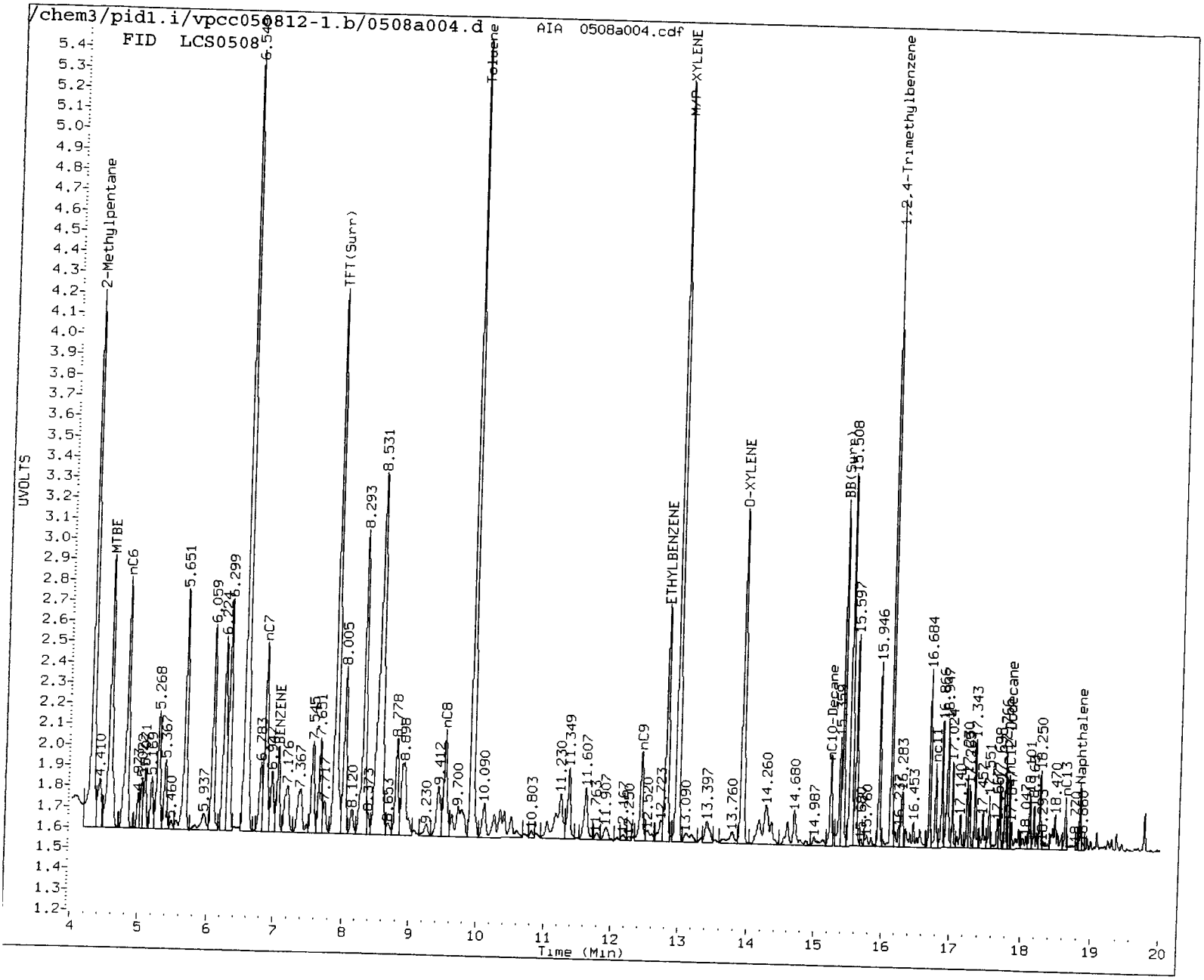
Instrument: pid1.i

Operator: JW

Column diameter: 0.18



UT30 : 00057

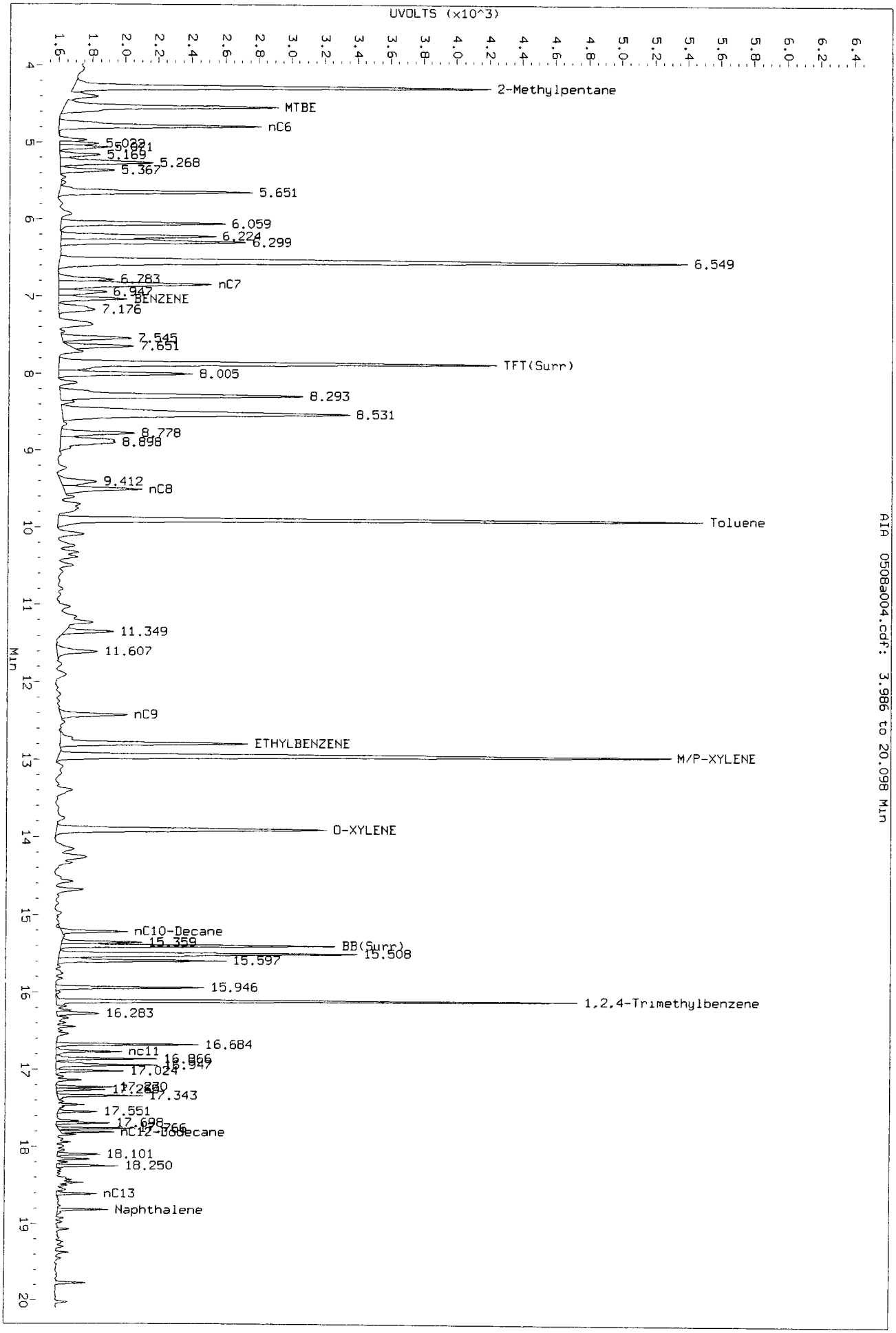


MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: JW Date: 5/9/12



Data File: /chem3/pid1.i/vpcc050812-1.b/0508a004.d/0508a004.cdf
Injection Date: 08-MAY-2012 11:11
Instrument: pid1.i
Client Sample ID:

AIA 0508a004.cdf: 3.986 to 20.098 Min

Before 5/9/12

Data File: /chem3/pid1.i/vpcc050812-1.b/0508a005.d

Date : 08-MAY-2012 11:41

Client ID:

Sample Info: LCSD0508

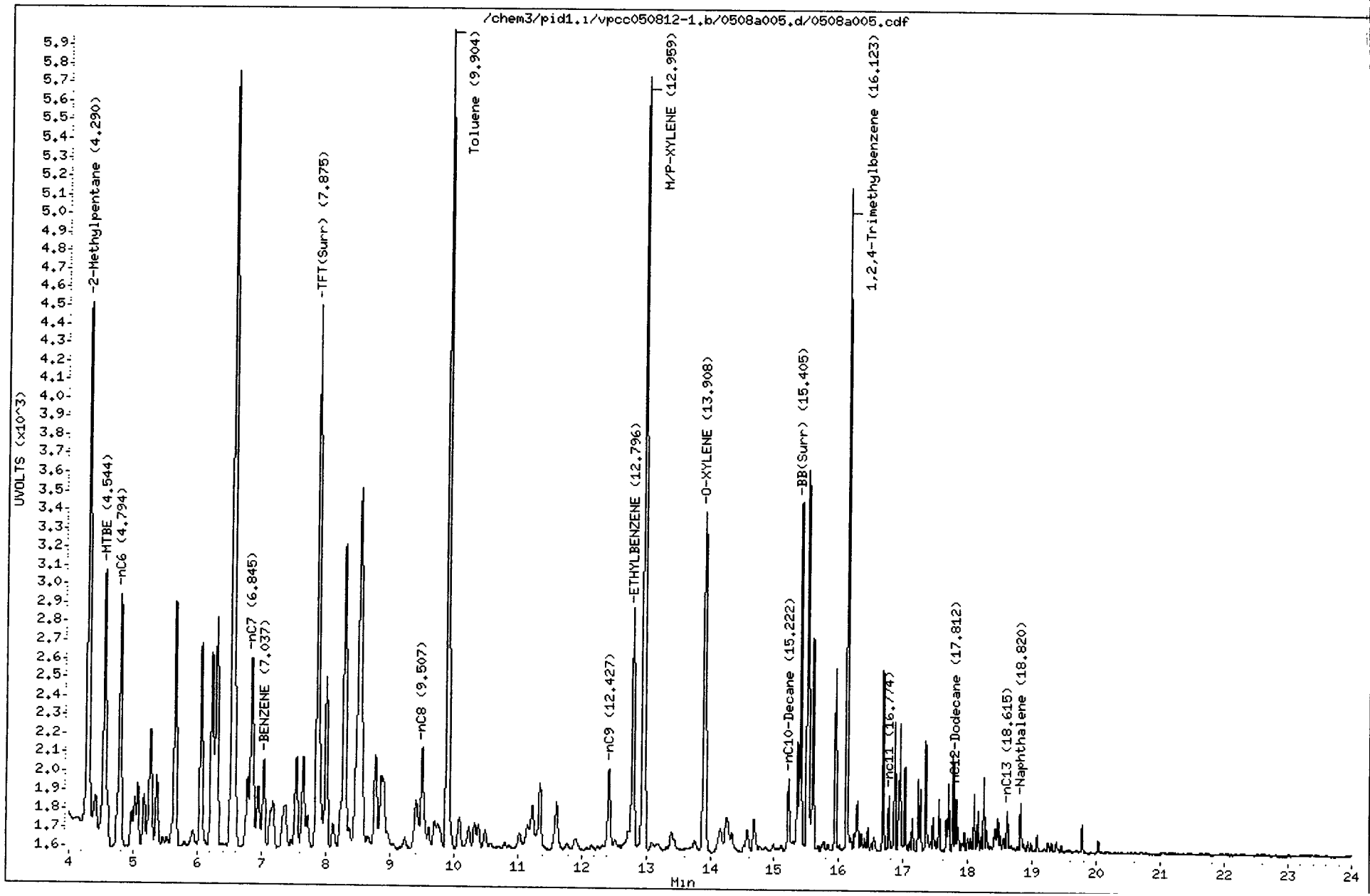
Instrument: pid1.i

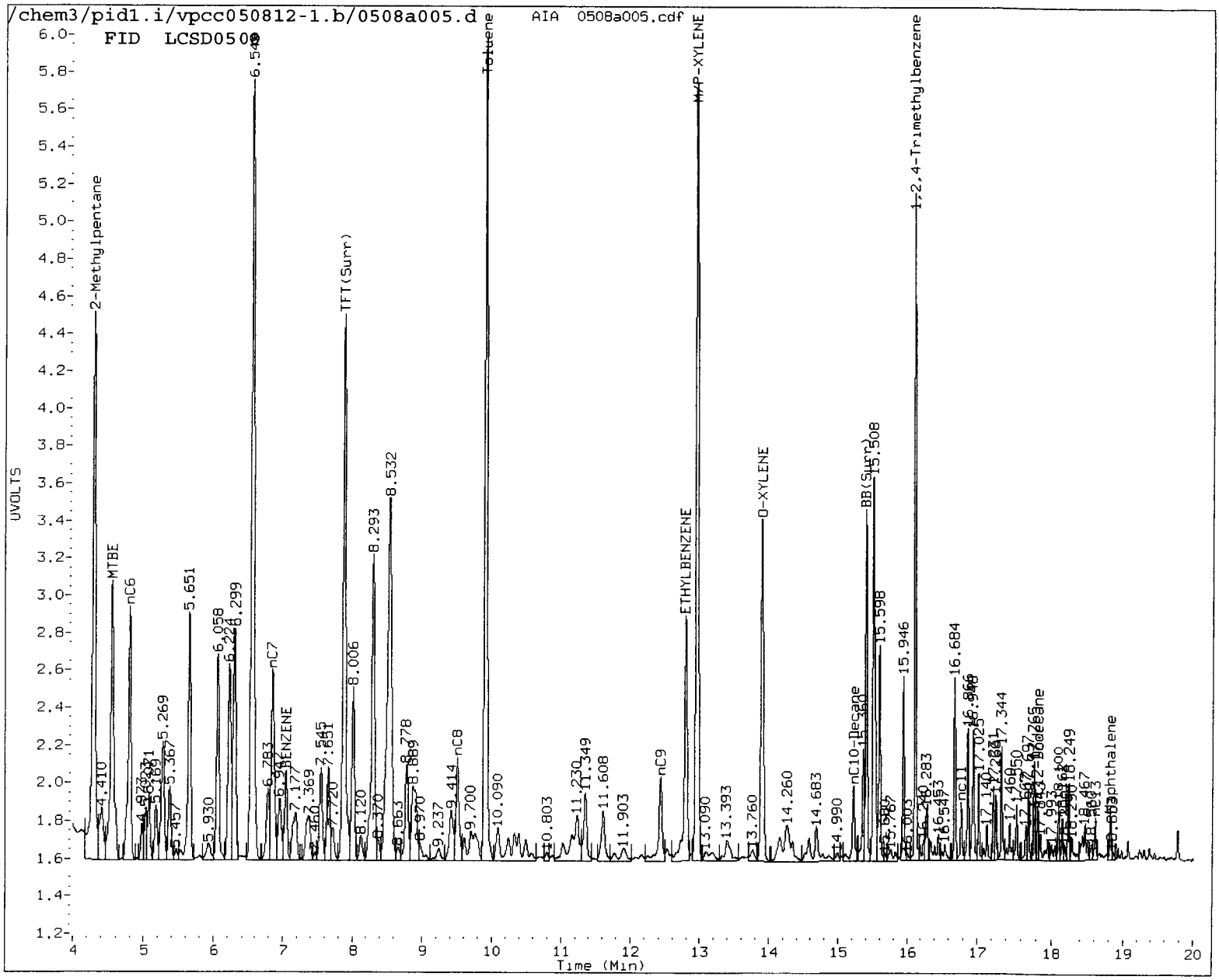
Operator: JW

Column phase: RTX 502-2 FID

Column diameter: 0.18

UT30 : 000650



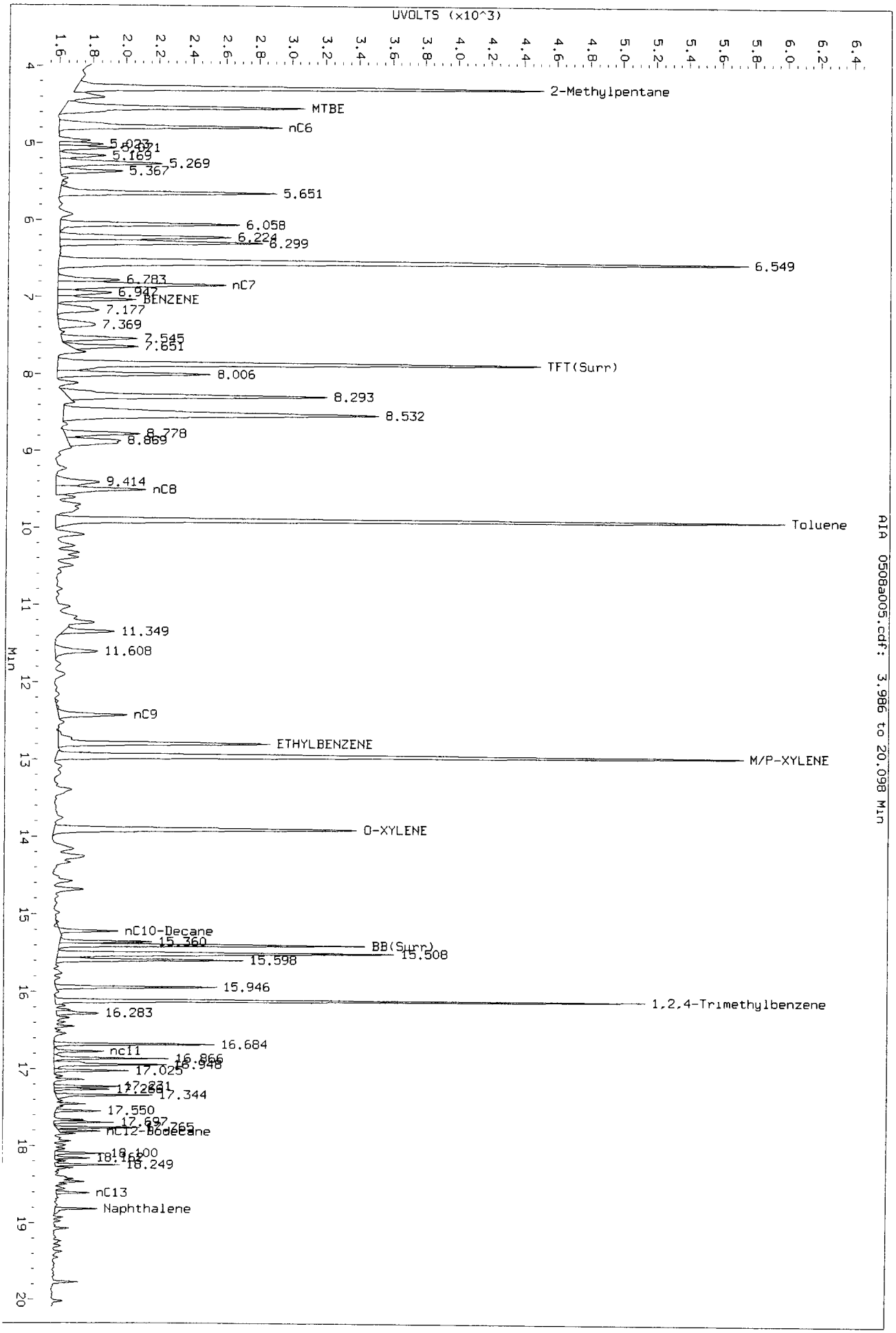


MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: JW Date: 5/9/12



Data File: /chem3/pid1.i/vpcc050812-1.b/0508a005.d/0508a005.cdf
Injection Date: 08-MAY-2012 11:41
Instrument: pid1.i
Client Sample ID:

Before Spike

Data File: /chem3/pid1.i/vpcc050812-1.b/0508a006.d

Date : 08-MAY-2012 12:10

Client ID:

Sample Info: MB0508

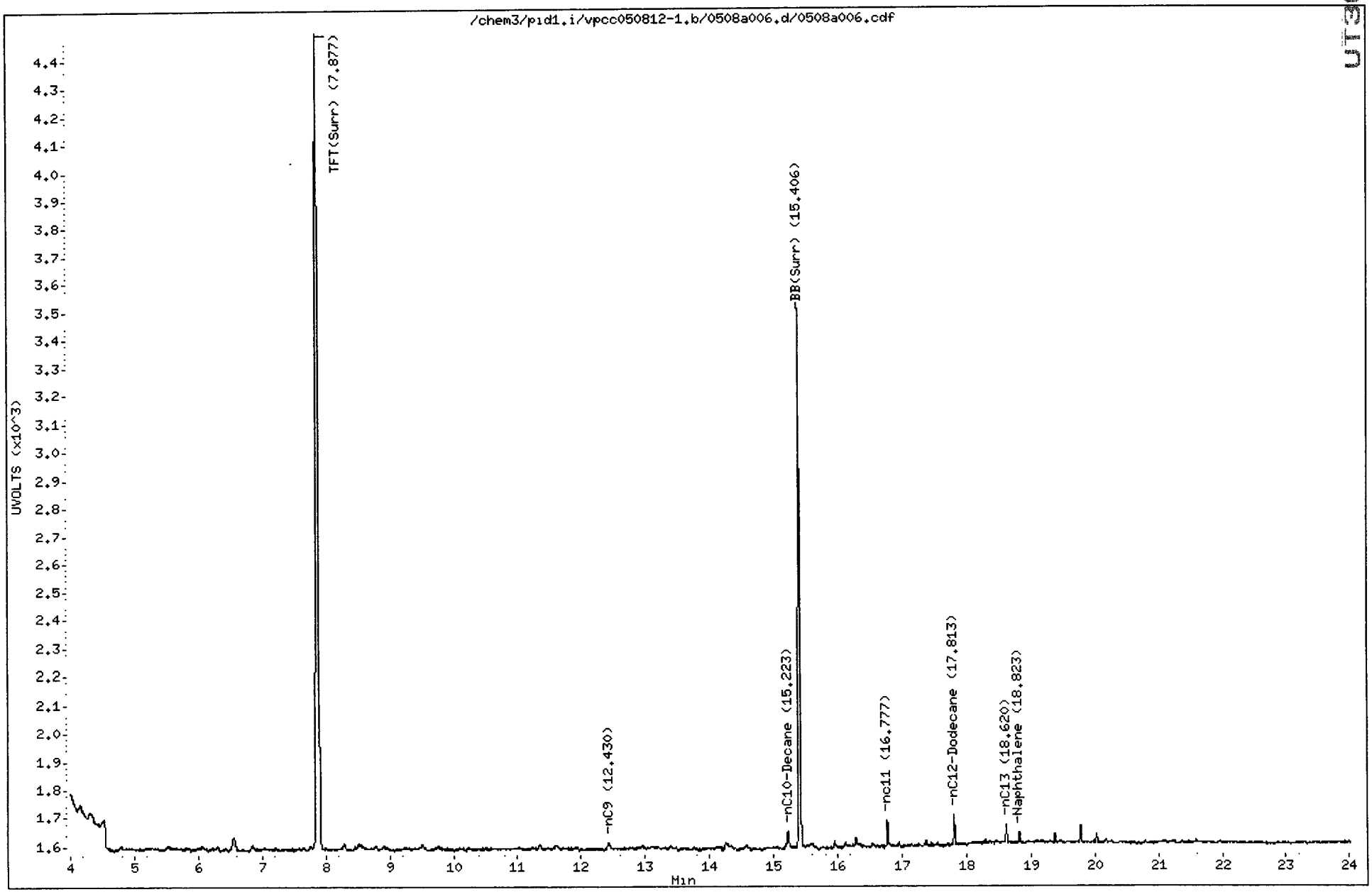
Column phase: RTX 502-2 FID

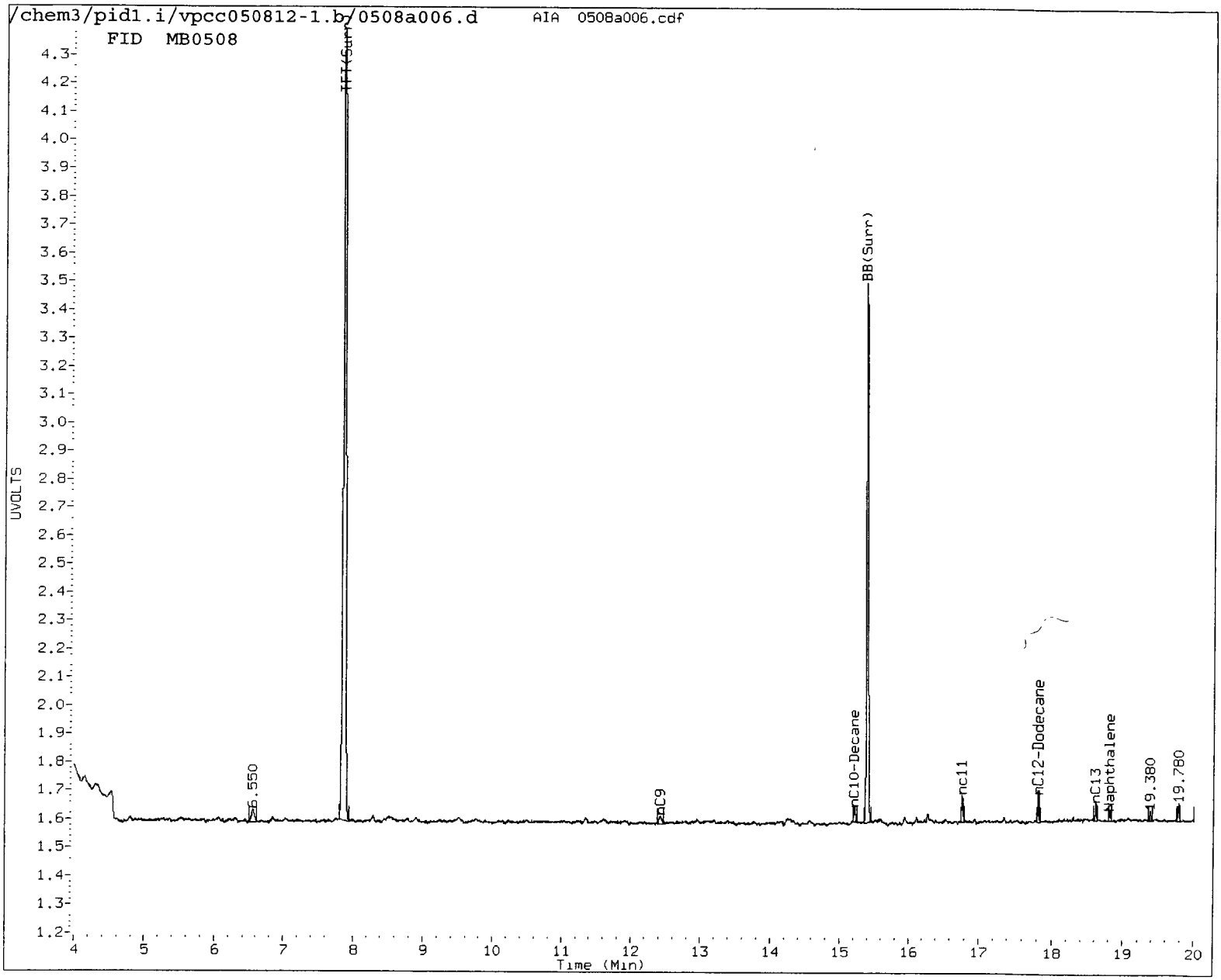
Instrument: pid1.i

Operator: JW

Column diameter: 0.18

UT30:00053





MANUAL INTEGRATION

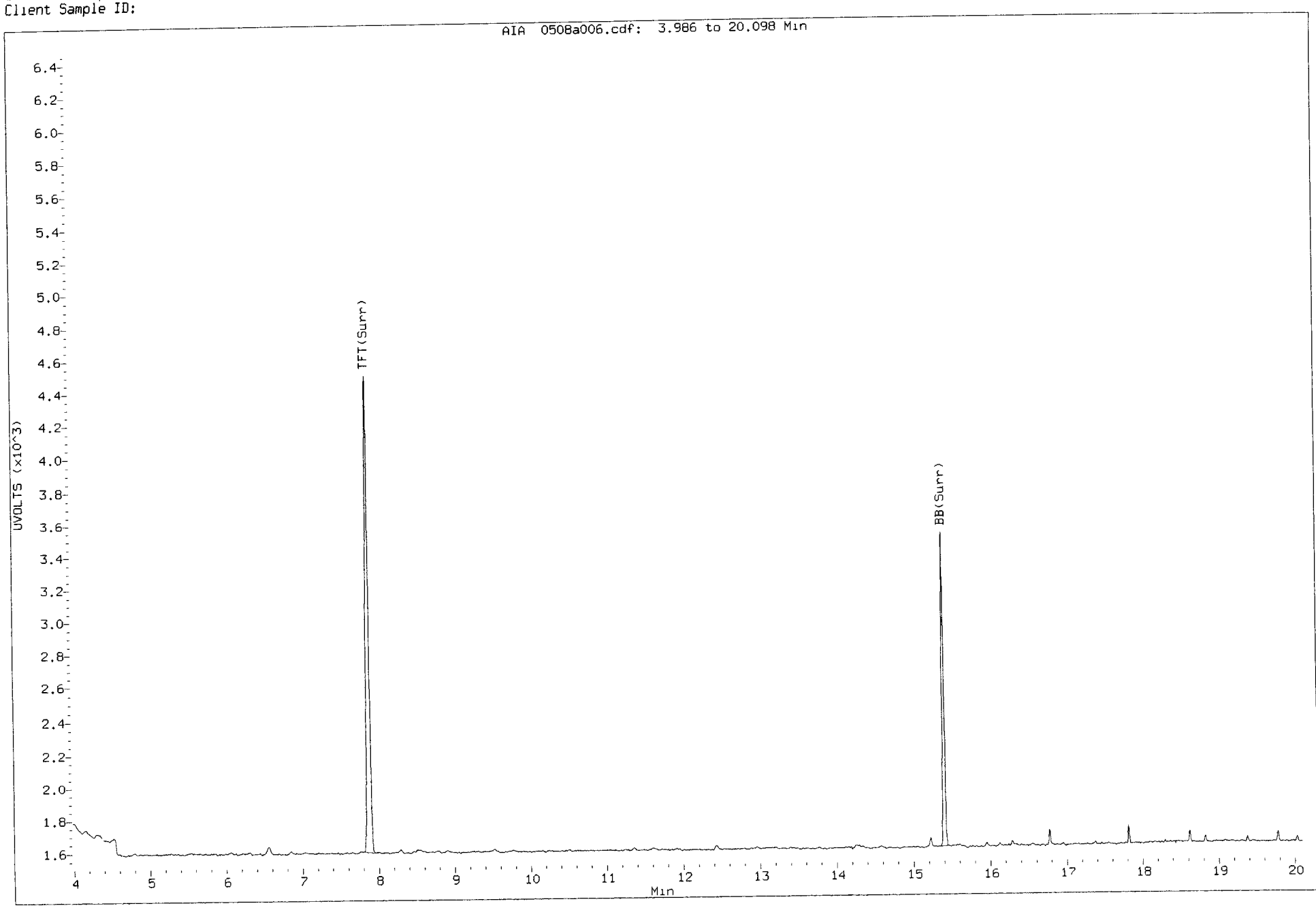
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: JW Date: 5/9/12

Data File: /chem3/pid1.i/vpcc050812-1.b/0508a006.d/0508a006.cdf
Injection Date: 08-MAY-2012 12:10
Instrument: pid1.i
Client Sample ID:

Before JV 5/9/12



JT30:00065

Data File: /chem3/pid1.i/vpcc050812-1.b/0508a021.d

Date : 08-MAY-2012 20:01

Client ID: Trip Blank

Sample Info: UT30G

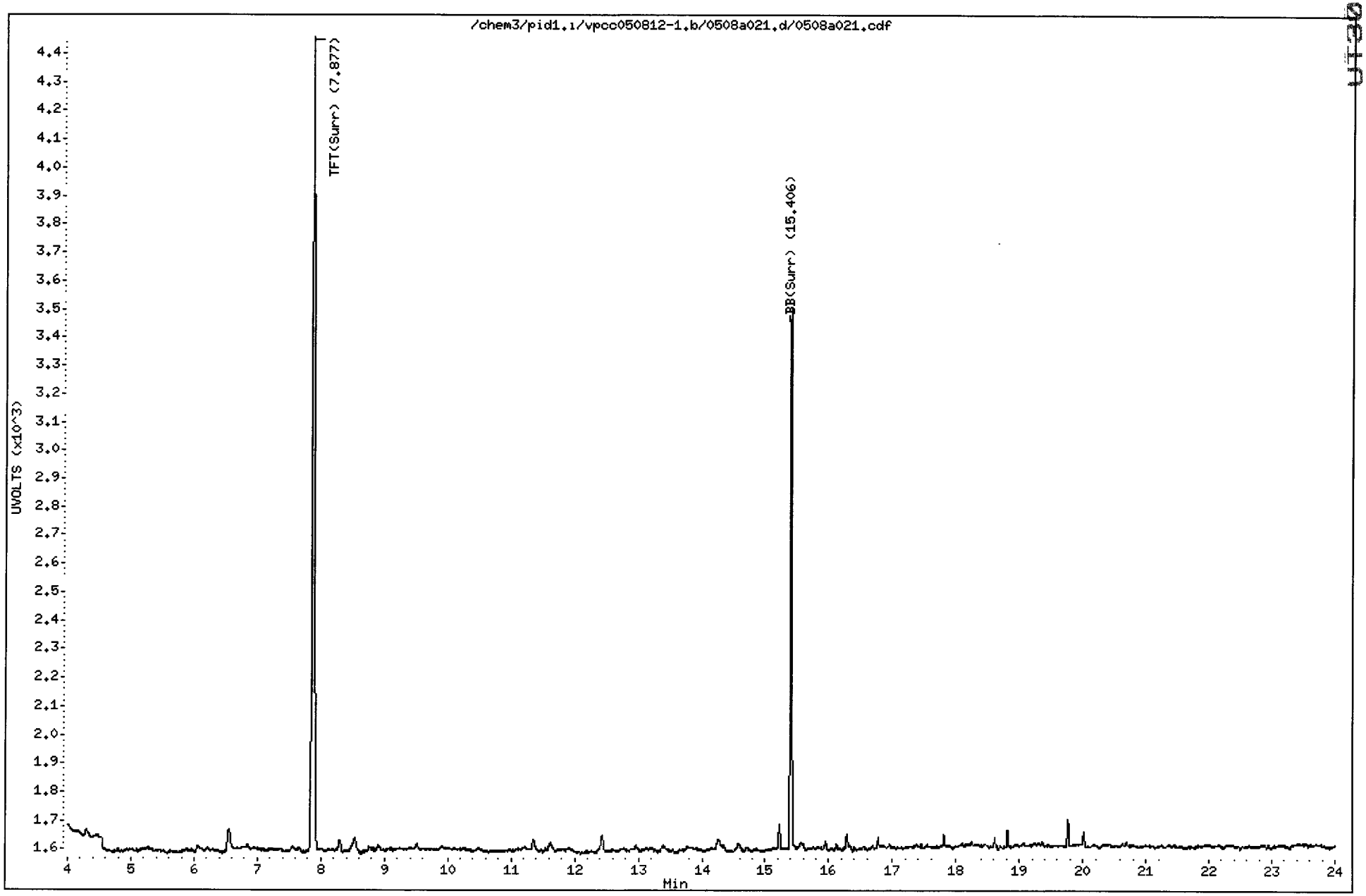
Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: JW

Column diameter: 0.18

99999 UT30



Data File: /chem3/pid1.i/vpcc050812-1.b/0508a022.d

Date : 08-MAY-2012 20:30

Client ID: GP1-W-7.5

Sample Info: UT30E

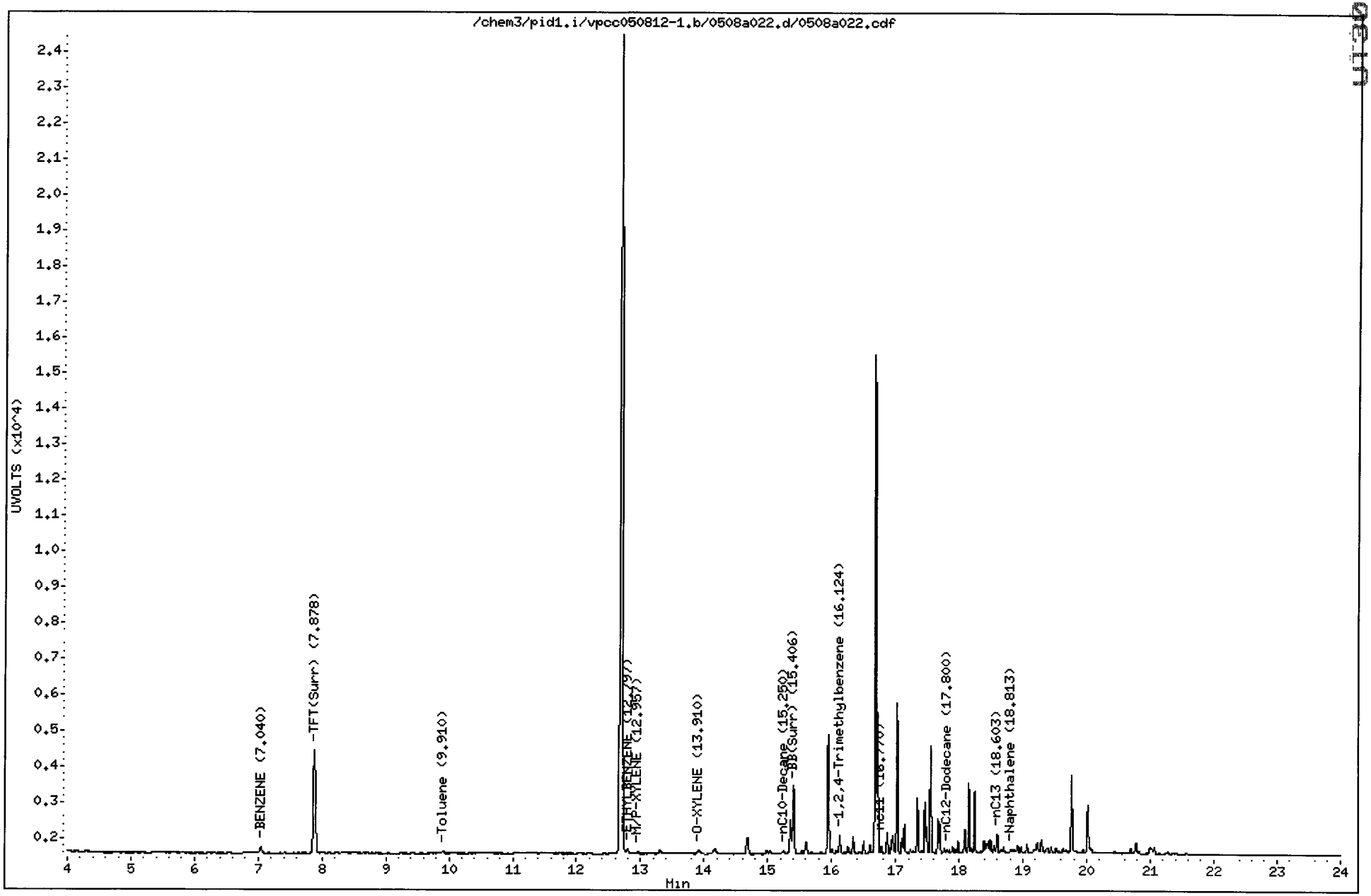
Column phase: RTX 502-2 FID

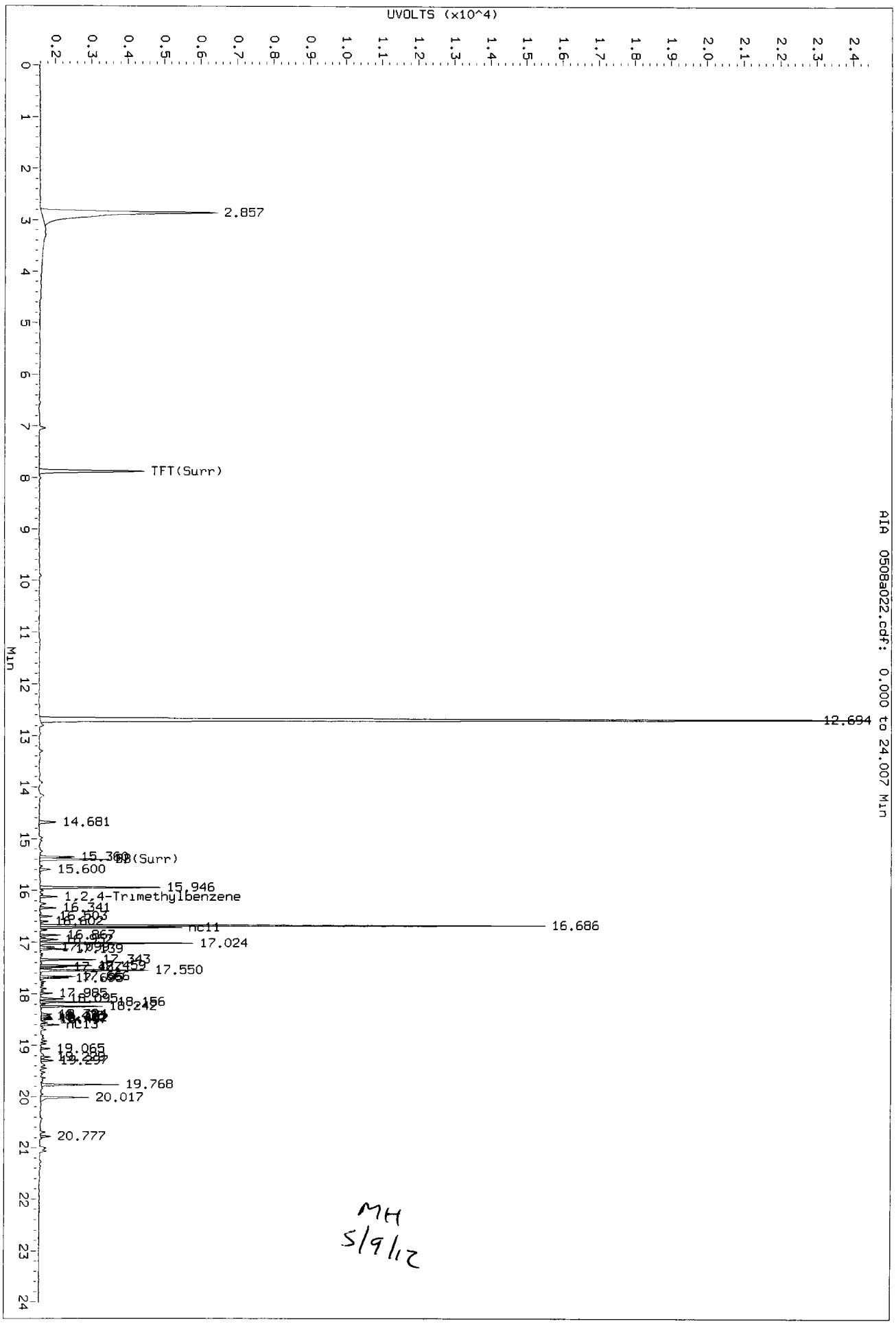
Instrument: pid1.i

Operator: JW

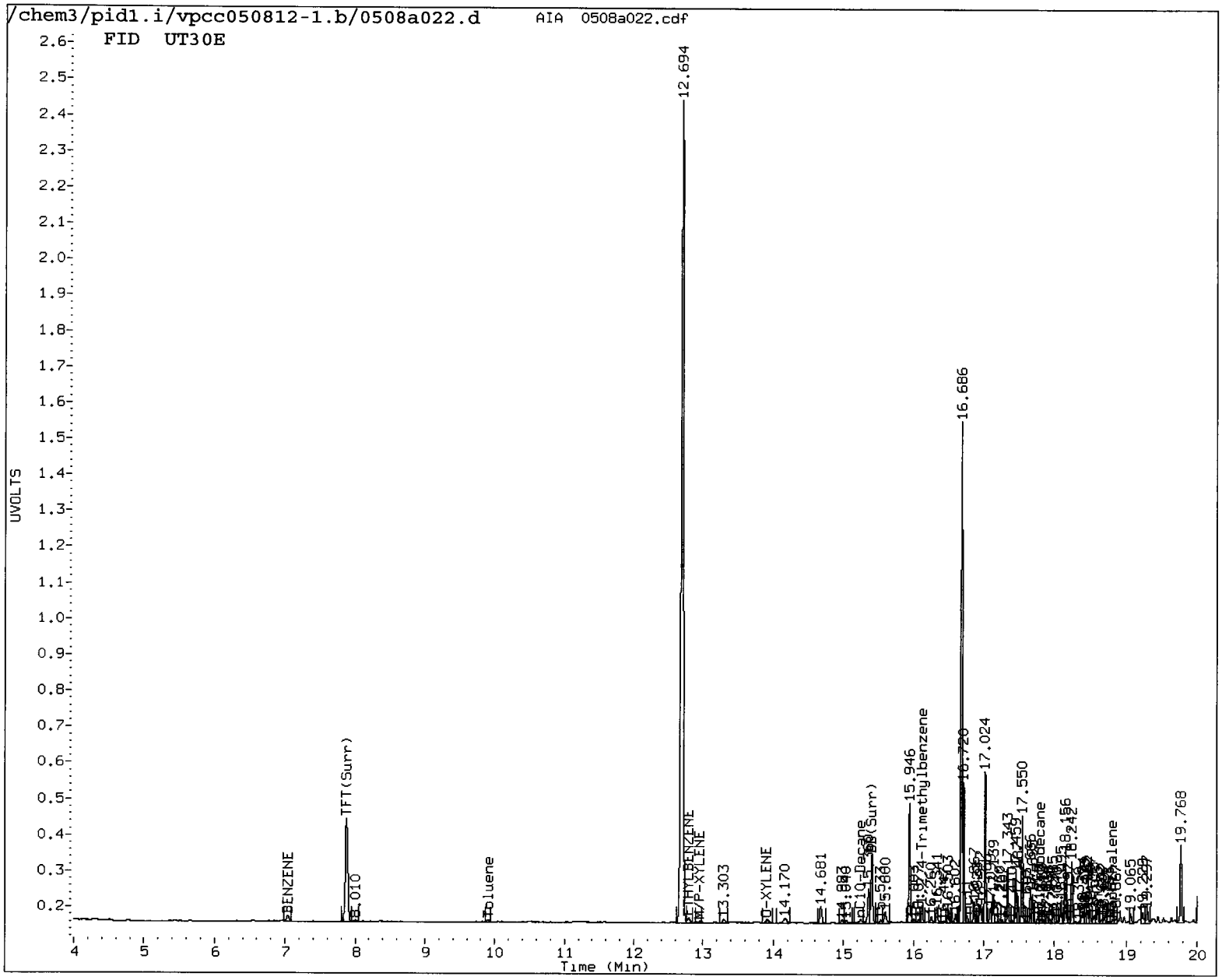
Column diameter: 0.18

UT30E : 00057




Data File: /chem3/pid1.i/vpcc050812-1.b/0508a022.d/0508a022.cdf
Injection Date: 08-MAY-2012 20:30
Instrument: pid1.i
Client Sample ID: GP1-W-7.5
UVOLTS (x10^4)
Min
AIA 0508a022.cdf: 0.000 to 24.007 Min
2.857
TFT(Surr)
12.694
14.681
15.600
15.946
1,2,4-Trimethylbenzene
16.341
nC11
16.686
17.024
17.550
18.242
19.065
19.768
20.017
20.777

MH
5/9/12



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/9/12

Data File: /chem3/pid1.i/vpcc050812-1.b/0508a023.d

Date : 08-MAY-2012 20:59

Client ID: GP2-W-10

Sample Info: UT30F

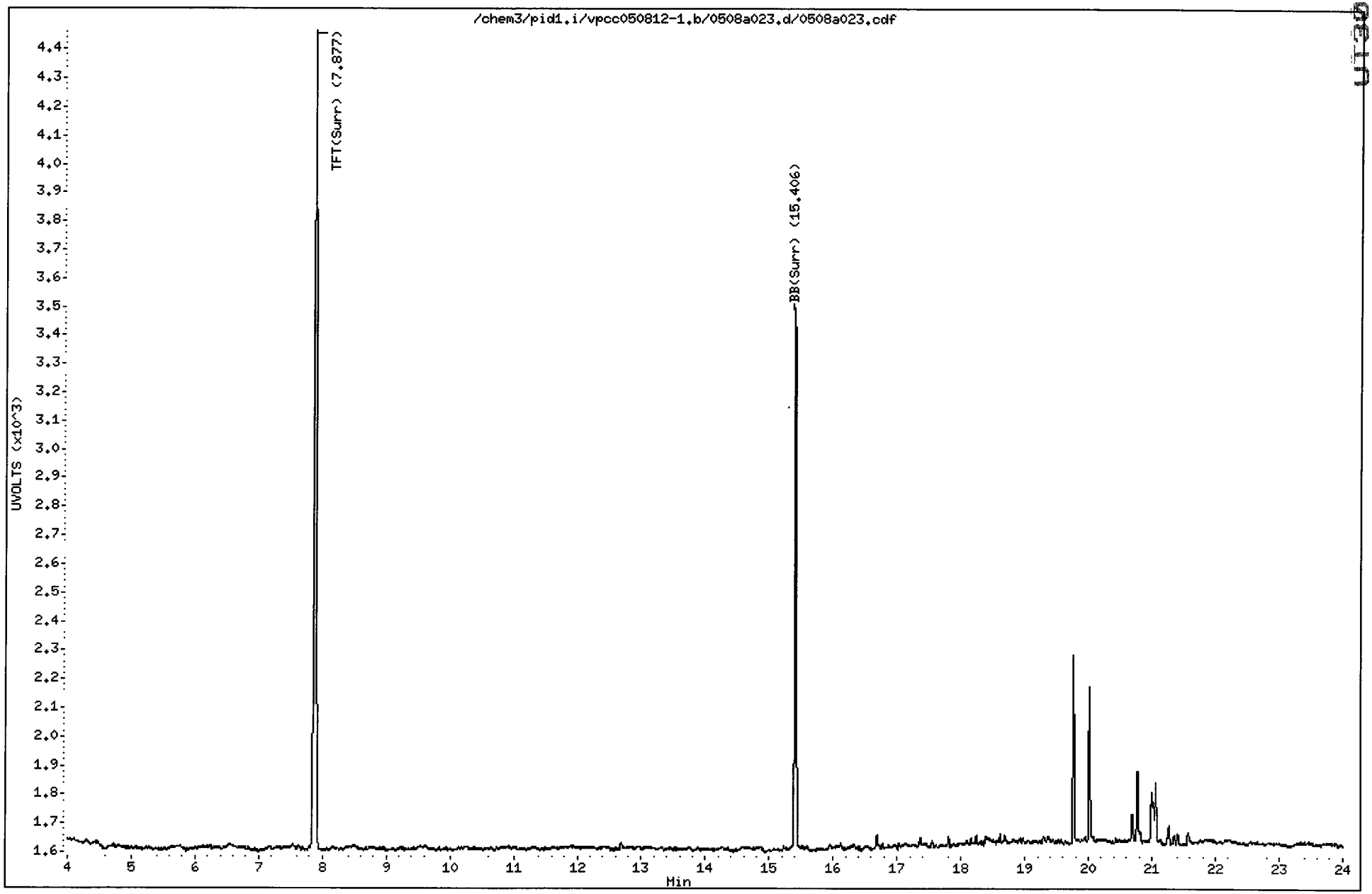
Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: JW

Column diameter: 0.18

UT30 00079



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH
Page 1 of 1

Sample ID: MB-051412
METHOD BLANK

Lab Sample ID: MB-051412
LIMS ID: 12-8203
Matrix: Soil
Data Release Authorized: MW
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Analyzed: 05/14/12 12:35
Instrument/Analyst: PID1/JLW

Purge Volume: 10 mL
Sample Amount: 111 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	450	< 450 U
108-88-3	Toluene	450	< 450 U
100-41-4	Ethylbenzene	450	< 450 U
179601-23-1	m,p-Xylene	900	< 900 U
95-47-6	o-Xylene	450	< 450 U
1634-04-4	Methyl tert-Butyl Ether	450	< 450 U
109-66-0	n-Pentane	450	< 450 U
110-54-3	n-Hexane	450	< 450 U
111-65-9	n-Octane	450	< 450 U
124-18-5	n-Decane	450	< 450 U
112-40-3	n-Dodecane	450	< 450 U

Range	RL	Result
C8-C10 Aromatics	4,500	< 4,500 U
C10-C12 Aromatics	4,500	< 4,500 U
C12-C13 Aromatics	4,500	< 4,500 U
C5-C6 Aliphatics	4,500	< 4,500 U
C6-C8 Aliphatics	4,500	< 4,500 U
C8-C10 Aliphatics	4,500	< 4,500 U
C10-C12 Aliphatics	4,500	< 4,500 U

Values reported in µg/kg (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	108%
FID: 2,5-Dibromotoluene	100%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH **Sample ID: MB-051212**
Page 1 of 1 **METHOD BLANK**

Lab Sample ID: MB-051212 QC Report No: UT30-Maul, Foster & Alongi
LIMS ID: 12-8334 Project: SIMS - N Cascade Ford
Matrix: Water 0747.01.01
Data Release Authorized: MW Date Sampled: NA
Reported: 05/18/12 Date Received: NA

Date Analyzed: 05/12/12 12:18 Purge Volume: 10 mL
Instrument/Analyst: PID1/JLW Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	5.0	< 5.0 U
108-88-3	Toluene	5.0	< 5.0 U
100-41-4	Ethylbenzene	5.0	< 5.0 U
179601-23-1	m,p-Xylene	10	< 10 U
95-47-6	o-Xylene	5.0	< 5.0 U
1634-04-4	Methyl tert-Butyl Ether	5.0	< 5.0 U
109-66-0	n-Pentane	5.0	< 5.0 U
110-54-3	n-Hexane	5.0	< 5.0 U
111-65-9	n-Octane	5.0	< 5.0 U
124-18-5	n-Decane	5.0	< 5.0 U
112-40-3	n-Dodecane	5.0	< 5.0 U

Range	RL	Result
C8-C10 Aromatics	50	< 50 U
C10-C12 Aromatics	50	< 50 U
C12-C13 Aromatics	50	< 50 U
C5-C6 Aliphatics	50	< 50 U
C6-C8 Aliphatics	50	< 50 U
C8-C10 Aliphatics	50	< 50 U
C10-C12 Aliphatics	50	< 50 U

Values reported in µg/L (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	110%
FID: 2,5-Dibromotoluene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH **Sample ID: GP1-S-2.5**
Page 1 of 1 **SAMPLE**

Lab Sample ID: UT30D
LIMS ID: 12-8203
Matrix: Soil
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Analyzed: 05/14/12 14:20
Instrument/Analyst: PID1/JLW

Purge Volume: 10 mL
Sample Amount: 36.0 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1400	< 1,400 U
108-88-3	Toluene	1400	< 1,400 U
100-41-4	**Ethylbenzene**	**1400**	**10,000**
179601-23-1	m,p-Xylene	2800	< 2,800 U
95-47-6	o-Xylene	1400	< 1,400 U
1634-04-4	Methyl tert-Butyl Ether	1400	< 1,400 U
109-66-0	n-Pentane	1400	< 1,400 U
110-54-3	n-Hexane	1400	< 1,400 U
111-65-9	n-Octane	1400	< 1,400 U
124-18-5	**n-Decane**	**1400**	**8,500**
112-40-3	**n-Dodecane**	**1400**	**4,000**

Range	RL	Result
C8-C10 Aromatics	**14,000**	**160,000**
C10-C12 Aromatics	**14,000**	**140,000**
C12-C13 Aromatics	**14,000**	**42,000**
C5-C6 Aliphatics	14,000	< 14,000 U
C6-C8 Aliphatics	14,000	< 14,000 U
C8-C10 Aliphatics	14,000	< 14,000 U
C10-C12 Aliphatics	**14,000**	**180,000**

Values reported in µg/kg (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	125%
FID: 2,5-Dibromotoluene	131%

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

Sample ID: Trip Blank
SAMPLE

Lab Sample ID: UT30H
LIMS ID: 12-8334
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Analyzed: 05/12/12 12:50
Instrument/Analyst: PID1/JLW

Purge Volume: 10 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	5.0	< 5.0 U
108-88-3	Toluene	5.0	< 5.0 U
100-41-4	Ethylbenzene	5.0	< 5.0 U
179601-23-1	m,p-Xylene	10	< 10 U
95-47-6	o-Xylene	5.0	< 5.0 U
1634-04-4	Methyl tert-Butyl Ether	5.0	< 5.0 U
109-66-0	n-Pentane	5.0	< 5.0 U
110-54-3	n-Hexane	5.0	< 5.0 U
111-65-9	n-Octane	5.0	< 5.0 U
124-18-5	n-Decane	5.0	< 5.0 U
112-40-3	n-Dodecane	5.0	< 5.0 U

Range	RL	Result
C8-C10 Aromatics	50	< 50 U
C10-C12 Aromatics	50	< 50 U
C12-C13 Aromatics	50	< 50 U
C5-C6 Aliphatics	50	< 50 U
C6-C8 Aliphatics	50	< 50 U
C8-C10 Aliphatics	50	< 50 U
C10-C12 Aliphatics	50	< 50 U

Values reported in µg/L (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	117%
FID: 2,5-Dibromotoluene	104%

ANALYTICAL RESOURCES INCORPORATED

VPH SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

ARI ID	Client ID	PDBT	FDBT	TOT OUT
MB-051212	Method Blank	110%	101%	0
LCS-051212	Lab Control	102%	101%	0
LCSD-051212	Lab Control Dup	103%	101%	0
UT30H	Trip Blank	117%	104%	0

	LCS/MB LIMITS	QC LIMITS
(PDBT) = 2,5-Dibromotoluene	(60-140)	(60-140)
(FDBT) = 2,5-Dibromotoluene	(60-140)	(60-140)

Prep Method: METHOD
Log Number Range: 12-8334 to 12-8334

FORM-II VPH

ANALYTICAL RESOURCES INCORPORATED

VPH SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	PDBT	FDBT	TOT OUT
MB-051412	108%	100%	0
LCS-051412	105%	106%	0
LCSD-051412	98.8%	98.8%	0
GP1-S-2.5	125%	131%	0

	LCS/MB LIMITS	QC LIMITS
(PDBT) = 2,5-Dibromotoluene	(60-140)	(60-140)
(FDBT) = 2,5-Dibromotoluene	(60-140)	(60-140)

Prep Method: METHOD
Log Number Range: 12-8203 to 12-8203

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH **Sample ID: LCS-051412**
Page 1 of 1 **LCS/LCSD**

Lab Sample ID: LCS-051412 QC Report No: UT30-Maul, Foster & Alongi
LIMS ID: 12-8203 Project: SIMS - N Cascade Ford
Matrix: Soil 0747.01.01
Data Release Authorized: Date Sampled: NA
Reported: 05/18/12 Date Received: NA

Date Analyzed LCS: 05/14/12 11:33 Purge Volume: 10 mL
Date Analyzed LCSD: 05/14/12 12:04 Sample Amount: 111 mg-dry-wt
Instrument/Analyst: PID1/JLW

Analyte/Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Benzene	1800	1800	100%	1870	1800	104%	3.8%
Toluene	1810	1800	101%	1850	1800	103%	2.2%
Ethylbenzene	1810	1800	101%	1840	1800	102%	1.6%
m,p-Xylene	3590	3600	99.7%	3660	3600	102%	1.9%
o-Xylene	1810	1800	101%	1850	1800	103%	2.2%
Methyl tert-Butyl Ether	1760	1800	97.8%	1760	1800	97.8%	0.0%
Naphthalene	1930	1800	107%	1640	1800	91.1%	16.2%
1,2,3-Trimethylbenzene	1810	1800	101%	1820	1800	101%	0.6%
1-Methylnaphthalene	2180	1800	121%	2020	1800	112%	7.6%
n-Pentane	2240	1800	124%	2240	1800	124%	0.0%
n-Hexane	1990	1800	111%	1990	1800	111%	0.0%
n-Octane	1870	1800	104%	1860	1800	103%	0.5%
n-Decane	1780	1800	98.9%	1760	1800	97.8%	1.1%
n-Dodecane	2280	1800	127%	2130	1800	118%	6.8%

Values reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

VPH Surrogate Recovery

	LCS	LCSD
PID: 2,5-Dibromotoluene	105%	98.8%
FID: 2,5-Dibromotoluene	106%	98.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH
Page 1 of 1

Sample ID: LCS-051212
LCS/LCSD

Lab Sample ID: LCS-051212
LIMS ID: 12-8334
Matrix: Water
Data Release Authorized: MW
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 05/12/12 10:28
Date Analyzed LCSD: 05/12/12 11:14
Instrument/Analyst: PID1/JLW

Purge Volume: 10 mL
Dilution Factor: 1.00

Analyte/Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Benzene	52.9	50.0	106%	52.1	50.0	104%	1.5%
Toluene	52.4	50.0	105%	51.9	50.0	104%	1.0%
Ethylbenzene	53.3	50.0	107%	52.7	50.0	105%	1.1%
m,p-Xylene	105	100	105%	104	100	104%	1.0%
o-Xylene	52.2	50.0	104%	51.9	50.0	104%	0.6%
Methyl tert-Butyl Ether	49.9	50.0	99.8%	50.5	50.0	101%	1.2%
Naphthalene	51.1	50.0	102%	51.7	50.0	103%	1.2%
1,2,3-Trimethylbenzene	52.5	50.0	105%	52.2	50.0	104%	0.6%
1-Methylnaphthalene	57.3	50.0	115%	59.4	50.0	119%	3.6%
n-Pentane	64.0	50.0	128%	63.7	50.0	127%	0.5%
n-Hexane	55.4	50.0	111%	55.5	50.0	111%	0.2%
n-Octane	52.2	50.0	104%	52.5	50.0	105%	0.6%
n-Decane	57.4	50.0	115%	53.6	50.0	107%	6.8%
n-Dodecane	58.3	50.0	117%	61.2	50.0	122%	4.9%

Values reported in µg/L (ppb)
RPD calculated using sample concentrations per SW846.

VPH Surrogate Recovery

	LCS	LCSD
PID: 2,5-Dibromotoluene	102%	103%
FID: 2,5-Dibromotoluene	101%	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: GP1-W-7.5
SAMPLE

Lab Sample ID: UT30E
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/10/12
Date Analyzed: 05/16/12 14:55
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	**2-Chlorophenol**	**1.0**	**2.6**
541-73-1	**1,3-Dichlorobenzene**	**1.0**	**1.1**
106-46-7	**1,4-Dichlorobenzene**	**1.0**	**19**
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	**1,2-Dichlorobenzene**	**1.0**	**0.7 J**
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	1.0	< 1.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	**2-Methylnaphthalene**	**1.0**	**11**
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	**Diethylphthalate**	**1.0**	**1.0**

Lab Sample ID: UT30E
LIMS ID: 12-8204
Matrix: Water
Date Analyzed: 05/16/12 14:55

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	**Fluorene**	**1.0**	**0.8 J**
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	**Phenanthrene**	**1.0**	**0.6 J**
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	**1-Methylnaphthalene**	**1.0**	**12**
TOTBFA	Total Benzofluoranthenes	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	61.6%	2-Fluorobiphenyl	48.0%
d14-p-Terphenyl	21.5%	d4-1,2-Dichlorobenzene	52.0%
d5-Phenol	61.9%	2-Fluorophenol	62.1%
2,4,6-Tribromophenol	72.3%	d4-2-Chlorophenol	62.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-051012
METHOD BLANK

Lab Sample ID: MB-051012
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/10/12
Date Analyzed: 05/16/12 12:08
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	1.0	< 1.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

Lab Sample ID: MB-051012 QC Report No: UT30-Maul, Foster & Alongi
LIMS ID: 12-8204 Project: SIMS - N Cascade Ford
Matrix: Water 0747.01.01
Date Analyzed: 05/16/12 12:08

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	76.8%	2-Fluorobiphenyl	72.8%
d14-p-Terphenyl	85.6%	d4-1,2-Dichlorobenzene	65.2%
d5-Phenol	77.1%	2-Fluorophenol	77.9%
2,4,6-Tribromophenol	78.7%	d4-2-Chlorophenol	77.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-051012
LCS/LCSD

Lab Sample ID: LCS-051012
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted LCS/LCSD: 05/10/12

Date Analyzed LCS: 05/16/12 12:42
LCSD: 05/16/12 13:15
Instrument/Analyst LCS: NT6/JZ
LCSD: NT6/JZ
GPC Cleanup: NO

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Phenol	16.4	25.0	65.6%	16.3	25.0	65.2%	0.6%
Bis-(2-Chloroethyl) Ether	17.5	25.0	70.0%	17.2	25.0	68.8%	1.7%
2-Chlorophenol	16.0	25.0	64.0%	15.5	25.0	62.0%	3.2%
1,3-Dichlorobenzene	12.5	25.0	50.0%	11.7	25.0	46.8%	6.6%
1,4-Dichlorobenzene	12.8	25.0	51.2%	12.1	25.0	48.4%	5.6%
Benzyl Alcohol	14.9	25.0	59.6%	15.0	25.0	60.0%	0.7%
1,2-Dichlorobenzene	13.4	25.0	53.6%	12.6	25.0	50.4%	6.2%
2-Methylphenol	15.3	25.0	61.2%	15.1	25.0	60.4%	1.3%
2,2'-Oxybis(1-Chloropropane)	17.2	25.0	68.8%	16.7	25.0	66.8%	2.9%
4-Methylphenol	32.1	50.0	64.2%	31.4	50.0	62.8%	2.2%
N-Nitroso-Di-N-Propylamine	18.6	25.0	74.4%	18.2	25.0	72.8%	2.2%
Hexachloroethane	11.7	25.0	46.8%	11.0	25.0	44.0%	6.2%
Nitrobenzene	16.4	25.0	65.6%	16.1	25.0	64.4%	1.8%
Isophorone	20.4	25.0	81.6%	20.1	25.0	80.4%	1.5%
2-Nitrophenol	16.5	25.0	66.0%	16.0	25.0	64.0%	3.1%
2,4-Dimethylphenol	35.6	75.0	47.5%	38.8	75.0	51.7%	8.6%
Benzoic Acid	104	138	75.4%	104	138	75.4%	0.0%
bis(2-Chloroethoxy) Methane	17.3	25.0	69.2%	17.0	25.0	68.0%	1.7%
2,4-Dichlorophenol	48.5	75.0	64.7%	47.4	75.0	63.2%	2.3%
1,2,4-Trichlorobenzene	13.2	25.0	52.8%	12.6	25.0	50.4%	4.7%
Naphthalene	14.5	25.0	58.0%	14.0	25.0	56.0%	3.5%
4-Chloroaniline	43.3	75.0	57.7%	44.3	75.0	59.1%	2.3%
Hexachlorobutadiene	11.4	25.0	45.6%	11.0	25.0	44.0%	3.6%
4-Chloro-3-methylphenol	54.3	75.0	72.4%	53.6	75.0	71.5%	1.3%
2-Methylnaphthalene	14.1	25.0	56.4%	13.6	25.0	54.4%	3.6%
Hexachlorocyclopentadiene	24.3	75.0	32.4%	23.9	75.0	31.9%	1.7%
2,4,6-Trichlorophenol	51.0	75.0	68.0%	51.0	75.0	68.0%	0.0%
2,4,5-Trichlorophenol	51.4	75.0	68.5%	51.8	75.0	69.1%	0.8%
2-Chloronaphthalene	15.8	25.0	63.2%	15.6	25.0	62.4%	1.3%
2-Nitroaniline	51.3	75.0	68.4%	49.3	75.0	65.7%	4.0%
Dimethylphthalate	20.5	25.0	82.0%	20.2	25.0	80.8%	1.5%
Acenaphthylene	16.8	25.0	67.2%	16.4	25.0	65.6%	2.4%
3-Nitroaniline	57.1	75.0	76.1%	56.9	75.0	75.9%	0.4%
Acenaphthene	16.2	25.0	64.8%	15.6	25.0	62.4%	3.8%
2,4-Dinitrophenol	98.8	138	71.6%	97.5	138	70.7%	1.3%
4-Nitrophenol	59.0	75.0	78.7%	58.6	75.0	78.1%	0.7%
Dibenzofuran	16.0	25.0	64.0%	15.5	25.0	62.0%	3.2%
2,6-Dinitrotoluene	60.2	75.0	80.3%	58.8	75.0	78.4%	2.4%
2,4-Dinitrotoluene	63.5	75.0	84.7%	62.2	75.0	82.9%	2.1%
Diethylphthalate	21.3	25.0	85.2%	21.0	25.0	84.0%	1.4%
4-Chlorophenyl-phenylether	18.0	25.0	72.0%	18.1	25.0	72.4%	0.6%
Fluorene	17.0	25.0	68.0%	16.7	25.0	66.8%	1.8%
4-Nitroaniline	57.2	75.0	76.3%	55.4	75.0	73.9%	3.2%
4,6-Dinitro-2-Methylphenol	114	138	82.6%	114	138	82.6%	0.0%
N-Nitrosodiphenylamine	17.3	25.0	69.2%	16.9	25.0	67.6%	2.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-051012
LCS/LCSD

Lab Sample ID: LCS-051012
LIMS ID: 12-8204
Matrix: Water
Date Analyzed LCS: 05/16/12 12:42
LCSD: 05/16/12 13:15

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
4-Bromophenyl-phenylether	18.0	25.0	72.0%	18.2	25.0	72.8%	1.1%
Hexachlorobenzene	18.2	25.0	72.8%	18.7	25.0	74.8%	2.7%
Pentachlorophenol	58.8	75.0	78.4%	59.0	75.0	78.7%	0.3%
Phenanthrene	17.9	25.0	71.6%	18.0	25.0	72.0%	0.6%
Carbazole	20.2	25.0	80.8%	20.0	25.0	80.0%	1.0%
Anthracene	17.1	25.0	68.4%	17.4	25.0	69.6%	1.7%
Di-n-Butylphthalate	21.9	25.0	87.6%	22.5	25.0	90.0%	2.7%
Fluoranthene	20.1	25.0	80.4%	20.4	25.0	81.6%	1.5%
Pyrene	16.2	25.0	64.8%	16.7	25.0	66.8%	3.0%
Butylbenzylphthalate	19.7	25.0	78.8%	20.4	25.0	81.6%	3.5%
3,3'-Dichlorobenzidine	46.7	75.0	62.3%	48.1	75.0	64.1%	3.0%
Benzo(a)anthracene	17.4	25.0	69.6%	17.7	25.0	70.8%	1.7%
bis(2-Ethylhexyl)phthalate	19.0	25.0	76.0%	19.4	25.0	77.6%	2.1%
Chrysene	17.5	25.0	70.0%	18.0	25.0	72.0%	2.8%
Di-n-Octyl phthalate	19.0	25.0	76.0%	19.5	25.0	78.0%	2.6%
Benzo(a)pyrene	16.2	25.0	64.8%	16.7	25.0	66.8%	3.0%
Indeno(1,2,3-cd)pyrene	14.4	25.0	57.6%	15.0	25.0	60.0%	4.1%
Dibenz(a,h)anthracene	11.1	25.0	44.4%	11.7	25.0	46.8%	5.3%
Benzo(g,h,i)perylene	14.7	25.0	58.8%	15.5	25.0	62.0%	5.3%
1-Methylnaphthalene	19.5	25.0	78.0%	18.6	25.0	74.4%	4.7%
Total Benzofluoranthenes	35.7	50.0	71.4%	36.7	50.0	73.4%	2.8%

Semivolatile Surrogate Recovery

	LCS	LCSD
d5-Nitrobenzene	67.6%	64.8%
2-Fluorobiphenyl	67.2%	64.4%
d14-p-Terphenyl	74.8%	74.0%
d4-1,2-Dichlorobenzene	58.8%	55.2%
d5-Phenol	68.3%	66.1%
2-Fluorophenol	65.9%	65.1%
2,4,6-Tribromophenol	82.7%	79.5%
d4-2-Chlorophenol	68.3%	65.6%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-051012	76.8%	72.8%	85.6%	65.2%	77.1%	77.9%	78.7%	77.1%	0
LCS-051012	67.6%	67.2%	74.8%	58.8%	68.3%	65.9%	82.7%	68.3%	0
LCSD-051012	64.8%	64.4%	74.0%	55.2%	66.1%	65.1%	79.5%	65.6%	0
GP1-W-7.5	61.6%	48.0%	21.5%*	52.0%	61.9%	62.1%	72.3%	62.9%	1

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(50-100)	(34-101)
(FBP) = 2-Fluorobiphenyl	(51-100)	(38-100)
(TPH) = d14-p-Terphenyl	(54-117)	(27-122)
(DCB) = d4-1,2-Dichlorobenzene	(40-100)	(27-100)
(PHL) = d5-Phenol	(15-121)	(16-106)
(2FP) = 2-Fluorophenol	(33-100)	(23-100)
(TBP) = 2,4,6-Tribromophenol	(46-125)	(31-128)
(2CP) = d4-2-Chlorophenol	(46-102)	(33-100)

Prep Method: SW3520C
Log Number Range: 12-8204 to 12-8204

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: GP1-S-2.5
SAMPLE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/10/12
Date Analyzed: 05/17/12 20:28
Instrument/Analyst: NT6/JZ
GPC Cleanup: Yes

Sample Amount: 5.39 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 10.0
Percent Moisture: 25.1%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	930	< 930 U
111-44-4	Bis-(2-Chloroethyl) Ether	930	< 930 U
95-57-8	2-Chlorophenol	930	< 930 U
541-73-1	**1,3-Dichlorobenzene**	**930**	**700 J**
106-46-7	**1,4-Dichlorobenzene**	**930**	**12,000**
100-51-6	Benzyl Alcohol	4,600	< 4,600 U
95-50-1	**1,2-Dichlorobenzene**	**930**	**580 J**
95-48-7	2-Methylphenol	930	< 930 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	930	< 930 U
106-44-5	4-Methylphenol	930	< 930 U
621-64-7	N-Nitroso-Di-N-Propylamine	930	< 930 U
67-72-1	Hexachloroethane	930	< 930 U
98-95-3	Nitrobenzene	930	< 930 U
78-59-1	Isophorone	930	< 930 U
88-75-5	2-Nitrophenol	930	< 930 U
105-67-9	2,4-Dimethylphenol	930	< 930 U
65-85-0	Benzoic Acid	9,300	< 9,300 U
111-91-1	bis(2-Chloroethoxy) Methane	930	< 930 U
120-83-2	2,4-Dichlorophenol	4,600	< 4,600 U
120-82-1	1,2,4-Trichlorobenzene	930	< 930 U
91-20-3	**Naphthalene**	**930**	**1,200**
106-47-8	4-Chloroaniline	4,600	< 4,600 U
87-68-3	Hexachlorobutadiene	930	< 930 U
59-50-7	4-Chloro-3-methylphenol	4,600	< 4,600 U
91-57-6	**2-Methylnaphthalene**	**930**	**10,000**
77-47-4	Hexachlorocyclopentadiene	4,600	< 4,600 U
88-06-2	2,4,6-Trichlorophenol	4,600	< 4,600 U
95-95-4	2,4,5-Trichlorophenol	4,600	< 4,600 U
91-58-7	2-Chloronaphthalene	930	< 930 U
88-74-4	2-Nitroaniline	4,600	< 4,600 U
131-11-3	Dimethylphthalate	930	< 930 U
208-96-8	Acenaphthylene	930	< 930 U
99-09-2	3-Nitroaniline	4,600	< 4,600 U
83-32-9	Acenaphthene	930	< 930 U
51-28-5	2,4-Dinitrophenol	9,300	< 9,300 U
100-02-7	4-Nitrophenol	4,600	< 4,600 U
132-64-9	Dibenzofuran	930	< 930 U
606-20-2	2,6-Dinitrotoluene	4,600	< 4,600 U
121-14-2	2,4-Dinitrotoluene	4,600	< 4,600 U
84-66-2	Diethylphthalate	930	< 930 U
7005-72-3	4-Chlorophenyl-phenylether	930	< 930 U
86-73-7	**Fluorene**	**930**	**1,200**
100-01-6	4-Nitroaniline	4,600	< 4,600 U
534-52-1	4,6-Dinitro-2-Methylphenol	9,300	< 9,300 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: GP1-S-2.5
SAMPLE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Date Analyzed: 05/17/12 20:28

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result
86-30-6	N-Nitrosodiphenylamine	930	< 930 U
101-55-3	4-Bromophenyl-phenylether	930	< 930 U
118-74-1	Hexachlorobenzene	930	< 930 U
87-86-5	Pentachlorophenol	4,600	< 4,600 U
85-01-8	**Phenanthrene**	**930**	**1,900**
86-74-8	Carbazole	930	< 930 U
120-12-7	Anthracene	930	< 930 U
84-74-2	Di-n-Butylphthalate	930	< 930 U
206-44-0	Fluoranthene	930	< 930 U
129-00-0	Pyrene	930	< 930 U
85-68-7	Butylbenzylphthalate	930	< 930 U
91-94-1	3,3'-Dichlorobenzidine	4,600	< 4,600 U
56-55-3	Benzo(a)anthracene	930	< 930 U
117-81-7	bis(2-Ethylhexyl)phthalate	930	< 930 U
218-01-9	Chrysene	930	< 930 U
117-84-0	Di-n-Octyl phthalate	930	< 930 U
50-32-8	Benzo(a)pyrene	930	< 930 U
193-39-5	Indeno(1,2,3-cd)pyrene	930	< 930 U
53-70-3	Dibenz(a,h)anthracene	930	< 930 U
191-24-2	Benzo(g,h,i)perylene	930	< 930 U
90-12-0	**1-Methylnaphthalene**	**930**	**8,600**
TOTBFA	Total Benzofluoranthenes	930	< 930 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	43.6%	2-Fluorobiphenyl	68.8%
d14-p-Terphenyl	62.8%	d4-1,2-Dichlorobenzene	68.0%
d5-Phenol	56.3%	2-Fluorophenol	49.3%
2,4,6-Tribromophenol	72.8%	d4-2-Chlorophenol	55.7%

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

ANALYTICAL RESOURCES INCORPORATED

Sample ID: GP1-S-2.5
MS/MSD

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted MS/MSD: 05/10/12

Date Analyzed MS: 05/17/12 21:02
MSD: 05/17/12 21:35
Instrument/Analyst MS: NT6/JZ
MSD: NT6/JZ
GPC Cleanup: Yes

Sample Amount MS: 5.51 g-dry-wt
MSD: 5.61 g-dry-wt
Final Extract Volume MS: 0.5 mL
MSD: 0.5 mL
Dilution Factor MS: 10.0
MSD: 10.0
Percent Moisture: 25.1 %

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Phenol	< 928 U	1400	2270	61.7%	1390	2230	62.3%	0.7%
Bis-(2-Chloroethyl) Ether	< 928 U	1310	2270	57.7%	1190	2230	53.4%	9.6%
2-Chlorophenol	< 928 U	1230	2270	54.2%	1130	2230	50.7%	8.5%
1,3-Dichlorobenzene	705 J	1730	2270	45.2%	1680	2230	43.7%	2.9%
1,4-Dichlorobenzene	12200	13600	2270	NA	13300	2230	NA	2.2%
Benzyl Alcohol	< 4640 U	< 4540 U	2270	NA	< 4460 U	2230	NA	NA
1,2-Dichlorobenzene	575 J	1930	2270	59.7%	1770	2230	53.6%	8.6%
2-Methylphenol	< 928 U	1250	2270	55.1%	1070	2230	48.0%	15.5%
2,2'-Oxybis(1-Chloropropane)	< 928 U	1290	2270	56.8%	1230	2230	55.2%	4.8%
4-Methylphenol	< 928 U	2710	4540	59.7%	2390	4460	53.6%	12.5%
N-Nitroso-Di-N-Propylamine	< 928 U	1950	2270	85.9%	2080	2230	93.3%	6.5%
Hexachloroethane	< 928 U	935	2270	41.2%	900	2230	40.4%	3.8%
Nitrobenzene	< 928 U	5920	2270	261%	5640	2230	253%	4.8%
Isophorone	< 928 U	2190	2270	96.5%	2010	2230	90.1%	8.6%
2-Nitrophenol	< 928 U	1020	2270	44.9%	945	2230	42.4%	7.6%
2,4-Dimethylphenol	< 928 U	1290	6810	18.9%	1180	6680	17.7%	8.9%
Benzoic Acid	< 9280 U	< 9070 U	12500	NA	< 8910 U	12300	NA	NA
bis(2-Chloroethoxy) Methane	< 928 U	1530	2270	67.4%	1280	2230	57.4%	17.8%
2,4-Dichlorophenol	< 4640 U	4140 J	6810	60.8%	3690 J	6680	55.2%	11.5%
1,2,4-Trichlorobenzene	< 928 U	1500	2270	66.1%	1320	2230	59.2%	12.8%
Naphthalene	1200	2820	2270	71.4%	2630	2230	64.1%	7.0%
4-Chloroaniline	< 4640 U	< 4540 U	6810	NA	< 4460 U	6680	NA	NA
Hexachlorobutadiene	< 928 U	1410	2270	62.1%	1280	2230	57.4%	9.7%
4-Chloro-3-methylphenol	< 4640 U	4170 J	6810	61.2%	3480 J	6680	52.1%	18.0%
2-Methylnaphthalene	10100	10500	2270	NA	10200	2230	NA	2.9%
Hexachlorocyclopentadiene	< 4640 U	1150 J	6810	16.9%	945 J	6680	14.1%	19.6%
2,4,6-Trichlorophenol	< 4640 U	4420 J	6810	64.9%	3900 J	6680	58.4%	12.5%
2,4,5-Trichlorophenol	< 4640 U	4420 J	6810	64.9%	3980 J	6680	59.6%	10.5%
2-Chloronaphthalene	< 928 U	1620	2270	71.4%	1480	2230	66.4%	9.0%
2-Nitroaniline	< 4640 U	4260 J	6810	62.6%	3870 J	6680	57.9%	9.6%
Dimethylphthalate	< 928 U	1660	2270	73.1%	1530	2230	68.6%	8.2%
Acenaphthylene	< 928 U	1590	2270	70.0%	1370	2230	61.4%	14.9%
3-Nitroaniline	< 4640 U	2440 J	6810	35.8%	2130 J	6680	31.9%	13.6%
Acenaphthene	< 928 U	1980	2270	87.2%	1910	2230	85.7%	3.6%
2,4-Dinitrophenol	< 9280 U	< 9070 U	12500	NA	< 8910 U	12300	NA	NA
4-Nitrophenol	< 4640 U	2220 J	6810	32.6%	2060 J	6680	30.8%	7.5%
Dibenzofuran	< 928 U	1870	2270	82.4%	1740	2230	78.0%	7.2%
2,6-Dinitrotoluene	< 4640 U	4510 J	6810	66.2%	3840 J	6680	57.5%	16.0%
2,4-Dinitrotoluene	< 4640 U	4880	6810	71.7%	4430 J	6680	66.3%	9.7%
Diethylphthalate	< 928 U	1750	2270	77.1%	1540	2230	69.1%	12.8%
4-Chlorophenyl-phenylether	< 928 U	1580	2270	69.6%	1430	2230	64.1%	10.0%
Fluorene	1210	2620	2270	62.1%	2420	2230	54.3%	7.9%
4-Nitroaniline	< 4640 U	3220 J	6810	47.3%	2790 J	6680	41.8%	14.3%
4,6-Dinitro-2-Methylphenol	< 9280 U	2050 J	12500	16.4%	< 8910 U	12300	NA	NA
N-Nitrosodiphenylamine	< 928 U	2840	2270	125%	2870	2230	129%	1.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: GP1-S-2.5
MS/MSD

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Date Analyzed MS: 05/17/12 21:02
MSD: 05/17/12 21:35

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
4-Bromophenyl-phenylether	< 928 U	1490	2270	65.6%	1360	2230	61.0%	9.1%
Hexachlorobenzene	< 928 U	1620	2270	71.4%	1450	2230	65.0%	11.1%
Pentachlorophenol	< 4640 U	4020 J	6810	59.0%	3790 J	6680	56.7%	5.9%
Phenanthrene	1860	3310	2270	63.9%	3080	2230	54.7%	7.2%
Carbazole	< 928 U	2000	2270	88.1%	1860	2230	83.4%	7.3%
Anthracene	< 928 U	1510	2270	66.5%	1350	2230	60.5%	11.2%
Di-n-Butylphthalate	< 928 U	2390	2270	105%	2090	2230	93.7%	13.4%
Fluoranthene	< 928 U	2570	2270	113%	2420	2230	109%	6.0%
Pyrene	< 928 U	1720	2270	75.8%	1560	2230	70.0%	9.8%
Butylbenzylphthalate	< 928 U	1760	2270	77.5%	1640	2230	73.5%	7.1%
3,3'-Dichlorobenzidine	< 4640 U	< 4540 U	6810	NA	< 4460 U	6680	NA	NA
Benzo(a)anthracene	< 928 U	1750	2270	77.1%	1610	2230	72.2%	8.3%
bis(2-Ethylhexyl)phthalate	< 928 U	2140 B	2270	94.3%	1840 B	2230	82.5%	15.1%
Chrysene	< 928 U	1880	2270	82.8%	1730	2230	77.6%	8.3%
Di-n-Octyl phthalate	< 928 U	1940	2270	85.5%	1660	2230	74.4%	15.6%
Benzo(a)pyrene	< 928 U	1660	2270	73.1%	1400	2230	62.8%	17.0%
Indeno(1,2,3-cd)pyrene	< 928 U	1340	2270	59.0%	1560	2230	70.0%	15.2%
Dibenz(a,h)anthracene	< 928 U	1030	2270	45.4%	2780	2230	125%	91.9%
Benzo(g,h,i)perylene	< 928 U	1430	2270	63.0%	1740	2230	78.0%	19.6%
1-Methylnaphthalene	8560	9440	2270	38.8%	9050	2230	22.0%	4.2%
Total Benzofluoranthenes	< 928 U	3510	4540	77.3%	3180	4460	71.3%	9.9%

Reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.
NA-No recovery due to high concentration of analyte in original sample and/or calculated negative recovery.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: GP1-S-2.5
MATRIX SPIKE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/10/12
Date Analyzed: 05/17/12 21:02
Instrument/Analyst: NT6/JZ
GPC Cleanup: Yes

Sample Amount: 5.51 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 10.0
Percent Moisture: 25.1%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	910	---
111-44-4	Bis-(2-Chloroethyl) Ether	910	---
95-57-8	2-Chlorophenol	910	---
541-73-1	1,3-Dichlorobenzene	910	---
106-46-7	1,4-Dichlorobenzene	910	---
100-51-6	Benzyl Alcohol	4,500	---
95-50-1	1,2-Dichlorobenzene	910	---
95-48-7	2-Methylphenol	910	---
108-60-1	2,2'-Oxybis(1-Chloropropane)	910	---
106-44-5	4-Methylphenol	910	---
621-64-7	N-Nitroso-Di-N-Propylamine	910	---
67-72-1	Hexachloroethane	910	---
98-95-3	Nitrobenzene	910	---
78-59-1	Isophorone	910	---
88-75-5	2-Nitrophenol	910	---
105-67-9	2,4-Dimethylphenol	910	---
65-85-0	Benzoic Acid	9,100	---
111-91-1	bis(2-Chloroethoxy) Methane	910	---
120-83-2	2,4-Dichlorophenol	4,500	---
120-82-1	1,2,4-Trichlorobenzene	910	---
91-20-3	Naphthalene	910	---
106-47-8	4-Chloroaniline	4,500	---
87-68-3	Hexachlorobutadiene	910	---
59-50-7	4-Chloro-3-methylphenol	4,500	---
91-57-6	2-Methylnaphthalene	910	---
77-47-4	Hexachlorocyclopentadiene	4,500	---
88-06-2	2,4,6-Trichlorophenol	4,500	---
95-95-4	2,4,5-Trichlorophenol	4,500	---
91-58-7	2-Chloronaphthalene	910	---
88-74-4	2-Nitroaniline	4,500	---
131-11-3	Dimethylphthalate	910	---
208-96-8	Acenaphthylene	910	---
99-09-2	3-Nitroaniline	4,500	---
83-32-9	Acenaphthene	910	---
51-28-5	2,4-Dinitrophenol	9,100	---
100-02-7	4-Nitrophenol	4,500	---
132-64-9	Dibenzofuran	910	---
606-20-2	2,6-Dinitrotoluene	4,500	---
121-14-2	2,4-Dinitrotoluene	4,500	---
84-66-2	Diethylphthalate	910	---
7005-72-3	4-Chlorophenyl-phenylether	910	---
86-73-7	Fluorene	910	---
100-01-6	4-Nitroaniline	4,500	---
534-52-1	4,6-Dinitro-2-Methylphenol	9,100	---

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Date Analyzed: 05/17/12 21:02

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result
86-30-6	N-Nitrosodiphenylamine	910	---
101-55-3	4-Bromophenyl-phenylether	910	---
118-74-1	Hexachlorobenzene	910	---
87-86-5	Pentachlorophenol	4,500	---
85-01-8	Phenanthrene	910	---
86-74-8	Carbazole	910	---
120-12-7	Anthracene	910	---
84-74-2	Di-n-Butylphthalate	910	---
206-44-0	Fluoranthene	910	---
129-00-0	Pyrene	910	---
85-68-7	Butylbenzylphthalate	910	---
91-94-1	3,3'-Dichlorobenzidine	4,500	---
56-55-3	Benzo(a)anthracene	910	---
117-81-7	bis(2-Ethylhexyl)phthalate	910	---
218-01-9	Chrysene	910	---
117-84-0	Di-n-Octyl phthalate	910	---
50-32-8	Benzo(a)pyrene	910	---
193-39-5	Indeno(1,2,3-cd)pyrene	910	---
53-70-3	Dibenz(a,h)anthracene	910	---
191-24-2	Benzo(g,h,i)perylene	910	---
90-12-0	1-Methylnaphthalene	910	---
TOTBFA	Total Benzofluoranthenes	910	---

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	44.0%	2-Fluorobiphenyl	68.8%
d14-p-Terphenyl	61.6%	d4-1,2-Dichlorobenzene	67.2%
d5-Phenol	51.2%	2-Fluorophenol	49.6%
2,4,6-Tribromophenol	71.2%	d4-2-Chlorophenol	57.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: GP1-S-2.5
MATRIX SPIKE DUPLICATE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/10/12
Date Analyzed: 05/17/12 21:35
Instrument/Analyst: NT6/JZ
GPC Cleanup: Yes

Sample Amount: 5.61 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 10.0
Percent Moisture: 25.1%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	890	---
111-44-4	Bis-(2-Chloroethyl) Ether	890	---
95-57-8	2-Chlorophenol	890	---
541-73-1	1,3-Dichlorobenzene	890	---
106-46-7	1,4-Dichlorobenzene	890	---
100-51-6	Benzyl Alcohol	4,500	---
95-50-1	1,2-Dichlorobenzene	890	---
95-48-7	2-Methylphenol	890	---
108-60-1	2,2'-Oxybis(1-Chloropropane)	890	---
106-44-5	4-Methylphenol	890	---
621-64-7	N-Nitroso-Di-N-Propylamine	890	---
67-72-1	Hexachloroethane	890	---
98-95-3	Nitrobenzene	890	---
78-59-1	Isophorone	890	---
88-75-5	2-Nitrophenol	890	---
105-67-9	2,4-Dimethylphenol	890	---
65-85-0	Benzoic Acid	8,900	---
111-91-1	bis(2-Chloroethoxy) Methane	890	---
120-83-2	2,4-Dichlorophenol	4,500	---
120-82-1	1,2,4-Trichlorobenzene	890	---
91-20-3	Naphthalene	890	---
106-47-8	4-Chloroaniline	4,500	---
87-68-3	Hexachlorobutadiene	890	---
59-50-7	4-Chloro-3-methylphenol	4,500	---
91-57-6	2-Methylnaphthalene	890	---
77-47-4	Hexachlorocyclopentadiene	4,500	---
88-06-2	2,4,6-Trichlorophenol	4,500	---
95-95-4	2,4,5-Trichlorophenol	4,500	---
91-58-7	2-Chloronaphthalene	890	---
88-74-4	2-Nitroaniline	4,500	---
131-11-3	Dimethylphthalate	890	---
208-96-8	Acenaphthylene	890	---
99-09-2	3-Nitroaniline	4,500	---
83-32-9	Acenaphthene	890	---
51-28-5	2,4-Dinitrophenol	8,900	---
100-02-7	4-Nitrophenol	4,500	---
132-64-9	Dibenzofuran	890	---
606-20-2	2,6-Dinitrotoluene	4,500	---
121-14-2	2,4-Dinitrotoluene	4,500	---
84-66-2	Diethylphthalate	890	---
7005-72-3	4-Chlorophenyl-phenylether	890	---
86-73-7	Fluorene	890	---
100-01-6	4-Nitroaniline	4,500	---
534-52-1	4,6-Dinitro-2-Methylphenol	8,900	---

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Date Analyzed: 05/17/12 21:35

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result
86-30-6	N-Nitrosodiphenylamine	890	---
101-55-3	4-Bromophenyl-phenylether	890	---
118-74-1	Hexachlorobenzene	890	---
87-86-5	Pentachlorophenol	4,500	---
85-01-8	Phenanthrene	890	---
86-74-8	Carbazole	890	---
120-12-7	Anthracene	890	---
84-74-2	Di-n-Butylphthalate	890	---
206-44-0	Fluoranthene	890	---
129-00-0	Pyrene	890	---
85-68-7	Butylbenzylphthalate	890	---
91-94-1	3,3'-Dichlorobenzidine	4,500	---
56-55-3	Benzo(a)anthracene	890	---
117-81-7	bis(2-Ethylhexyl)phthalate	890	---
218-01-9	Chrysene	890	---
117-84-0	Di-n-Octyl phthalate	890	---
50-32-8	Benzo(a)pyrene	890	---
193-39-5	Indeno(1,2,3-cd)pyrene	890	---
53-70-3	Dibenz(a,h)anthracene	890	---
191-24-2	Benzo(g,h,i)perylene	890	---
90-12-0	1-Methylnaphthalene	890	---
TOTBFA	Total Benzofluoranthenes	890	---

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	34.8%	2-Fluorobiphenyl	62.0%
d14-p-Terphenyl	53.2%	d4-1,2-Dichlorobenzene	64.8%
d5-Phenol	56.0%	2-Fluorophenol	48.0%
2,4,6-Tribromophenol	65.9%	d4-2-Chlorophenol	52.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-051012
METHOD BLANK

Lab Sample ID: MB-051012
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/10/12
Date Analyzed: 05/16/12 18:14
Instrument/Analyst: NT6/JZ
GPC Cleanup: Yes

Sample Amount: 7.50 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
108-95-2	Phenol	67	< 67 U
111-44-4	Bis-(2-Chloroethyl) Ether	67	< 67 U
95-57-8	2-Chlorophenol	67	< 67 U
541-73-1	1,3-Dichlorobenzene	67	< 67 U
106-46-7	1,4-Dichlorobenzene	67	< 67 U
100-51-6	Benzyl Alcohol	330	< 330 U
95-50-1	1,2-Dichlorobenzene	67	< 67 U
95-48-7	2-Methylphenol	67	< 67 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	67	< 67 U
106-44-5	4-Methylphenol	67	< 67 U
621-64-7	N-Nitroso-Di-N-Propylamine	67	< 67 U
67-72-1	Hexachloroethane	67	< 67 U
98-95-3	Nitrobenzene	67	< 67 U
78-59-1	Isophorone	67	< 67 U
88-75-5	2-Nitrophenol	67	< 67 U
105-67-9	2,4-Dimethylphenol	67	< 67 U
65-85-0	Benzoic Acid	670	< 670 U
111-91-1	bis(2-Chloroethoxy) Methane	67	< 67 U
120-83-2	2,4-Dichlorophenol	330	< 330 U
120-82-1	1,2,4-Trichlorobenzene	67	< 67 U
91-20-3	Naphthalene	67	< 67 U
106-47-8	4-Chloroaniline	330	< 330 U
87-68-3	Hexachlorobutadiene	67	< 67 U
59-50-7	4-Chloro-3-methylphenol	330	< 330 U
91-57-6	2-Methylnaphthalene	67	< 67 U
77-47-4	Hexachlorocyclopentadiene	330	< 330 U
88-06-2	2,4,6-Trichlorophenol	330	< 330 U
95-95-4	2,4,5-Trichlorophenol	330	< 330 U
91-58-7	2-Chloronaphthalene	67	< 67 U
88-74-4	2-Nitroaniline	330	< 330 U
131-11-3	Dimethylphthalate	67	< 67 U
208-96-8	Acenaphthylene	67	< 67 U
99-09-2	3-Nitroaniline	330	< 330 U
83-32-9	Acenaphthene	67	< 67 U
51-28-5	2,4-Dinitrophenol	670	< 670 U
100-02-7	4-Nitrophenol	330	< 330 U
132-64-9	Dibenzofuran	67	< 67 U
606-20-2	2,6-Dinitrotoluene	330	< 330 U
121-14-2	2,4-Dinitrotoluene	330	< 330 U
84-66-2	Diethylphthalate	67	< 67 U
7005-72-3	4-Chlorophenyl-phenylether	67	< 67 U
86-73-7	Fluorene	67	< 67 U
100-01-6	4-Nitroaniline	330	< 330 U
534-52-1	4,6-Dinitro-2-Methylphenol	670	< 670 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-051012
METHOD BLANK

Lab Sample ID: MB-051012
LIMS ID: 12-8200
Matrix: Soil
Date Analyzed: 05/16/12 18:14

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result
86-30-6	N-Nitrosodiphenylamine	67	< 67 U
101-55-3	4-Bromophenyl-phenylether	67	< 67 U
118-74-1	Hexachlorobenzene	67	< 67 U
87-86-5	Pentachlorophenol	330	< 330 U
85-01-8	Phenanthrene	67	< 67 U
86-74-8	Carbazole	67	< 67 U
120-12-7	Anthracene	67	< 67 U
84-74-2	Di-n-Butylphthalate	67	< 67 U
206-44-0	Fluoranthene	67	< 67 U
129-00-0	Pyrene	67	< 67 U
85-68-7	Butylbenzylphthalate	67	< 67 U
91-94-1	3,3'-Dichlorobenzidine	330	< 330 U
56-55-3	Benzo(a)anthracene	67	< 67 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**67**	**55 J**
218-01-9	Chrysene	67	< 67 U
117-84-0	Di-n-Octyl phthalate	67	< 67 U
50-32-8	Benzo(a)pyrene	67	< 67 U
193-39-5	Indeno(1,2,3-cd)pyrene	67	< 67 U
53-70-3	Dibenz(a,h)anthracene	67	< 67 U
191-24-2	Benzo(g,h,i)perylene	67	< 67 U
90-12-0	1-Methylnaphthalene	67	< 67 U
TOTBFA	Total Benzofluoranthenes	67	< 67 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	58.0%	2-Fluorobiphenyl	59.2%
d14-p-Terphenyl	72.8%	d4-1,2-Dichlorobenzene	56.4%
d5-Phenol	58.9%	2-Fluorophenol	60.3%
2,4,6-Tribromophenol	66.9%	d4-2-Chlorophenol	58.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-051012
LAB CONTROL

Lab Sample ID: LCS-051012
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/10/12
Date Analyzed: 05/16/12 18:47
Instrument/Analyst: NT6/JZ
GPC Cleanup: Yes

Sample Amount: 7.50 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
Phenol	1050	1670	62.9%
Bis-(2-Chloroethyl) Ether	1080	1670	64.7%
2-Chlorophenol	990	1670	59.3%
1,3-Dichlorobenzene	955	1670	57.2%
1,4-Dichlorobenzene	978	1670	58.6%
Benzyl Alcohol	917	1670	54.9%
1,2-Dichlorobenzene	993	1670	59.5%
2-Methylphenol	945	1670	56.6%
2,2'-Oxybis(1-Chloropropane)	1060	1670	63.5%
4-Methylphenol	2000	3330	60.1%
N-Nitroso-Di-N-Propylamine	1060	1670	63.5%
Hexachloroethane	981	1670	58.7%
Nitrobenzene	986	1670	59.0%
Isophorone	1190	1670	71.3%
2-Nitrophenol	1000	1670	59.9%
2,4-Dimethylphenol	2080	5000	41.6%
Benzoic Acid	6230	9170	67.9%
bis(2-Chloroethoxy) Methane	1040	1670	62.3%
2,4-Dichlorophenol	3000	5000	60.0%
1,2,4-Trichlorobenzene	996	1670	59.6%
Naphthalene	959	1670	57.4%
4-Chloroaniline	2310	5000	46.2%
Hexachlorobutadiene	980	1670	58.7%
4-Chloro-3-methylphenol	3420	5000	68.4%
2-Methylnaphthalene	943	1670	56.5%
Hexachlorocyclopentadiene	2620	5000	52.4%
2,4,6-Trichlorophenol	3260	5000	65.2%
2,4,5-Trichlorophenol	3250	5000	65.0%
2-Chloronaphthalene	1050	1670	62.9%
2-Nitroaniline	3330	5000	66.6%
Dimethylphthalate	1350	1670	80.8%
Acenaphthylene	1070	1670	64.1%
3-Nitroaniline	3120	5000	62.4%
Acenaphthene	1030	1670	61.7%
2,4-Dinitrophenol	6170	9170	67.3%
4-Nitrophenol	3840	5000	76.8%
Dibenzofuran	1030	1670	61.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-051012
LAB CONTROL

Lab Sample ID: LCS-051012
LIMS ID: 12-8200
Matrix: Soil
Date Analyzed: 05/16/12 18:47

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Analyte	Lab Control	Spike Added	Recovery
2,6-Dinitrotoluene	3890	5000	77.8%
2,4-Dinitrotoluene	4200	5000	84.0%
Diethylphthalate	1410	1670	84.4%
4-Chlorophenyl-phenylether	1180	1670	70.7%
Fluorene	1110	1670	66.5%
4-Nitroaniline	3380	5000	67.6%
4,6-Dinitro-2-Methylphenol	7180	9170	78.3%
N-Nitrosodiphenylamine	1170	1670	70.1%
4-Bromophenyl-phenylether	1150	1670	68.9%
Hexachlorobenzene	1190	1670	71.3%
Pentachlorophenol	3550	5000	71.0%
Phenanthrene	1180	1670	70.7%
Carbazole	1310	1670	78.4%
Anthracene	1070	1670	64.1%
Di-n-Butylphthalate	1470	1670	88.0%
Fluoranthene	1330	1670	79.6%
Pyrene	1090	1670	65.3%
Butylbenzylphthalate	1340	1670	80.2%
3,3'-Dichlorobenzidine	2730	5000	54.6%
Benzo(a)anthracene	1190	1670	71.3%
bis(2-Ethylhexyl)phthalate	1330 B	1670	79.6%
Chrysene	1190	1670	71.3%
Di-n-Octyl phthalate	1320	1670	79.0%
Benzo(a)pyrene	1130	1670	67.7%
Indeno(1,2,3-cd)pyrene	1120	1670	67.1%
Dibenz(a,h)anthracene	1220	1670	73.1%
Benzo(g,h,i)perylene	1100	1670	65.9%
1-Methylnaphthalene	1280	1670	76.6%
Total Benzofluoranthenes	2490	3330	74.8%

Semivolatile Surrogate Recovery	
d5-Nitrobenzene	58.0%
2-Fluorobiphenyl	60.4%
d14-p-Terphenyl	70.8%
d4-1,2-Dichlorobenzene	55.2%
d5-Phenol	62.7%
2-Fluorophenol	62.9%
2,4,6-Tribromophenol	77.6%
d4-2-Chlorophenol	60.5%

Reported in µg/kg (ppb)

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-051012	58.0%	59.2%	72.8%	56.4%	58.9%	60.3%	66.9%	58.4%	0
LCS-051012	58.0%	60.4%	70.8%	55.2%	62.7%	62.9%	77.6%	60.5%	0
GP1-S-2.5	43.6%	68.8%	62.8%	68.0%	56.3%	49.3%	72.8%	55.7%	0
GP1-S-2.5 MS	44.0%	68.8%	61.6%	67.2%	51.2%	49.6%	71.2%	57.1%	0
GP1-S-2.5 MSD	34.8%	62.0%	53.2%	64.8%	56.0%	48.0%	65.9%	52.0%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-102)	(32-106)
(FBP) = 2-Fluorobiphenyl	(51-105)	(39-107)
(TPH) = d14-p-Terphenyl	(55-124)	(31-130)
(DCB) = d4-1,2-Dichlorobenzene	(48-104)	(38-102)
(PHL) = d5-Phenol	(44-110)	(27-112)
(2FP) = 2-Fluorophenol	(38-112)	(22-108)
(TBP) = 2,4,6-Tribromophenol	(54-120)	(31-131)
(2CP) = d4-2-Chlorophenol	(50-103)	(36-104)

Prep Method: SW3546
Log Number Range: 12-8200 to 12-8200

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS

Sample ID: GP1-S-2.5
SAMPLE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/15/12
Date Analyzed: 05/18/12 18:57
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 4.00 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 10.0
Percent Moisture: 25.1%

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**250**	**1,200**
91-57-6	**2-Methylnaphthalene**	**250**	**11,000**
90-12-0	**1-Methylnaphthalene**	**250**	**7,300**
208-96-8	Acenaphthylene	250	< 250 U
83-32-9	**Acenaphthene**	**250**	**510**
86-73-7	**Fluorene**	**250**	**1,200**
85-01-8	**Phenanthrene**	**250**	**1,900**
120-12-7	**Anthracene**	**250**	**190 J**
206-44-0	**Fluoranthene**	**250**	**530**
129-00-0	**Pyrene**	**250**	**590**
56-55-3	**Benzo(a)anthracene**	**250**	**150 J**
218-01-9	**Chrysene**	**250**	**340**
50-32-8	Benzo(a)pyrene	250	< 250 U
193-39-5	Indeno(1,2,3-cd)pyrene	250	< 250 U
53-70-3	Dibenz(a,h)anthracene	250	< 250 U
191-24-2	Benzo(g,h,i)perylene	250	< 250 U
132-64-9	**Dibenzofuran**	**250**	**620**
TOTBFA	Total Benzofluoranthenes	250	< 250 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	93.3%
d14-Dibenzo(a,h)anthracen	93.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: GP1-S-2.5
MATRIX SPIKE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted MS/MSD: 05/15/12

Date Analyzed MS: 05/18/12 19:25
MSD: 05/18/12 19:54
Instrument/Analyst MS: NT4/JZ
MSD: NT4/JZ

Sample Amount MS: 3.95 g-dry-wt
MSD: 4.07 g-dry-wt
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 10.0
MSD: 10.0

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Naphthalene	1200	1510	380	81.6%	1550	369	94.9%	2.6%
2-Methylnaphthalene	10800	10700	380	NA	11900	369	NA	10.6%
1-Methylnaphthalene	7340	7640	380	NA	7900	369	NA	3.3%
Acenaphthylene	< 250 U	565	380	149%	545	369	148%	3.6%
Acenaphthene	508	759	380	66.1%	951	369	120%	22.5%
Fluorene	1250	1330	380	21.1%	1610	369	97.6%	19.0%
Phenanthrene	1930	2250	380	NA	2390	369	NA	6.0%
Anthracene	190 J	420	380	60.5%	445	369	69.1%	5.8%
Fluoranthene	530	919	380	102%	941	369	111%	2.4%
Pyrene	592	833	380	63.4%	907	369	85.4%	8.5%
Benzo(a)anthracene	150 J	387	380	62.4%	580	369	117%	39.9%
Chrysene	342	648	380	80.5%	686	369	93.2%	5.7%
Benzo(a)pyrene	< 250 U	509	380	134%	575	369	156%	12.2%
Indeno(1,2,3-cd)pyrene	< 250 U	357	380	93.9%	371	369	101%	3.8%
Dibenz(a,h)anthracene	< 250 U	309	380	81.3%	587	369	159%	62.1%
Benzo(g,h,i)perylene	< 250 U	430	380	113%	482	369	131%	11.4%
Dibenzofuran	615	772	380	41.3%	762	369	39.8%	1.3%
Total Benzofluoranthenes	< 250 U	900	759	119%	1060	737	144%	16.3%

Reported in µg/kg (ppb)

NA-No recovery due to high concentration (> 4X) of analyte in original sample, calculated negative recovery, or undetected spike.
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS

Sample ID: GP1-S-2.5
MATRIX SPIKE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/15/12
Date Analyzed: 05/18/12 19:25
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 3.95 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 10.0
Percent Moisture: 25.1%

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	250	---
91-57-6	2-Methylnaphthalene	250	---
90-12-0	1-Methylnaphthalene	250	---
208-96-8	Acenaphthylene	250	---
83-32-9	Acenaphthene	250	---
86-73-7	Fluorene	250	---
85-01-8	Phenanthrene	250	---
120-12-7	Anthracene	250	---
206-44-0	Fluoranthene	250	---
129-00-0	Pyrene	250	---
56-55-3	Benzo(a)anthracene	250	---
218-01-9	Chrysene	250	---
50-32-8	Benzo(a)pyrene	250	---
193-39-5	Indeno(1,2,3-cd)pyrene	250	---
53-70-3	Dibenz(a,h)anthracene	250	---
191-24-2	Benzo(g,h,i)perylene	250	---
132-64-9	Dibenzofuran	250	---
TOTBFA	Total Benzofluoranthenes	250	---

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	80.0%
d14-Dibenzo(a,h)anthracen	86.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: GP1-S-2.5
MATRIX SPIKE DUPLICATE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/15/12
Date Analyzed: 05/18/12 19:54
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 4.07 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 10.0
Percent Moisture: 25.1%

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	250	---
91-57-6	2-Methylnaphthalene	250	---
90-12-0	1-Methylnaphthalene	250	---
208-96-8	Acenaphthylene	250	---
83-32-9	Acenaphthene	250	---
86-73-7	Fluorene	250	---
85-01-8	Phenanthrene	250	---
120-12-7	Anthracene	250	---
206-44-0	Fluoranthene	250	---
129-00-0	Pyrene	250	---
56-55-3	Benzo(a)anthracene	250	---
218-01-9	Chrysene	250	---
50-32-8	Benzo(a)pyrene	250	---
193-39-5	Indeno(1,2,3-cd)pyrene	250	---
53-70-3	Dibenz(a,h)anthracene	250	---
191-24-2	Benzo(g,h,i)perylene	250	---
132-64-9	Dibenzofuran	250	---
TOTBFA	Total Benzofluoranthenes	250	---

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	113%
d14-Dibenzo(a,h)anthracen	93.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS

Sample ID: MB-051512
METHOD BLANK

Lab Sample ID: MB-051512
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/15/12
Date Analyzed: 05/18/12 10:25
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.00 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	5.0	< 5.0 U
90-12-0	1-Methylnaphthalene	5.0	< 5.0 U
208-96-8	Acenaphthylene	5.0	< 5.0 U
83-32-9	Acenaphthene	5.0	< 5.0 U
86-73-7	Fluorene	5.0	< 5.0 U
85-01-8	Phenanthrene	5.0	< 5.0 U
120-12-7	Anthracene	5.0	< 5.0 U
206-44-0	Fluoranthene	5.0	< 5.0 U
129-00-0	Pyrene	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	5.0	< 5.0 U
218-01-9	Chrysene	5.0	< 5.0 U
50-32-8	Benzo(a)pyrene	5.0	< 5.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	< 5.0 U
53-70-3	Dibenz(a,h)anthracene	5.0	< 5.0 U
191-24-2	Benzo(g,h,i)perylene	5.0	< 5.0 U
132-64-9	Dibenzofuran	5.0	< 5.0 U
TOTBFA	Total Benzofluoranthenes	5.0	< 5.0 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	64.0%
d14-Dibenzo(a,h)anthracen	86.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS

Sample ID: LCS-051512
LAB CONTROL SAMPLE

Lab Sample ID: LCS-051512
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/15/12
Date Analyzed LCS: 05/18/12 10:53
Instrument/Analyst LCS: NT4/JZ

Sample Amount LCS: 10.0 g-dry-wt
Final Extract Volume LCS: 0.50 mL
Dilution Factor LCS: 1.00

Analyte	LCS	Spike Added	Recovery
Naphthalene	81.2	150	54.1%
2-Methylnaphthalene	81.4	150	54.3%
1-Methylnaphthalene	89.5	150	59.7%
Acenaphthylene	80.6	150	53.7%
Acenaphthene	91.8	150	61.2%
Fluorene	92.0	150	61.3%
Phenanthrene	99.4	150	66.3%
Anthracene	94.8	150	63.2%
Fluoranthene	109	150	72.7%
Pyrene	115	150	76.7%
Benzo(a)anthracene	112	150	74.7%
Chrysene	119	150	79.3%
Benzo(a)pyrene	104	150	69.3%
Indeno(1,2,3-cd)pyrene	120	150	80.0%
Dibenz(a,h)anthracene	120	150	80.0%
Benzo(g,h,i)perylene	113	150	75.3%
Dibenzofuran	83.6	150	55.7%
Total Benzofluoranthenes	248	300	82.7%

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	61.7%
d14-Dibenzo(a,h)anthracen	81.0%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	MNP	DBA	TOT OUT
MB-051512	64.0%	86.7%	0
LCS-051512	61.7%	81.0%	0
GP1-S-2.5	93.3%	93.3%	0
GP1-S-2.5 MS	80.0%	86.7%	0
GP1-S-2.5 MSD	113%*	93.3%	1

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(35-100)	(34-100)
(DBA) = d14-Dibenzo(a,h)anthracene	(37-120)	(10-117)

Prep Method: SW3546
Log Number Range: 12-8200 to 12-8200

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS **Sample ID: GP1-W-7.5**
Page 1 of 1 **SAMPLE**

Lab Sample ID: UT30E
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/12/12
Date Analyzed: 05/18/12 00:12
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result	
91-20-3	**Naphthalene**	**0.10**	**0.32**	
91-57-6	**2-Methylnaphthalene**	**0.10**	**11**	**E**
90-12-0	**1-Methylnaphthalene**	**0.10**	**9.4**	
208-96-8	Acenaphthylene	0.10	< 0.10	U
83-32-9	**Acenaphthene**	**0.10**	**0.99**	
86-73-7	**Fluorene**	**0.10**	**1.0**	
85-01-8	**Phenanthrene**	**0.10**	**0.87**	
120-12-7	Anthracene	0.10	< 0.10	U
206-44-0	Fluoranthene	0.10	< 0.10	U
129-00-0	Pyrene	0.10	< 0.10	U
56-55-3	Benzo(a)anthracene	0.10	< 0.10	U
218-01-9	Chrysene	0.10	< 0.10	U
50-32-8	Benzo(a)pyrene	0.10	< 0.10	U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10	U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10	U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10	U
132-64-9	**Dibenzofuran**	**0.10**	**0.28**	
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20	U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	61.3%
d14-Dibenzo(a,h)anthracene	20.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS **Sample ID: GP1-W-7.5**
Page 1 of 1 **DILUTION**

Lab Sample ID: UT30E
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/12/12
Date Analyzed: 05/18/12 11:50
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 3.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.30**	**0.41**
91-57-6	**2-Methylnaphthalene**	**0.30**	**13**
90-12-0	**1-Methylnaphthalene**	**0.30**	**11**
208-96-8	Acenaphthylene	0.30	< 0.30 U
83-32-9	Acenaphthene	0.30	< 0.30 U
86-73-7	**Fluorene**	**0.30**	**1.1**
85-01-8	**Phenanthrene**	**0.30**	**0.94**
120-12-7	Anthracene	0.30	< 0.30 U
206-44-0	Fluoranthene	0.30	< 0.30 U
129-00-0	Pyrene	0.30	< 0.30 U
56-55-3	Benzo(a)anthracene	0.30	< 0.30 U
218-01-9	Chrysene	0.30	< 0.30 U
50-32-8	Benzo(a)pyrene	0.30	< 0.30 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.30	< 0.30 U
53-70-3	Dibenz(a,h)anthracene	0.30	< 0.30 U
191-24-2	Benzo(g,h,i)perylene	0.30	< 0.30 U
132-64-9	**Dibenzofuran**	**0.30**	**0.40**
TOTBFA	Total Benzofluoranthenes	0.60	< 0.60 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	71.0%
d14-Dibenzo(a,h)anthracene	21.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: GP2-W-10
SAMPLE

Lab Sample ID: UT30F
LIMS ID: 12-8205
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/12/12
Date Analyzed: 05/18/12 00:41
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	**2-Methylnaphthalene**	**0.10**	**0.05 J**
90-12-0	1-Methylnaphthalene	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	66.7%
d14-Dibenzo(a,h)anthracene	78.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS

Sample ID: MB-051212
METHOD BLANK

Lab Sample ID: MB-051212
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/12/12
Date Analyzed: 05/18/12 15:08
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	55.3%
d14-Dibenzo(a,h)anthracene	56.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS

Sample ID: LCS-051212
LAB CONTROL SAMPLE

Lab Sample ID: LCS-051212
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 05/12/12
Date Analyzed LCS: 05/17/12 22:47
Instrument/Analyst LCS: NT4/JZ

Sample Amount LCS: 500 mL
Final Extract Volume LCS: 0.50 mL
Dilution Factor LCS: 1.00

Analyte	LCS	Spike Added	Recovery
Naphthalene	1.81	3.00	60.3%
2-Methylnaphthalene	1.67	3.00	55.7%
1-Methylnaphthalene	1.92	3.00	64.0%
Acenaphthylene	1.83	3.00	61.0%
Acenaphthene	2.06	3.00	68.7%
Fluorene	2.15	3.00	71.7%
Phenanthrene	2.46	3.00	82.0%
Anthracene	2.28	3.00	76.0%
Fluoranthene	2.61	3.00	87.0%
Pyrene	2.62	3.00	87.3%
Benzo(a)anthracene	2.56	3.00	85.3%
Chrysene	2.67	3.00	89.0%
Benzo(a)pyrene	2.26	3.00	75.3%
Indeno(1,2,3-cd)pyrene	2.47	3.00	82.3%
Dibenz(a,h)anthracene	2.08	3.00	69.3%
Benzo(g,h,i)perylene	2.28	3.00	76.0%
Dibenzofuran	1.97	3.00	65.7%
Total Benzofluoranthenes	5.19	6.00	86.5%

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	70.7%
d14-Dibenzo(a,h)anthracene	76.7%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	MNP	DBA	TOT OUT
MB-051212	55.3%	56.0%	0
LCS-051212	70.7%	76.7%	0
GP1-W-7.5	61.3%	20.3%	0
GP1-W-7.5 DL	71.0%	21.0%	0
GP2-W-10	66.7%	78.0%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(40-110)	(33-107)
(DBA) = d14-Dibenzo(a,h)anthracene	(33-140)	(10-142)

Prep Method: SW3520C
Log Number Range: 12-8204 to 12-8205

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: GP1-S-2.5
SAMPLE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/16/12
Date Analyzed: 05/18/12 08:06
Instrument/Analyst: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.9 g-dry-wt
Final Extract Volume: 4.00 mL
Dilution Factor: 10.0
Silica Gel: Yes

Percent Moisture: 25.1%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	62	< 62 U
53469-21-9	Aroclor 1242	62	< 62 U
12672-29-6	**Aroclor 1248**	**62**	**460**
11097-69-1	**Aroclor 1254**	**62**	**310**
11096-82-5	**Aroclor 1260**	**62**	**500**
11104-28-2	Aroclor 1221	62	< 62 U
11141-16-5	Aroclor 1232	62	< 62 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	104%
Tetrachlorometaxylene	90.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: GP1-S-2.5
MS/MSD

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted MS/MSD: 05/16/12

Date Analyzed MS: 05/18/12 09:50
MSD: 05/18/12 10:11
Instrument/Analyst MS: ECD7/JGR
MSD: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount MS: 12.8 g-dry-wt
MSD: 12.9 g-dry-wt
Final Extract Volume MS: 4.0 mL
MSD: 4.0 mL
Dilution Factor MS: 10.0
MSD: 10.0
Silica Gel: Yes

Percent Moisture: 25.1%

Analyte	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Aroclor 1016	< 62.2 U	308	156	197%	333	155	215%	7.8%
Aroclor 1260	497	604	156	68.6%	692	155	126%	13.6%

Results reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: GP1-S-2.5
MATRIX SPIKE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/16/12
Date Analyzed: 05/18/12 09:50
Instrument/Analyst: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.8 g-dry-wt
Final Extract Volume: 4.00 mL
Dilution Factor: 10.0
Silica Gel: Yes

Percent Moisture: 25.1%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	62	---
53469-21-9	Aroclor 1242	62	< 62 U
12672-29-6	**Aroclor 1248**	**62**	**440**
11097-69-1	**Aroclor 1254**	**62**	**380**
11096-82-5	Aroclor 1260	62	---
11104-28-2	Aroclor 1221	62	< 62 U
11141-16-5	Aroclor 1232	62	< 62 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	108%
Tetrachlorometaxylene	91.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: GP1-S-2.5
MATRIX SPIKE DUP

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/16/12
Date Analyzed: 05/18/12 10:11
Instrument/Analyst: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.9 g-dry-wt
Final Extract Volume: 4.00 mL
Dilution Factor: 10.0
Silica Gel: Yes

Percent Moisture: 25.1%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	62	---
53469-21-9	Aroclor 1242	62	< 62 U
12672-29-6	**Aroclor 1248**	**62**	**480**
11097-69-1	**Aroclor 1254**	**62**	**340**
11096-82-5	Aroclor 1260	62	---
11104-28-2	Aroclor 1221	62	< 62 U
11141-16-5	Aroclor 1232	62	< 62 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	115%
Tetrachlorometaxylene	93.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: MB-051612
METHOD BLANK

Lab Sample ID: MB-051612
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/16/12
Date Analyzed: 05/18/12 10:32
Instrument/Analyst: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.0 g
Final Extract Volume: 4.00 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: NA

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	6.7	< 6.7 U
53469-21-9	Aroclor 1242	6.7	< 6.7 U
12672-29-6	Aroclor 1248	6.7	< 6.7 U
11097-69-1	Aroclor 1254	6.7	< 6.7 U
11096-82-5	Aroclor 1260	6.7	< 6.7 U
11104-28-2	Aroclor 1221	6.7	< 6.7 U
11141-16-5	Aroclor 1232	6.7	< 6.7 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	97.2%
Tetrachlorometaxylene	82.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: LCS-051612
LCS/LCSD

Lab Sample ID: LCS-051612
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 05/16/12

Date Analyzed LCS: 05/18/12 10:53
LCSD: 05/18/12 11:14
Instrument/Analyst LCS: ECD7/JGR
LCSD: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount LCS: 12.0 g-dry-wt
LCSD: 12.0 g-dry-wt
Final Extract Volume LCS: 4.00 mL
LCSD: 4.00 mL
Dilution Factor LCS: 1.00
LCSD: 1.00
Silica Gel: Yes

Percent Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Aroclor 1016	126	167	75.4%	129	167	77.2%	2.4%
Aroclor 1260	126	167	75.4%	133	167	79.6%	5.4%

PCB Surrogate Recovery

	LCS	LCSD
Decachlorobiphenyl	93.5%	96.5%
Tetrachlorometaxylene	87.0%	86.5%

Results reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-051612	97.2%	49-126	82.8%	53-108	0
LCS-051612	93.5%	49-126	87.0%	53-108	0
LCSD-051612	96.5%	49-126	86.5%	53-108	0
GP1-S-2.5	104%	31-140	90.5%	39-122	0
GP1-S-2.5 MS	108%	31-140	91.8%	39-122	0
GP1-S-2.5 MSD	115%	31-140	93.0%	39-122	0

Microwave (MARS) Control Limits PCBSMI
Prep Method: SW3546
Log Number Range: 12-8200 to 12-8200

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: MB-050912
METHOD BLANK

Lab Sample ID: MB-050912
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/09/12
Date Analyzed: 05/12/12 09:11
Instrument/Analyst: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes

Sample Amount: 1000 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00
Silica Gel: Yes
Acid Cleanup: Yes

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.010	< 0.010 U
53469-21-9	Aroclor 1242	0.010	< 0.010 U
12672-29-6	Aroclor 1248	0.010	< 0.010 U
11097-69-1	Aroclor 1254	0.010	< 0.010 U
11096-82-5	Aroclor 1260	0.010	< 0.010 U
11104-28-2	Aroclor 1221	0.010	< 0.010 U
11141-16-5	Aroclor 1232	0.010	< 0.010 U

Reported in µg/L (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	112%
Tetrachlorometaxylene	73.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: GP1-W-7.5
SAMPLE

Lab Sample ID: UT30E
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/09/12
Date Analyzed: 05/12/12 11:16
Instrument/Analyst: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes

Sample Amount: 1000 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00
Silica Gel: Yes
Acid Cleanup: Yes

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.010	< 0.010 U
53469-21-9	Aroclor 1242	0.010	< 0.010 U
12672-29-6	**Aroclor 1248**	**0.010**	**0.0090 J**
11097-69-1	Aroclor 1254	0.010	< 0.010 U
11096-82-5	Aroclor 1260	0.010	< 0.010 U
11104-28-2	Aroclor 1221	0.010	< 0.010 U
11141-16-5	Aroclor 1232	0.010	< 0.010 U

Reported in µg/L (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	96.2%
Tetrachlorometaxylene	87.8%

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-050912	112%*	32-108	73.0%	31-100	1
LCS-050912	114%*	32-108	84.5%	31-100	1
LCSD-050912	114%*	32-108	70.8%	31-100	1
GP1-W-7.5	96.2%	19-111	87.8%	21-100	0

Prep Method: SW3510C
Log Number Range: 12-8204 to 12-8204

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082 **Sample ID: LCS-050912**
Page 1 of 1 **LCS/LCSD**

Lab Sample ID: LCS-050912 QC Report No: UT30-Maul, Foster & Alongi
LIMS ID: 12-8204 Project: SIMS - N Cascade Ford
Matrix: Water 0747.01.01
Data Release Authorized: MW Date Sampled: NA
Reported: 05/15/12 Date Received: NA

Date Extracted LCS/LCSD: 05/09/12 Sample Amount LCS: 1000 mL
LCSD: 1000 mL
Date Analyzed LCS: 05/12/12 09:32 Final Extract Volume LCS: 0.50 mL
LCSD: 05/12/12 09:53 LCSD: 0.50 mL
Instrument/Analyst LCS: ECD7/JGR Dilution Factor LCS: 1.00
LCSD: ECD7/JGR LCSD: 1.00
GPC Cleanup: No Silica Gel: Yes
Sulfur Cleanup: Yes Acid Cleanup: Yes

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Aroclor 1016	0.046	0.050	92.0%	0.042	0.050	84.0%	9.1%
Aroclor 1260	0.054	0.050	108%	0.051	0.050	102%	5.7%

PCB Surrogate Recovery

	LCS	LCSD
Decachlorobiphenyl	114%	114%
Tetrachlorometaxylene	84.5%	70.8%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Page 1 of 1
Matrix: Soil

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Received: 05/07/12

Data Release Authorized:
Reported: 05/14/12

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range/Surrogate	RL	Result
MB-051112	Method Blank	05/11/12	05/12/12	1.00	Diesel Range	5.0	< 5.0 U
12-8200	HC ID: ---		FID4A	1.0	Motor Oil Range	10	< 10 U
					o-Terphenyl		89.9%
UT30A	GP1-S-2.5	05/11/12	05/12/12	1.00	**Diesel Range**	**66**	**3,800 E**
12-8200	HC ID: **DRO/MOTOR OIL**		FID4A	10	**Motor Oil Range**	**130**	**10,000 E**
					o-Terphenyl		NR
UT30A DL	GP1-S-2.5	05/11/12	05/14/12	1.00	**Diesel Range**	**660**	**4,000**
12-8200	HC ID: **DRO/MOTOR OIL**		FID4A	100	**Motor Oil Range**	**1,300**	**10,000**
					o-Terphenyl		D

Reported in mg/kg (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: GP1-S-2.5
MS/MSD

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/14/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted MS/MSD: 05/11/12

Date Analyzed MS: 05/12/12 21:22
MSD: 05/12/12 21:46
Instrument/Analyst MS: FID4A/MH
MSD: FID4A/MH

Sample Amount MS: 7.60 g-dry-wt
MSD: 7.59 g-dry-wt
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL
Dilution Factor MS: 10.0
MSD: 10.0
Percent Moisture: 25.1%

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Diesel	3,810 E	4,720	197	NA	5,420	198	NA	13.8%

TPHD Surrogate Recovery

	MS	MSD
o-Terphenyl	NR	NR

Results reported in mg/kg
NA-No recovery due to high concentration of analyte in original sample and/or calculated negative recovery.
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID

Sample ID: LCS-051112
LAB CONTROL

Lab Sample ID: LCS-051112
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/14/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/11/12
Date Analyzed: 05/12/12 20:33
Instrument/Analyst: FID4A/MH

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
Diesel	120	150	80.0%

TPHD Surrogate Recovery

o-Terphenyl	85.9%

Results reported in mg/kg

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	OTER	TOT OUT
051112MBS	89.9%	0
051112LCS	85.9%	0
GP1-S-2.5	NR	0
GP1-S-2.5 DL	D	0
GP1-S-2.5 MS	NR	0
GP1-S-2.5 MSD	NR	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: DL
Log Number Range: 12-8200 to 12-8200

FORM-II TPHD

UT30 00126

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: UT30
Matrix: Soil Project: SIMS - N Cascade Ford
Date Received: 05/07/12 0747.01.01

ARI ID	Client ID	Client Amt	Final Vol	Basis	Prep Date
12-8200-051112MB1	Method Blank	10.0 g	1.00 mL	-	05/11/12
12-8200-051112LCS1	Lab Control	10.0 g	1.00 mL	-	05/11/12
12-8200-UT30A	GP1-S-2.5	7.61 g	1.00 mL	D	05/11/12
12-8200-UT30AMS	GP1-S-2.5	7.60 g	1.00 mL	D	05/11/12
12-8200-UT30AMSD	GP1-S-2.5	7.59 g	1.00 mL	D	05/11/12

Basis: D=Dry Weight W=As Received

Data File: /chem3/fid4a.i/20120512.b/0512a034.d

Date : 12-MAY-2012 20:09

Client ID: UT30MBS1

Sample Info: UT30MBS1

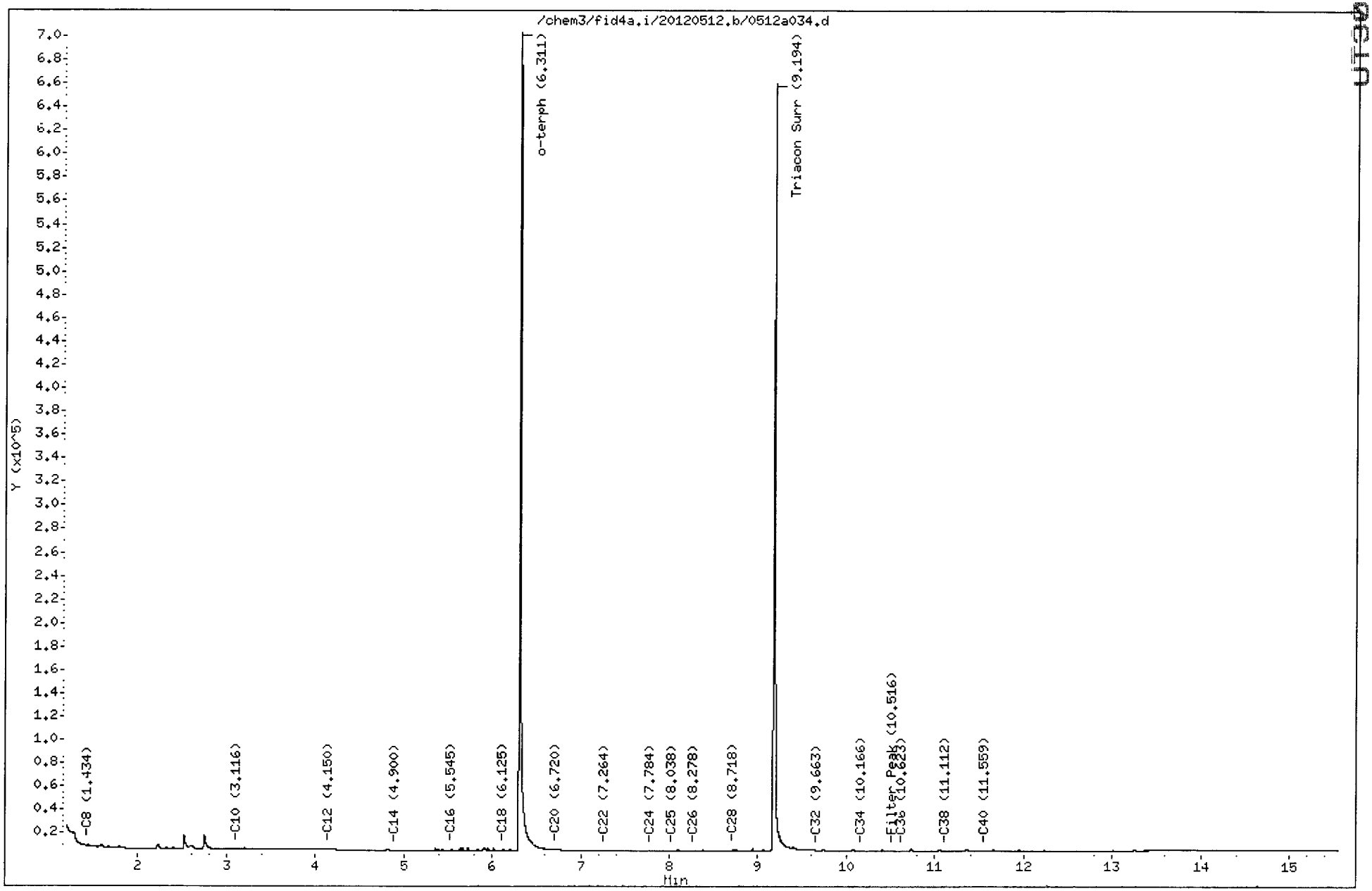
Column phase: RTX-1

Instrument: fid4a.i

Operator: MH

Column diameter: 0.25

UT30 : 00128



Data File: /chem3/fid4a.1/20120512.b/0512a035.d

Date : 12-MAY-2012 20:33

Client ID: UT30LCSS1

Sample Info: UT30LCSS1

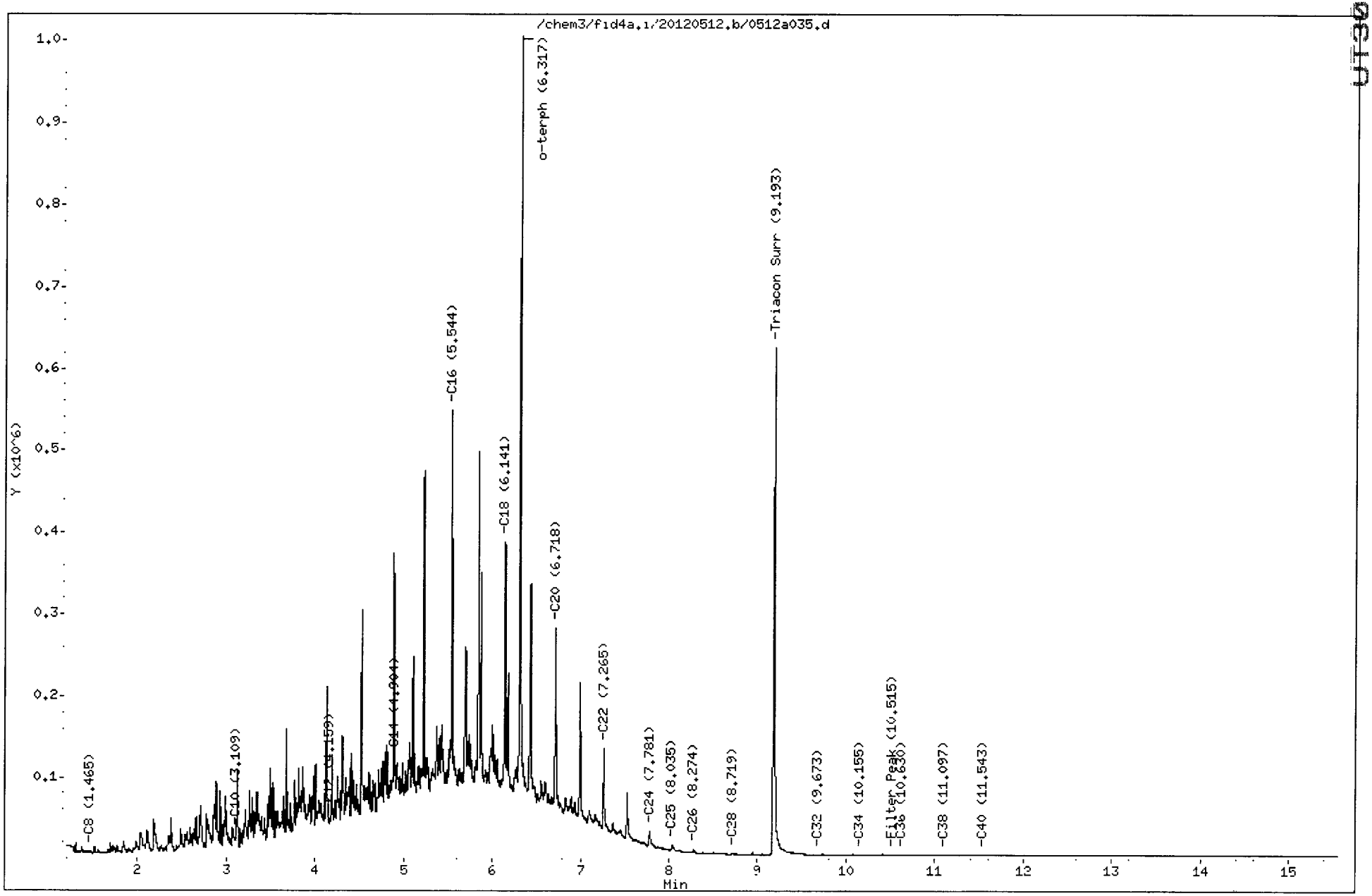
Column phase: RTX-1

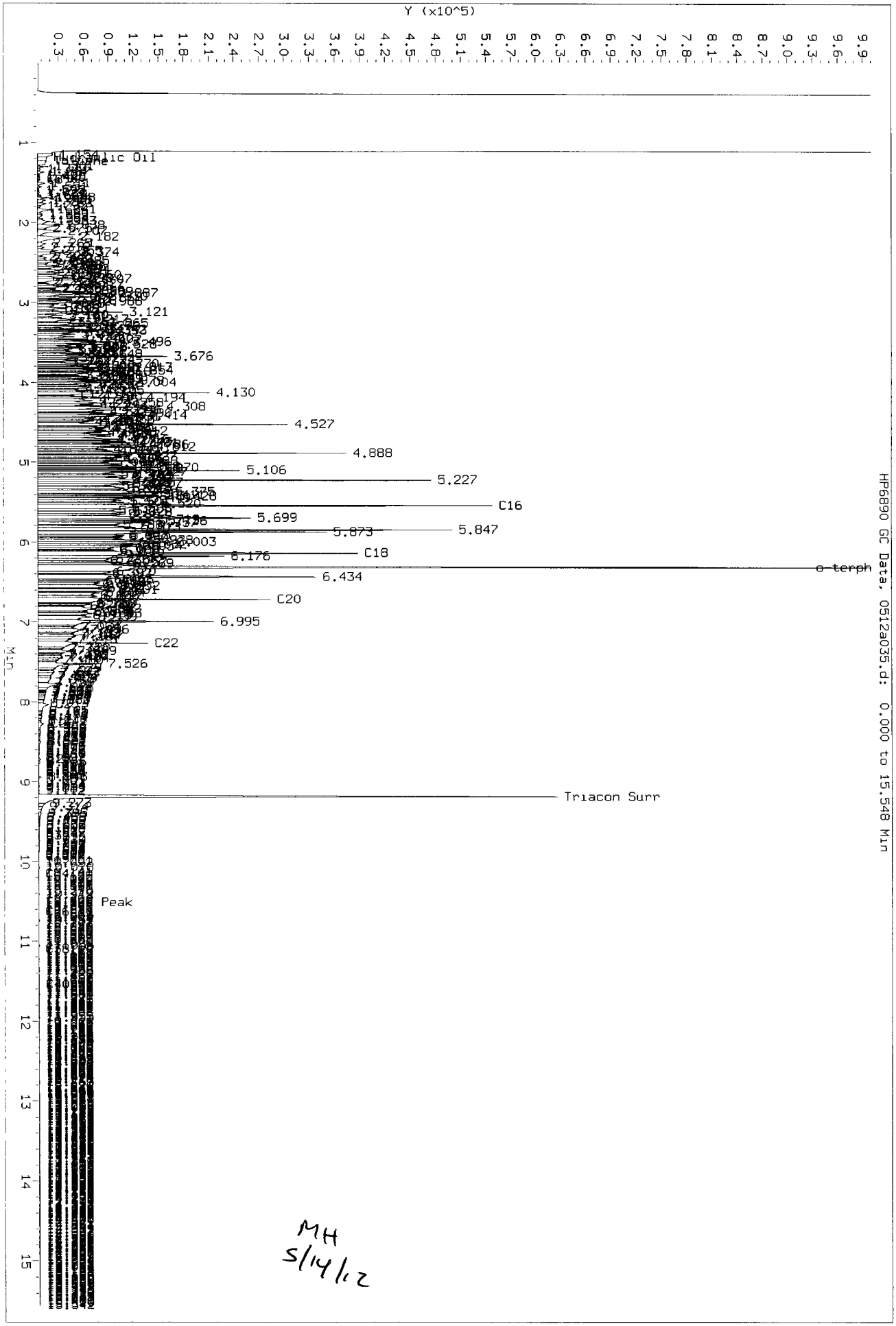
Instrument: fid4a.1

Operator: MH

Column diameter: 0.25

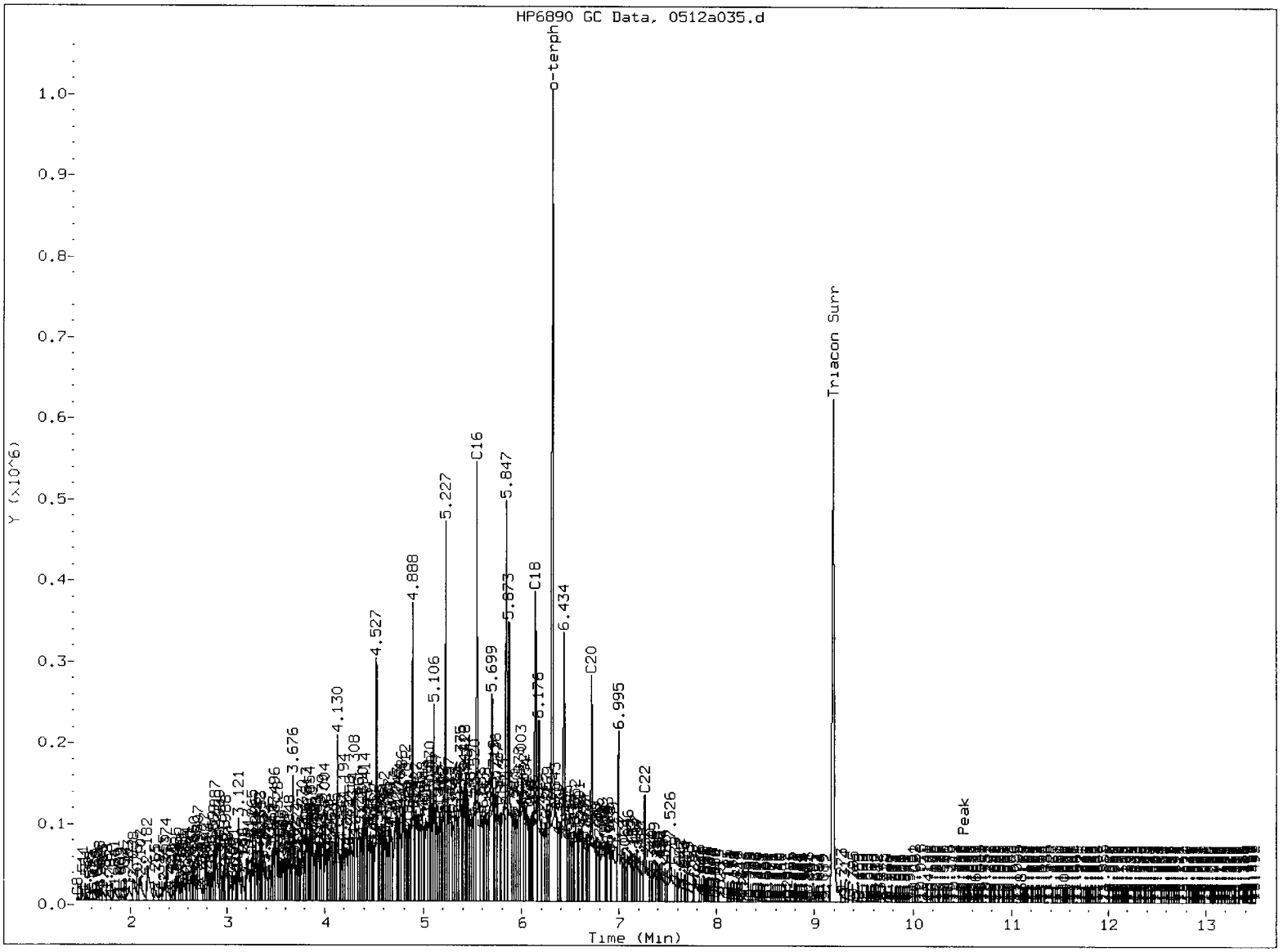
UT30 : 00129




Data File: /chem3/fid4a.i/20120512.b/0512a035.d
Injection Date: 12-MAY-2012 20:33
Instrument: fid4a.i
Client Sample ID: UT30LCSS1
Y (x10^5)
Min
Peak
Mineral Oil
3.121
3.676
4.130
4.527
4.888
5.106
5.227
C16
5.699
5.847
C18
8.176
o-terph
6.434
C20
6.995
C22
7.526
Triacon Surr
HP6890 GC Data, 0512a035.d: 0.000 to 15.548 Min

MH
5/14/12

FID:4A-2C/RTX-1 UT30LCSS1 FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/14/12

Data File: /chem3/fid4a.i/20120512.b/0512a036.d

Page 1

Date : 12-MAY-2012 20:58

Client ID: GP1-S-2.5

Instrument: fid4a.i

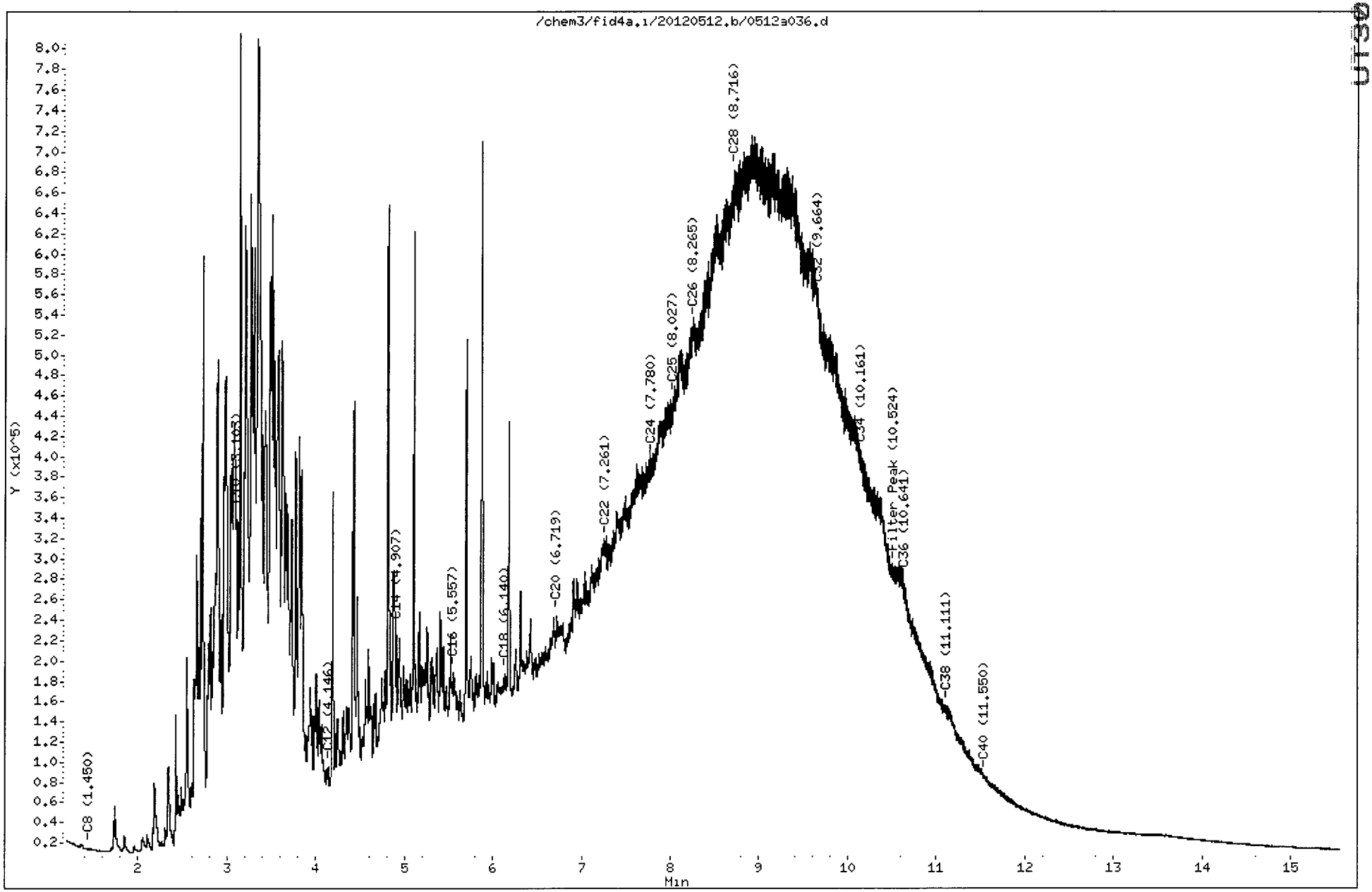
Sample Info: UT30A,10

Operator: MH

Column phase: RTX-1

Column diameter: 0.25

UT30:001132



Data File: /chem3/fid4a.i/20120512.b/0512a037.d

Date : 12-MAY-2012 21:22

Client ID: GP1-S-2.5 MS

Sample Info: UT30AMS,10

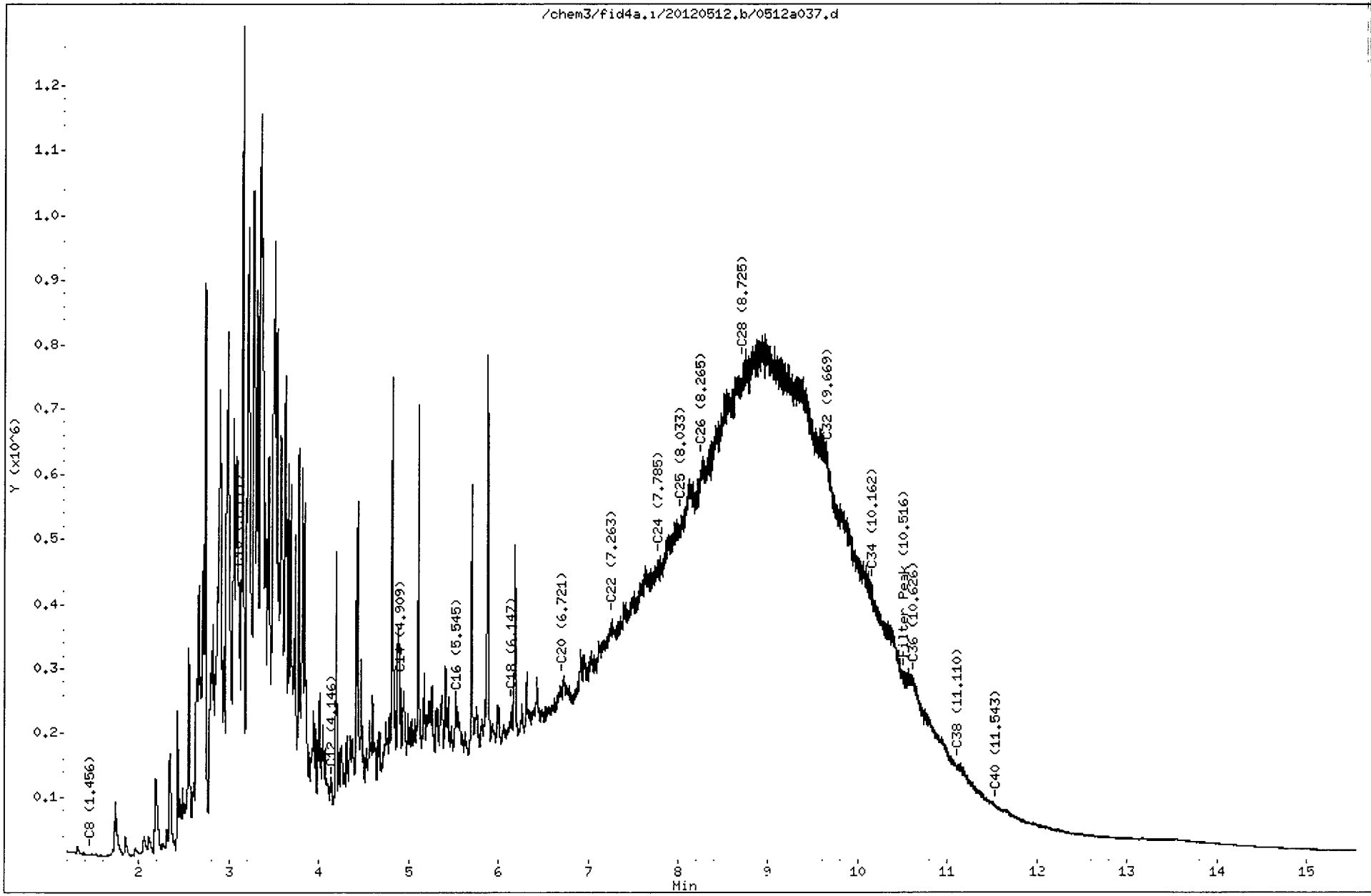
Column phase: RTX-1

Instrument: fid4a.i

Operator: MH

Column diameter: 0.25

UT30:001133



Data File: /chem3/fid4a.i/20120512.b/0512a038.d

Date : 12-MAY-2012 21:46

Client ID: GP1-S-2.5 MSD

Sample Info: UT30AMSD,10

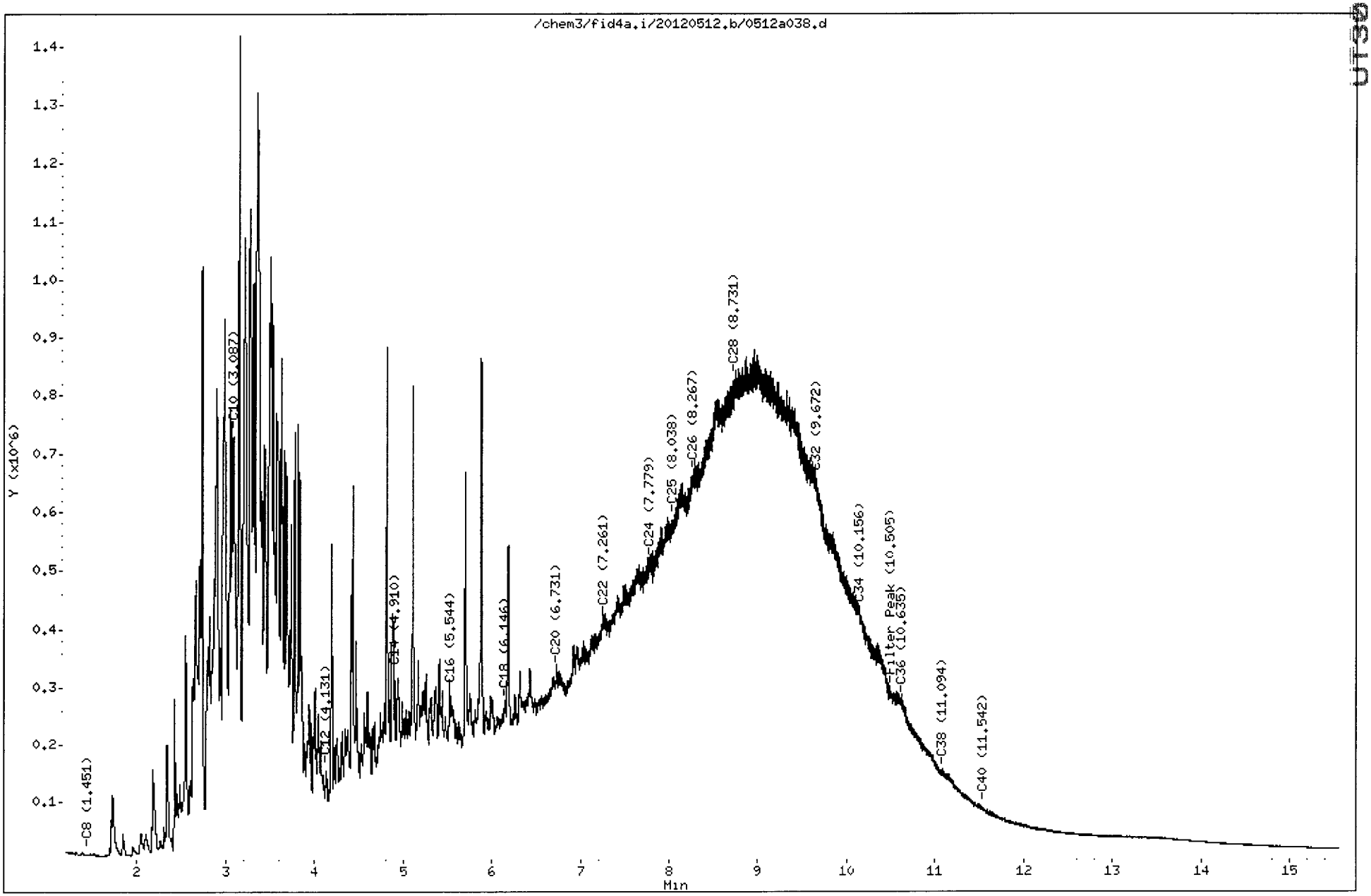
Column phase: RTX-1

Instrument: fid4a.i

Operator: MH

Column diameter: 0.25

UT30 : 001314



Data File: /chem3/fid4a.i/20120514.b/0514a006.d

Date : 14-MAY-2012 08:01

Client ID: GP1-S-2.5

Sample Info: UT30A,100

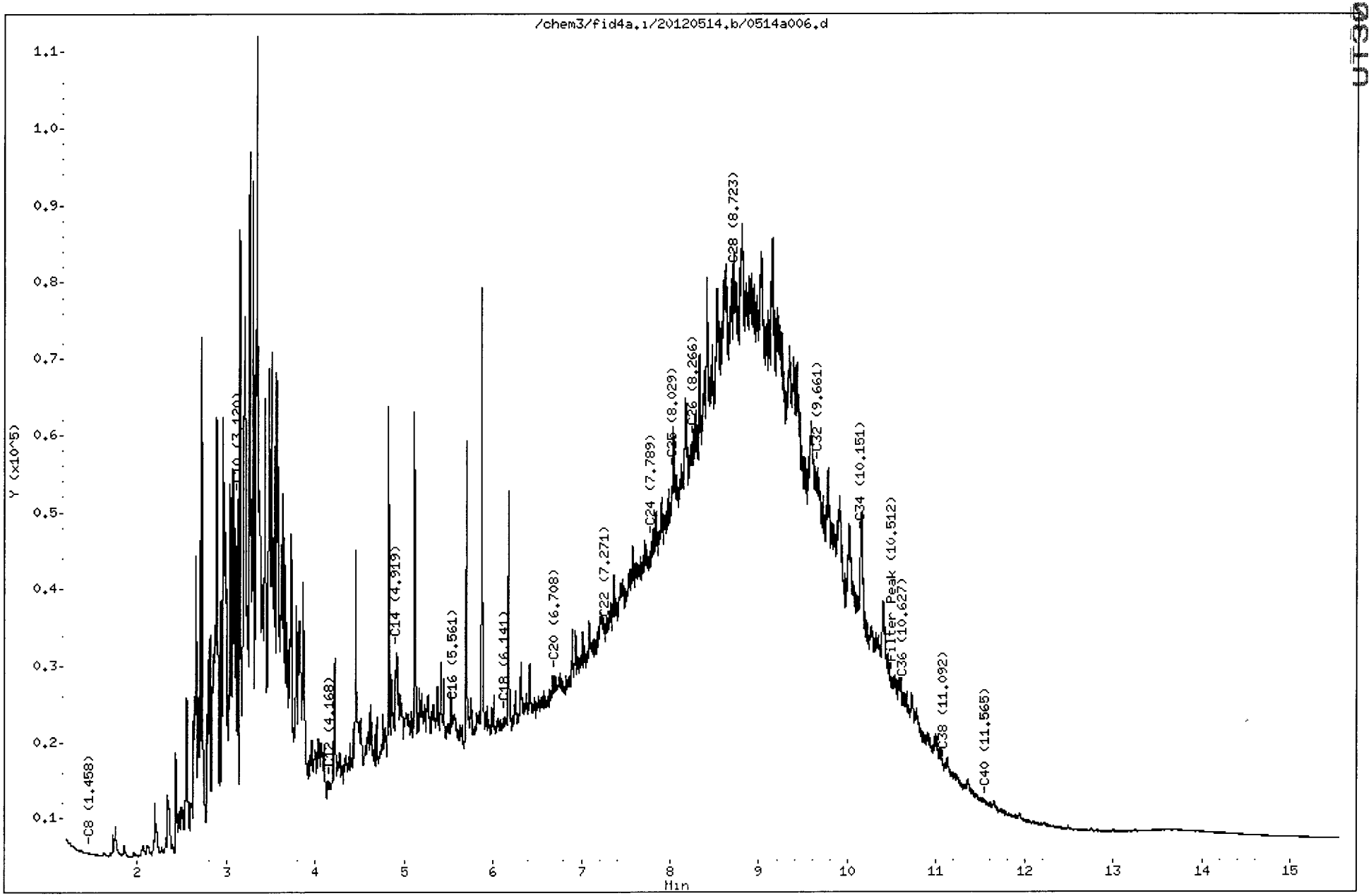
Column phase: RTX-1

Instrument: fid4a.i

Operator: MH

Column diameter: 0.25

UT30 : 00135



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Page 1 of 1
Matrix: Water

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Received: 05/07/12

Data Release Authorized:
Reported: 05/14/12

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range/Surrogate	RL	Result
MB-051012	Method Blank	05/10/12	05/13/12	1.00	Diesel Range	0.10	< 0.10 U
12-8204	HC ID: ---		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		87.4%
UT30E	GP1-W-7.5	05/10/12	05/13/12	1.00	**Diesel Range**	**0.10**	**3.3**
12-8204	HC ID: **DRO/RRO**		FID4A	1.0	**Motor Oil Range**	**0.20**	**1.1**
					o-Terphenyl		83.0%
UT30F	GP2-W-10	05/10/12	05/13/12	1.00	Diesel Range	0.10	< 0.10 U
12-8205	HC ID: ---		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		84.5%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	OTER	TOT OUT
MB-051012	87.4%	0
LCS-051012	81.2%	0
LCSD-051012	85.1%	0
GP1-W-7.5	83.0%	0
GP2-W-10	84.5%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3510C
Log Number Range: 12-8204 to 12-8205

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID **Sample ID: LCS-051012**
Page 1 of 1 **LCS/LCSD**

Lab Sample ID: LCS-051012 QC Report No: UT30-Maul, Foster & Alongi
LIMS ID: 12-8204 Project: SIMS - N Cascade Ford
Matrix: Water 0747.01.01
Data Release Authorized: Date Sampled: NA
Reported: 05/14/12 Date Received: NA

Date Extracted LCS/LCSD: 05/10/12 Sample Amount LCS: 500 mL
LCSD: 500 mL
Date Analyzed LCS: 05/13/12 18:40 Final Extract Volume LCS: 1.0 mL
LCSD: 05/13/12 19:04 LCSD: 1.0 mL
Instrument/Analyst LCS: FID4A/MH Dilution Factor LCS: 1.00
LCSD: FID4A/MH LCSD: 1.00

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	2.36	3.00	78.7%	2.53	3.00	84.3%	7.0%

TPHD Surrogate Recovery

	LCS	LCSD
o-Terphenyl	81.2%	85.1%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: UT30
Matrix: Water
Project: SIMS - N Cascade Ford
Date Received: 05/07/12
0747.01.01

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
12-8204-051012MB1	Method Blank	500 mL	1.00 mL	05/10/12
12-8204-051012LCS1	Lab Control	500 mL	1.00 mL	05/10/12
12-8204-051012LCSD1	Lab Control Dup	500 mL	1.00 mL	05/10/12
12-8204-UT30E	GP1-W-7.5	500 mL	1.00 mL	05/10/12
12-8205-UT30F	GP2-W-10	500 mL	1.00 mL	05/10/12

Data File: /chem3/fid4a.i/20120512a.b/0512a089.d

Date : 13-MAY-2012 18:15

Client ID: UT23MBW1

Sample Info: UT23MBW1

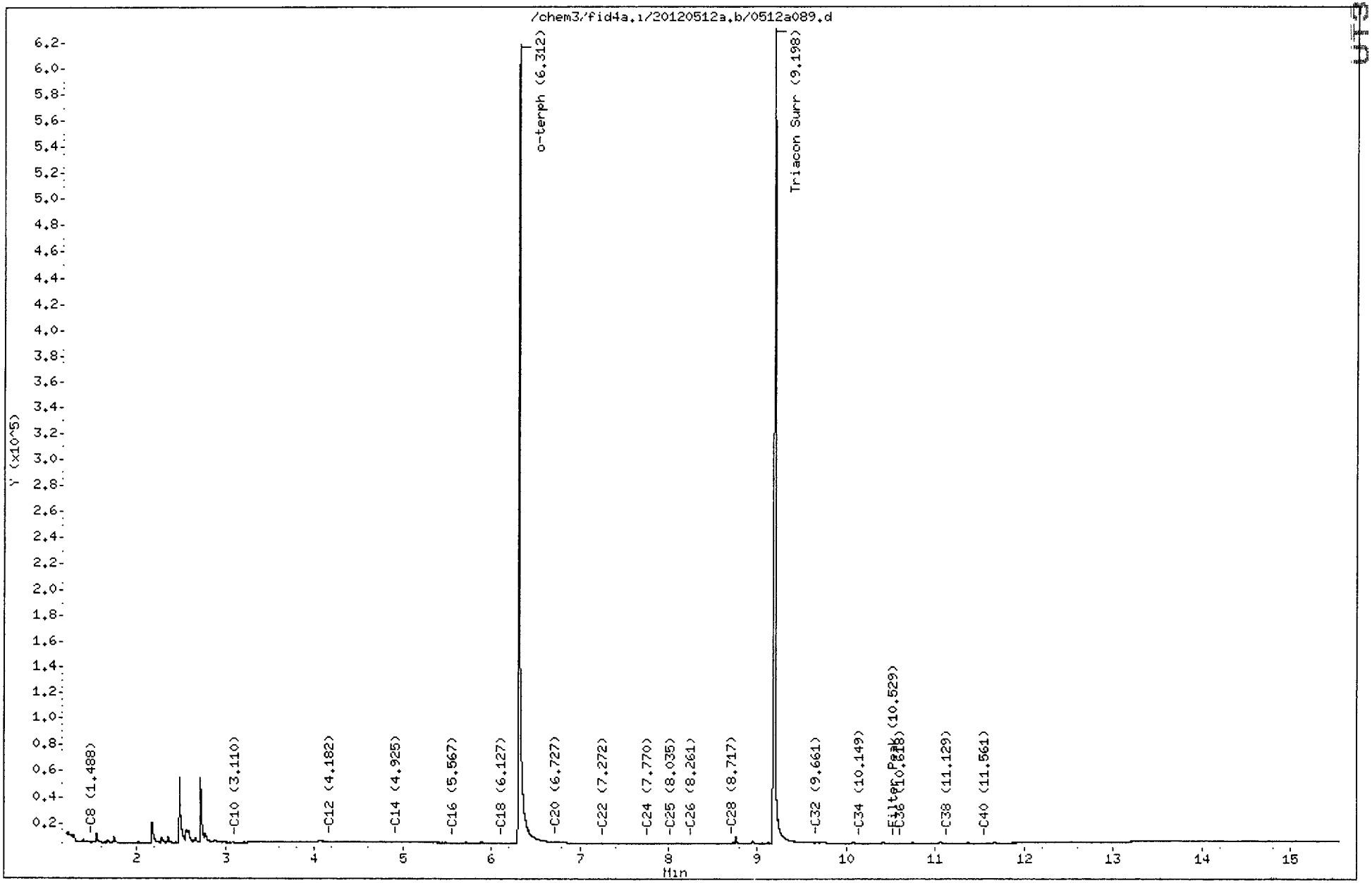
Instrument: fid4a.i

Operator: MH

Column phase: RTX-1

Column diameter: 0.25

UT30:00110



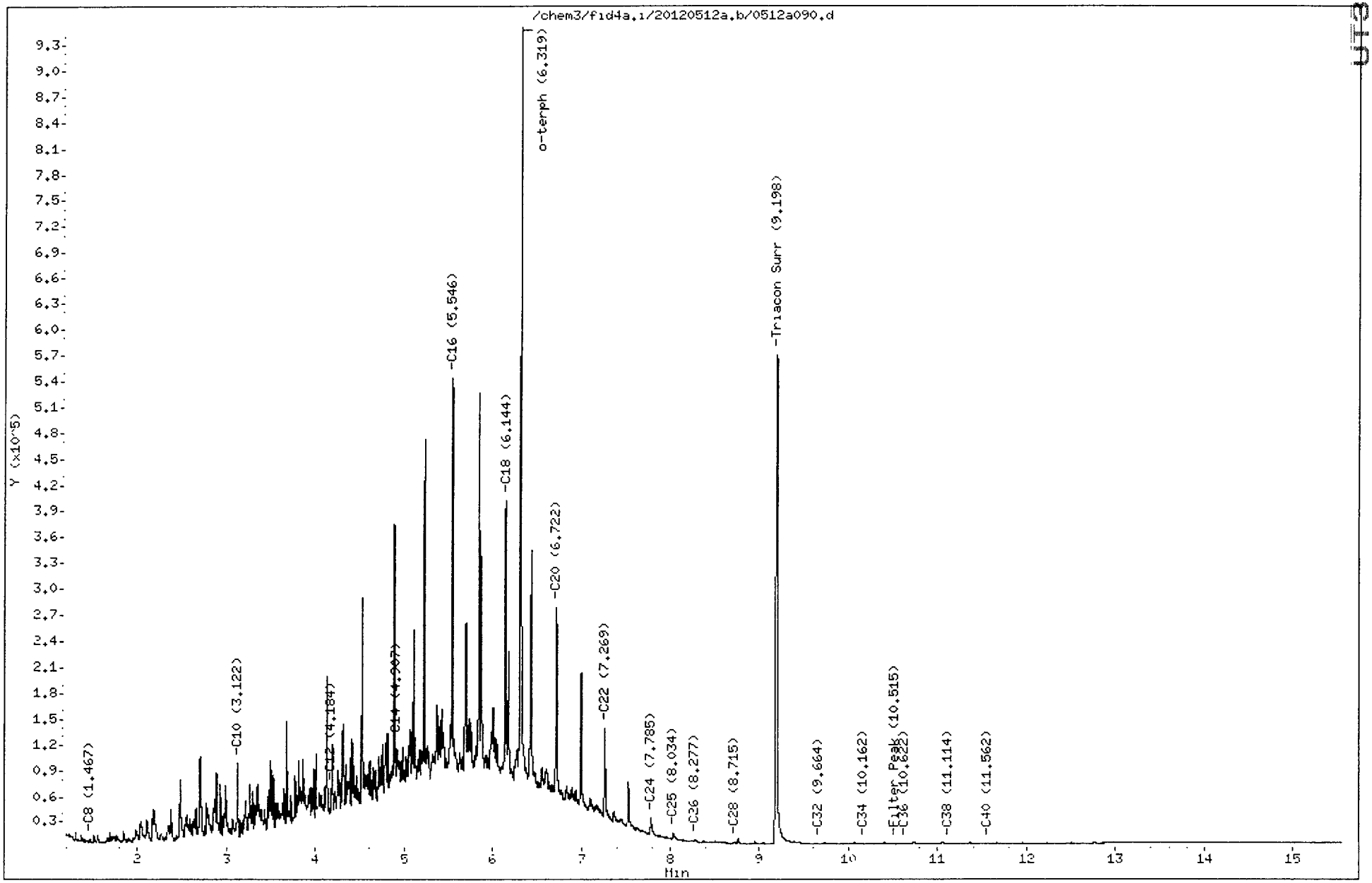
Data File: /chem3/fid4a.i/20120512a.b/0512a090.d
Date : 13-MAY-2012 18:40
Client ID: UT23LCSW1
Sample Info: UT23LCSW1

Instrument: fid4a.i

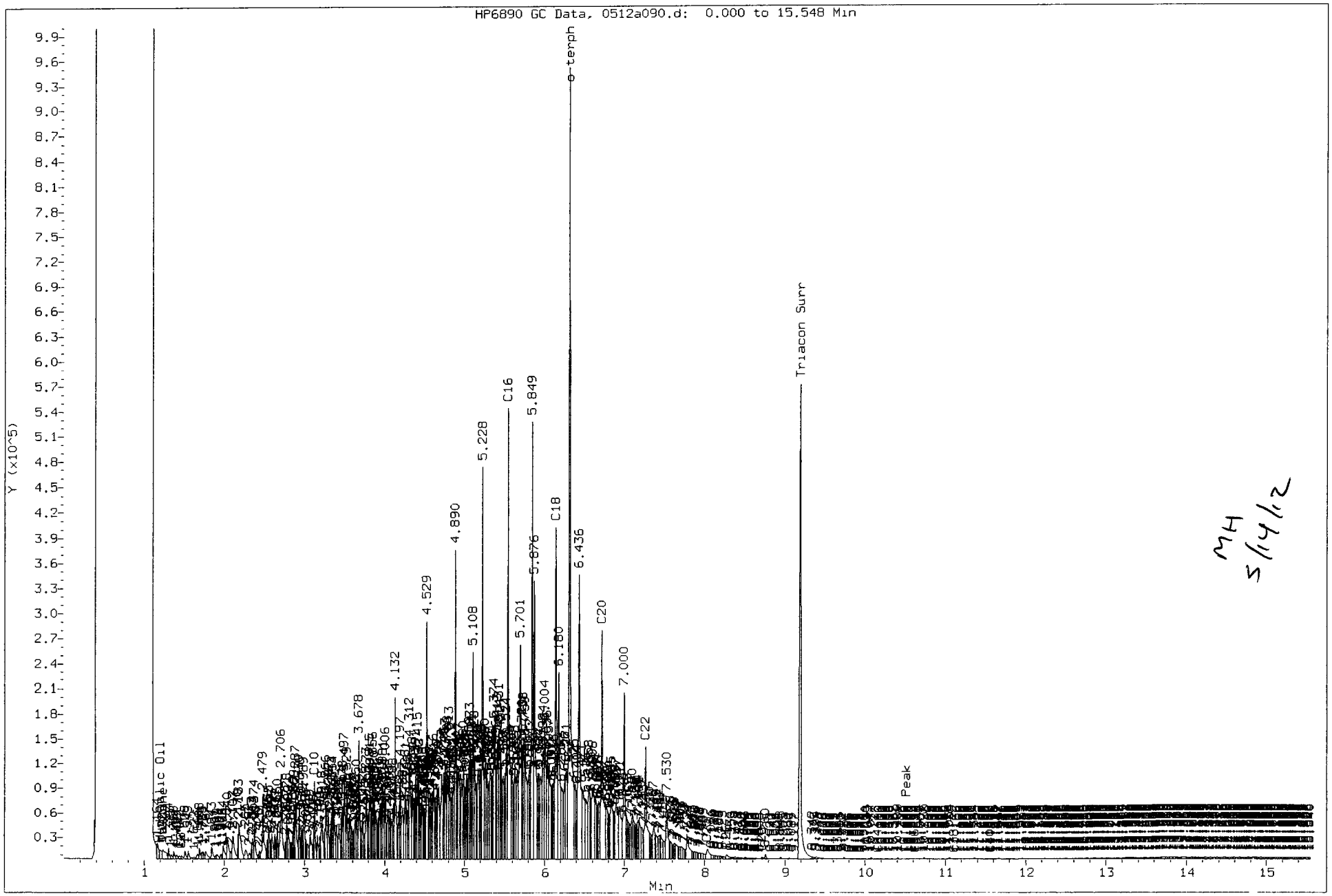
Operator: MH
Column diameter: 0.25

Column phase: PTX-1

UT23 : 05011



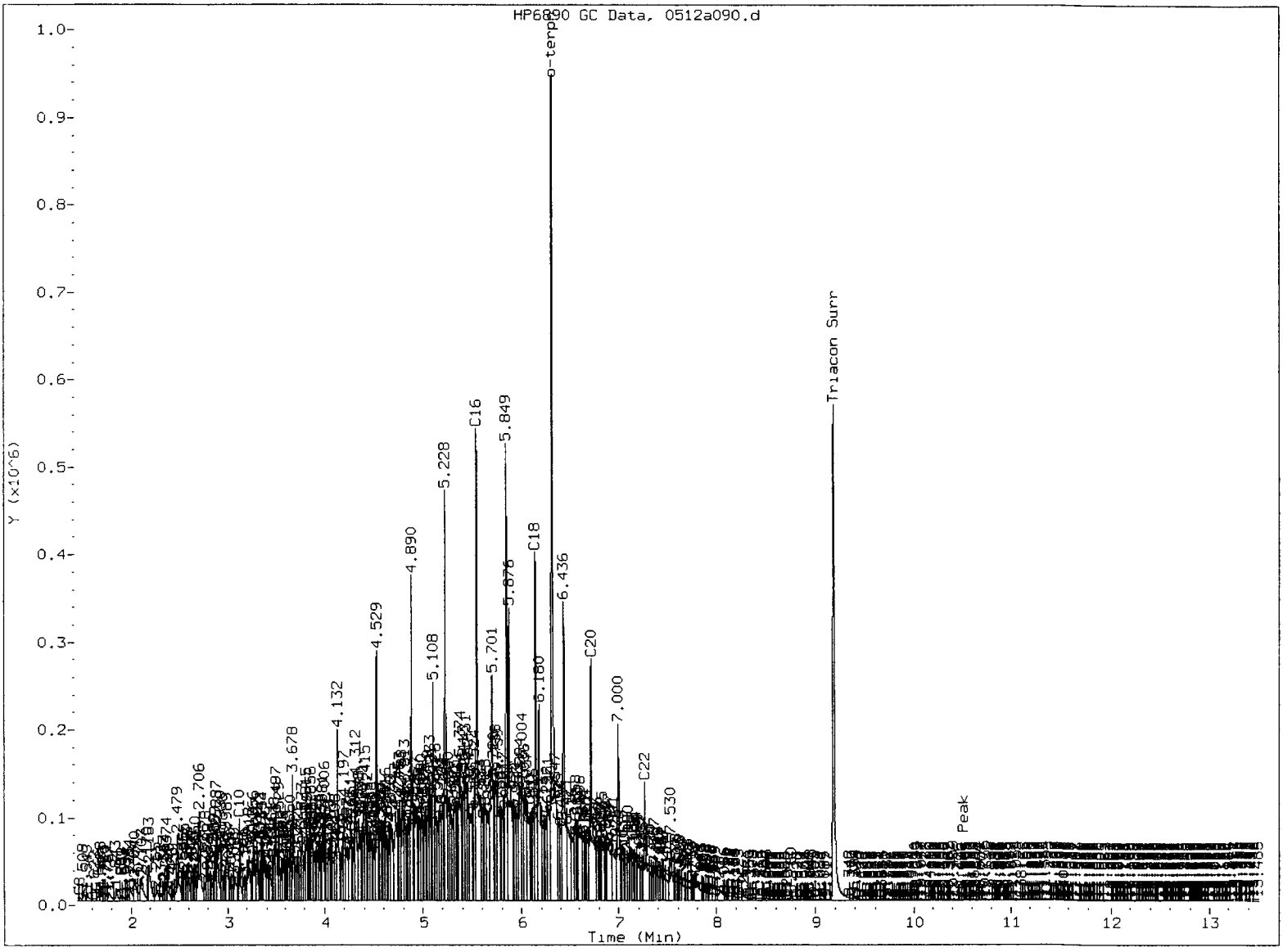
Data File: /chem3/fid4a.i/20120512a.b/0512a090.d
Injection Date: 13-MAY-2012 18:40
Instrument: fid4a.i
Client Sample ID: UT23LCSW1



MH
5/14/12

UT30:00112

FID:4A-2C/RTX-1 UT23LCSW1 FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/14/12

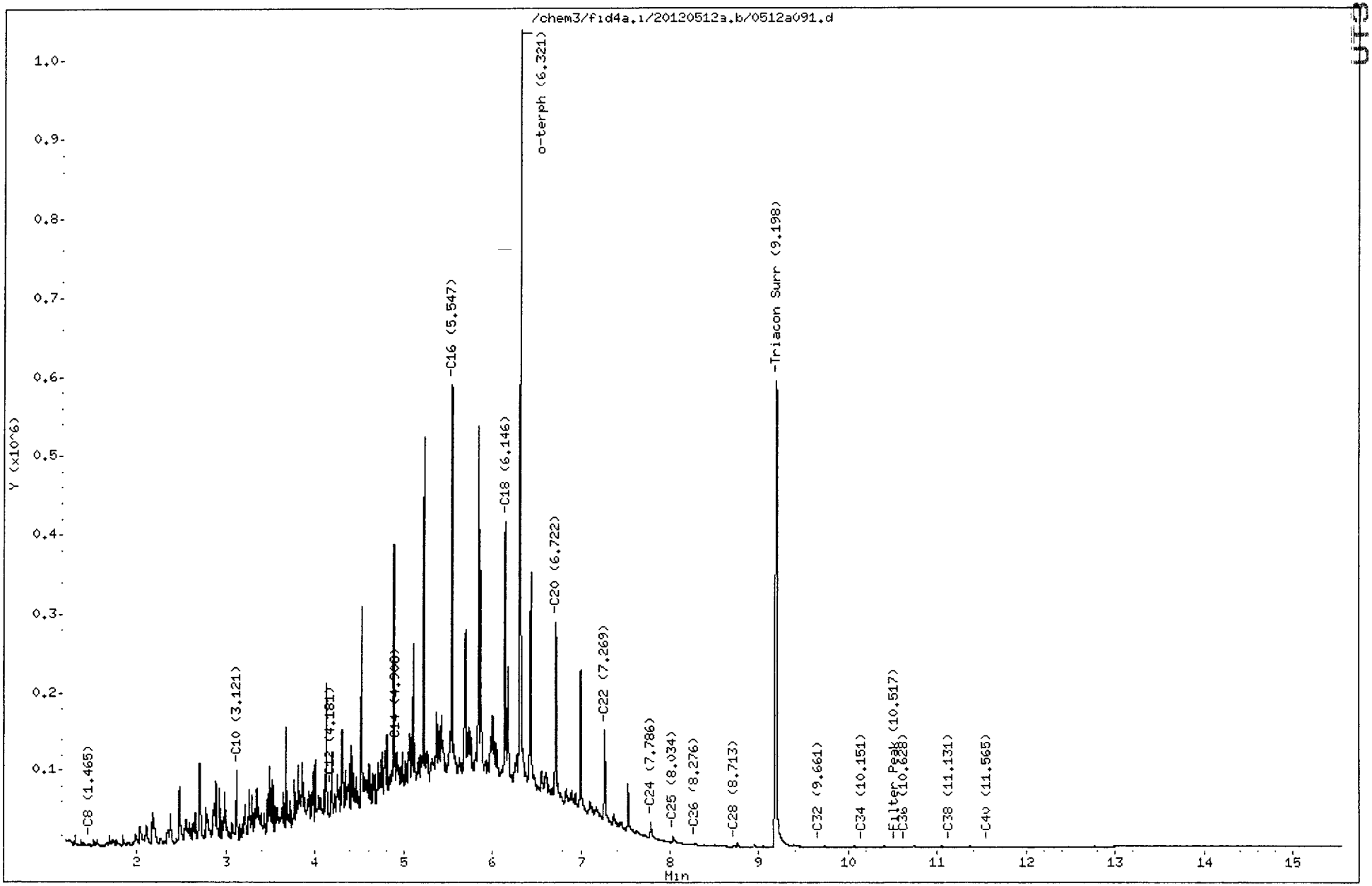
Data File: /chem3/fid4a.i/20120512a.b/0512a091.d
Date : 13-MAY-2012 19:04
Client ID: UT23LCSDW1
Sample Info: UT23LCSDW1

Column phase: RTX-1

Instrument: fid4a.i

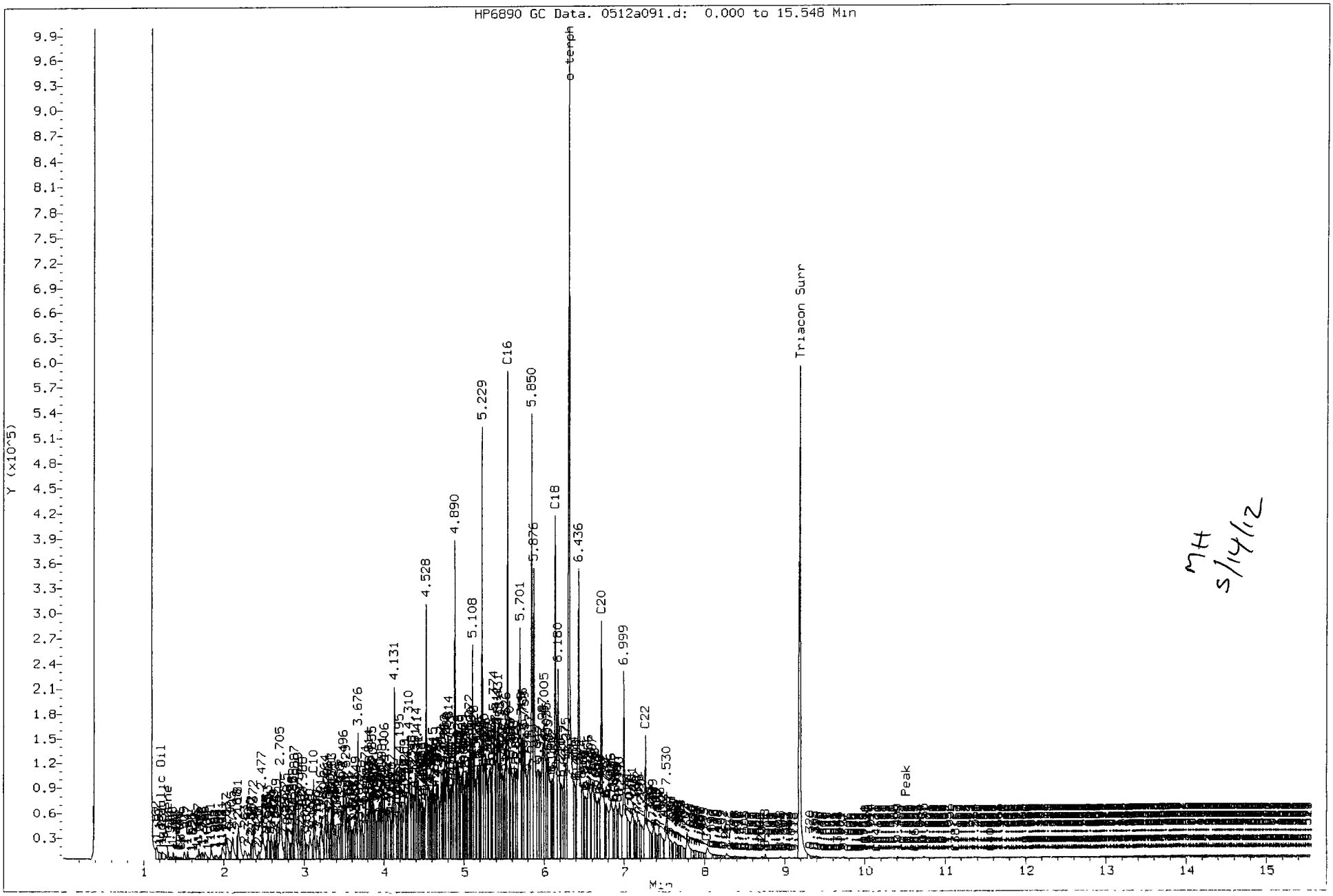
Operator: MH
Column diameter: 0.25

UT30:001H4



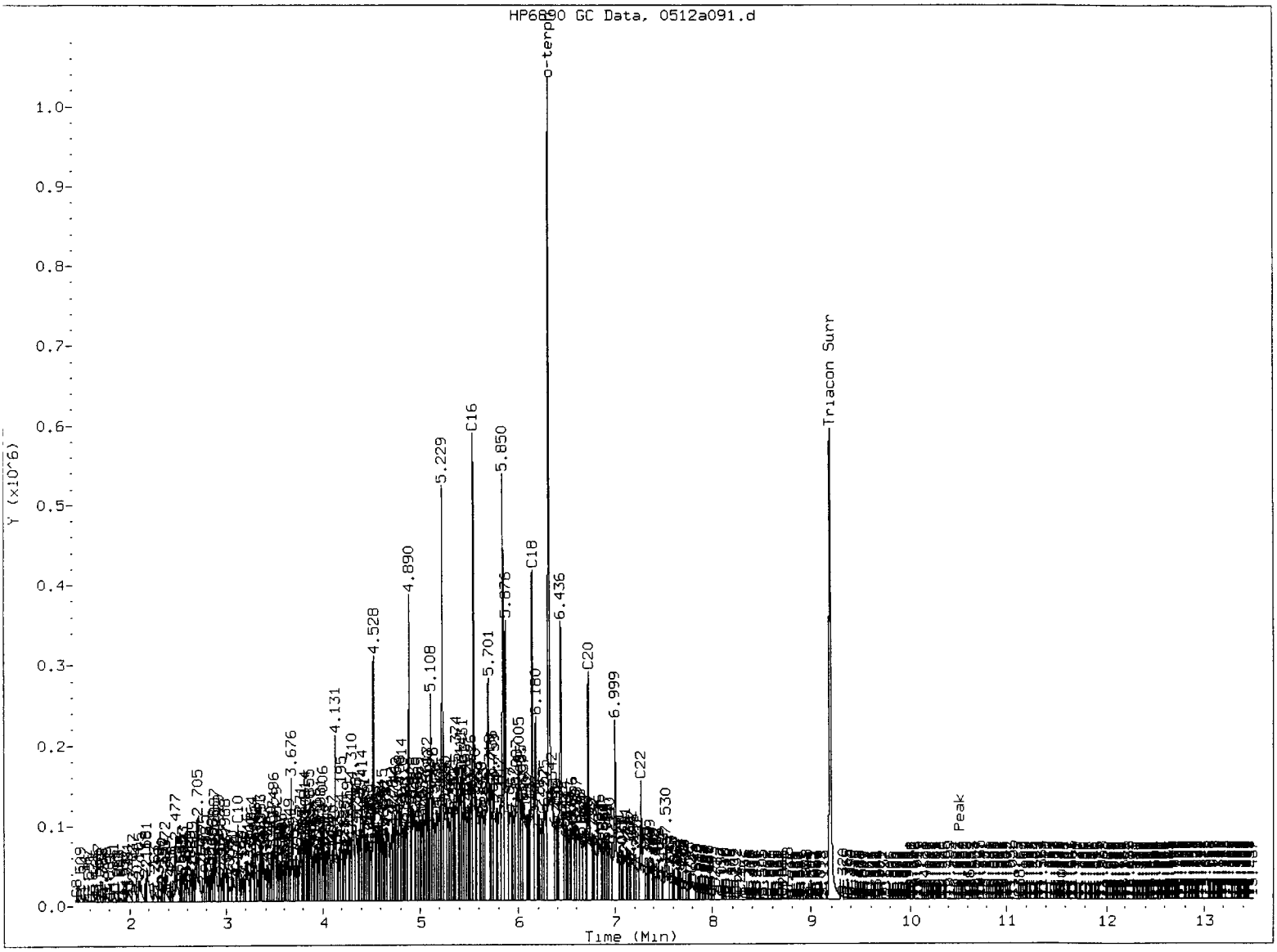
Data File: /chem3/fid4a.i/20120512a.b/0512a091.d
Injection Date: 13-MAY-2012 19:04
Instrument: fid4a.i
Client Sample ID: UT23LCSDW1

UT30 00115



MH
5/14/12

FID:4A-2C/RTX-1 UT23LCSDW1 FID:4A SIGNAL



MANUAL INTEGRATION

X 1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/14/12

Data File: /chem3/fid4a.i/2012v512a.b/0512a101.d

Date : 13-MAY-2012 23:06

Client ID: GP1-W-7.5

Sample Info: UT30E

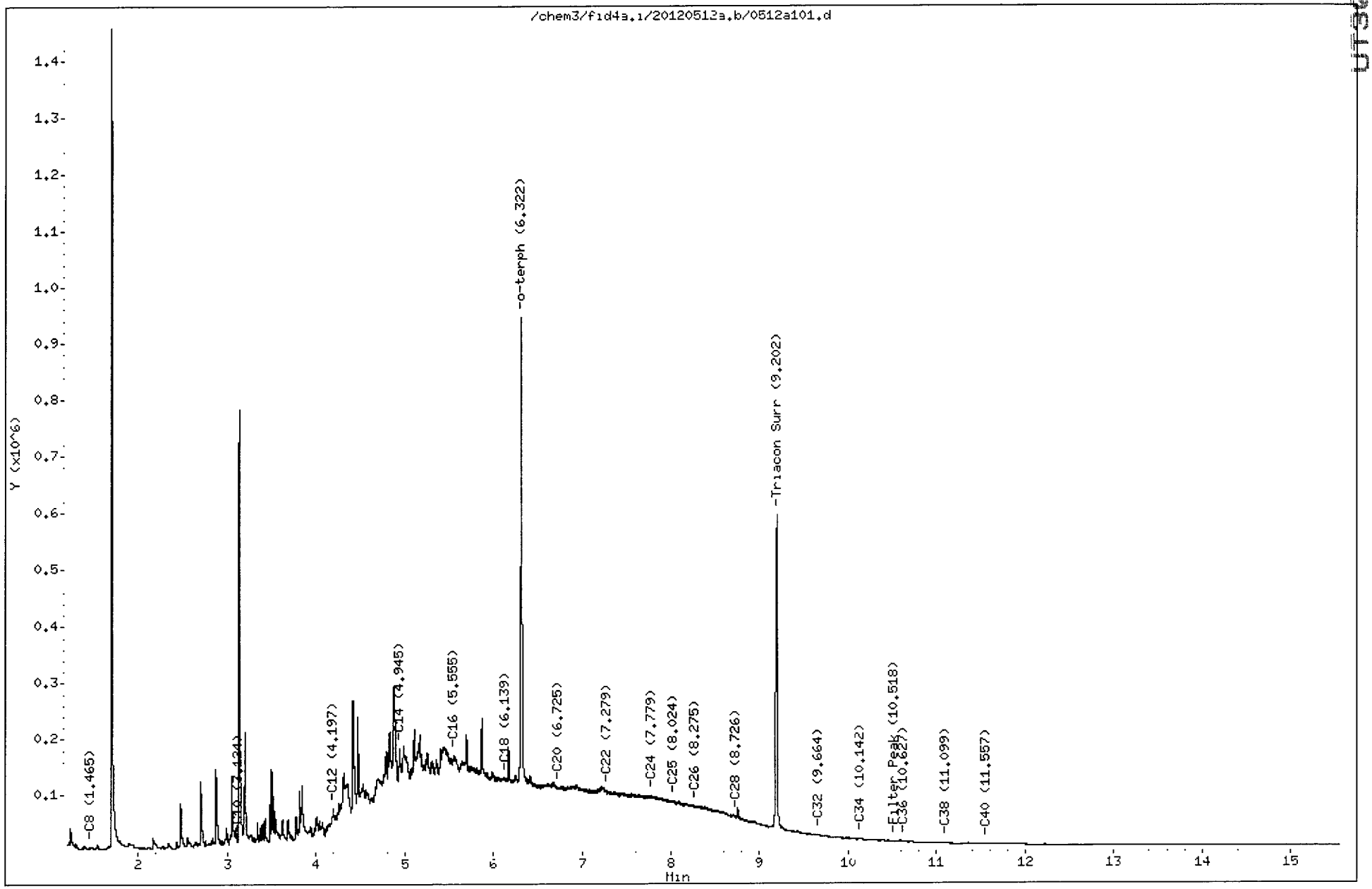
Column phase: RTX-1

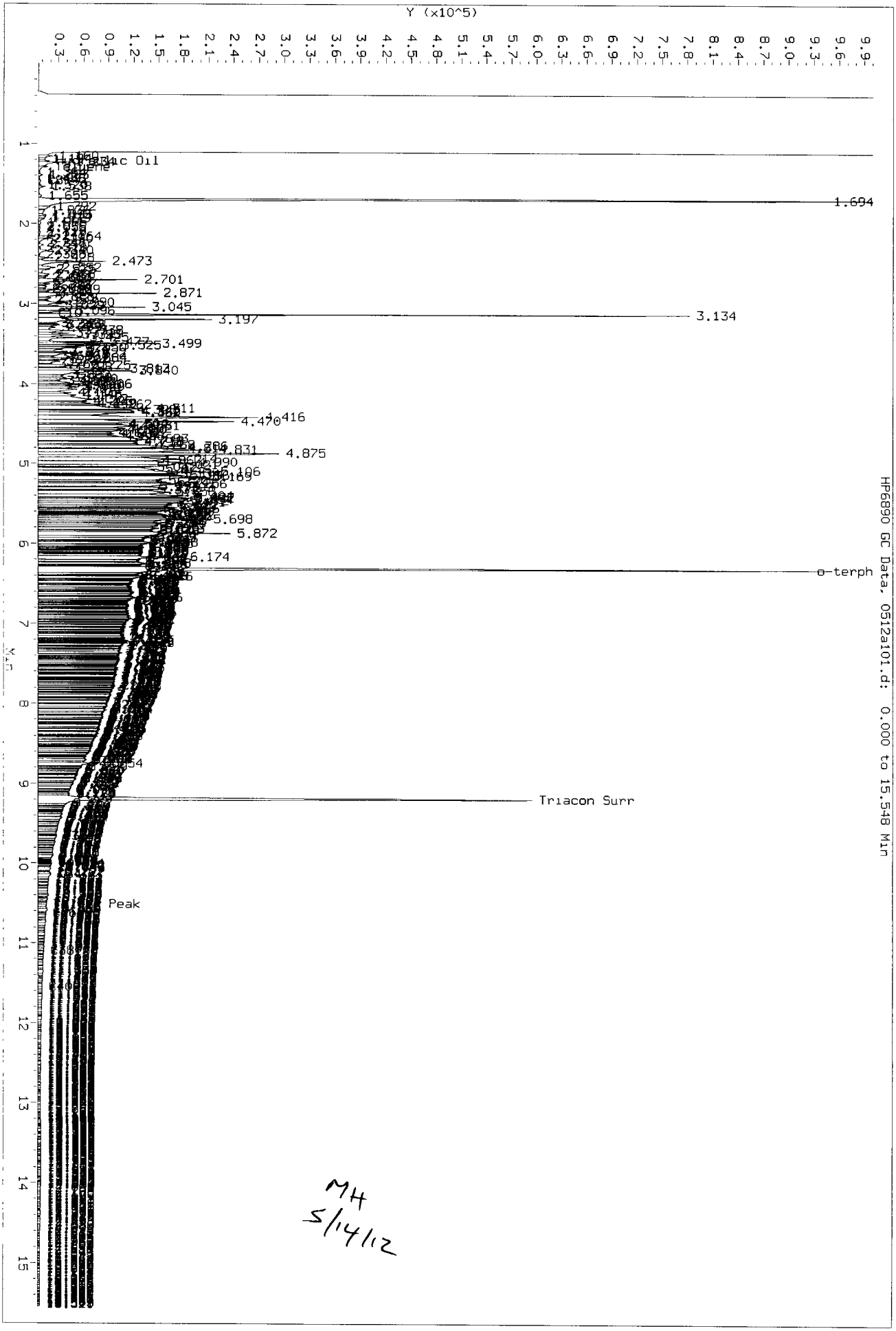
Instrument: fid4a.i

Operator: MH

Column diameter: 0.25

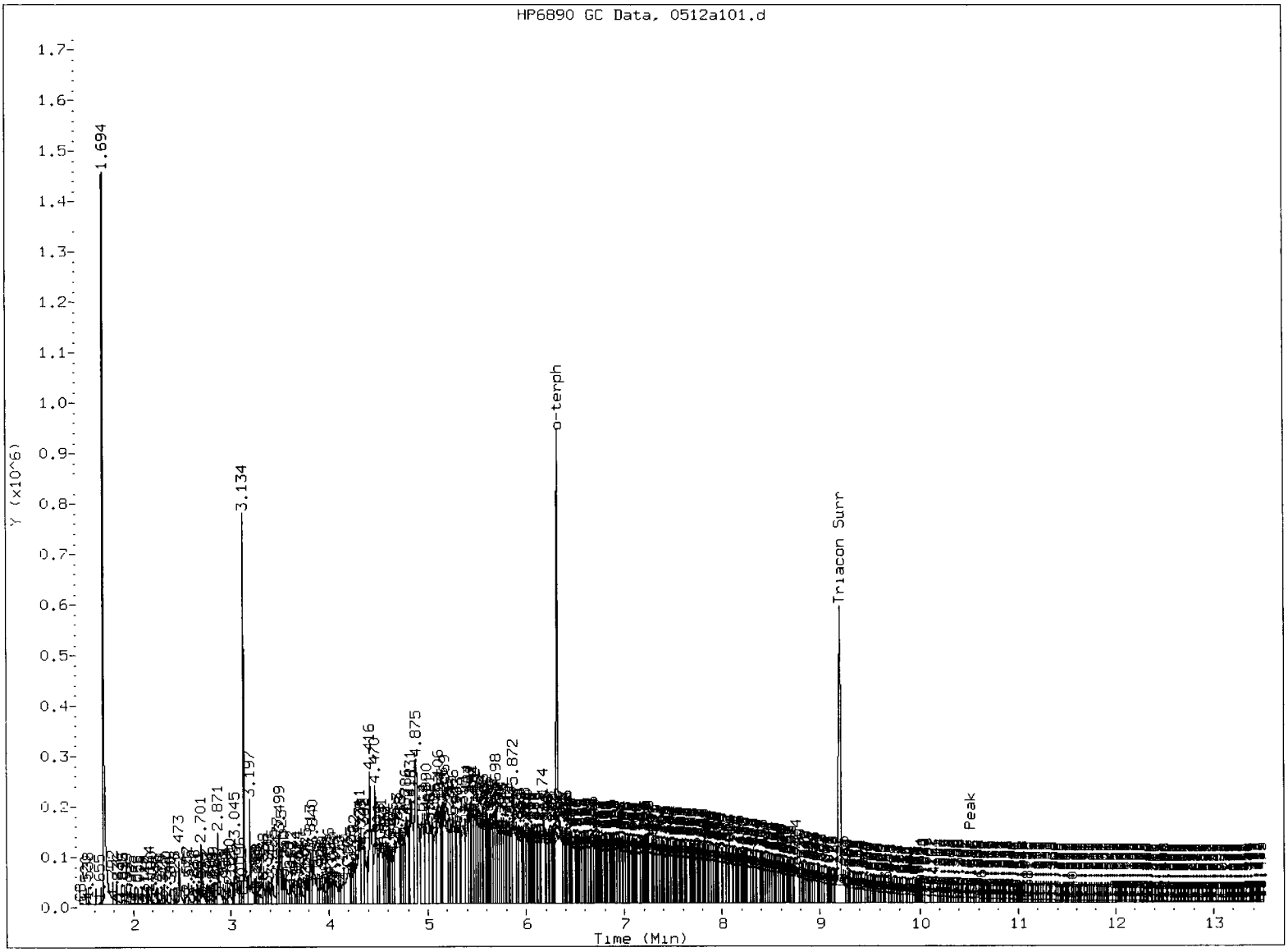
UT30 : 00117




Data File: /chem3/fid4a.i/20120512a.b/0512a101.d
Injection Date: 13-MAY-2012 23:06
Instrument: fid4a.i
Client Sample ID: GP1-W-7.5
Y (x10^5)
1.694
2.473
2.701
2.871
3.045
3.197
3.134
3.499
4.470
4.875
5.872
6.174
o-terph
Triacon Surr
Peak
HP6890 GC Data, 0512a101.d: 0.000 to 15.548 Min

MH
5/14/12

FID:4A-2C/RTX-1 UT30E FID:4A SIGNAL



MANUAL INTEGRATION

X 1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/14/12

Data File: /chem3/fid4a.i/20120512a.b/0512a102.d

Date : 13-MAY-2012 23:30

Client ID: GP2-W-10

Sample Info: UT30F

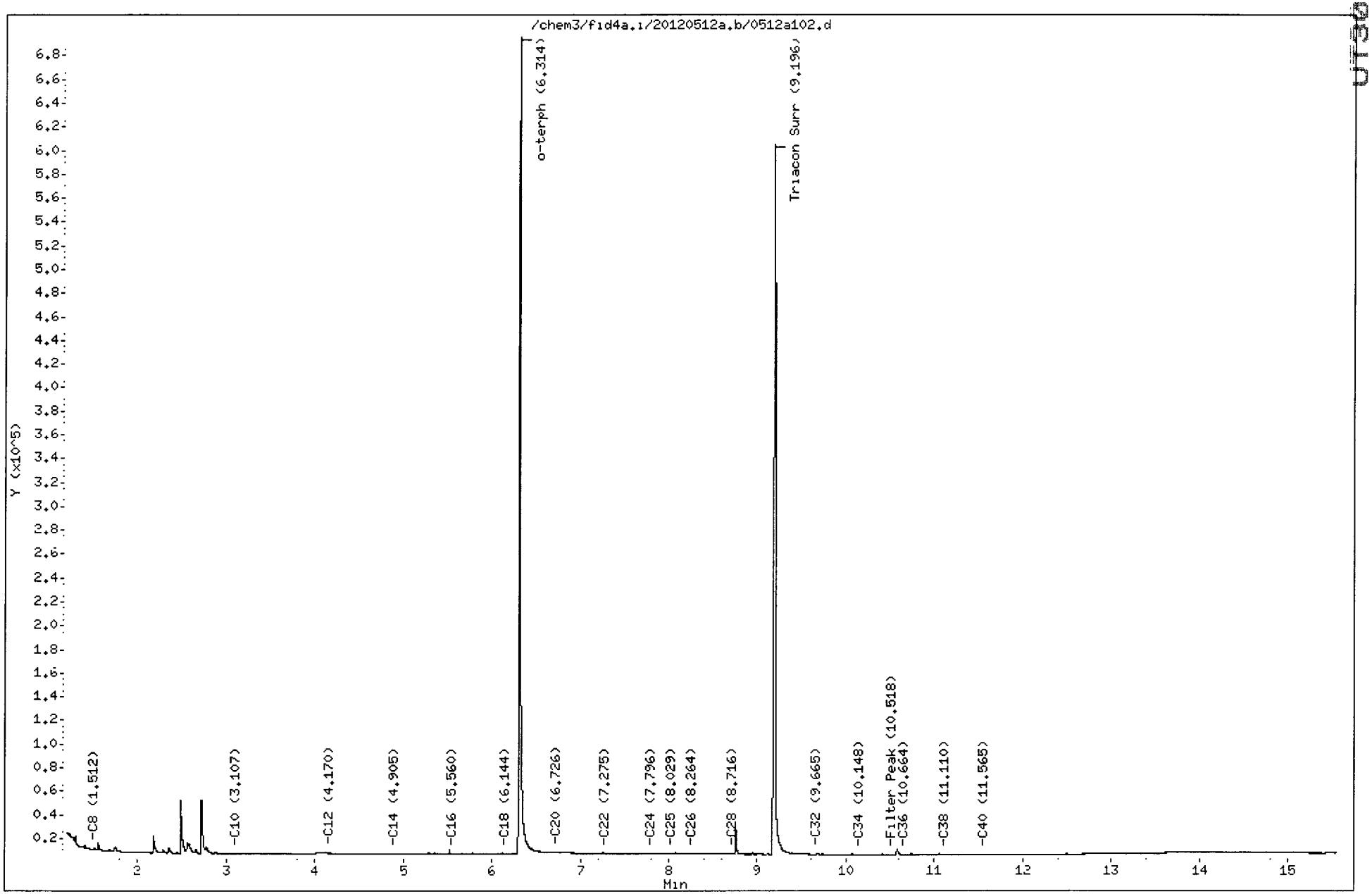
Instrument: fid4a.i

Operator: MH

Column phase: RTX-1

Column diameter: 0.25

UT30 : 001150



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH
Page 1 of 1

Sample ID: GP1-S-2.5
SAMPLE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/15/12
Percent Moisture: 25.1%

Sample Amount: 3.84 g-dry-wt
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 05/18/12 17:54
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Aromatic
Date Analyzed: 05/19/12 02:58
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Range	RL	Result	
C8-C10 Aliphatics	**5,200**	**880,000**	**B**
C10-C12 Aliphatics	**5,200**	**1,400,000**	
C12-C16 Aliphatics	**5,200**	**930,000**	
C16-C21 Aliphatics	**5,200**	**1,400,000**	
C21-C34 Aliphatics	**5,200**	**8,800,000**	
C8-C10 Aromatics	**5,200**	**81,000**	
C10-C12 Aromatics	**5,200**	**200,000**	
C12-C16 Aromatics	**5,200**	**220,000**	
C16-C21 Aromatics	**5,200**	**490,000**	
C21-C34 Aromatics	**5,200**	**1,300,000**	

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	87.7%
Aromatic	o-Terphenyl	97.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH **Sample ID: GP1-S-2.5**
Page 1 of 1 **MS/MSD**

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted MS/MSD: 05/15/12

Sample Amount MS: 3.86 g-dry-wt
MSD: 3.81 g-dry-wt
Final Extract Volume MS: 1.0 mL
MSD: 1.0 mL

Aliphatic
Date Analyzed MS: 05/18/12 18:19
MSD: 05/18/12 18:44
Instrument/Analyst MS: FID8/MH
MSD: FID8/MH

Dilution Factor MS: 1.00
MSD: 1.00

Aromatic
Date Analyzed MS: 05/19/12 03:22
MSD: 05/19/12 03:47
Instrument/Analyst MS: FID8/MH
MSD: FID8/MH

Dilution Factor MS: 1.00
MSD: 1.00

Range	Sample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
C8-C10 Aliphatics	880000 B	870000 B	38900	NA	971000 B	39400	NA	11.0%
C10-C12 Aliphatics	1380000	1370000	38900	NA	1460000	39400	NA	6.4%
C12-C16 Aliphatics	930000	984000	38900	NA	1120000	39400	NA	12.9%
C16-C21 Aliphatics	1400000	1400000	38900	NA	1590000	39400	NA	12.7%
C10-C12 Aromatics	200000	363000	38900	NA	344000	39400	NA	5.4%
C12-C16 Aromatics	215000	350000	38900	NA	354000	39400	NA	1.1%
C16-C21 Aromatics	487000	813000	77700	NA	816000	78700	NA	0.4%
C21-C34 Aromatics	1270000	2070000	77700	NA	1960000	78700	NA	5.5%

Results reported in µg/kg
RPD calculated using sample concentrations per SW846.
NA-No recovery due to high concentration of analyte in original sample and/or calculated negative recovery.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH
Page 1 of 1

Sample ID: GP1-S-2.5
MATRIX SPIKE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/15/12
Percent Moisture: 25.1%

Sample Amount: 3.86 g-dry-wt
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 05/18/12 18:19
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Aromatic
Date Analyzed: 05/19/12 03:22
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	5,200	---
C10-C12 Aliphatics	5,200	---
C12-C16 Aliphatics	5,200	---
C16-C21 Aliphatics	5,200	---
C8-C10 Aromatics	**5,200**	**190,000**
C10-C12 Aromatics	5,200	---
C12-C16 Aromatics	5,200	---
C16-C21 Aromatics	5,200	---
C21-C34 Aromatics	5,200	---

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	77.4%
Aromatic	o-Terphenyl	118%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH
Page 1 of 1

Sample ID: GP1-S-2.5
MATRIX SPIKE DUP

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Date Extracted: 05/15/12
Percent Moisture: 25.1%

Sample Amount: 3.81 g-dry-wt
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 05/18/12 18:44
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Aromatic
Date Analyzed: 05/19/12 03:47
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	5,200	---
C10-C12 Aliphatics	5,200	---
C12-C16 Aliphatics	5,200	---
C16-C21 Aliphatics	5,200	---
C8-C10 Aromatics	**5,200**	**180,000**
C10-C12 Aromatics	5,200	---
C12-C16 Aromatics	5,200	---
C16-C21 Aromatics	5,200	---
C21-C34 Aromatics	5,200	---

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	79.2%
Aromatic	o-Terphenyl	109%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH
Page 1 of 1

Sample ID: MB-051512
METHOD BLANK

Lab Sample ID: MB-051512
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/15/12
Percent Moisture: NA

Sample Amount: 10.0 g-as-rec
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 05/18/12 14:36
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Aromatic
Date Analyzed: 05/18/12 23:42
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	**2,000**	**2,000**
C10-C12 Aliphatics	2,000	< 2,000 U
C12-C16 Aliphatics	2,000	< 2,000 U
C16-C21 Aliphatics	2,000	< 2,000 U
C21-C34 Aliphatics	2,000	< 2,000 U
C8-C10 Aromatics	2,000	< 2,000 U
C10-C12 Aromatics	2,000	< 2,000 U
C12-C16 Aromatics	2,000	< 2,000 U
C16-C21 Aromatics	2,000	< 2,000 U
C21-C34 Aromatics	2,000	< 2,000 U

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	90.9%
Aromatic	o-Terphenyl	90.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH
Page 1 of 1

Sample ID: LCS-051512
LAB CONTROL

Lab Sample ID: LCS-051512
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/15/12

Sample Amount: 10.0 g-as-rec
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 05/18/12 15:01
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Aromatic
Date Analyzed: 05/19/12 00:07
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
C8-C10 Aliphatics	12000 B	15000	80.0%
C10-C12 Aliphatics	12000	15000	80.0%
C12-C16 Aliphatics	16000	15000	107%
C16-C21 Aliphatics	15000	15000	100%
C10-C12 Aromatics	12200	15000	81.3%
C12-C16 Aromatics	12900	15000	86.0%
C16-C21 Aromatics	27300	30000	91.0%
C21-C34 Aromatics	29700	30000	99.0%

Results reported in µg/kg

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	92.6%
Aromatic	o-Terphenyl	95.3%

ANALYTICAL RESOURCES INCORPORATED

ALEPH SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	COD	TOT OUT
MB-051512	90.9%	0
LCS-051512	92.6%	0
GP1-S-2.5	87.7%	0
GP1-S-2.5 MS	77.4%	0
GP1-S-2.5 MSD	79.2%	0

	LCS/MB LIMITS	QC LIMITS
(COD) = 1-Chlorooctadecane	(27-128)	(39-131)

Prep Method: SW3580A
Log Number Range: 12-8200 to 12-8200

ANALYTICAL RESOURCES INCORPORATED

AREPH SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	OTER	TOT OUT
MB-051512	90.3%	0
LCS-051512	95.3%	0
GP1-S-2.5	97.6%	0
GP1-S-2.5 MS	118%	0
GP1-S-2.5 MSD	109%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(34-133)	(10-143)

Prep Method: SW3580A
Log Number Range: 12-8200 to 12-8200

FORM-II AREPH

UT30:00158

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TCLP METALS
Page 1 of 1

Sample ID: GP1-S-2.5
SAMPLE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L	Q
1311	05/09/12	6010C	05/11/12	7440-38-2	Arsenic	0.2	0.2	U
1311	05/09/12	6010C	05/11/12	**7440-39-3**	**Barium**	0.02	**0.34**	
1311	05/09/12	6010C	05/11/12	7440-43-9	Cadmium	0.01	0.01	U
1311	05/09/12	6010C	05/11/12	7440-47-3	Chromium	0.02	0.02	U
1311	05/09/12	6010C	05/11/12	7439-92-1	Lead	0.1	0.1	U
1311	05/09/12	7470A	05/14/12	7439-97-6	Mercury	0.0001	0.0001	U
1311	05/09/12	6010C	05/11/12	7782-49-2	Selenium	0.2	0.2	U
1311	05/09/12	6010C	05/11/12	7440-22-4	Silver	0.02	0.02	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TCLP METALS
Page 1 of 1

Sample ID: GP1-S-2.5
DUPLICATE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	6010C	0.2 U	0.2 U	0.0%	+/- 0.2	L
Barium	6010C	0.34	0.35	2.9%	+/- 20%	
Cadmium	6010C	0.01 U	0.01 U	0.0%	+/- 0.01	L
Chromium	6010C	0.02 U	0.02 U	0.0%	+/- 0.02	L
Lead	6010C	0.1 U	0.1 U	0.0%	+/- 0.1	L
Mercury	7470A	0.0001 U	0.0001 U	0.0%	+/- 0.0001	L
Selenium	6010C	0.2 U	0.2 U	0.0%	+/- 0.2	L
Silver	6010C	0.02 U	0.02 U	0.0%	+/- 0.02	L

Reported in mg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TCLP METALS
Page 1 of 1

Sample ID: GP1-S-2.5
MATRIX SPIKE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	6010C	0.2 U	4.2	4.0	105%	
Barium	6010C	0.34	4.27	4.00	98.2%	
Cadmium	6010C	0.01 U	1.11	1.00	111%	
Chromium	6010C	0.02 U	1.01	1.00	101%	
Lead	6010C	0.1 U	4.2	4.0	105%	
Mercury	7470A	0.0001 U	0.0010	0.0010	100%	
Selenium	6010C	0.2 U	4.2	4.0	105%	
Silver	6010C	0.02 U	1.02	1.00	102%	

Reported in mg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked or diluted near or below detection limit

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TCLP METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: UT30MB
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS + N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L	Q
1311	05/09/12	6010C	05/11/12	7440-38-2	Arsenic	0.2	0.2	U
1311	05/09/12	6010C	05/11/12	**7440-39-3**	**Barium**	0.02	**0.03**	
1311	05/09/12	6010C	05/11/12	7440-43-9	Cadmium	0.01	0.01	U
1311	05/09/12	6010C	05/11/12	7440-47-3	Chromium	0.02	0.02	U
1311	05/09/12	6010C	05/11/12	7439-92-1	Lead	0.1	0.1	U
1311	05/09/12	7470A	05/14/12	7439-97-6	Mercury	0.0001	0.0001	U
1311	05/09/12	6010C	05/11/12	7782-49-2	Selenium	0.2	0.2	U
1311	05/09/12	6010C	05/11/12	7440-22-4	Silver	0.02	0.02	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP1-S-2.5
SAMPLE

Lab Sample ID: UT30A
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Percent Total Solids: 78.2%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/08/12	200.8	05/10/12	**7440-38-2**	**Arsenic**	0.2	**2.5**	
3050B	05/08/12	200.8	05/10/12	**7440-39-3**	**Barium**	0.6	**36.9**	
3050B	05/08/12	200.8	05/10/12	**7440-43-9**	**Cadmium**	0.1	**0.4**	
3050B	05/08/12	200.8	05/10/12	**7440-47-3**	**Chromium**	0.6	**13.6**	
3050B	05/08/12	200.8	05/10/12	**7439-92-1**	**Lead**	0.1	**28.8**	
CLP	05/08/12	7471A	05/09/12	7439-97-6	Mercury	0.03	0.03	U
3050B	05/08/12	200.8	05/10/12	7782-49-2	Selenium	0.6	0.6	U
3050B	05/08/12	200.8	05/10/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP2-S-1.1
SAMPLE

Lab Sample ID: UT30B
LIMS ID: 12-8201
Matrix: Soil
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Percent Total Solids: 80.8%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/08/12	200.8	05/10/12	**7440-38-2**	**Arsenic**	0.2	**3.1**	
3050B	05/08/12	200.8	05/10/12	**7440-39-3**	**Barium**	0.6	**102**	
3050B	05/08/12	200.8	05/10/12	**7440-43-9**	**Cadmium**	0.1	**0.2**	
3050B	05/08/12	200.8	05/10/12	**7440-47-3**	**Chromium**	0.6	**13.5**	
3050B	05/08/12	200.8	05/10/12	**7439-92-1**	**Lead**	0.1	**163**	
CLP	05/08/12	7471A	05/09/12	**7439-97-6**	**Mercury**	0.02	**0.07**	
3050B	05/08/12	200.8	05/10/12	7782-49-2	Selenium	0.6	0.6	U
3050B	05/08/12	200.8	05/10/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP2-S-1.1
DUPLICATE

Lab Sample ID: UT30B
LIMS ID: 12-8201
Matrix: Soil
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	3.1	2.5	21.4%	+/- 20%	*
Barium	200.8	102	70.4	36.7%	+/- 20%	*
Cadmium	200.8	0.2	0.2	0.0%	+/- 0.1	L
Chromium	200.8	13.5	15.2	11.8%	+/- 20%	
Lead	200.8	163	80.4	67.9%	+/- 20%	*
Mercury	7471A	0.07	0.09	25.0%	+/- 0.02	L
Selenium	200.8	0.6 U	0.6 U	0.0%	+/- 0.6	L
Silver	200.8	0.2 U	0.2 U	0.0%	+/- 0.2	L

Reported in mg/kg-dry

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP2-S-1.1
MATRIX SPIKE

Lab Sample ID: UT30B
LIMS ID: 12-8201
Matrix: Soil
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	3.1	30.9	29.9	93.0%	
Barium	200.8	102	105	29.9	10.0%	N
Cadmium	200.8	0.2	27.6	29.9	91.6%	
Chromium	200.8	13.5	43.9	29.9	102%	
Lead	200.8	163	132	29.9	-104%	H
Mercury	7471A	0.07	0.28	0.242	86.8%	
Selenium	200.8	0.6 U	85.2	95.7	89.0%	
Silver	200.8	0.2 U	27.2	29.9	91.0%	

Reported in mg/kg-dry

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP3-S-2
SAMPLE

Lab Sample ID: UT30C
LIMS ID: 12-8202
Matrix: Soil
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Percent Total Solids: 82.1%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/08/12	200.8	05/10/12	**7440-38-2**	**Arsenic**	0.2	**2.2**	
3050B	05/08/12	200.8	05/10/12	**7440-39-3**	**Barium**	0.6	**40.1**	
3050B	05/08/12	200.8	05/10/12	7440-43-9	Cadmium	0.1	0.1	U
3050B	05/08/12	200.8	05/11/12	**7440-47-3**	**Chromium**	1	**13**	
3050B	05/08/12	200.8	05/10/12	**7439-92-1**	**Lead**	0.1	**49.0**	
CLP	05/08/12	7471A	05/09/12	**7439-97-6**	**Mercury**	0.03	**0.17**	
3050B	05/08/12	200.8	05/10/12	7782-49-2	Selenium	0.6	0.6	U
3050B	05/08/12	200.8	05/10/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: METHOD BLANK**

Lab Sample ID: UT30MB
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/08/12	200.8	05/10/12	7440-38-2	Arsenic	0.2	0.2	U
3050B	05/08/12	200.8	05/10/12	7440-39-3	Barium	0.5	0.5	U
3050B	05/08/12	200.8	05/10/12	7440-43-9	Cadmium	0.1	0.1	U
3050B	05/08/12	200.8	05/10/12	7440-47-3	Chromium	0.5	0.5	U
3050B	05/08/12	200.8	05/10/12	7439-92-1	Lead	0.1	0.1	U
CLP	05/08/12	7471A	05/09/12	7439-97-6	Mercury	0.02	0.02	U
3050B	05/08/12	200.8	05/10/12	7782-49-2	Selenium	0.5	0.5	U
3050B	05/08/12	200.8	05/10/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: LAB CONTROL**

Lab Sample ID: UT30LCS
LIMS ID: 12-8200
Matrix: Soil
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	24.4	25.0	97.6%	
Barium	200.8	23.9	25.0	95.6%	
Cadmium	200.8	23.4	25.0	93.6%	
Chromium	200.8	24.5	25.0	98.0%	
Lead	200.8	24.6	25.0	98.4%	
Mercury	7471A	0.49	0.50	98.0%	
Selenium	200.8	75.7	80.0	94.6%	
Silver	200.8	24.3	25.0	97.2%	

Reported in mg/kg-dry

N-Control limit not met
NA-Not Applicable, Analyte Not Spiked
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: GP1-W-7.5
SAMPLE

Lab Sample ID: UT30E
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/10/12	200.8	05/14/12	**7440-38-2**	**Arsenic**	0.5	**3.6**	
200.8	05/10/12	200.8	05/11/12	**7440-39-3**	**Barium**	0.5	**137**	
200.8	05/10/12	200.8	05/11/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/10/12	200.8	05/14/12	7440-47-3	Chromium	1	1	U
200.8	05/10/12	200.8	05/11/12	**7439-92-1**	**Lead**	0.1	**0.1**	
7470A	05/10/12	7470A	05/14/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/10/12	200.8	05/11/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/10/12	200.8	05/11/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: GP1-W-7.5
DUPLICATE

Lab Sample ID: UT30E
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	3.6	3.6	0.0%	+/- 20%	
Barium	200.8	137	136	0.7%	+/- 20%	
Cadmium	200.8	0.1 U	0.1 U	0.0%	+/- 0.1	L
Chromium	200.8	1 U	1 U	0.0%	+/- 1	L
Lead	200.8	0.1	0.1	0.0%	+/- 0.1	L
Mercury	7470A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Selenium	200.8	0.5 U	0.5 U	0.0%	+/- 0.5	L
Silver	200.8	0.2 U	0.2 U	0.0%	+/- 0.2	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: GP1-W-7.5
MATRIX SPIKE

Lab Sample ID: UT30E
LIMS ID: 12-8204
Matrix: Water
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	3.60	28.8	25.0	101%	
Barium	200.8	137	158	25.0	84.0%	H
Cadmium	200.8	0.100 U	23.0	25.0	92.0%	
Chromium	200.8	1.25 U	23.1	25.0	92.4%	
Lead	200.8	0.120	24.9	25.0	99.1%	
Mercury	7470A	0.100 U	0.990	1.00	99.0%	
Selenium	200.8	0.500 U	69.5	80.0	86.9%	
Silver	200.8	0.200 U	23.1	25.0	92.4%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: GP2-W-10
SAMPLE

Lab Sample ID: UT30F
LIMS ID: 12-8205
Matrix: Water
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/06/12
Date Received: 05/07/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/10/12	200.8	05/14/12	**7440-38-2**	**Arsenic**	0.2	**0.5**	
200.8	05/10/12	200.8	05/11/12	**7440-39-3**	**Barium**	0.5	**13.1**	
200.8	05/10/12	200.8	05/11/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/10/12	200.8	05/11/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/10/12	200.8	05/11/12	**7439-92-1**	**Lead**	0.1	**0.1**	
7470A	05/10/12	7470A	05/14/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/10/12	200.8	05/11/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/10/12	200.8	05/11/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: UT30LCS
LIMS ID: 12-8205
Matrix: Water
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	24.4	25.0	97.6%	
Barium	200.8	24.0	25.0	96.0%	
Cadmium	200.8	23.5	25.0	94.0%	
Chromium	200.8	23.5	25.0	94.0%	
Lead	200.8	24.5	25.0	98.0%	
Mercury	7470A	2.0	2.0	100%	
Selenium	200.8	73.6	80.0	92.0%	
Silver	200.8	24.3	25.0	97.2%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: UT30MB
LIMS ID: 12-8205
Matrix: Water
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT30-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/10/12	200.8	05/14/12	7440-38-2	Arsenic	0.2	0.2	U
200.8	05/10/12	200.8	05/11/12	7440-39-3	Barium	0.5	0.5	U
200.8	05/10/12	200.8	05/11/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/10/12	200.8	05/11/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/10/12	200.8	05/11/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/10/12	7470A	05/14/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/10/12	200.8	05/11/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/10/12	200.8	05/11/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

Analytical Resources, Incorporated
Analytical Chemists and Consultants

9 May 2012

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: Sims-N Cascade Ford, 0747.01.01
ARI Job No.: UT51

Dear Heather:

Please find enclosed a copy of the original Chain-of-Custody (COC) record and the final results for the sample from the project referenced above. Analytical Resources, Inc. (ARI) accepted one soil sample on May 8, 2012. The sample was analyzed for NWTPH-HCID as requested. (The data for the remaining samples will be mailed under separate cover.)

This analysis proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file UT51

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number:	Turn-around Requested: HCID = 48 HR, OTHERS = STD	Page: 2 of 2	
ARI Client Company: Maul Foster & Alongi	Phone: 360-927-1309	Date: 5/7/12	Ice Present?
Client Contact: Heather Hirsch		No. of Coolers:	Cooler Temps:
Client Project Name: SIMS - N. CASCADE FORD			
Client Project #: 0747.01.01	Samplers: H. HIRSCH / A. HUGHES		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: NWTPH-HCID	Analysis Requested: Lead (6020)	Notes/Comments
MW2-S-2	5/7/12	1215	SOIL	1	X	—	
MW3-S-1.9	5/7/12	1345	SOIL	1	—	X	

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: Heather Hirsch	Printed Name: Rachel Relle	Printed Name:	Printed Name: A. Vargardsen
	Company: Maul Foster & Alongi	Company: ARI	Company:	Company: ARI
	Date & Time: 5/8/12 0900	Date & Time: 5/8/12 8:50	Date & Time:	Date & Time: 5/8/12 1105

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Maul Foster

Project Name: Sims-N Cascade Pond

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS (Courier) Hand Delivered Other: _____

Assigned ARI Job No: UT51

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	(YES)	(NO) N/A
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO
Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)	1.9	

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 90877952

Cooler Accepted by: RR (AV) Date: 5/8/12 Time: 850

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used?	Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:		
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		(YES)	NO
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	(NA)	YES	NO
Were all VOC vials free of air bubbles?	(NA)	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

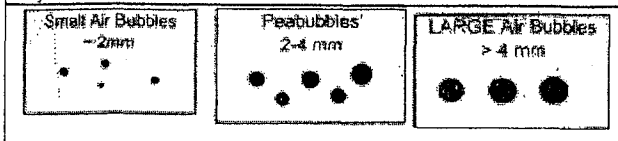
Samples Logged by: JS Date: 5-8-12 Time: 1125

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: UT51
Client: Maul, Foster & Alongi
Project Event: 0747.01.01
Project Name: Sims-N. Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	MW2-S-2	UT51A	12-8285	Soil	05/07/12 12:15	05/08/12 11:05

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Duplicate RPD is not within established control limits
B	Reported value is less than the CRDL but ≥ the Reporting Limit
N	Matrix Spike recovery not within established control limits
NA	Not Applicable, analyte not spiked
H	The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
L	Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Flagged value is not within established control limits
B	Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
J	Estimated concentration when the value is less than ARI's established reporting limits
D	The spiked compound was not detected due to sample extract dilution
E	Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

UT51 : 00005

S	Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte
NA	The flagged analyte was not analyzed for
NR	Spiked compound recovery is not reported due to chromatographic interference
NS	The flagged analyte was not spiked into the sample
M	Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses
M2	The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"
Y	The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.
EMPC	Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**
C	The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column
P	The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference
X	Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**
Z	Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

Geotechnical Data

A	The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
F	Samples were frozen prior to particle size determination
SM	Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
SS	Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
W	Weight of sample in some pipette aliquots was below the level required for accurate weighting

UT51 : 00007

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPH-HCID Method by GC/FID
Page 1 of 1
Matrix: Soil

QC Report No: UT51-Maul, Foster & Alongi
Project: Sims-N. Cascade Ford
0747.01.01

Data Release Authorized: MW
Reported: 05/09/12

ARI ID	Sample ID	Extraction Date	Analysis Date	DL	Range	Result
MB-050812	Method Blank	05/08/12	05/08/12	1.0	Gas	< 20 U
12-8285					Diesel	< 50 U
					Oil	< 100 U
					o-Terphenyl	95.5%
UT51A	MW2-S-2	05/08/12	05/08/12	1.0	Gas	< 20 U
12-8285	HC ID: ---				Diesel	< 50 U
					Oil	< 100 U
					o-Terphenyl	94.7%

Reported in mg/kg (ppm)

Gas value based on total peaks in the range from Toluene to C12.
Diesel value based on the total peaks in the range from C12 to C24.
Oil value based on the total peaks in the range from C24 to C38.

ANALYTICAL RESOURCES INCORPORATED

HCID SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT51-Maul, Foster & Alongi
Project: Sims-N. Cascade Ford
0747.01.01

Client ID	O-TER	TOT OUT
050812MB	95.5%	0
MW2-S-2	94.7%	0

	LCS/MB LIMITS	QC LIMITS
(O-TER) = o-Terphenyl	(68-122)	(50-150)

Prep Method: SW3550B
Log Number Range: 12-8285 to 12-8285

ANALYTICAL RESOURCES INCORPORATED

TOTAL HCID RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: UT51
Matrix: Soil Project: Sims-N. Cascade Ford
Date Received: 05/08/12 0747.01.01

ARI ID	Client ID	Sample Amt	Final Vol	Basis	Prep Date
12-8285-050812MB	Method Blank	10.0 g	5.00 mL	-	05/08/12
12-8285-UT51A	MW2-S-2	8.52 g	5.00 mL	D	05/08/12

Basis: D=Dry Weight W=As Received

Analytical Resources, Incorporated
Analytical Chemists and Consultants

23 May 2012

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: Sims-N Cascade Ford, 0747.01.01
ARI Job No.: UT57

Dear Heather:

Please find enclosed a copy of the original Chain-of-Custody (COC) records and the final results for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted three soil samples, one water samples and one trip blank on May 8, 2012. The samples were analyzed for VOAs, NWTPH-G, VPH, SVOAs, SIM-PAHs, PCBs, NWTPH-Dx, EPH and total and dissolved metals as requested. (The data for the HCID analyses were mailed under separate cover.)

These analyses proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file UT57

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: UT57	Turn-around Requested: HCID = 48-HR; OTHERS = STD
ARI Client Company: Maul Foster & Alongi	Phone: 360-927-1309
Client Contact: Heather Hirsch	
Client Project Name: SIMS - N. CASCADE FORD	
Client Project #: 0747.01.01	Samplers: H. HIRSCH, A. HUGHES

Page: 1	of 2
Date: 5/7/12	Ice Present? Y
No. of Coolers: 1	Cooler Temps: 1.9

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: NWTPH-Gx	NWTPH-Dx	Metals (RCRA 8 by 6020)	VOCs (8260B-Full Level)	SVOCs (8270C)	PAHs (8270SIM)	PCBs (8082)	NWTPH-EPH	NWTPH-VPH	Notes/Comments
MW1-S-3.1	5/7/12	1030	SOIL	11	X	X	X	X	X	X	X	X	X	
MW2-S-2		1215	SOIL	8	Hold	Hold	X	Hold	Hold	Hold	Hold	—	—	
MW3-S-1.9		1345	SOIL	9	X	—	—	X	—	—	—	—	X	
GP4-W-10		1000	WATER	10	X	X	X	X	—	X	—	—	—	Field Filtered
TRIP BLANK	4/30/12		WATER	3										
5-g of sample were collected in the NaSO4-preserved VOAs this time.														

Comments/Special Instructions: edd's in Equis format, pdf lab report (no hard copy) X = analyze — = do not analyze Hold = Hold for HCID results	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: Heather Hirsch	Printed Name: Rachel Kelle	Printed Name	Printed Name: A. Vidgardsen
	Company: Maul Foster & Alongi	Company: ARI	Company:	Company: ARI
	Date & Time: 5/8/12 0900	Date & Time: 5/8/12 8:50	Date & Time:	Date & Time: 5/8/12 1105

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 1757	Turn-around Requested: HCID = 48 HR, OTHERS = STD	Page: 2 of 2	
ARI Client Company: Maul Foster & Alongi	Phone: 360-927-1309	Date: 5/7/12	Ice Present? Y
Client Contact: Heather Hirsch		No. of Coolers: 1	Cooler Temps: 1.9
Client Project Name: SIMS - N. CASCADE FORD			
Client Project #: 0747.01.01	Samplers: H. HIRSCH / A. HUGHES		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: NWTPH-HCID	Analysis Requested: Lead (6020)	Notes/Comments
MW2-S-2	5/7/12	1215	SOIL	1	X	—	
MW3-S-1.9	5/7/12	1345	SOIL	1	—	X	

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by (Signature)	Received by (Signature)
	Printed Name: Heather Hirsch	Printed Name: Rachel Kelle	Printed Name	Printed Name: A. Vargardsen
	Company: Maul Foster & Alongi	Company: ARI	Company	Company: ARI
	Date & Time: 5/8/12 0900	Date & Time: 5/8/12 8:50	Date & Time	Date & Time: 5/8/12 1145

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Maul Foster | Project Name: Sims-N Cascade Pond

COC No(s): _____ (NA) | Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: UT57 | Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	(YES)	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc)	(YES)	NO
Temperature of Cooler(s) (°C) (recommended 2 0-6 0 °C for chemistry): 1.9		
If cooler temperature is out of compliance fill out form 00070F	Temp Gun ID#: 90877252	

Cooler Accepted by: RR (AV) Date: 5/8/12 Time: 8:50

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? Bubble Wrap (Wet Ice) Gel Packs (Baggies) Foam Block Paper Other: _____			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	(YES)	NO
Were all VOC vials free of air bubbles?	NA	(YES)	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI.	NA		4/30/12

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

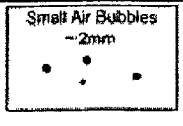
Samples Logged by: JM Date: 5/8/12 Time: 1439

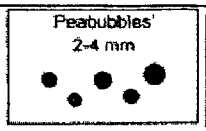
***** Notify Project Manager of discrepancies or concerns *****

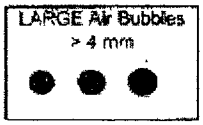
Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: _____ Date: _____







Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

PRESERVATION VERIFICATION 05/08/12
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: **UT57**

Inquiry Number: NONE
Analysis Requested: 05/08/12
Contact: Alongi, Neil
Client: Maul, Foster & Alongi
Logged by: JM
Sample Set Used: Yes-490
Validatable Package: No
Deliverables:

PC: Mark
VTSR: 05/08/12

Project #: 0747.01.01
Project: SIMS - N Cascade Ford
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	AK102 <2	Fe2+ <2	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
12-8338 **UT57D**	GP4-W-10						DIS DMS									Y						

UT57 : 56905

Checked By JM Date 5/8/12

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: UT57
Client: Maul, Foster & Alongi
Project Event: 0747.01.01
Project Name: SIMS - N Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	MW1-S-3.1	UT57A	12-8335	Soil	05/07/12 10:30	05/08/12 11:05
2.	MW2-S-2	UT57B	12-8336	Soil	05/07/12 12:15	05/08/12 11:05
3.	MW3-S-1.9	UT57C	12-8337	Soil	05/07/12 13:45	05/08/12 11:05
4.	GP4-W-10	UT57D	12-8338	Water	05/07/12 10:00	05/08/12 11:05
5.	Trip Blank	UT57E	12-8339	Water	05/07/12	05/08/12 11:05
6.	MW1-S-3.1	UT57F	12-8340	Soil	05/07/12 10:30	05/08/12 11:05
7.	MW3-S-1.9	UT57G	12-8341	Soil	05/07/12 13:45	05/08/12 11:05
8.	Trip Blank	UT57H	12-8342	Water	05/07/12	05/08/12 11:05

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U — Indicates that the target analyte was not detected at the reported concentration

* — Duplicate RPD is not within established control limits

B — Reported value is less than the CRDL but ≥ the Reporting Limit

N — Matrix Spike recovery not within established control limits

NA — Not Applicable, analyte not spiked

H — The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible

L — Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U — Indicates that the target analyte was not detected at the reported concentration

* — Flagged value is not within established control limits

B — Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.

J — Estimated concentration when the value is less than ARI's established reporting limits

D — The spiked compound was not detected due to sample extract dilution

E — Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Q — Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

UT57 : 00007

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

Geotechnical Data

A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F Samples were frozen prior to particle size determination

SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots was below the level required for accurate weighting

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW1-S-3.1**
Page 1 of 2 **SAMPLE**

Lab Sample ID: UT57A
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Instrument/Analyst: NT9/PAB
Date Analyzed: 05/16/12 19:08

Sample Amount: 4.13 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 24.6%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.2	< 1.2	U
74-83-9	Bromomethane	1.2	< 1.2	U
75-01-4	Vinyl Chloride	1.2	< 1.2	U
75-00-3	Chloroethane	1.2	< 1.2	U
75-09-2	**Methylene Chloride**	**2.4**	**5.0**	
67-64-1	**Acetone**	**6.0**	**110**	**B**
75-15-0	Carbon Disulfide	1.2	< 1.2	U
75-35-4	1,1-Dichloroethene	1.2	< 1.2	U
75-34-3	1,1-Dichloroethane	1.2	< 1.2	U
156-60-5	trans-1,2-Dichloroethene	1.2	< 1.2	U
156-59-2	cis-1,2-Dichloroethene	1.2	< 1.2	U
67-66-3	Chloroform	1.2	< 1.2	U
107-06-2	1,2-Dichloroethane	1.2	< 1.2	U
78-93-3	**2-Butanone**	**6.0**	**4.3**	**J**
71-55-6	1,1,1-Trichloroethane	1.2	< 1.2	U
56-23-5	Carbon Tetrachloride	1.2	< 1.2	U
108-05-4	Vinyl Acetate	6.0	< 6.0	U
75-27-4	Bromodichloromethane	1.2	< 1.2	U
78-87-5	1,2-Dichloropropane	1.2	< 1.2	U
10061-01-5	cis-1,3-Dichloropropene	1.2	< 1.2	U
79-01-6	Trichloroethene	1.2	< 1.2	U
124-48-1	Dibromochloromethane	1.2	< 1.2	U
79-00-5	1,1,2-Trichloroethane	1.2	< 1.2	U
71-43-2	Benzene	1.2	< 1.2	U
10061-02-6	trans-1,3-Dichloropropene	1.2	< 1.2	U
110-75-8	2-Chloroethylvinylether	6.0	< 6.0	U
75-25-2	Bromoform	1.2	< 1.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	6.0	< 6.0	U
591-78-6	2-Hexanone	6.0	< 6.0	U
127-18-4	Tetrachloroethene	1.2	< 1.2	U
79-34-5	1,1,2,2-Tetrachloroethane	1.2	< 1.2	U
108-88-3	**Toluene**	**1.2**	**0.7**	**J**
108-90-7	Chlorobenzene	1.2	< 1.2	U
100-41-4	Ethylbenzene	1.2	< 1.2	U
100-42-5	Styrene	1.2	< 1.2	U
75-69-4	Trichlorofluoromethane	1.2	< 1.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.4	< 2.4	U
179601-23-1	m,p-Xylene	1.2	< 1.2	U
95-47-6	o-Xylene	1.2	< 1.2	U
95-50-1	1,2-Dichlorobenzene	1.2	< 1.2	U
541-73-1	1,3-Dichlorobenzene	1.2	< 1.2	U
106-46-7	1,4-Dichlorobenzene	1.2	< 1.2	U
107-02-8	Acrolein	60	< 60	U
74-88-4	Methyl Iodide	1.2	< 1.2	U
74-96-4	Bromoethane	2.4	< 2.4	U
107-13-1	Acrylonitrile	6.0	< 6.0	U
563-58-6	1,1-Dichloropropene	1.2	< 1.2	U
74-95-3	Dibromomethane	1.2	< 1.2	U
630-20-6	1,1,1,2-Tetrachloroethane	1.2	< 1.2	U
96-12-8	1,2-Dibromo-3-chloropropane	6.0	< 6.0	U
96-18-4	1,2,3-Trichloropropane	2.4	< 2.4	U
110-57-6	trans-1,4-Dichloro-2-butene	6.0	< 6.0	U
108-67-8	1,3,5-Trimethylbenzene	1.2	< 1.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW1-S-3.1**
Page 2 of 2 **SAMPLE**

Lab Sample ID: UT57A
LIMS ID: 12-8335
Matrix: Soil
Date Analyzed: 05/16/12 19:08

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	1.2	< 1.2	U
87-68-3	Hexachlorobutadiene	6.0	< 6.0	U
106-93-4	Ethylene Dibromide	1.2	< 1.2	U
74-97-5	Bromochloromethane	1.2	< 1.2	U
594-20-7	2,2-Dichloropropane	1.2	< 1.2	U
142-28-9	1,3-Dichloropropane	1.2	< 1.2	U
98-82-8	Isopropylbenzene	1.2	< 1.2	U
103-65-1	n-Propylbenzene	1.2	< 1.2	U
108-86-1	Bromobenzene	1.2	< 1.2	U
95-49-8	2-Chlorotoluene	1.2	< 1.2	U
106-43-4	4-Chlorotoluene	1.2	< 1.2	U
98-06-6	tert-Butylbenzene	1.2	< 1.2	U
135-98-8	sec-Butylbenzene	1.2	< 1.2	U
99-87-6	4-Isopropyltoluene	1.2	< 1.2	U
104-51-8	n-Butylbenzene	1.2	< 1.2	U
120-82-1	1,2,4-Trichlorobenzene	6.0	< 6.0	U
91-20-3	Naphthalene	6.0	< 6.0	U
87-61-6	1,2,3-Trichlorobenzene	6.0	< 6.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	119%
d8-Toluene	100%
Bromofluorobenzene	98.8%
d4-1,2-Dichlorobenzene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW3-S-1.9**
Page 1 of 2 **SAMPLE**

Lab Sample ID: UT57C
LIMS ID: 12-8337
Matrix: Soil
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Instrument/Analyst: NT9/PAB
Date Analyzed: 05/16/12 19:29

Sample Amount: 4.42 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 22.1%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.1	< 1.1	U
74-83-9	Bromomethane	1.1	< 1.1	U
75-01-4	Vinyl Chloride	1.1	< 1.1	U
75-00-3	Chloroethane	1.1	< 1.1	U
75-09-2	**Methylene Chloride**	**2.3**	**3.3**	
67-64-1	**Acetone**	**5.7**	**100**	**B**
75-15-0	Carbon Disulfide	1.1	< 1.1	U
75-35-4	1,1-Dichloroethene	1.1	< 1.1	U
75-34-3	1,1-Dichloroethane	1.1	< 1.1	U
156-60-5	trans-1,2-Dichloroethene	1.1	< 1.1	U
156-59-2	cis-1,2-Dichloroethene	1.1	< 1.1	U
67-66-3	Chloroform	1.1	< 1.1	U
107-06-2	1,2-Dichloroethane	1.1	< 1.1	U
78-93-3	2-Butanone	5.7	< 5.7	U
71-55-6	1,1,1-Trichloroethane	1.1	< 1.1	U
56-23-5	Carbon Tetrachloride	1.1	< 1.1	U
108-05-4	Vinyl Acetate	5.7	< 5.7	U
75-27-4	Bromodichloromethane	1.1	< 1.1	U
78-87-5	1,2-Dichloropropane	1.1	< 1.1	U
10061-01-5	cis-1,3-Dichloropropene	1.1	< 1.1	U
79-01-6	Trichloroethene	1.1	< 1.1	U
124-48-1	Dibromochloromethane	1.1	< 1.1	U
79-00-5	1,1,2-Trichloroethane	1.1	< 1.1	U
71-43-2	Benzene	1.1	< 1.1	U
10061-02-6	trans-1,3-Dichloropropene	1.1	< 1.1	U
110-75-8	2-Chloroethylvinylether	5.7	< 5.7	U
75-25-2	Bromoform	1.1	< 1.1	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.7	< 5.7	U
591-78-6	2-Hexanone	5.7	< 5.7	U
127-18-4	Tetrachloroethene	1.1	< 1.1	U
79-34-5	1,1,2,2-Tetrachloroethane	1.1	< 1.1	U
108-88-3	**Toluene**	**1.1**	**0.6**	**J**
108-90-7	Chlorobenzene	1.1	< 1.1	U
100-41-4	Ethylbenzene	1.1	< 1.1	U
100-42-5	Styrene	1.1	< 1.1	U
75-69-4	Trichlorofluoromethane	1.1	< 1.1	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.3	< 2.3	U
179601-23-1	m,p-Xylene	1.1	< 1.1	U
95-47-6	o-Xylene	1.1	< 1.1	U
95-50-1	1,2-Dichlorobenzene	1.1	< 1.1	U
541-73-1	1,3-Dichlorobenzene	1.1	< 1.1	U
106-46-7	1,4-Dichlorobenzene	1.1	< 1.1	U
107-02-8	Acrolein	57	< 57	U
74-88-4	Methyl Iodide	1.1	< 1.1	U
74-96-4	Bromoethane	2.3	< 2.3	U
107-13-1	Acrylonitrile	5.7	< 5.7	U
563-58-6	1,1-Dichloropropene	1.1	< 1.1	U
74-95-3	Dibromomethane	1.1	< 1.1	U
630-20-6	1,1,1,2-Tetrachloroethane	1.1	< 1.1	U
96-12-8	1,2-Dibromo-3-chloropropane	5.7	< 5.7	U
96-18-4	1,2,3-Trichloropropane	2.3	< 2.3	U
110-57-6	trans-1,4-Dichloro-2-butene	5.7	< 5.7	U
108-67-8	1,3,5-Trimethylbenzene	1.1	< 1.1	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW3-S-1.9**
 SAMPLE

Lab Sample ID: UT57C
LIMS ID: 12-8337
Matrix: Soil
Date Analyzed: 05/16/12 19:29

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	1.1	< 1.1	U
87-68-3	Hexachlorobutadiene	5.7	< 5.7	U
106-93-4	Ethylene Dibromide	1.1	< 1.1	U
74-97-5	Bromochloromethane	1.1	< 1.1	U
594-20-7	2,2-Dichloropropane	1.1	< 1.1	U
142-28-9	1,3-Dichloropropane	1.1	< 1.1	U
98-82-8	Isopropylbenzene	1.1	< 1.1	U
103-65-1	n-Propylbenzene	1.1	< 1.1	U
108-86-1	Bromobenzene	1.1	< 1.1	U
95-49-8	2-Chlorotoluene	1.1	< 1.1	U
106-43-4	4-Chlorotoluene	1.1	< 1.1	U
98-06-6	tert-Butylbenzene	1.1	< 1.1	U
135-98-8	sec-Butylbenzene	1.1	< 1.1	U
99-87-6	4-Isopropyltoluene	1.1	< 1.1	U
104-51-8	n-Butylbenzene	1.1	< 1.1	U
120-82-1	1,2,4-Trichlorobenzene	5.7	< 5.7	U
91-20-3	Naphthalene	5.7	< 5.7	U
87-61-6	1,2,3-Trichlorobenzene	5.7	< 5.7	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	120%
d8-Toluene	99.5%
Bromofluorobenzene	99.5%
d4-1,2-Dichlorobenzene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-051612A**
 METHOD BLANK

Lab Sample ID: MB-051612A
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT9/PAB
Date Analyzed: 05/16/12 12:08

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.0	< 1.0	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	Methylene Chloride	2.0	< 2.0	U
67-64-1	**Acetone**	**5.0**	**2.8**	**J**
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	5.0	< 5.0	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	< 2.0	U
179601-23-1	m,p-Xylene	1.0	< 1.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
107-02-8	Acrolein	50	< 50	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	5.0	< 5.0	U
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0	U
96-18-4	1,2,3-Trichloropropane	2.0	< 2.0	U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-051612A**
 METHOD BLANK

Lab Sample ID: MB-051612A QC Report No: UT57-Maul, Foster & Alongi
LIMS ID: 12-8335 Project: SIMS - N Cascade Ford
Matrix: Soil 0747.01.01
Date Analyzed: 05/16/12 12:08

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	5.0	< 5.0	U
106-93-4	Ethylene Dibromide	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
91-20-3	**Naphthalene**	**5.0**	**0.6**	**J**
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	98.0%
Bromofluorobenzene	93.7%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-051612A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-051612A
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/23/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT9/PAB
LCSD: NT9/PAB
Date Analyzed LCS: 05/16/12 11:26
LCSD: 05/16/12 11:47

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	47.5	50.0	95.0%	49.3	50.0	98.6%	3.7%
Bromomethane	40.7 Q	50.0	81.4%	43.0 Q	50.0	86.0%	5.5%
Vinyl Chloride	51.9	50.0	104%	53.2	50.0	106%	2.5%
Chloroethane	65.7 Q	50.0	131%	64.5 Q	50.0	129%	1.8%
Methylene Chloride	45.5	50.0	91.0%	45.3	50.0	90.6%	0.4%
Acetone	240 B	250	96.0%	248 B	250	99.2%	3.3%
Carbon Disulfide	55.8	50.0	112%	56.9	50.0	114%	2.0%
1,1-Dichloroethene	50.8	50.0	102%	51.6	50.0	103%	1.6%
1,1-Dichloroethane	49.0	50.0	98.0%	49.1	50.0	98.2%	0.2%
trans-1,2-Dichloroethene	47.6	50.0	95.2%	48.0	50.0	96.0%	0.8%
cis-1,2-Dichloroethene	46.6	50.0	93.2%	47.0	50.0	94.0%	0.9%
Chloroform	46.3	50.0	92.6%	46.5	50.0	93.0%	0.4%
1,2-Dichloroethane	46.7	50.0	93.4%	49.0	50.0	98.0%	4.8%
2-Butanone	212	250	84.8%	231	250	92.4%	8.6%
1,1,1-Trichloroethane	45.9	50.0	91.8%	46.5	50.0	93.0%	1.3%
Carbon Tetrachloride	47.8	50.0	95.6%	51.6	50.0	103%	7.6%
Vinyl Acetate	46.2	50.0	92.4%	51.8	50.0	104%	11.4%
Bromodichloromethane	48.7	50.0	97.4%	50.6	50.0	101%	3.8%
1,2-Dichloropropane	46.4	50.0	92.8%	48.5	50.0	97.0%	4.4%
cis-1,3-Dichloropropene	49.1	50.0	98.2%	50.8	50.0	102%	3.4%
Trichloroethene	45.4	50.0	90.8%	47.8	50.0	95.6%	5.2%
Dibromochloromethane	47.7	50.0	95.4%	50.7	50.0	101%	6.1%
1,1,2-Trichloroethane	46.5	50.0	93.0%	48.6	50.0	97.2%	4.4%
Benzene	46.1	50.0	92.2%	49.0	50.0	98.0%	6.1%
trans-1,3-Dichloropropene	51.0	50.0	102%	52.7	50.0	105%	3.3%
2-Chloroethylvinylether	41.8	50.0	83.6%	45.3	50.0	90.6%	8.0%
Bromoform	45.9	50.0	91.8%	50.9	50.0	102%	10.3%
4-Methyl-2-Pentanone (MIBK)	244	250	97.6%	270	250	108%	10.1%
2-Hexanone	244	250	97.6%	278	250	111%	13.0%
Tetrachloroethene	44.7	50.0	89.4%	47.3	50.0	94.6%	5.7%
1,1,2,2-Tetrachloroethane	43.7	50.0	87.4%	49.8	50.0	99.6%	13.0%
Toluene	45.5	50.0	91.0%	47.8	50.0	95.6%	4.9%
Chlorobenzene	44.8	50.0	89.6%	47.0	50.0	94.0%	4.8%
Ethylbenzene	46.2	50.0	92.4%	49.0	50.0	98.0%	5.9%
Styrene	49.3	50.0	98.6%	51.6	50.0	103%	4.6%
Trichlorofluoromethane	71.7 Q	50.0	143%	71.5 Q	50.0	143%	0.3%
1,1,2-Trichloro-1,2,2-trifluoroetha	50.2	50.0	100%	49.7	50.0	99.4%	1.0%
m,p-Xylene	95.1	100	95.1%	101	100	101%	6.0%
o-Xylene	48.2	50.0	96.4%	51.4	50.0	103%	6.4%
1,2-Dichlorobenzene	44.9	50.0	89.8%	48.4	50.0	96.8%	7.5%
1,3-Dichlorobenzene	44.8	50.0	89.6%	47.8	50.0	95.6%	6.5%
1,4-Dichlorobenzene	44.3	50.0	88.6%	46.8	50.0	93.6%	5.5%
Acrolein	248	250	99.2%	257	250	103%	3.6%
Methyl Iodide	45.1	50.0	90.2%	44.4	50.0	88.8%	1.6%
Bromoethane	50.9	50.0	102%	50.1	50.0	100%	1.6%
Acrylonitrile	45.1	50.0	90.2%	50.1	50.0	100%	10.5%

Lab Sample ID: LCS-051612A QC Report No: UT57-Maul, Foster & Alongi
LIMS ID: 12-8335 Project: SIMS - N Cascade Ford
Matrix: Soil 0747.01.01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,1-Dichloropropene	45.5	50.0	91.0%	49.1	50.0	98.2%	7.6%
Dibromomethane	46.1	50.0	92.2%	49.4	50.0	98.8%	6.9%
1,1,1,2-Tetrachloroethane	46.7	50.0	93.4%	49.3	50.0	98.6%	5.4%
1,2-Dibromo-3-chloropropane	47.9 Q	50.0	95.8%	58.0 Q	50.0	116%	19.1%
1,2,3-Trichloropropane	42.4	50.0	84.8%	48.4	50.0	96.8%	13.2%
trans-1,4-Dichloro-2-butene	45.6	50.0	91.2%	51.0	50.0	102%	11.2%
1,3,5-Trimethylbenzene	46.2	50.0	92.4%	49.7	50.0	99.4%	7.3%
1,2,4-Trimethylbenzene	46.6	50.0	93.2%	50.2	50.0	100%	7.4%
Hexachlorobutadiene	44.2	50.0	88.4%	48.4	50.0	96.8%	9.1%
Ethylene Dibromide	46.4	50.0	92.8%	49.5	50.0	99.0%	6.5%
Bromochloromethane	46.8	50.0	93.6%	46.7	50.0	93.4%	0.2%
2,2-Dichloropropane	45.9	50.0	91.8%	46.6	50.0	93.2%	1.5%
1,3-Dichloropropane	45.4	50.0	90.8%	48.7	50.0	97.4%	7.0%
Isopropylbenzene	44.8	50.0	89.6%	49.9	50.0	99.8%	10.8%
n-Propylbenzene	45.1	50.0	90.2%	49.2	50.0	98.4%	8.7%
Bromobenzene	42.9	50.0	85.8%	46.2	50.0	92.4%	7.4%
2-Chlorotoluene	44.4	50.0	88.8%	47.8	50.0	95.6%	7.4%
4-Chlorotoluene	44.4	50.0	88.8%	47.9	50.0	95.8%	7.6%
tert-Butylbenzene	45.6	50.0	91.2%	50.3	50.0	101%	9.8%
sec-Butylbenzene	46.0	50.0	92.0%	50.6	50.0	101%	9.5%
4-Isopropyltoluene	47.8	50.0	95.6%	51.5	50.0	103%	7.5%
n-Butylbenzene	49.4	50.0	98.8%	52.0	50.0	104%	5.1%
1,2,4-Trichlorobenzene	50.0	50.0	100%	53.3	50.0	107%	6.4%
Naphthalene	48.5 QB	50.0	97.0%	56.7 QB	50.0	113%	15.6%
1,2,3-Trichlorobenzene	49.0	50.0	98.0%	53.4	50.0	107%	8.6%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	101%	97.3%
d8-Toluene	100%	99.7%
Bromofluorobenzene	98.4%	99.0%
d4-1,2-Dichlorobenzene	102%	103%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-051612A	Method Blank	Low	100%	98.0%	93.7%	102%	0
LCS-051612A	Lab Control	Low	101%	100%	98.4%	102%	0
LCSD-051612A	Lab Control Dup	Low	97.3%	99.7%	99.0%	103%	0
UT57A	MW1-S-3.1	Low	119%	100%	98.8%	105%	0
UT57C	MW3-S-1.9	Low	120%	99.5%	99.5%	105%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260C	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	79-121	76-120	75-152	69-120
(TOL) = d8-Toluene	80-120	80-120	82-115	80-120
(BFB) = Bromofluorobenzene	80-120	80-120	64-120	76-128
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-120	80-120	80-120

Log Number Range: 12-8335 to 12-8337

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt9.i Injection Date: 16-MAY-2012 10:20
Lab File ID: 0500516.d Init. Cal. Date(s): 09-MAY-2012 09-MAY-2012
Analysis Type: SOIL Init. Cal. Times: 11:34 15:04
Lab Sample ID: CC0516 Quant Type: ISTD
Method: /chem1/nt9.i/16MAY12.b/VO050912S.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 Dichlorodifluoromethane	0.60690	0.54932	0.100	-9.48688	20.00000	Averaged	
2 Chloromethane	1.14497	1.05268	0.100	-8.06021	20.00000	Averaged	
3 Vinyl Chloride	0.94372	0.96169	0.100	1.90436	20.00000	Averaged	
4 Bromomethane	0.66458	0.52158	0.100	-21.51738	20.00000	Averaged	<-
5 Chloroethane	0.31781	0.41005	0.080	29.02457	20.00000	Averaged	<-
6 Trichlorofluoromethane	0.64890	1.06389	0.100	63.95375	20.00000	Averaged	<-
7 1,1-Dichloroethene	0.69181	0.69283	0.100	0.14646	20.00000	Averaged	
8 Carbon Disulfide	2.47430	2.75770	0.010	11.45361	20.00000	Averaged	
9 112Trichloro122Trifluoroeth	0.77947	0.79052	0.010	1.41731	20.00000	Averaged	
10 Iodomethane	0.75711	0.66882	0.010	-11.66202	20.00000	Averaged	
11 Bromoethane	0.52116	0.53123	0.100	1.93230	20.00000	Averaged	
12 Acrolein	0.11793	0.12433	0.000	5.42326	20.00000	Averaged	
13 Methylene Chloride	0.84113	0.80639	0.010	-4.13082	20.00000	Averaged	
14 Acetone	0.19597	0.20824	0.001	6.26245	20.00000	Averaged	
15 Trans-1,2-Dichloroethene	0.81763	0.81023	0.010	-0.90552	20.00000	Averaged	
16 Methyl tert butyl ether	2.01552	1.99958	0.100	-0.79071	20.00000	Averaged	
17 1,1-Dichloroethane	1.45586	1.52435	0.100	4.70461	20.00000	Averaged	
18 Acrylonitrile	0.25484	0.26358	0.001	3.42992	20.00000	Averaged	
19 Vinyl Acetate	1.28055	1.40623	0.010	9.81467	20.00000	Averaged	
20 Cis-1,2-Dichloroethene	0.81966	0.82564	0.010	0.72990	20.00000	Averaged	
22 2,2-Dichloropropane	1.12647	1.09059	0.010	-3.18478	20.00000	Averaged	
23 Bromochloromethane	0.36693	0.38033	0.050	3.65046	20.00000	Averaged	
24 Chloroform	1.29660	1.31936	0.100	1.75476	20.00000	Averaged	
25 Carbon Tetrachloride	0.38592	0.40757	0.100	5.60952	20.00000	Averaged	
$ 27 Dibromofluoromethane	0.77395	0.73642	0.100	-4.84950	20.00000	Averaged	
26 1,1,1-Trichloroethane	1.18472	1.17513	0.100	-0.81005	20.00000	Averaged	
28 1,1-Dichloropropene	0.42901	0.42709	0.010	-0.44778	20.00000	Averaged	
29 2-Butanone	0.07681	0.08152	0.001	6.13615	20.00000	Averaged	
30 Benzene	1.32438	1.36801	0.100	3.29375	20.00000	Averaged	
$ 32 d4-1,2-Dichloroethane	0.79670	0.77603	0.010	-2.59442	20.00000	Averaged	
33 1,2-Dichloroethane	0.38332	0.39914	0.100	4.12724	20.00000	Averaged	
34 Trichloroethene	0.32616	0.32216	0.100	-1.22558	20.00000	Averaged	
37 Dibromomethane	0.15987	0.16737	0.010	4.69080	20.00000	Averaged	
38 1,2-Dichloropropane	0.33489	0.34774	0.100	3.83685	20.00000	Averaged	
39 Bromodichloromethane	0.37765	0.41742	0.100	10.53291	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt9.i Injection Date: 16-MAY-2012 10:20
Lab File ID: 0500516.d Init. Cal. Date(s): 09-MAY-2012 09-MAY-2012
Analysis Type: SOIL Init. Cal. Times: 11:34 15:04
Lab Sample ID: CC0516 Quant Type: ISTD
Method: /chem1/nt9.i/16MAY12.b/VO050912S.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
40 2-Chloroethyl Vinyl Ether	0.05826	0.05717	0.000	-1.87122	20.00000	Averaged
41 Cis 1,3-dichloropropene	0.48137	0.52350	0.100	8.75094	20.00000	Averaged
$ 42 d8-Toluene	1.32144	1.30709	0.010	-1.08656	20.00000	Averaged
43 Toluene	0.89752	0.91495	0.100	1.94251	20.00000	Averaged
44 Tetrachloroethene	0.34903	0.35896	0.100	2.84436	20.00000	Averaged
45 4-Methyl-2-Pentanone	0.10871	0.12240	0.000	12.59404	20.00000	Averaged
46 Trans 1,3-Dichloropropene	0.42851	0.47740	0.010	11.40911	20.00000	Averaged
47 1,1,2-Trichloroethane	0.25241	0.26352	0.100	4.40136	20.00000	Averaged
48 Chlorodibromomethane	0.26301	0.29418	0.100	11.85472	20.00000	Averaged
49 1,3-Dichloropropane	0.43377	0.46406	0.100	6.98170	20.00000	Averaged
50 1,2-Dibromoethane	0.24526	0.25504	0.010	3.99044	20.00000	Averaged
51 2-Hexanone	0.19034	0.22496	0.010	18.18369	20.00000	Averaged
53 Chlorobenzene	0.96353	0.99362	0.300	3.12223	20.00000	Averaged
54 Ethyl Benzene	1.66920	1.76760	0.100	5.89497	20.00000	Averaged
55 1,1,1,2-Tetrachloroethane	0.29419	0.32312	0.010	9.83407	20.00000	Averaged
56 m,p-xylene	0.63649	0.70317	0.100	10.47752	20.00000	Averaged
57 o-Xylene	0.59123	0.65721	0.100	11.16051	20.00000	Averaged
58 Styrene	0.98816	1.12201	0.100	13.54565	20.00000	Averaged
59 Bromoform	0.34105	0.38079	0.100	11.65044	20.00000	Averaged
60 Isopropyl Benzene	3.22942	3.42012	0.010	5.90511	20.00000	Averaged
$ 62 4-Bromofluorobenzene	0.47526	0.46064	0.200	-3.07744	20.00000	Averaged
63 Bromobenzene	0.78559	0.78874	0.010	0.40101	20.00000	Averaged
64 N-Propyl Benzene	3.93024	4.12422	0.010	4.93540	20.00000	Averaged
65 1,1,2,2-Tetrachloroethane	0.60910	0.64543	0.300	5.96325	20.00000	Averaged
66 2-Chloro Toluene	2.33682	2.40520	0.010	2.92646	20.00000	Averaged
67 1,3,5-Trimethyl Benzene	2.65871	2.84681	0.010	7.07504	20.00000	Averaged
68 1,2,3-Trichloropropane	0.20691	0.21415	0.010	3.50138	20.00000	Averaged
69 Trans-1,4-Dichloro 2-Butene	0.21080	0.23303	0.001	10.54666	20.00000	Averaged
70 4-Chloro Toluene	2.39234	2.44872	0.010	2.35659	20.00000	Averaged
71 T-Butyl Benzene	2.31455	2.50792	0.010	8.35471	20.00000	Averaged
72 1,2,4-Trimethylbenzene	2.65537	2.87132	0.010	8.13250	20.00000	Averaged
73 S-Butyl Benzene	3.63756	3.94971	0.010	8.58126	20.00000	Averaged
74 4-Isopropyl Toluene	2.83184	3.11825	0.010	10.11399	20.00000	Averaged
75 1,3-Dichlorobenzene	1.54815	1.60512	0.100	3.67988	20.00000	Averaged
77 1,4-Dichlorobenzene	1.58787	1.63201	0.100	2.77982	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt9.i Injection Date: 16-MAY-2012 10:20
Lab File ID: 0500516.d Init. Cal. Date(s): 09-MAY-2012 09-MAY-2012
Analysis Type: SOIL Init. Cal. Times: 11:34 15:04
Lab Sample ID: CC0516 Quant Type: ISTD
Method: /chem1/nt9.i/16MAY12.b/VO050912S.m

COMPOUND	RRF / AMOUNT	RF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
78 N-Butyl Benzene	2.67407	3.04554	0.010	13.89189	20.00000	Averaged	
$ 79 d4-1,2-Dichlorobenzene	0.92859	0.95320	0.010	2.64979	20.00000	Averaged	
80 1,2-Dichlorobenzene	1.43223	1.51447	0.100	5.74248	20.00000	Averaged	
81 1,2-Dibromo 3-Chloropropane	0.09259	0.11389	0.010	23.00286	20.00000	Averaged	<-
82 Hexachloro 1,3-Butadiene	0.57158	0.61044	0.010	6.79774	20.00000	Averaged	
83 1,2,4-Trichlorobenzene	0.91858	1.05024	0.010	14.33266	20.00000	Averaged	
84 Naphthalene	1.87670	2.26003	0.010	20.42573	20.00000	Averaged	<-
85 1,2,3-Trichlorobenzene	0.84178	0.98215	0.010	16.67596	20.00000	Averaged	

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-051812A**
 METHOD BLANK

Lab Sample ID: MB-051812A
LIMS ID: 12-8338
Matrix: Water
Data Release Authorized:
Reported: 05/22/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/18/12 20:22

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-051812A**
 METHOD BLANK

Lab Sample ID: MB-051812A QC Report No: UT57-Maul, Foster & Alongi
LIMS ID: 12-8338 Project: SIMS - N Cascade Ford
Matrix: Water 0747.01.01
Date Analyzed: 05/18/12 20:22

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	99.8%
Bromofluorobenzene	96.8%
d4-1,2-Dichlorobenzene	96.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP4-W-10**
 SAMPLE

Lab Sample ID: UT57D
LIMS ID: 12-8338
Matrix: Water
Data Release Authorized:
Reported: 05/22/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/19/12 00:45

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP4-W-10**
 SAMPLE

Lab Sample ID: UT57D
LIMS ID: 12-8338
Matrix: Water
Date Analyzed: 05/19/12 00:45

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	96.4%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: Trip Blank**
Page 1 of 2 **SAMPLE**

Lab Sample ID: UT57E
LIMS ID: 12-8339
Matrix: Water
Data Release Authorized: MW
Reported: 05/22/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/19/12 01:12

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: Trip Blank**
 SAMPLE

Lab Sample ID: UT57E
LIMS ID: 12-8339
Matrix: Water
Date Analyzed: 05/19/12 01:12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	96.9%
Bromofluorobenzene	98.7%
d4-1,2-Dichlorobenzene	101%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-051812A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-051812A
LIMS ID: 12-8338
Matrix: Water
Data Release Authorized:
Reported: 05/22/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PKC
LCSD: NT2/PKC
Date Analyzed LCS: 05/18/12 19:28
LCSD: 05/18/12 19:55

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.0	10.0	90.0%	9.2	10.0	92.0%	2.2%
Bromomethane	7.8	10.0	78.0%	8.3	10.0	83.0%	6.2%
Vinyl Chloride	8.4	10.0	84.0%	8.8	10.0	88.0%	4.7%
Chloroethane	7.6	10.0	76.0%	7.8	10.0	78.0%	2.6%
Methylene Chloride	8.8	10.0	88.0%	8.8	10.0	88.0%	0.0%
Acetone	49.8	50.0	99.6%	50.2	50.0	100%	0.8%
Carbon Disulfide	8.8	10.0	88.0%	8.9	10.0	89.0%	1.1%
1,1-Dichloroethene	8.7	10.0	87.0%	8.9	10.0	89.0%	2.3%
1,1-Dichloroethane	9.3	10.0	93.0%	9.4	10.0	94.0%	1.1%
trans-1,2-Dichloroethene	8.6	10.0	86.0%	8.8	10.0	88.0%	2.3%
cis-1,2-Dichloroethene	8.9	10.0	89.0%	9.1	10.0	91.0%	2.2%
Chloroform	9.2	10.0	92.0%	9.4	10.0	94.0%	2.2%
1,2-Dichloroethane	10.0	10.0	100%	10.2	10.0	102%	2.0%
2-Butanone	54.0	50.0	108%	56.6	50.0	113%	4.7%
1,1,1-Trichloroethane	8.9	10.0	89.0%	9.2	10.0	92.0%	3.3%
Carbon Tetrachloride	8.6	10.0	86.0%	8.8	10.0	88.0%	2.3%
Vinyl Acetate	10.5	10.0	105%	11.0	10.0	110%	4.7%
Bromodichloromethane	10.1	10.0	101%	10.0	10.0	100%	1.0%
1,2-Dichloropropane	9.7	10.0	97.0%	9.9	10.0	99.0%	2.0%
cis-1,3-Dichloropropene	10.9	10.0	109%	10.8	10.0	108%	0.9%
Trichloroethene	9.6	10.0	96.0%	9.9	10.0	99.0%	3.1%
Dibromochloromethane	10.1	10.0	101%	10.8	10.0	108%	6.7%
1,1,2-Trichloroethane	10.0	10.0	100%	10.2	10.0	102%	2.0%
Benzene	9.4	10.0	94.0%	9.5	10.0	95.0%	1.1%
trans-1,3-Dichloropropene	10.8	10.0	108%	10.8	10.0	108%	0.0%
2-Chloroethylvinylether	10.8	10.0	108%	10.9	10.0	109%	0.9%
Bromoform	10.8	10.0	108%	10.8	10.0	108%	0.0%
4-Methyl-2-Pentanone (MIBK)	51.5	50.0	103%	51.9	50.0	104%	0.8%
2-Hexanone	52.7	50.0	105%	57.8	50.0	116%	9.2%
Tetrachloroethene	9.5	10.0	95.0%	10.0	10.0	100%	5.1%
1,1,2,2-Tetrachloroethane	9.9	10.0	99.0%	9.8	10.0	98.0%	1.0%
Toluene	9.8	10.0	98.0%	9.8	10.0	98.0%	0.0%
Chlorobenzene	9.7	10.0	97.0%	10.1	10.0	101%	4.0%
Ethylbenzene	9.5	10.0	95.0%	9.8	10.0	98.0%	3.1%
Styrene	10.1	10.0	101%	10.3	10.0	103%	2.0%
Trichlorofluoromethane	8.4	10.0	84.0%	8.9	10.0	89.0%	5.8%
1,1,2-Trichloro-1,2,2-trifluoroetha	8.7	10.0	87.0%	8.8	10.0	88.0%	1.1%
m,p-Xylene	19.4	20.0	97.0%	19.7	20.0	98.5%	1.5%
o-Xylene	9.4	10.0	94.0%	9.7	10.0	97.0%	3.1%
1,2-Dichlorobenzene	9.4	10.0	94.0%	9.7	10.0	97.0%	3.1%
1,3-Dichlorobenzene	9.5	10.0	95.0%	9.9	10.0	99.0%	4.1%
1,4-Dichlorobenzene	9.3	10.0	93.0%	9.5	10.0	95.0%	2.1%
Acrolein	46.7	50.0	93.4%	48.9	50.0	97.8%	4.6%
Methyl Iodide	8.8	10.0	88.0%	9.0	10.0	90.0%	2.2%
Bromoethane	9.0	10.0	90.0%	9.2	10.0	92.0%	2.2%
Acrylonitrile	9.4	10.0	94.0%	9.6	10.0	96.0%	2.1%
1,1-Dichloropropene	9.4	10.0	94.0%	9.4	10.0	94.0%	0.0%
Dibromomethane	10.1	10.0	101%	10.1	10.0	101%	0.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-051812A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-051812A QC Report No: UT57-Maul, Foster & Alongi
LIMS ID: 12-8338 Project: SIMS - N Cascade Ford
Matrix: Water 0747.01.01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,1,1,2-Tetrachloroethane	9.4	10.0	94.0%	9.6	10.0	96.0%	2.1%
1,2-Dibromo-3-chloropropane	9.4	10.0	94.0%	9.8	10.0	98.0%	4.2%
1,2,3-Trichloropropane	10.2	10.0	102%	10.1	10.0	101%	1.0%
trans-1,4-Dichloro-2-butene	9.8	10.0	98.0%	10.2	10.0	102%	4.0%
1,3,5-Trimethylbenzene	10.1	10.0	101%	10.1	10.0	101%	0.0%
1,2,4-Trimethylbenzene	9.8	10.0	98.0%	10.0	10.0	100%	2.0%
Hexachlorobutadiene	8.5	10.0	85.0%	8.8	10.0	88.0%	3.5%
Ethylene Dibromide	10.2	10.0	102%	10.5	10.0	105%	2.9%
Bromochloromethane	9.1	10.0	91.0%	9.4	10.0	94.0%	3.2%
2,2-Dichloropropane	8.0 Q	10.0	80.0%	8.2 Q	10.0	82.0%	2.5%
1,3-Dichloropropane	10.4	10.0	104%	10.8	10.0	108%	3.8%
Isopropylbenzene	10.2	10.0	102%	10.1	10.0	101%	1.0%
n-Propylbenzene	10.0	10.0	100%	9.9	10.0	99.0%	1.0%
Bromobenzene	10.1	10.0	101%	10.4	10.0	104%	2.9%
2-Chlorotoluene	9.6	10.0	96.0%	9.7	10.0	97.0%	1.0%
4-Chlorotoluene	9.9	10.0	99.0%	9.9	10.0	99.0%	0.0%
tert-Butylbenzene	10.3	10.0	103%	10.5	10.0	105%	1.9%
sec-Butylbenzene	9.8	10.0	98.0%	10.0	10.0	100%	2.0%
4-Isopropyltoluene	9.8	10.0	98.0%	10.1	10.0	101%	3.0%
n-Butylbenzene	9.5	10.0	95.0%	9.5	10.0	95.0%	0.0%
1,2,4-Trichlorobenzene	9.0	10.0	90.0%	9.4	10.0	94.0%	4.3%
Naphthalene	9.1	10.0	91.0%	9.8	10.0	98.0%	7.4%
1,2,3-Trichlorobenzene	8.7	10.0	87.0%	9.3	10.0	93.0%	6.7%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	103%	102%
d8-Toluene	101%	97.7%
Bromofluorobenzene	94.9%	94.0%
d4-1,2-Dichlorobenzene	98.6%	97.0%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-051812A	Method Blank	10	100%	99.8%	96.8%	96.8%	0
LCS-051812A	Lab Control	10	103%	101%	94.9%	98.6%	0
LCSD-051812A	Lab Control Dup	10	102%	97.7%	94.0%	97.0%	0
UT57D	GP4-W-10	10	105%	96.4%	101%	102%	0
UT57E	Trip Blank	10	106%	96.9%	98.7%	101%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-120)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 12-8338 to 12-8339

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i Injection Date: 18-MAY-2012 19:02
Lab File ID: cc0518x.d Init. Cal. Date(s): 18-MAY-2012 18-MAY-2012
Analysis Type: WATER Init. Cal. Times: 14:12 17:20
Lab Sample ID: CC0518 Quant Type: ISTD
Method: /chem3/nt2.i/20120518x.b/82600518L.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 Dichlorodifluoromethane	0.51062	0.46384	0.46384	0.010	-9.16259	20.00000	Averaged	
2 Chloromethane	1.00669	0.92773	0.92773	0.100	-7.84347	20.00000	Averaged	
3 Vinyl Chloride	0.83625	0.73046	0.73046	0.100	-12.65064	20.00000	Averaged	
4 Bromomethane	0.36106	0.29754	0.29754	0.100	-17.59195	20.00000	Averaged	
5 Chloroethane	0.44836	0.36082	0.36082	0.010	-19.52522	20.00000	Averaged	
6 Trichlorofluoromethane	0.70009	0.61275	0.61275	0.010	-12.47580	20.00000	Averaged	
7 1,1-Dichloroethene	0.61087	0.54424	0.54424	0.100	-10.90668	20.00000	Averaged	
8 Carbon Disulfide	2.26940	2.03933	2.03933	0.010	-10.13829	20.00000	Averaged	
9 112Trichloro122Trifluoroeth	0.63595	0.57163	0.57163	0.010	-10.11370	20.00000	Averaged	
10 Iodomethane	1.06275	0.95328	0.95328	0.010	-10.30064	20.00000	Averaged	
11 Bromoethane	0.51456	0.47071	0.47071	0.100	-8.52041	20.00000	Averaged	
12 Acrolein	0.07271	0.06760	0.06760	0.000	-7.03153	20.00000	Averaged	
13 Methylene Chloride	0.65448	0.58598	0.58598	0.010	-10.46692	20.00000	Averaged	
14 Acetone	0.11743	0.11597	0.11597	0.001	-1.24860	20.00000	Averaged	
15 Trans-1,2-Dichloroethene	0.69255	0.60125	0.60125	0.010	-13.18311	20.00000	Averaged	
17 Methyl tert butyl ether	1.60558	1.46906	1.46906	0.100	-8.50261	20.00000	Averaged	
18 1,1-Dichloroethane	1.18129	1.10162	1.10162	0.200	-6.74419	20.00000	Averaged	
19 Acrylonitrile	0.17450	0.16409	0.16409	0.001	-5.96346	20.00000	Averaged	
20 Vinyl Acetate	0.74192	0.79940	0.79940	0.010	7.74840	20.00000	Averaged	
22 Cis-1,2-Dichloroethene	0.68624	0.60399	0.60399	0.010	-11.98589	20.00000	Averaged	
23 2,2-Dichloropropane	0.75278	0.59347	0.59347	0.010	-21.16272	20.00000	Averaged	<-
24 Bromochloromethane	0.28875	0.26746	0.26746	0.050	-7.37183	20.00000	Averaged	
25 Chloroform	0.99778	0.90291	0.90291	0.200	-9.50821	20.00000	Averaged	
26 Carbon Tetrachloride	0.52302	0.43259	0.43259	0.100	-17.28912	20.00000	Averaged	
$ 27 Dibromofluoromethane	0.52450	0.50536	0.50536	0.100	-3.64903	20.00000	Averaged	
28 1,1,1-Trichloroethane	0.90540	0.80188	0.80188	0.100	-11.43365	20.00000	Averaged	
29 2-Butanone	0.16697	0.17947	0.17947	0.001	7.48822	20.00000	Averaged	
30 1,1-Dichloropropene	0.51342	0.47009	0.47009	0.010	-8.43942	20.00000	Averaged	
31 Benzene	1.45464	1.32833	1.32833	0.500	-8.68321	20.00000	Averaged	
$ 33 d4-1,2-Dichloroethane	0.47814	0.48867	0.48867	0.010	2.20124	20.00000	Averaged	
34 1,2-Dichloroethane	0.38198	0.37139	0.37139	0.100	-2.77224	20.00000	Averaged	
36 Trichloroethene	0.37835	0.36206	0.36206	0.100	-4.30559	20.00000	Averaged	
38 Dibromomethane	0.15289	0.14633	0.14633	0.010	-4.28754	20.00000	Averaged	
39 1,2-Dichloropropane	0.35281	0.33159	0.33159	0.100	-6.01643	20.00000	Averaged	
40 Bromodichloromethane	0.38700	0.37519	0.37519	0.100	-3.05192	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i Injection Date: 18-MAY-2012 19:02
Lab File ID: cc0518x.d Init. Cal. Date(s): 18-MAY-2012 18-MAY-2012
Analysis Type: WATER Init. Cal. Times: 14:12 17:20
Lab Sample ID: CC0518 Quant Type: ISTD
Method: /chem3/nt2.i/20120518x.b/82600518L.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
41 2-Chloroethyl Vinyl Ether	0.12577	0.13514	0.13514	0.000	7.44861	20.00000	Averaged
42 Cis 1,3-dichloropropene	0.43106	0.44874	0.44874	0.200	4.10169	20.00000	Averaged
$ 43 d8-Toluene	1.17695	1.14649	1.14649	0.010	-2.58870	20.00000	Averaged
44 Toluene	0.82810	0.78461	0.78461	0.400	-5.25187	20.00000	Averaged
45 4-Methyl-2-Pentanone	0.10480	0.10044	0.10044	0.000	-4.16360	20.00000	Averaged
46 Tetrachloroethene	0.40617	0.39501	0.39501	0.200	-2.74577	20.00000	Averaged
47 Trans 1,3-Dichloropropene	0.34895	0.36336	0.36336	0.010	4.13027	20.00000	Averaged
48 1,1,2-Trichloroethane	0.20910	0.20688	0.20688	0.100	-1.05749	20.00000	Averaged
49 Chlorodibromomethane	0.28089	0.29167	0.29167	0.100	3.83719	20.00000	Averaged
50 1,3-Dichloropropane	0.39667	0.41145	0.41145	0.100	3.72422	20.00000	Averaged
51 1,2-Dibromoethane	0.19944	0.20388	0.20388	0.010	2.22549	20.00000	Averaged
52 2-Hexanone	0.19359	0.19966	0.19966	0.010	3.13299	20.00000	Averaged
54 Chlorobenzene	0.98861	0.96573	0.96573	0.500	-2.31408	20.00000	Averaged
55 Ethyl Benzene	0.57314	0.54596	0.54596	0.100	-4.74164	20.00000	Averaged
56 1,1,1,2-Tetrachloroethane	0.38281	0.35780	0.35780	0.010	-6.53306	20.00000	Averaged
57 m,p-xylene	0.69061	0.66512	0.66512	0.300	-3.69127	20.00000	Averaged
58 o-Xylene	0.73521	0.68826	0.68826	0.300	-6.38575	20.00000	Averaged
59 Styrene	1.05525	1.02974	1.02974	0.300	-2.41831	20.00000	Averaged
60 Bromoform	0.28285	0.30309	0.30309	0.010	7.15631	20.00000	Averaged
61 Isopropyl Benzene	3.12946	3.11682	3.11682	0.010	-0.40393	20.00000	Averaged
$ 62 4-Bromofluorobenzene	0.52673	0.49801	0.49801	0.200	-5.45244	20.00000	Averaged
63 Bromobenzene	0.68493	0.69039	0.69039	0.010	0.79774	20.00000	Averaged
64 N-Propyl Benzene	3.45852	3.38783	3.38783	0.010	-2.04400	20.00000	Averaged
65 1,1,2,2-Tetrachloroethane	0.52299	0.50196	0.50196	0.100	-4.01996	20.00000	Averaged
66 2-Chloro Toluene	2.46837	2.35177	2.35177	0.010	-4.72355	20.00000	Averaged
67 1,3,5-Trimethyl Benzene	2.62752	2.59682	2.59682	0.010	-1.16851	20.00000	Averaged
68 1,2,3-Trichloropropane	0.15813	0.15443	0.15443	0.010	-2.34521	20.00000	Averaged
69 Trans-1,4-Dichloro 2-Butene	8.66225	10.00000	0.11210	0.001	-13.37752	20.00000	Quadratic
70 4-Chloro Toluene	2.19624	2.13872	2.13872	0.010	-2.61894	20.00000	Averaged
71 T-Butyl Benzene	2.25880	2.32864	2.32864	0.010	3.09191	20.00000	Averaged
72 1,2,4-Trimethylbenzene	2.69888	2.62663	2.62663	0.010	-2.67705	20.00000	Averaged
73 S-Butyl Benzene	3.44080	3.37090	3.37090	0.010	-2.03152	20.00000	Averaged
74 4-Isopropyl Toluene	2.85844	2.81016	2.81016	0.010	-1.68891	20.00000	Averaged
75 1,3-Dichlorobenzene	1.47403	1.41040	1.41040	0.600	-4.31664	20.00000	Averaged
77 1,4-Dichlorobenzene	1.52594	1.42810	1.42810	0.500	-6.41163	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i Injection Date: 18-MAY-2012 19:02
Lab File ID: cc0518x.d Init. Cal. Date(s): 18-MAY-2012 18-MAY-2012
Analysis Type: WATER Init. Cal. Times: 14:12 17:20
Lab Sample ID: CC0518 Quant Type: ISTD
Method: /chem3/nt2.i/20120518x.b/82600518L.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
78 N-Butyl Benzene	2.57930	2.41761	2.41761	0.010	-6.26862	20.00000	Averaged
$ 79 d4-1,2-Dichlorobenzene	0.89805	0.88923	0.88923	0.010	-0.98191	20.00000	Averaged
80 1,2-Dichlorobenzene	1.38632	1.30815	1.30815	0.400	-5.63852	20.00000	Averaged
81 1,2-Dibromo 3-Chloropropane	0.08293	0.07886	0.07886	0.010	-4.90109	20.00000	Averaged
83 Hexachloro 1,3-Butadiene	0.49311	0.42776	0.42776	0.010	-13.25223	20.00000	Averaged
84 1,2,4-Trichlorobenzene	0.90177	0.82017	0.82017	0.010	-9.04876	20.00000	Averaged
85 Naphthalene	1.53201	1.44964	1.44964	0.010	-5.37671	20.00000	Averaged
86 1,2,3-Trichlorobenzene	0.69026	0.61743	0.61743	0.010	-10.55097	20.00000	Averaged

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Matrix: Soil

Data Release Authorized:
Reported: 05/18/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

ARI ID	Client ID	Analysis Date	Basis	Range	Result
MB-051012	Method Blank	05/10/12	Dry	Gasoline	< 5.0 U
12-8335		PID1		HC ID	---
				Trifluorotoluene	99.8%
				Bromobenzene	99.3%
UT57A	MW1-S-3.1	05/10/12	Dry	Gasoline	< 8.9 U
12-8335		PID1		HC ID	---
				Trifluorotoluene	100%
				Bromobenzene	96.4%
UT57C	MW3-S-1.9	05/10/12	Dry	Gasoline	< 8.6 U
12-8337		PID1		HC ID	---
				Trifluorotoluene	99.1%
				Bromobenzene	97.9%

Gasoline values reported in mg/kg (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-051012
LAB CONTROL SAMPLE

Lab Sample ID: LCS-051012
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized: MW
Reported: 05/18/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 05/10/12 10:38
LCSD: 05/10/12 11:07
Instrument/Analyst LCS: PID1/JLW
LCSD: PID1/JLW

Purge Volume: 5.0 mL

Sample Amount LCS: 100 mg-dry-wt
LCSD: 100 mg-dry-wt

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	50.2	50.0	100%	50.1	50.0	100%	0.2%

Reported in mg/kg (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	93.8%	85.1%
Bromobenzene	91.6%	83.4%

ANALYTICAL RESOURCES INCORPORATED

TPHG SOIL SURROGATE RECOVERY SUMMARY

ARI Job: UT57
Matrix: Soil

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01

Client ID	BFB	TFT	BBZ	TOT OUT
MB-051012	NA	99.8%	99.3%	0
LCS-051012	NA	93.8%	91.6%	0
LCSD-051012	NA	85.1%	83.4%	0
MW1-S-3.1	NA	100%	96.4%	0
MW3-S-1.9	NA	99.1%	97.9%	0

	LCS/MB LIMITS	QC LIMITS
(BFB) = Bromofluorobenzene	(70-130)	(70-130)
(TFT) = Trifluorotoluene	(80-120)	(66-123)
(BBZ) = Bromobenzene	(80-120)	(62-130)

Log Number Range: 12-8335 to 12-8337

Data File: /chem3/pid1.i/vpcc051012-1.b/0510a006.d

Date : 10-MAY-2012 11:36

Client ID:

Sample Info: MB0510

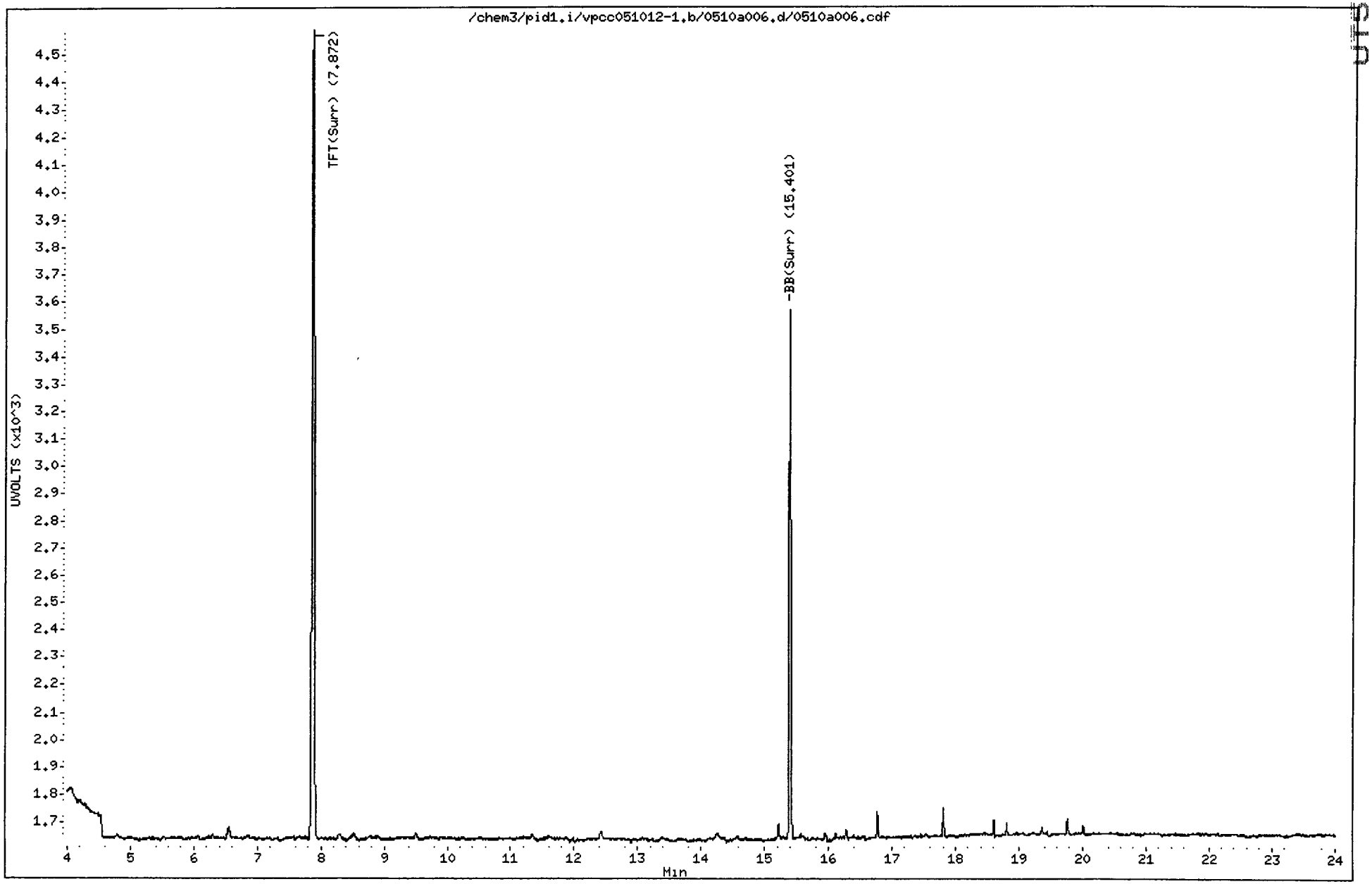
Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: JW

Column diameter: 0.18

DFS 00037



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Date : 10-MAY-2012 10:38

Client ID:

Sample Info: LCS0510

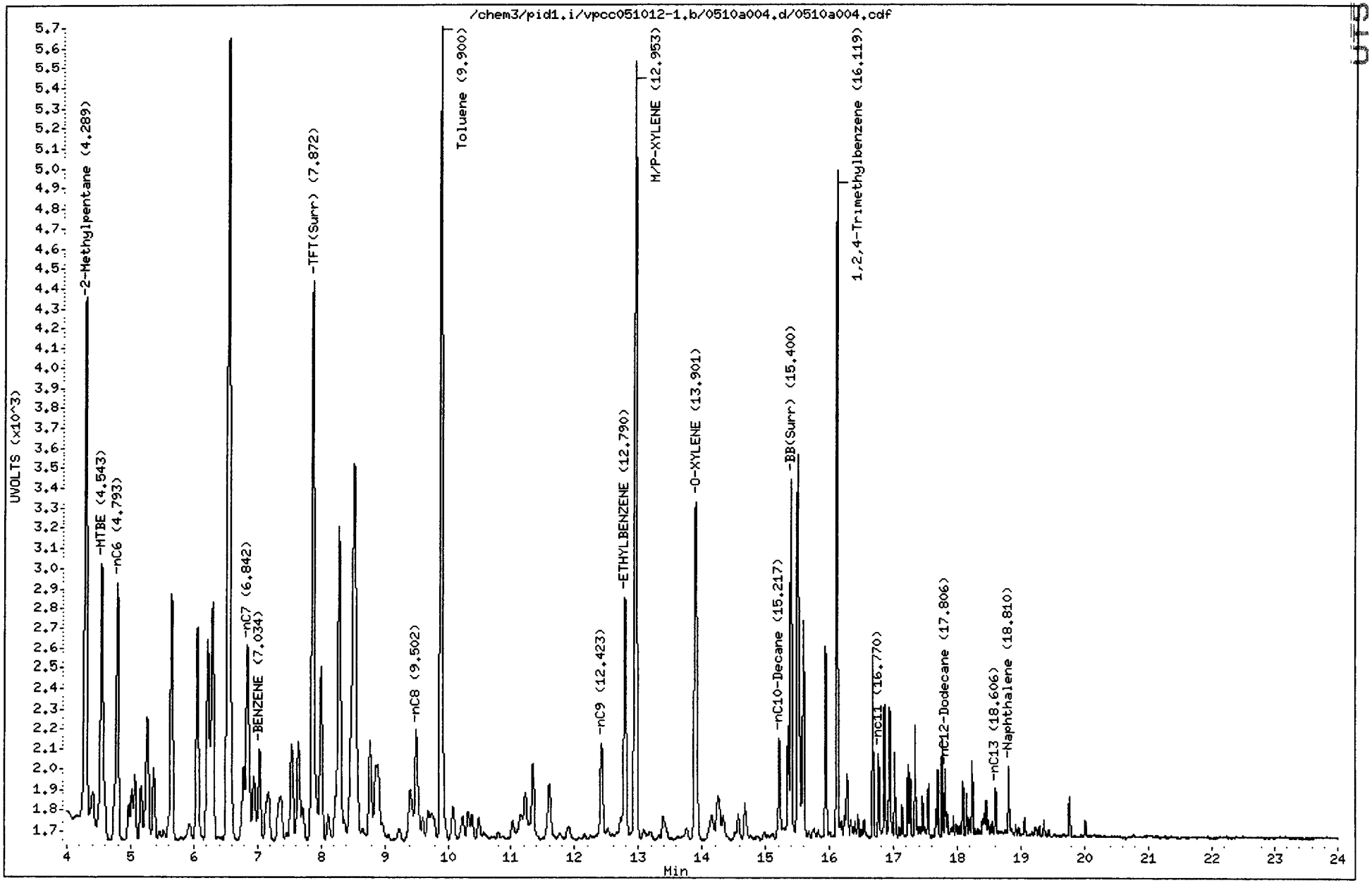
Column phase: RTX 502-2 FID

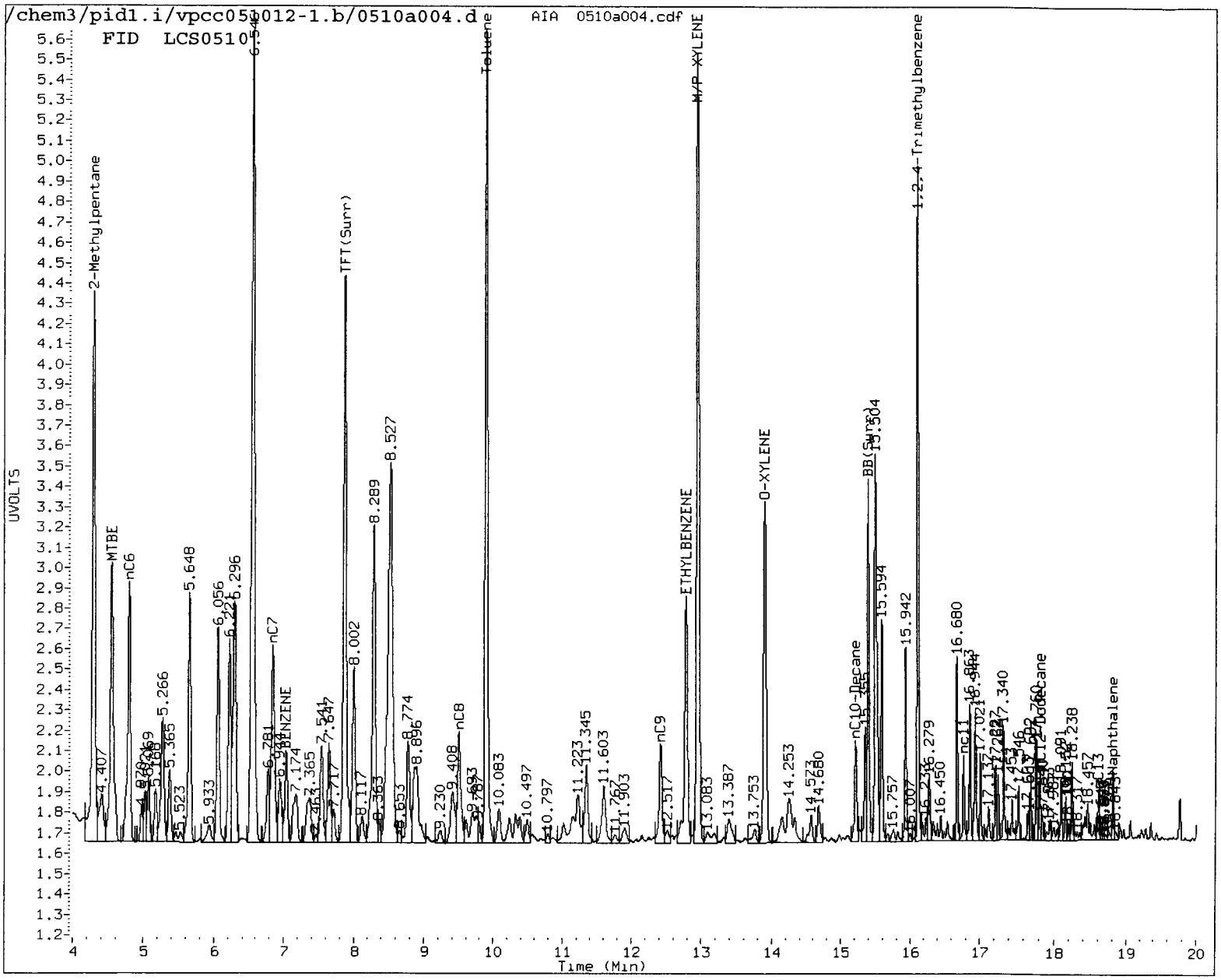
Instrument: pid1.i

Operator: JW

Column diameter: 0.18

DTSC 00038



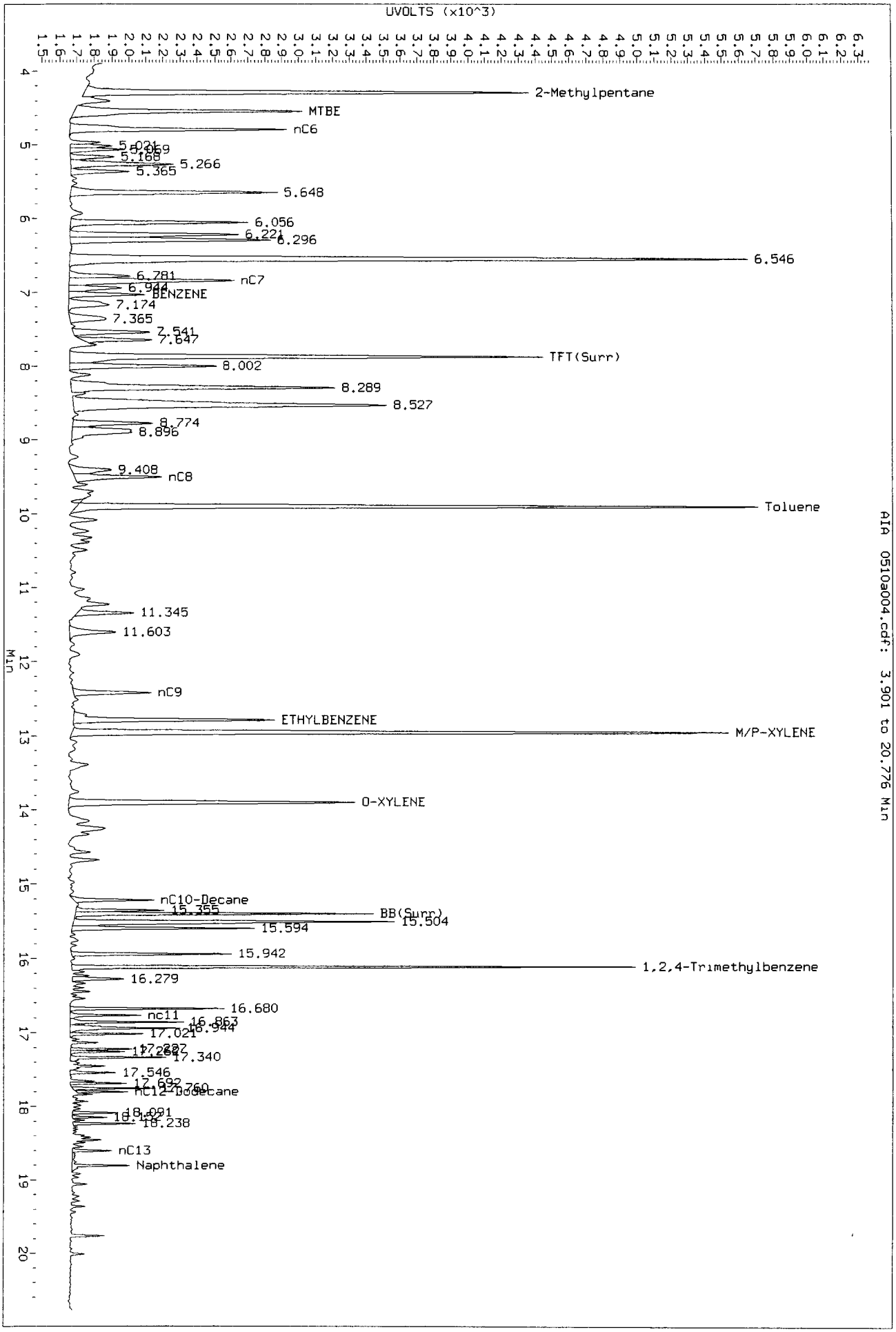


MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: JW Date: 5/15/12



Data File: /chem3/pid1.i/vpcc051012-1.b/0510a004.d/0510a004.cdf
Injection Date: 10-MAY-2012 10:38
Instrument: pid1.i
Client Sample ID:

AIA 0510a004.cdf: 3.901 to 20.776 Min

Bahne
5/15/12

Data File: /chem3/pid1.i/vpcc051012-1.b/0510a005.d

Date : 10-MAY-2012 11:07

Client ID:

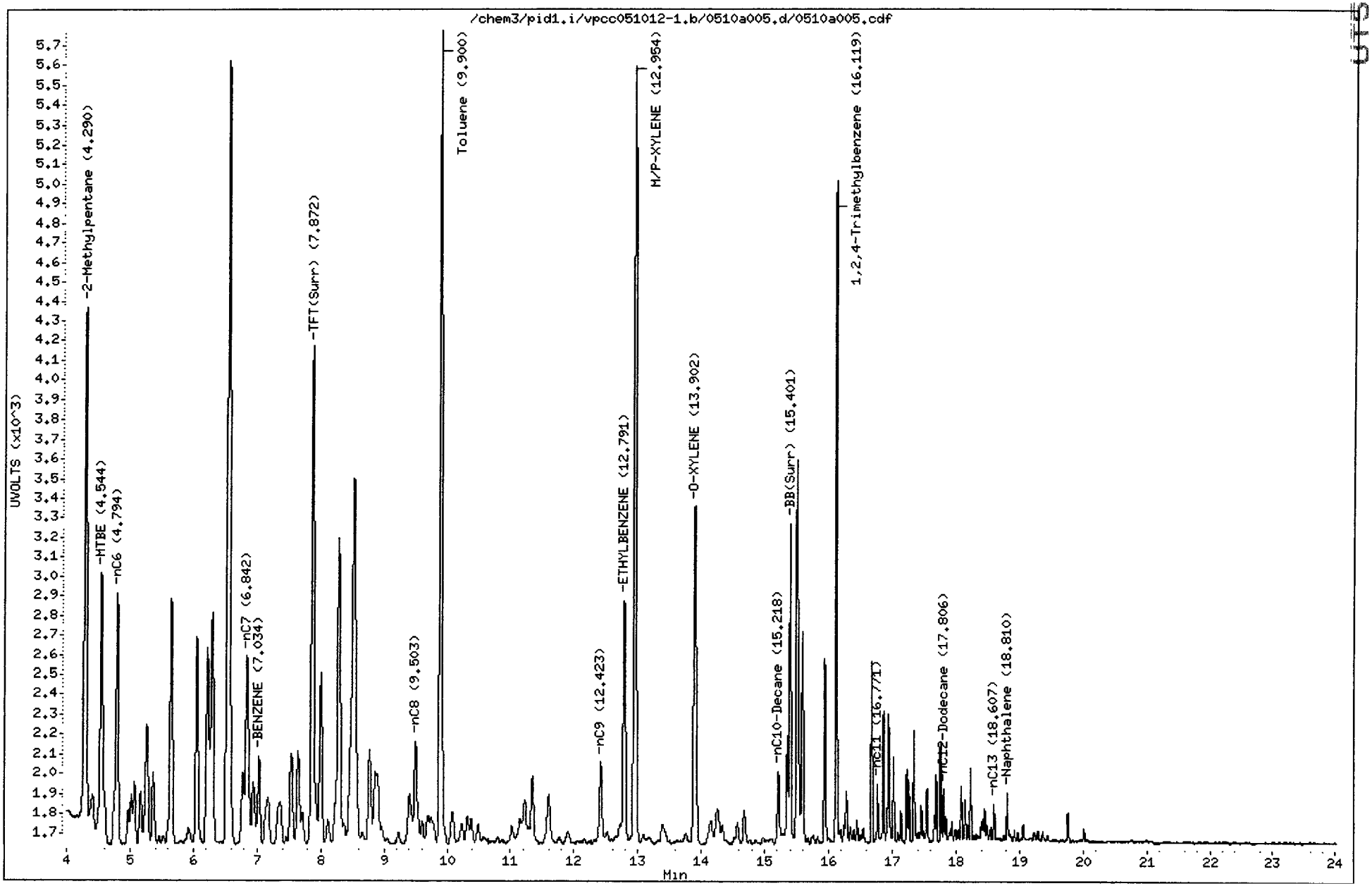
Sample Info: LCSD0510

Instrument: pid1.i

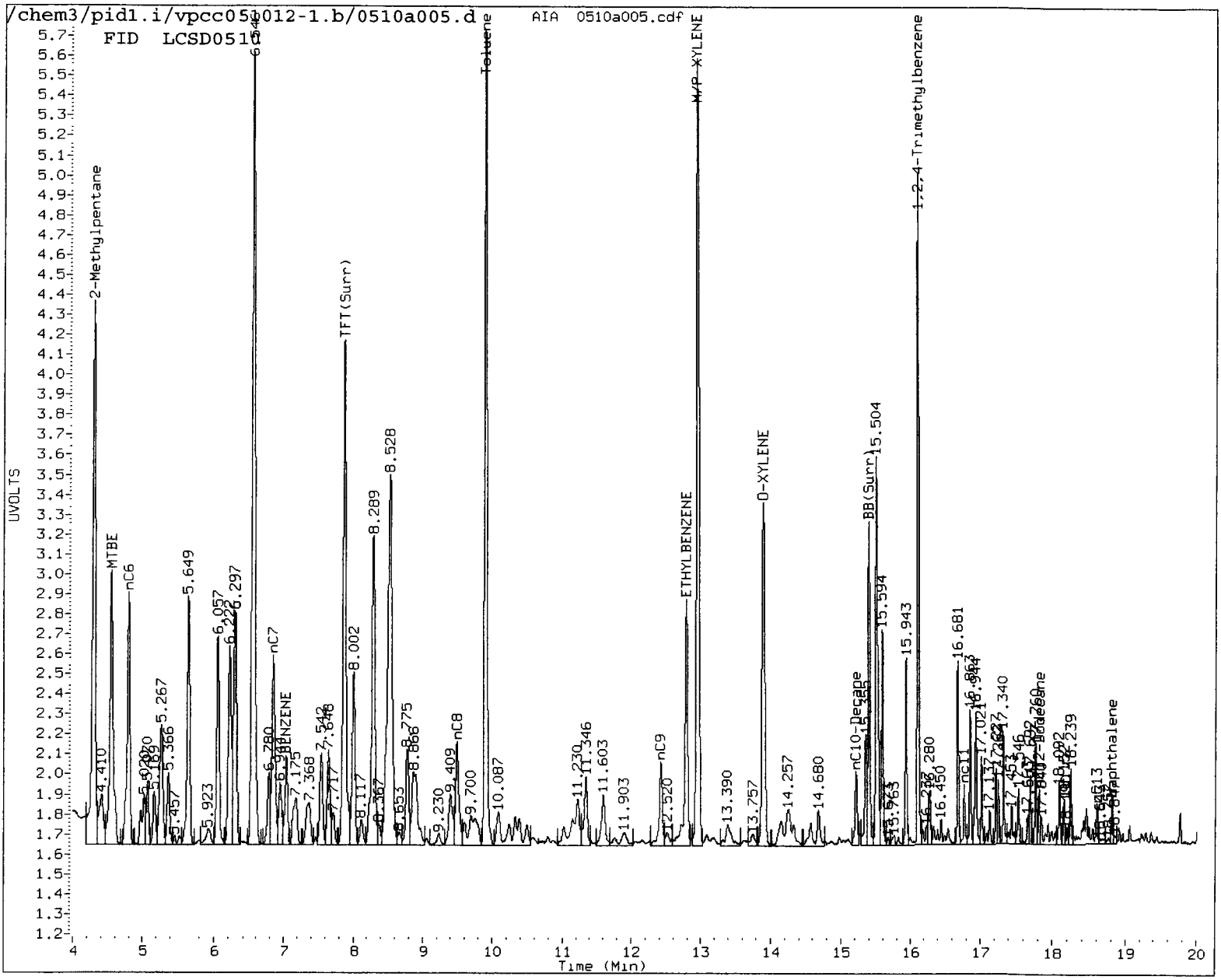
Operator: JW

Column phase: RTX 502-2 FID

Column diameter: 0.18



DTS7:00011

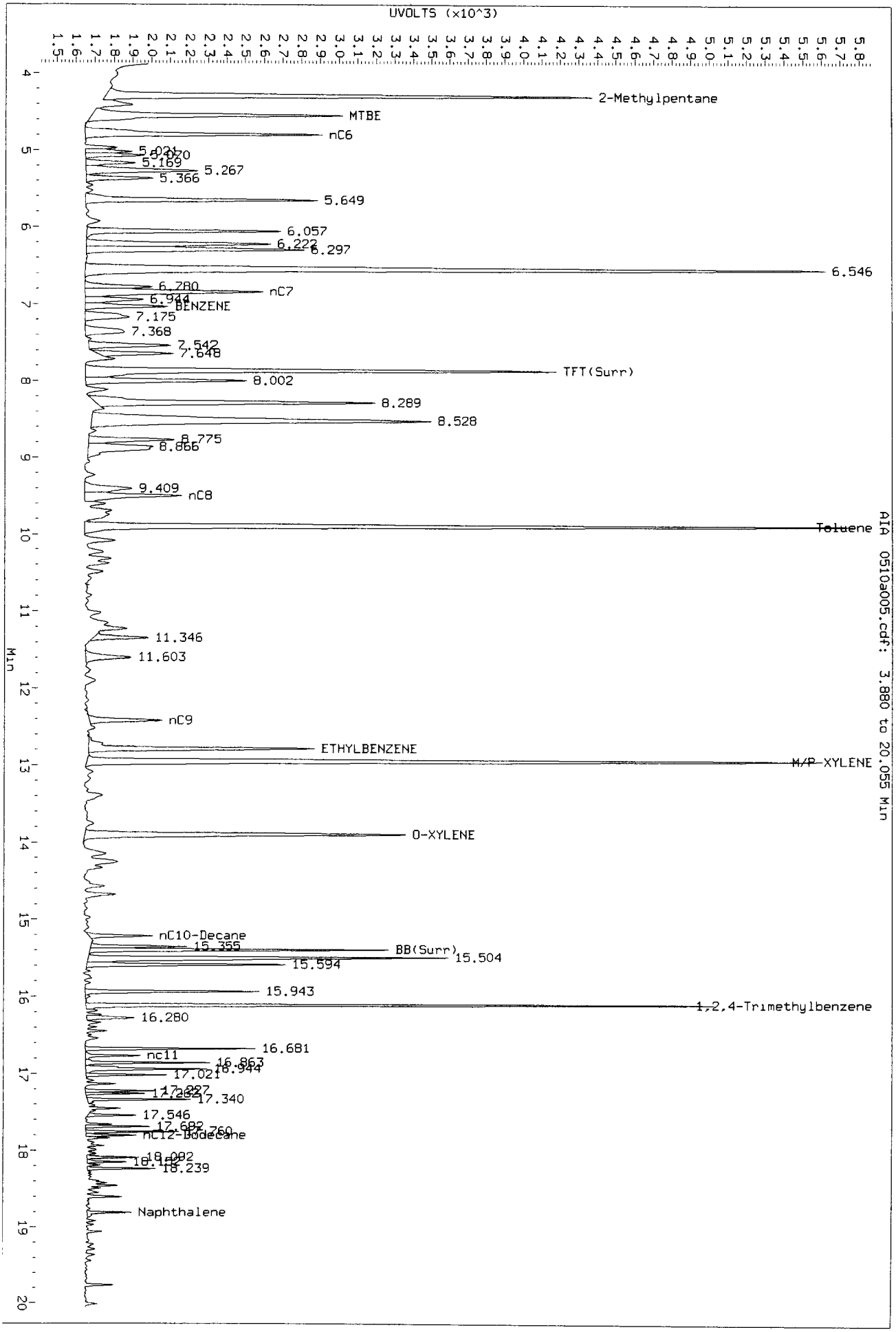


MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: JJ Date: 5/15/12



Before
5/15/12

Data File: /chem3/pid1.i/vpcc051012-1.b/0510a010.d

Date : 10-MAY-2012 14:08

Client ID: MW1-S-3.1

Sample Info: UT57A

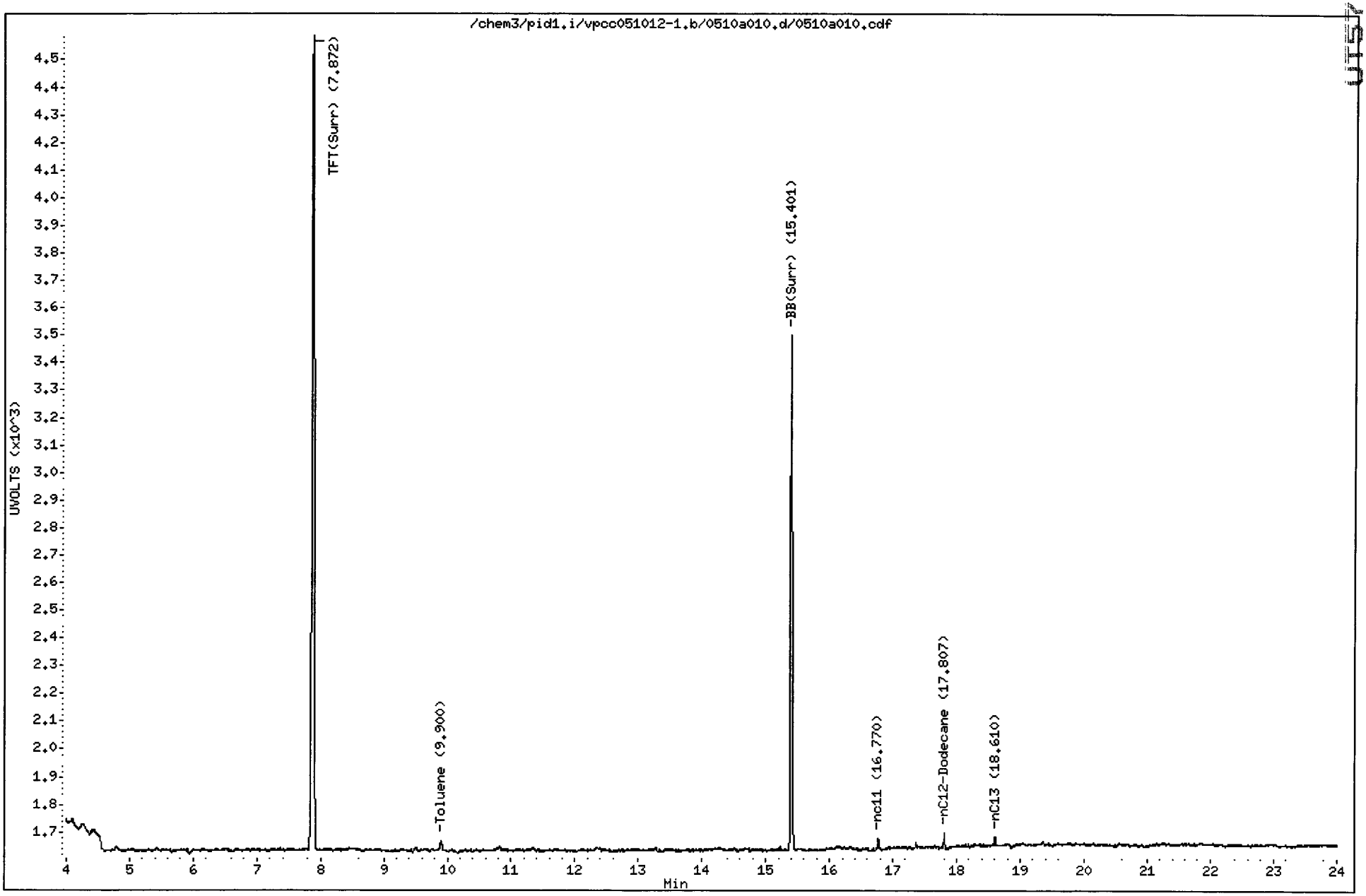
Instrument: pid1.i

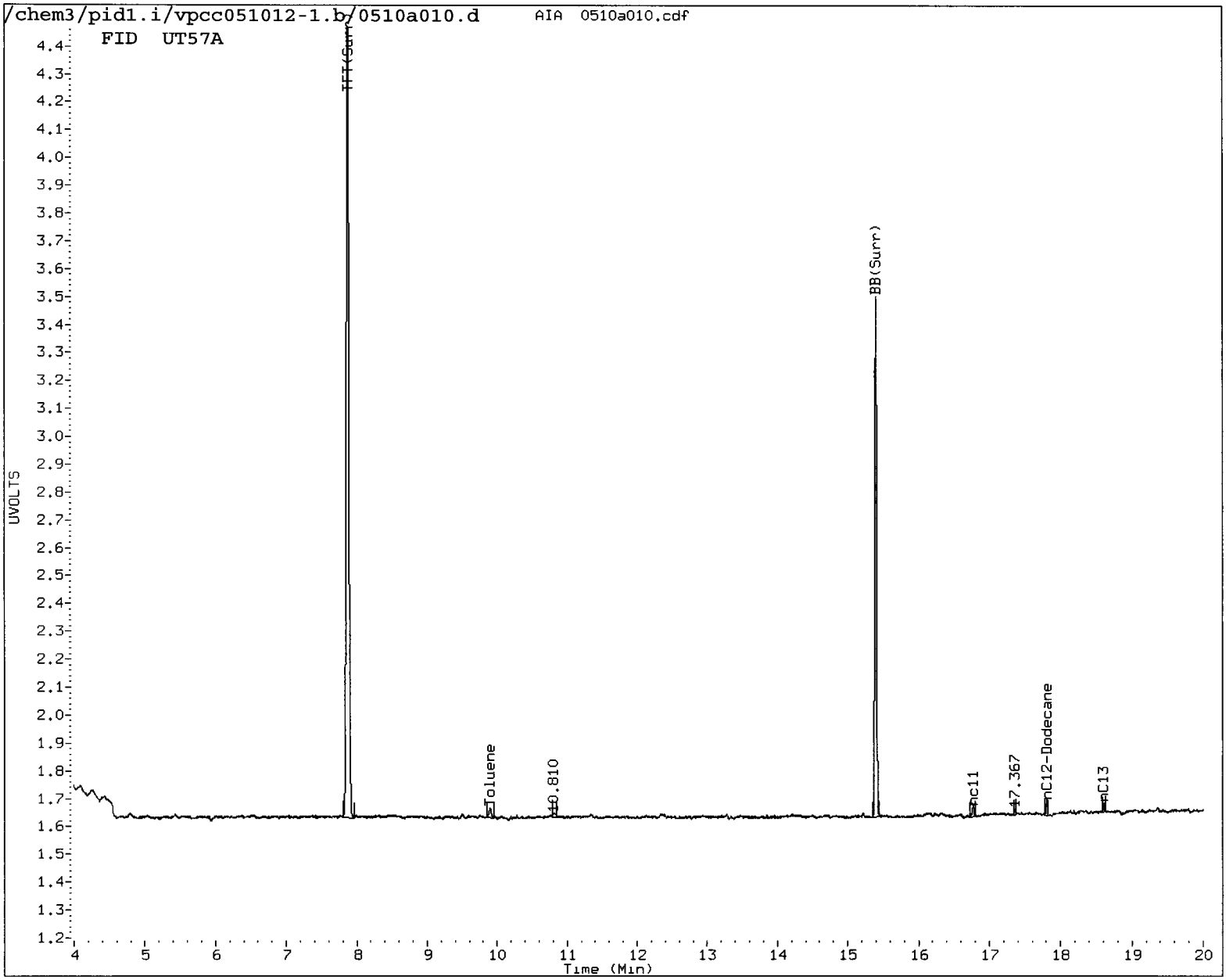
Operator: JW

Column phase: RTX 502-2 FID

Column diameter: 0.18

UT57 000414





MANUAL INTEGRATION

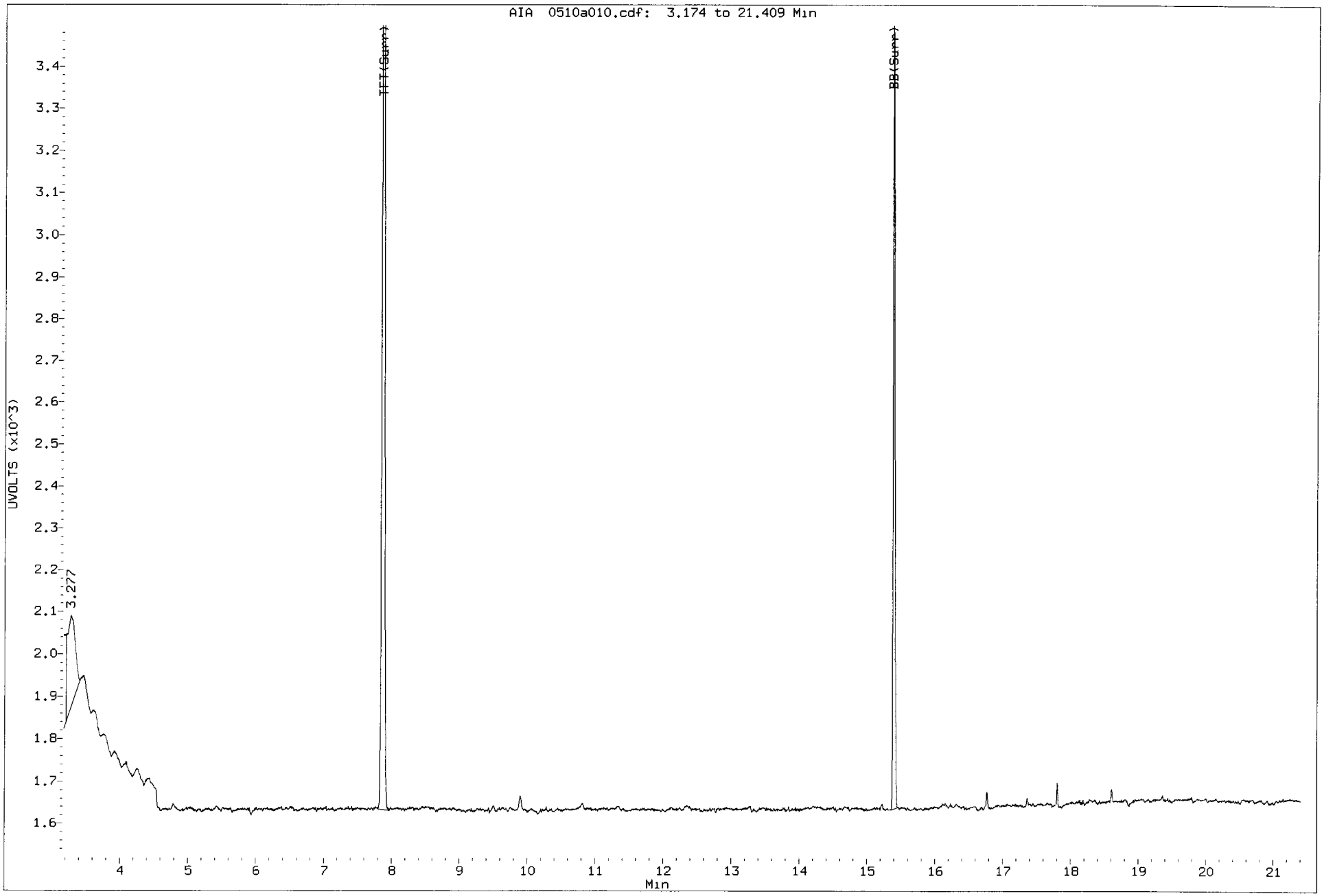
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: JW Date: 5/15/12

Data File: /chem3/pid1.i/vpcc051012-1.b/0510a010.d/0510a010.cdf
Injection Date: 10-MAY-2012 14:08
Instrument: pid1.i
Client Sample ID: MW1-S-3.1

Before
JW
5/15/12



UTS7.00046

Data File: /chem3/pid1.i/vpcc051012-1.b/0510a011.d

Date : 10-MAY-2012 14:37

Client ID: MW3-S-1.9

Sample Info: UT57C

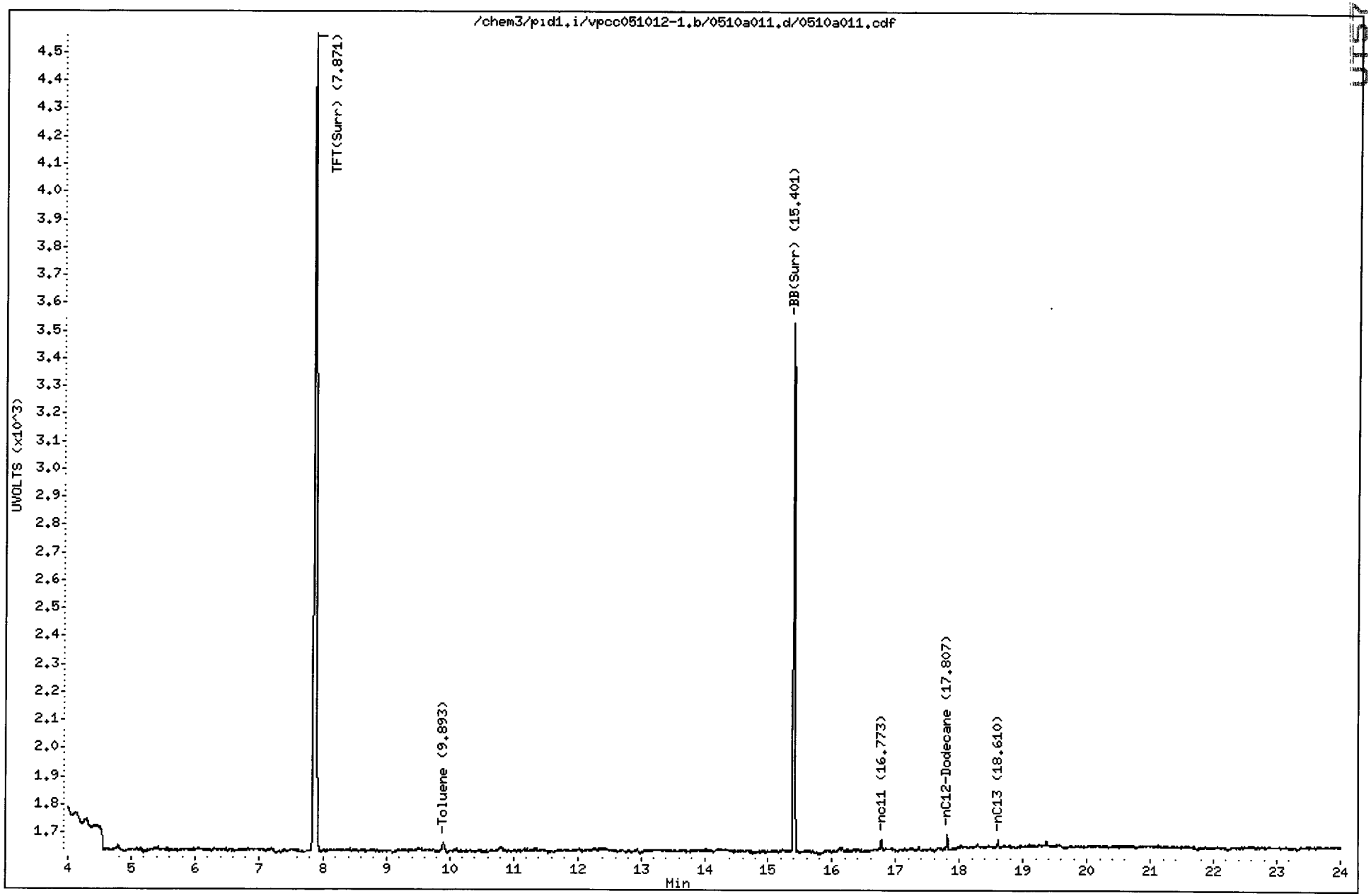
Column phase: RTX 502-2 FID

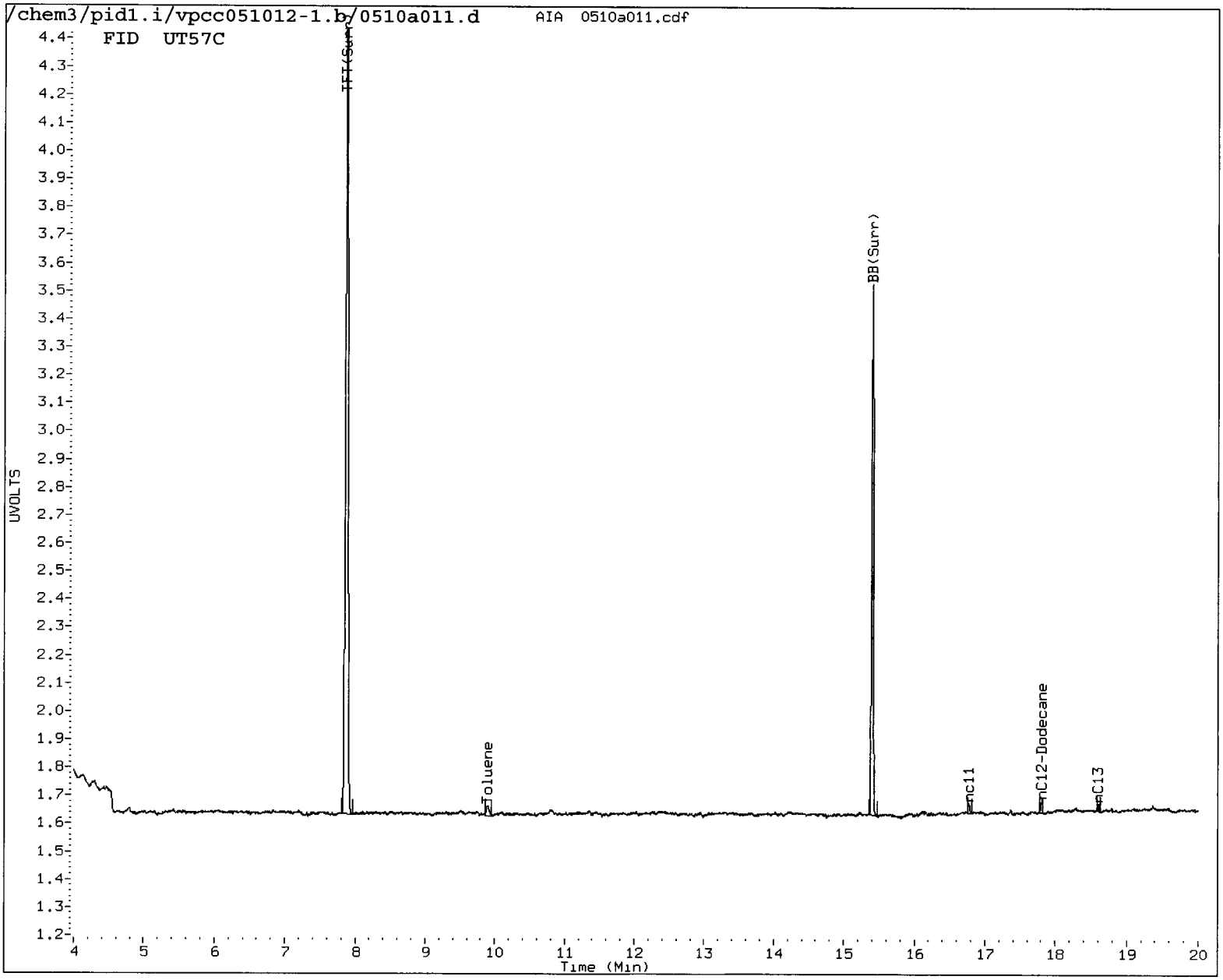
Instrument: pid1.i

Operator: JW

Column diameter: 0.18

UT57 : 00011





MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

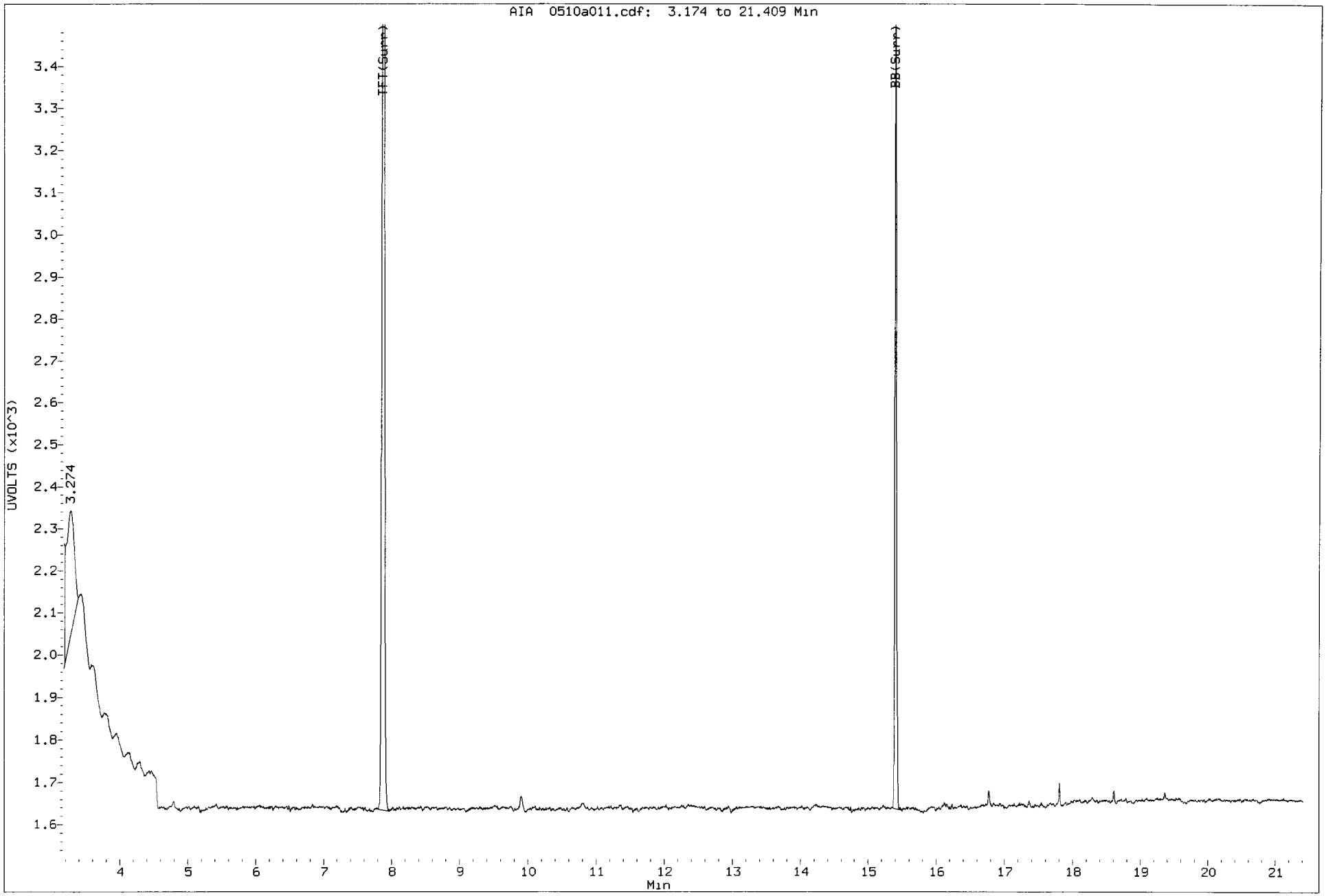
5. Other _____

Analyst: JW Date: 5/15/12

Data File: /chem3/pid1.i/vpcc051012-1.b/0510a011.d/0510a011.cdf
Injection Date: 10-MAY-2012 14:37
Instrument: pid1.i
Client Sample ID: MW3-S-1.9

Before JW 5/15/12

UT57:000019



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Matrix: Water

Data Release Authorized:
Reported: 05/16/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

ARI ID	Client ID	Analysis Date	DL	Range	Result
MB-051012	Method Blank	05/10/12	1.0	Gasoline	< 0.25 U
12-8338		PID1		HC ID	---
				Trifluorotoluene	99.8%
				Bromobenzene	99.3%
UT57D	GP4-W-10	05/10/12	1.0	Gasoline	< 0.25 U
12-8338		PID1		HC ID	---
				Trifluorotoluene	101%
				Bromobenzene	97.3%
UT57E	Trip Blank	05/10/12	1.0	Gasoline	< 0.25 U
12-8339		PID1		HC ID	---
				Trifluorotoluene	100%
				Bromobenzene	97.1%

Gasoline values reported in mg/L (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-051012
LAB CONTROL SAMPLE

Lab Sample ID: LCS-051012
LIMS ID: 12-8338
Matrix: Water
Data Release Authorized:
Reported: 05/16/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 05/10/12 10:38
LCSD: 05/10/12 11:07
Instrument/Analyst LCS: PID1/JLW
LCSD: PID1/JLW

Purge Volume: 5.0 mL
Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	1.00	1.00	100%	1.00	1.00	100%	0.0%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	93.8%	85.1%
Bromobenzene	91.6%	83.4%

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: UT57
Matrix: Water

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01

Client ID	TFT	BBZ	TOT OUT
MB-051012	99.8%	99.3%	0
LCS-051012	93.8%	91.6%	0
LCSD-051012	85.1%	83.4%	0
GP4-W-10	101%	97.3%	0
Trip Blank	100%	97.1%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 12-8338 to 12-8339

Data File: /chem3/pid1.i/vpcc051012-1.b/0510a006.d

Date : 10-MAY-2012 11:36

Client ID:

Sample Info: MB0510

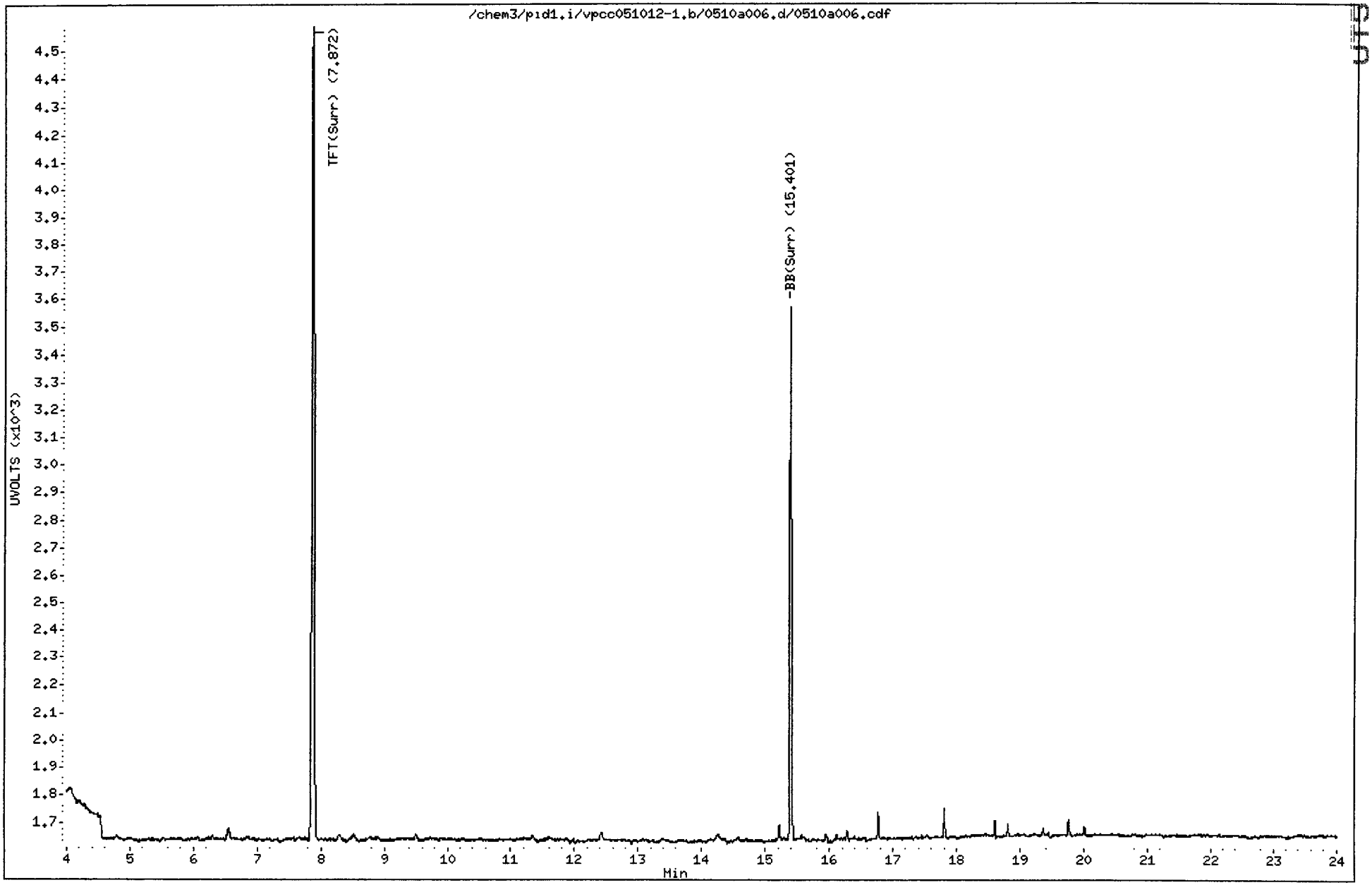
Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: JW

Column diameter: 0.18

DFTPP 50053



Data File: /chem3/pid1.i/vpcc051012-1.b/0510a004.d

Date : 10-MAY-2012 10:38

Client ID:

Sample Info: LCS0510

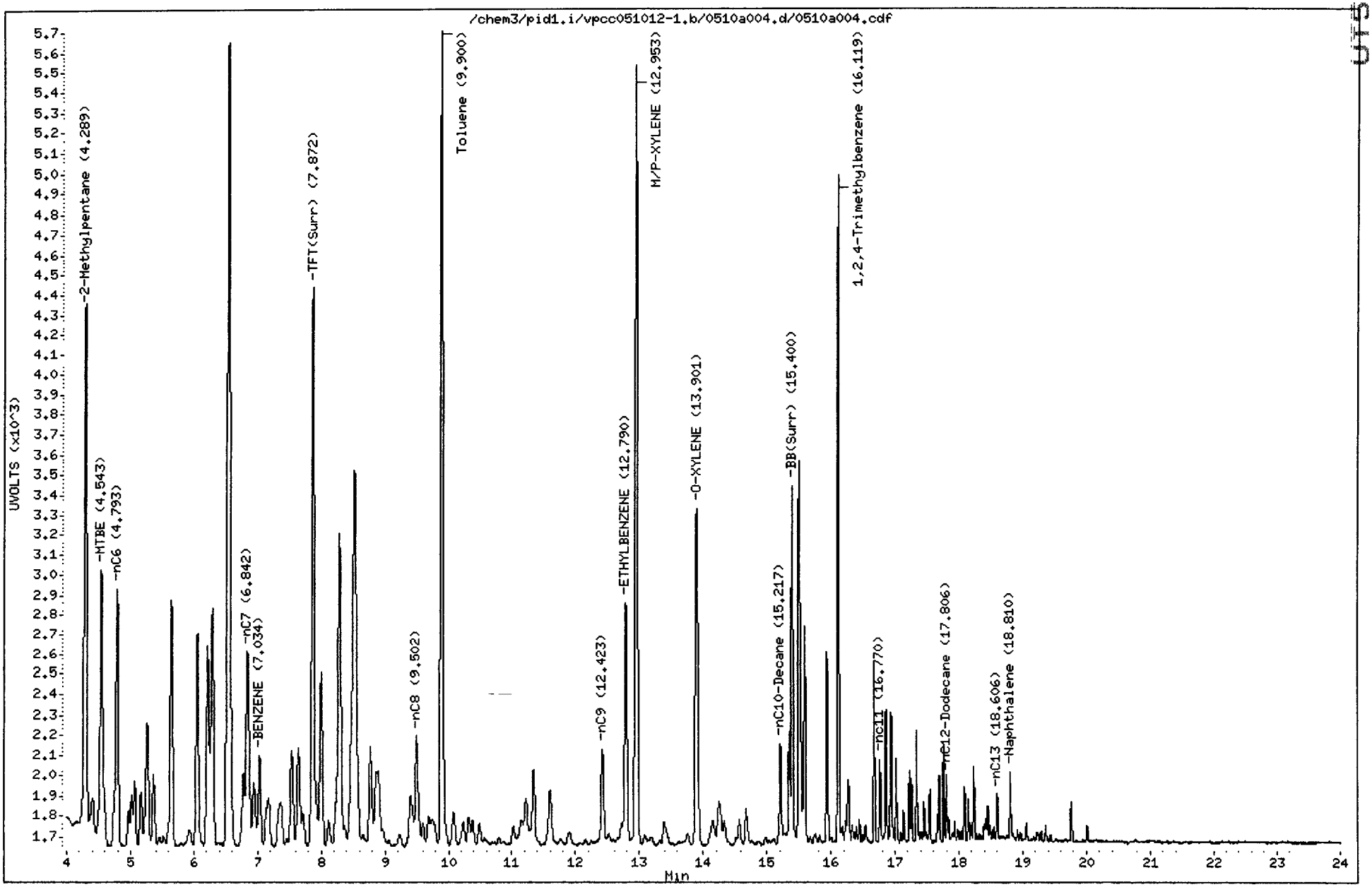
Column phase: RTX 502-2 FID

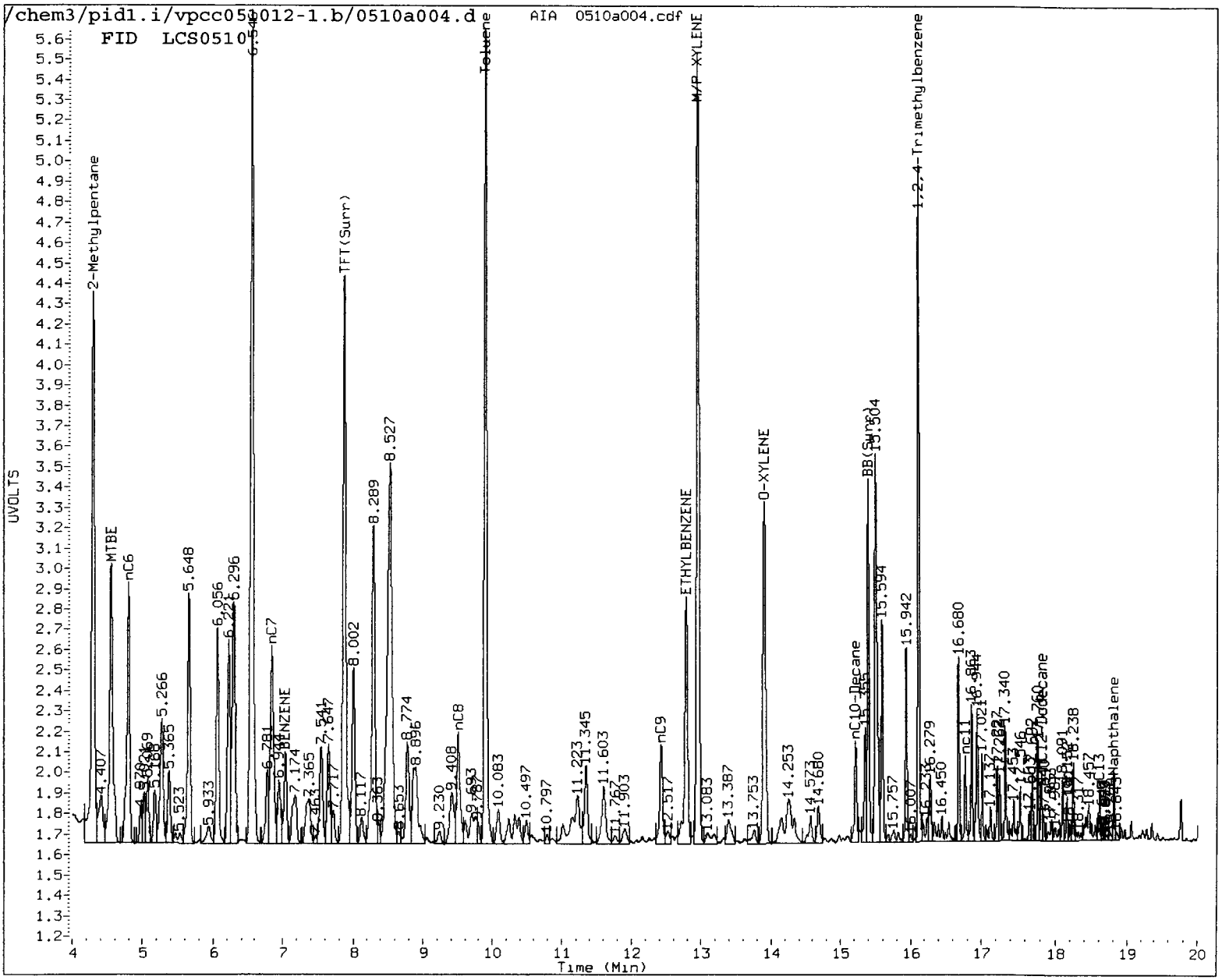
Instrument: pid1.i

Operator: JW

Column diameter: 0.18

UTS7.0051



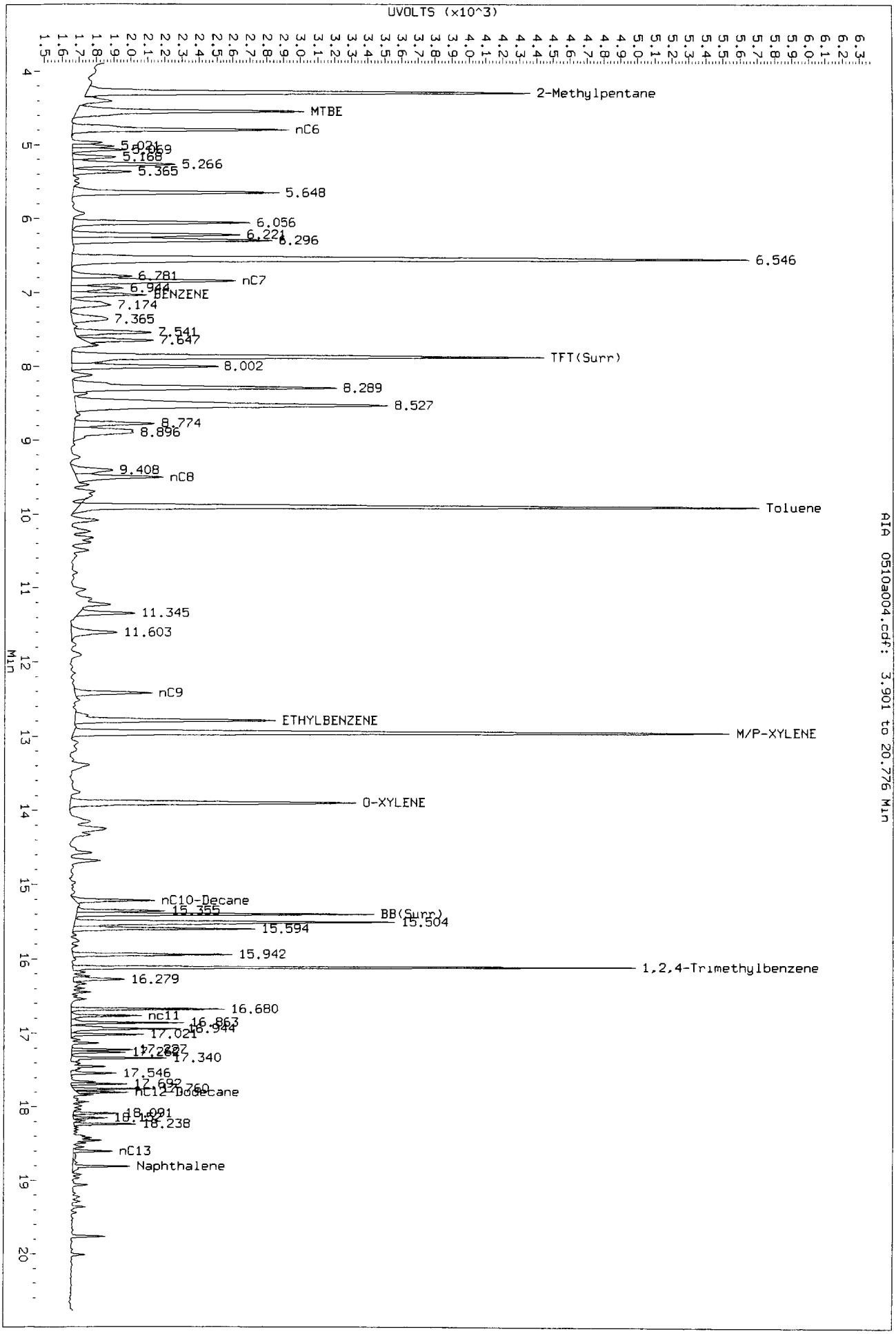


MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: JW Date: 5/15/12



Data File: /chem3/pid1.i/vpcc051012-1.b/0510a004.d/0510a004.cdf
Injection Date: 10-MAY-2012 10:38
Instrument: pid1.i
Client Sample ID:

AIA 0510a004.cdf: 3.901 to 20.776 Min

Bahne
RW
5/15/12

Data File: /chem3/pid1.i/vpcc051012-1.b/0510a005.d

Date : 10-MAY-2012 11:07

Client ID:

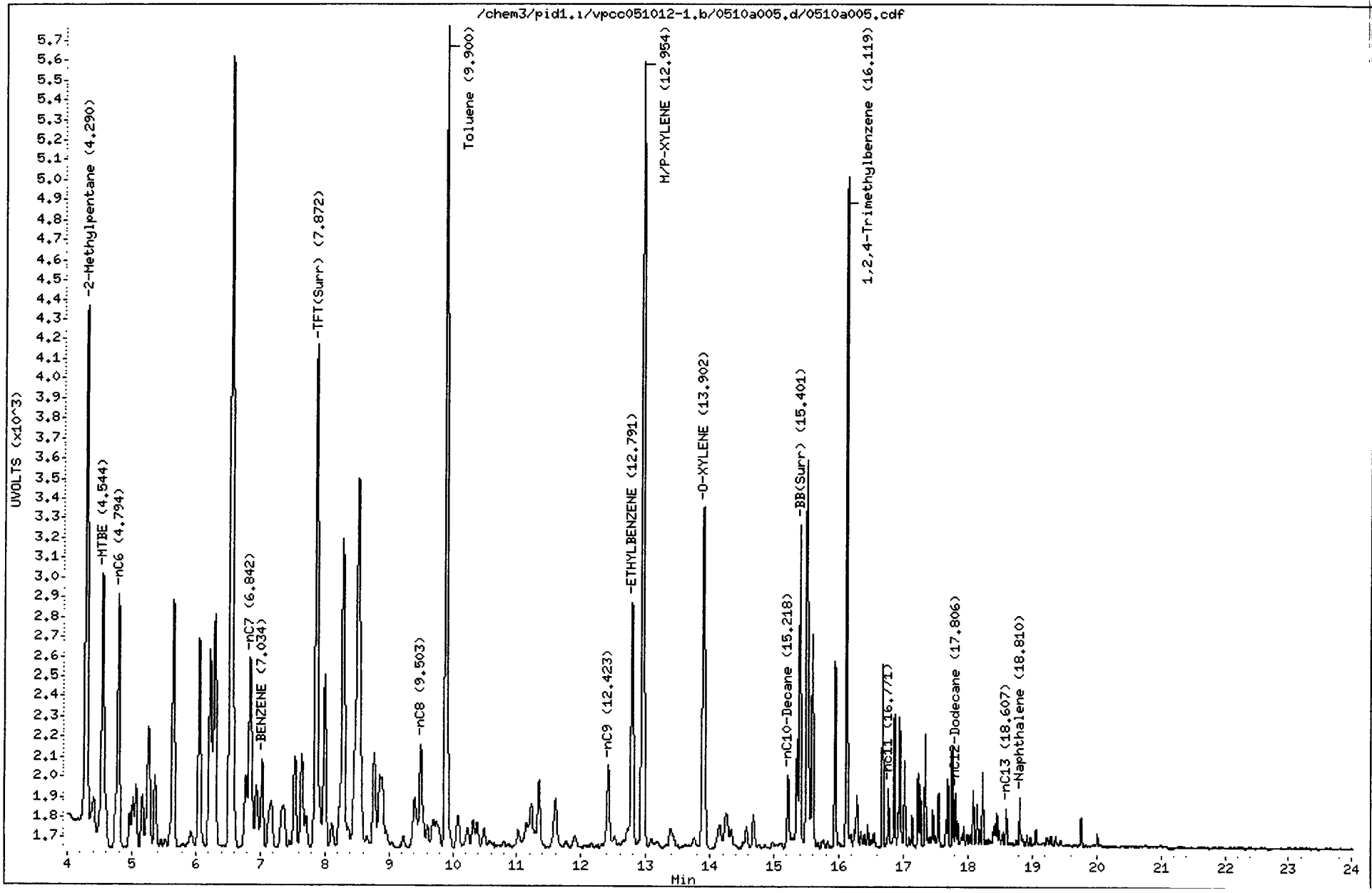
Sample Info: LCSD0510

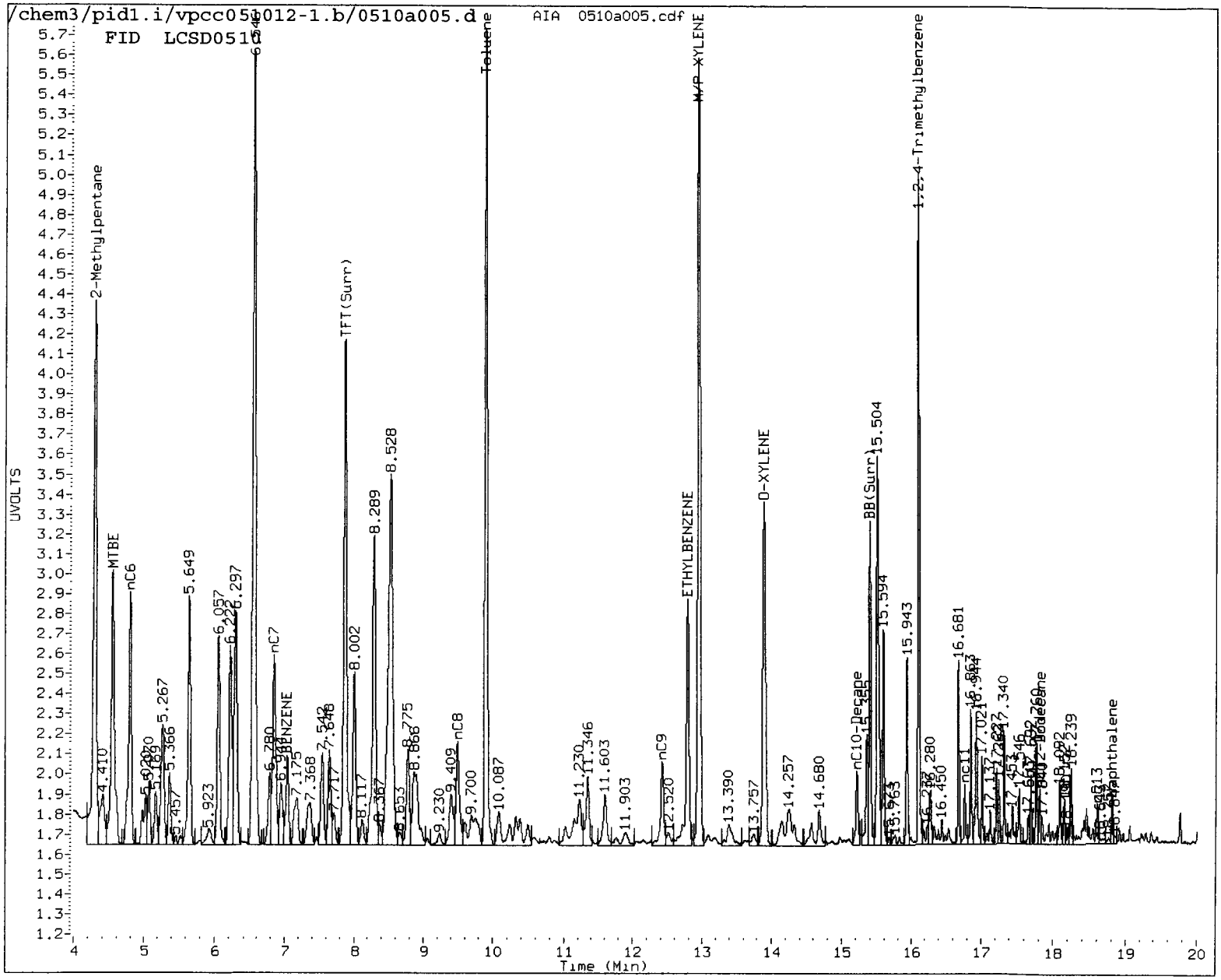
Instrument: pid1.i

Operator: JW

Column phase: RTX 502-2 FID

Column diameter: 0.18



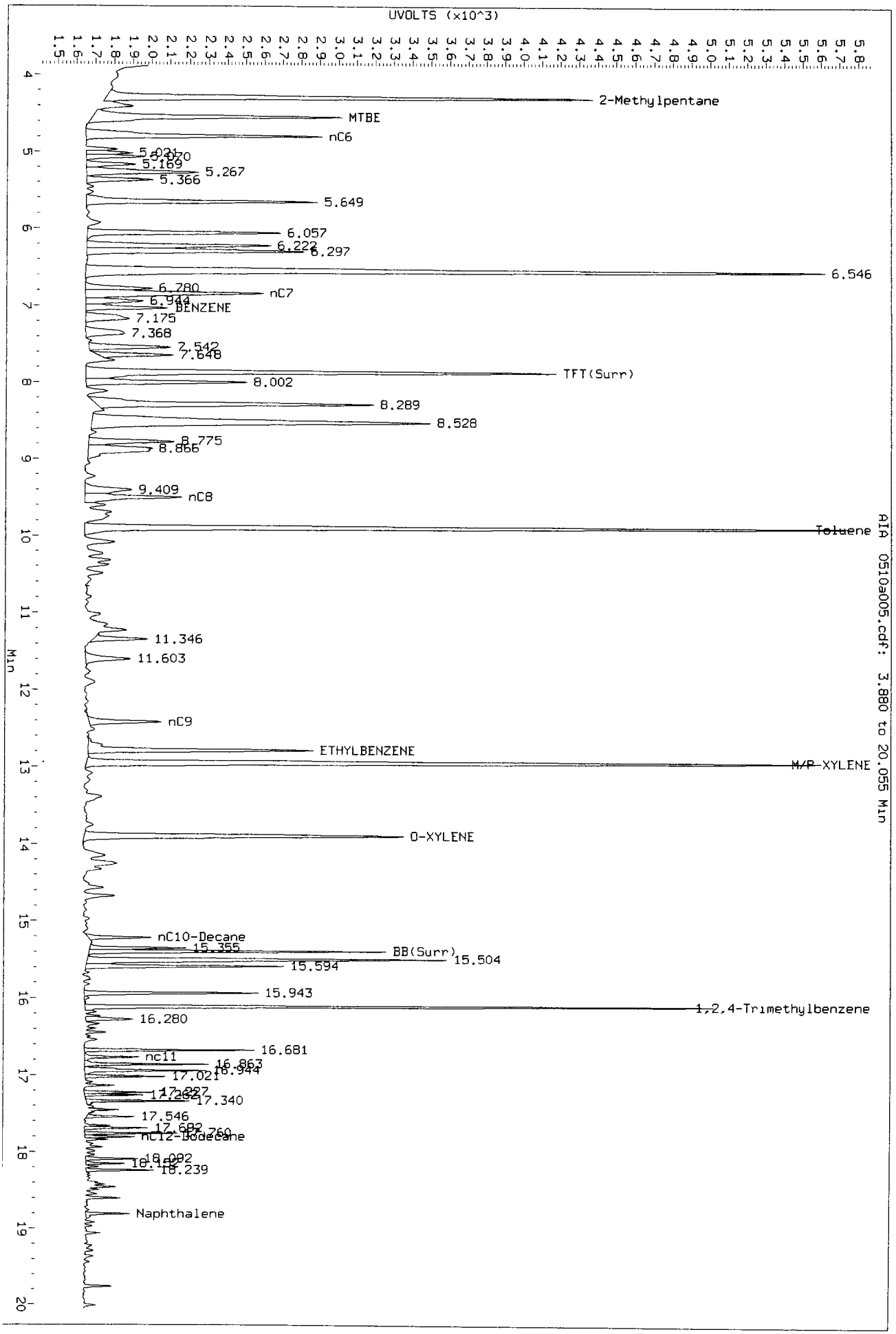


MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: JU Date: 5/15/12



Before
5/15/12

Data File: /chem3/pid1.i/vpcc051012-1.b/0510a009.d

Date : 10-MAY-2012 13:39

Client ID: GP4-W-10

Sample Info: UT57D

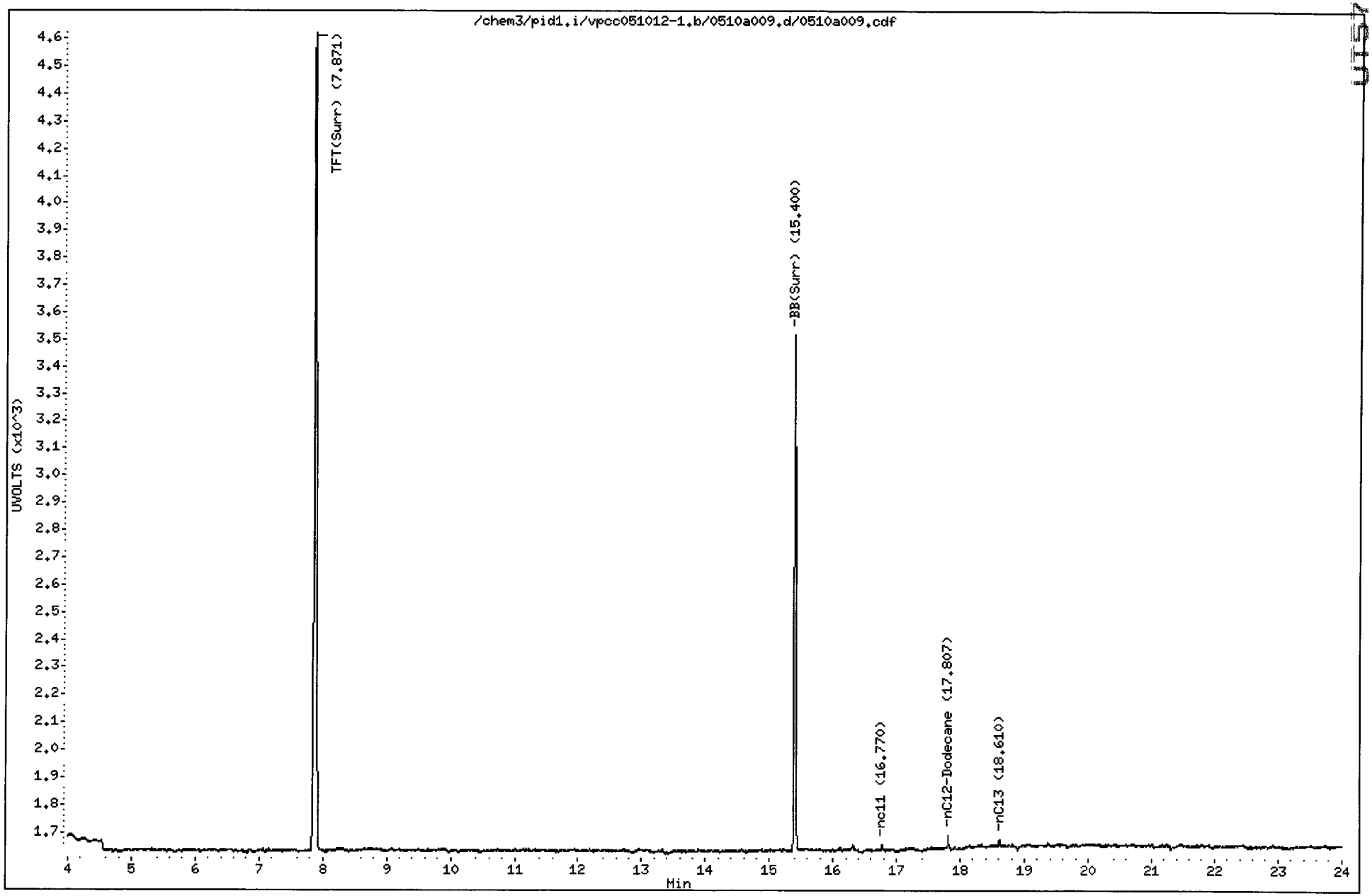
Column phase: RTX 502-2 FID

Instrument: pid1.i

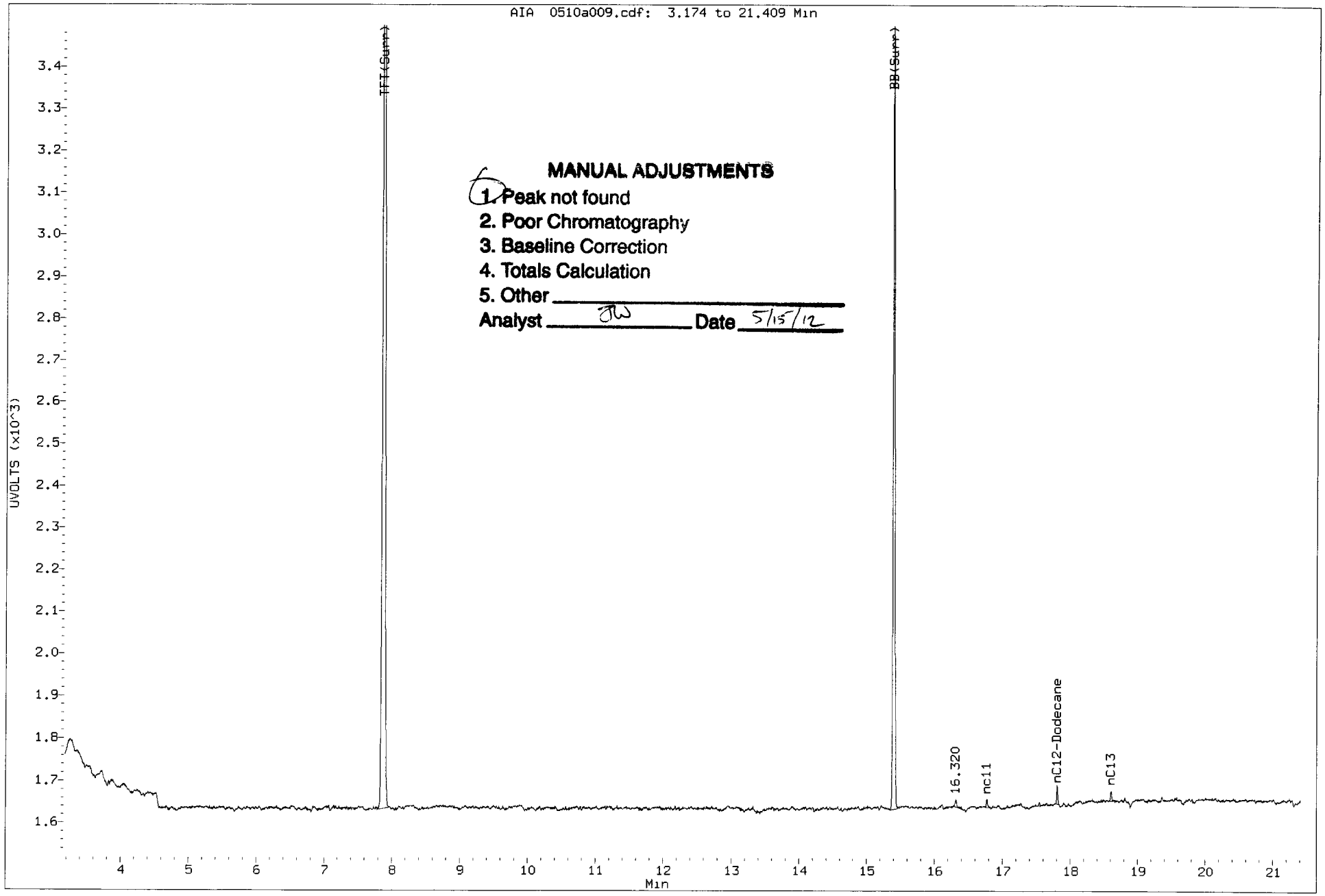
Operator: JW

Column diameter: 0.18

UT57 : 00050



Data File: /chem3/pid1.i/vpcc051012-1.b/0510a009.d/0510a009.cdf
Injection Date: 10-MAY-2012 13:39
Instrument: pid1.i
Client Sample ID: GP4-W-10



MANUAL ADJUSTMENTS

1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other _____

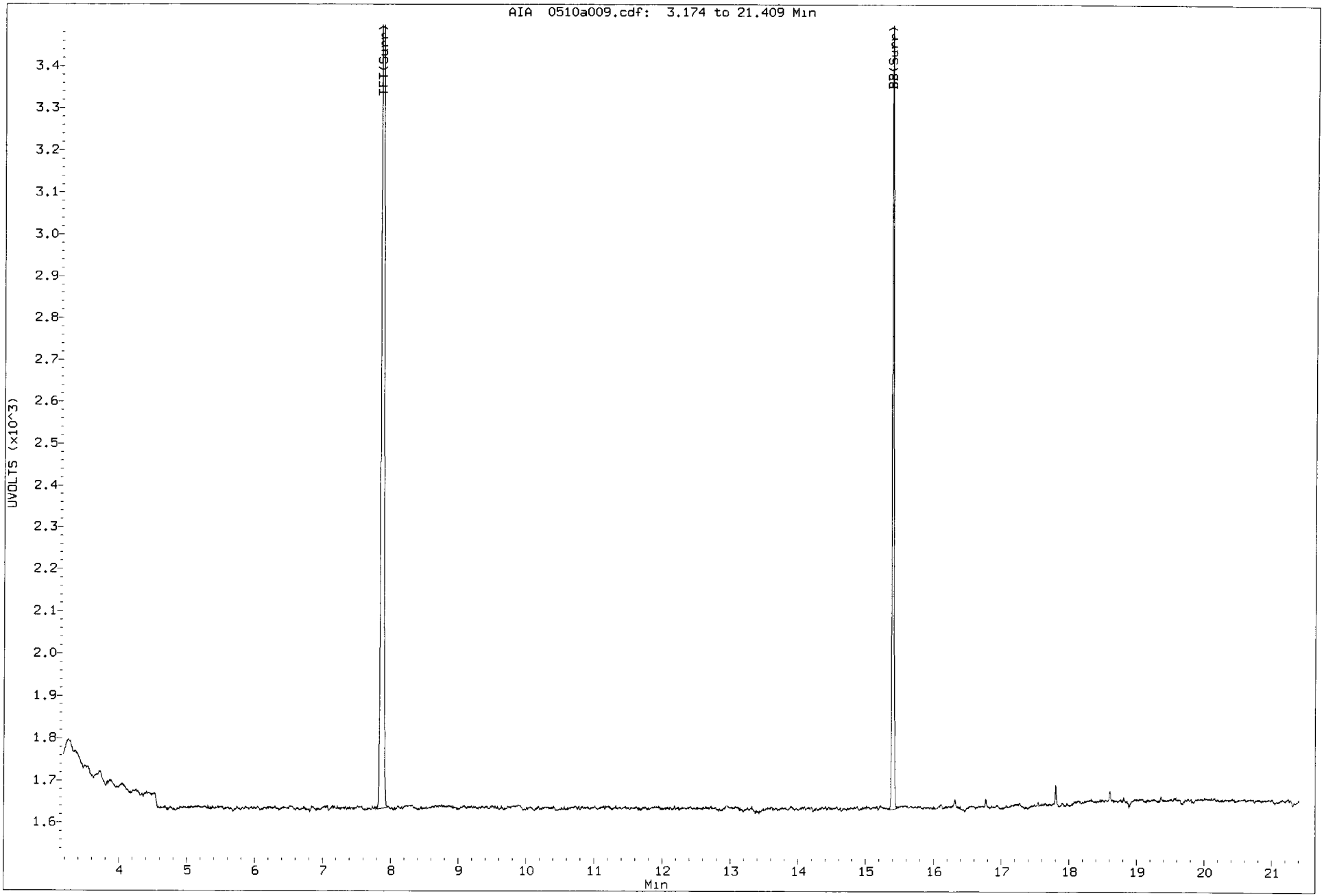
Analyst JW Date 5/15/12

UTS7 00061

Data File: /chem3/pid1.i/vpcc051012-1.b/0510a009.d/0510a009.cdf
Injection Date: 10-MAY-2012 13:39
Instrument: pid1.i
Client Sample ID: GP4-W-10

Before
JW
5/15/12

UT57:00062



Data File: /chem3/pid1.i/vpcc051012-1.b/0510a008.d

Date : 10-MAY-2012 13:10

Client ID: Trip Blank

Sample Info: UT57E

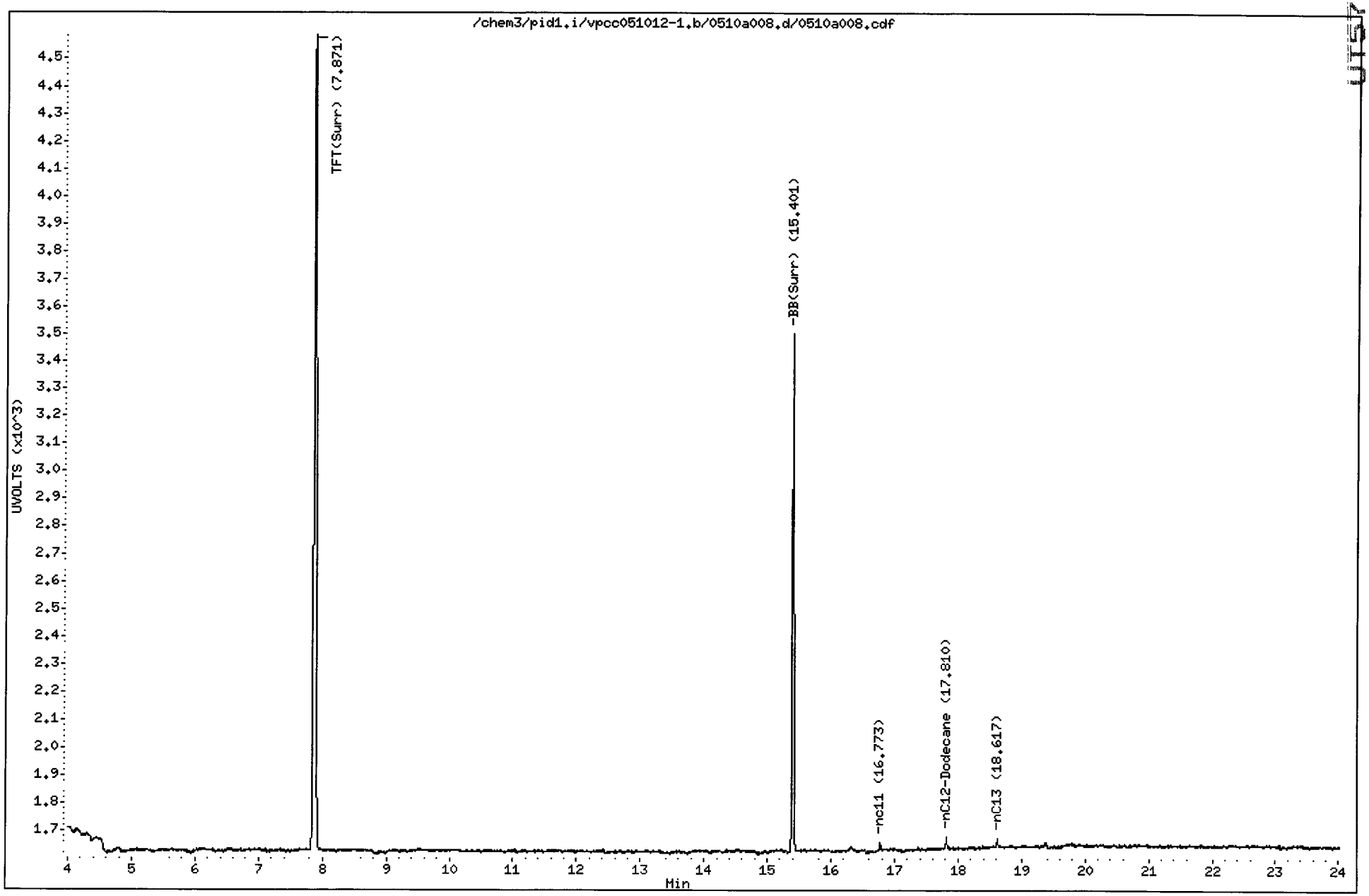
Column phase: RTX 502-2 FID

Instrument: pid1.i

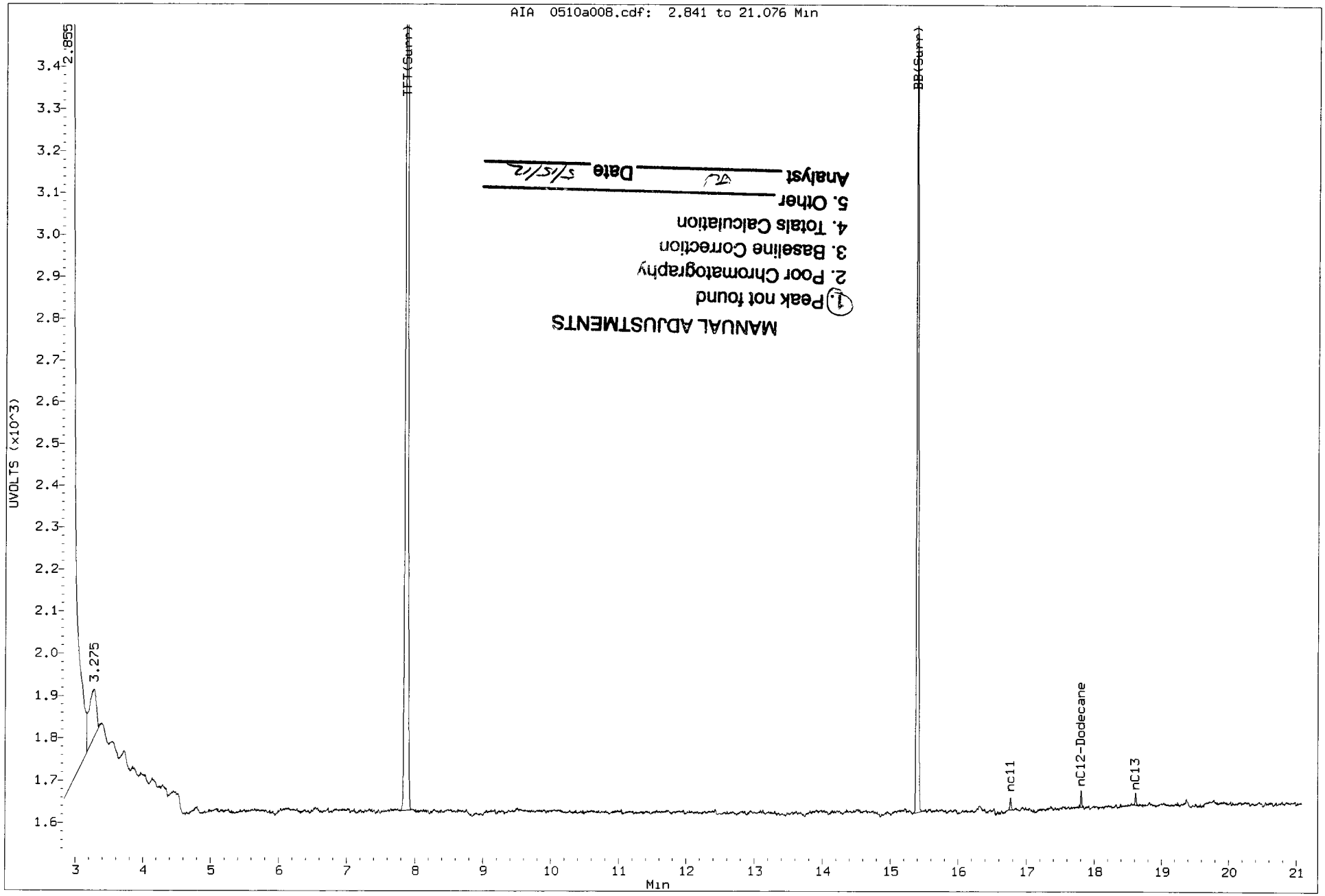
Operator: JW

Column diameter: 0.18

UT57 : 00063



Data File: /chem3/pid1.i/vpcc051012-1.b/0510a008.d/0510a008.cdf
Injection Date: 10-MAY-2012 13:10
Instrument: pid1.i
Client Sample ID: Trip Blank



MANUAL ADJUSTMENTS

1. Peak not found
2. Poor Chromatography
3. Baseline Correction
4. Totals Calculation
5. Other

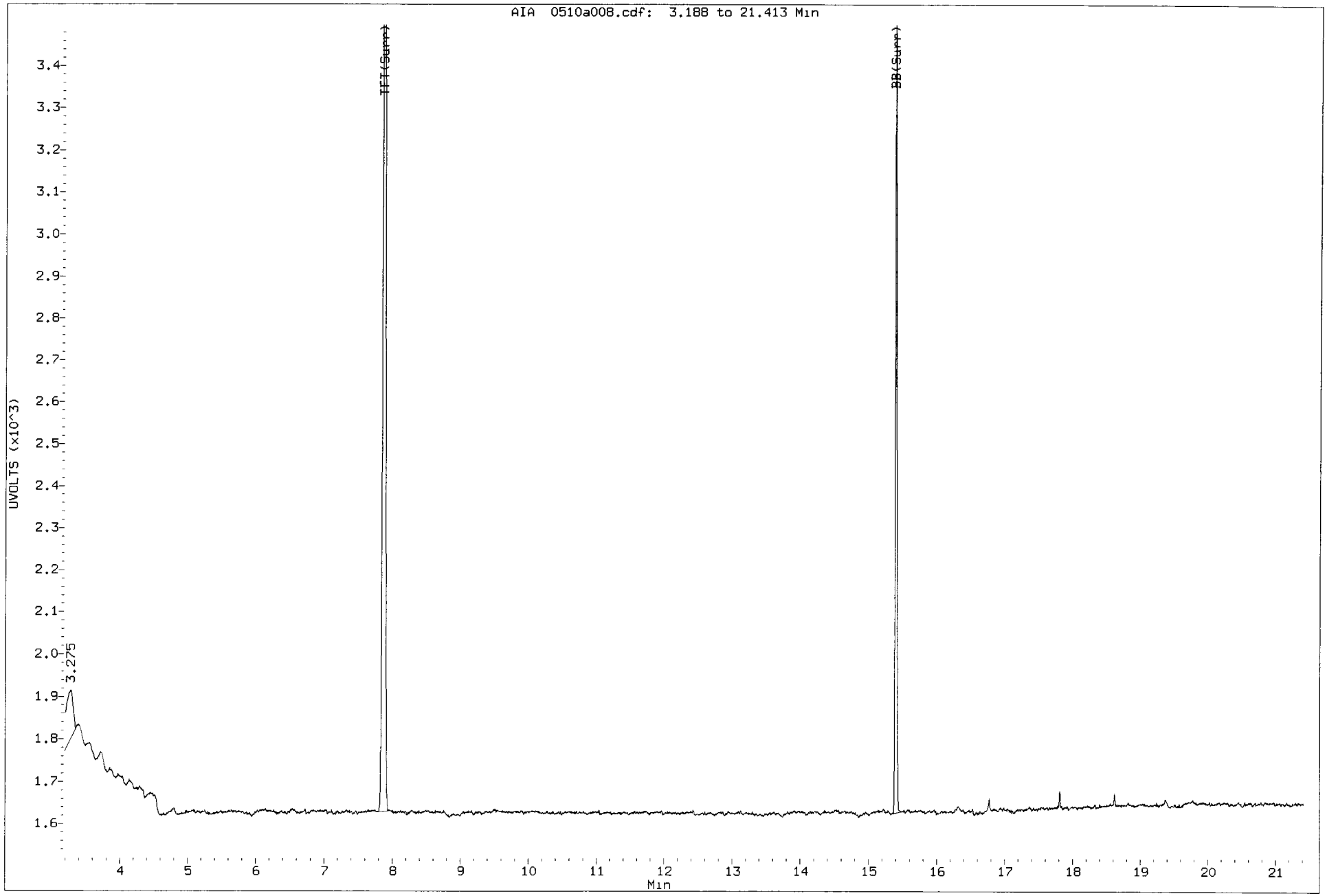
Analyst VC Date 5/15/12

JT57 00061

Data File: /chem3/pid1.i/vpcc051012-1.b/0510a008.d/0510a008.cdf
Injection Date: 10-MAY-2012 13:10
Instrument: pid1.i
Client Sample ID: Trip Blank

Before
dw
5/15/12

UT57:00055



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH
Page 1 of 1

Sample ID: MW1-S-3.1
SAMPLE

Lab Sample ID: UT57F
LIMS ID: 12-8340
Matrix: Soil
Data Release Authorized: MW
Reported: 05/18/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Date Analyzed: 05/12/12 17:45
Instrument/Analyst: PID1/JLW

Purge Volume: 10 mL
Sample Amount: 31.3 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1600	< 1,600 U
108-88-3	Toluene	1600	< 1,600 U
100-41-4	Ethylbenzene	1600	< 1,600 U
179601-23-1	m,p-Xylene	3200	< 3,200 U
95-47-6	o-Xylene	1600	< 1,600 U
1634-04-4	Methyl tert-Butyl Ether	1600	< 1,600 U
109-66-0	n-Pentane	1600	< 1,600 U
110-54-3	n-Hexane	1600	< 1,600 U
111-65-9	n-Octane	1600	< 1,600 U
124-18-5	n-Decane	1600	< 1,600 U
112-40-3	n-Dodecane	1600	< 1,600 U

Range	RL	Result
C8-C10 Aromatics	16,000	< 16,000 U
C10-C12 Aromatics	16,000	< 16,000 U
C12-C13 Aromatics	16,000	< 16,000 U
C5-C6 Aliphatics	16,000	< 16,000 U
C6-C8 Aliphatics	16,000	< 16,000 U
C8-C10 Aliphatics	16,000	< 16,000 U
C10-C12 Aliphatics	16,000	< 16,000 U

Values reported in µg/kg (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	107%
FID: 2,5-Dibromotoluene	101%

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH
Page 1 of 1

Sample ID: MB-051212
METHOD BLANK

Lab Sample ID: MB-051212
LIMS ID: 12-8340
Matrix: Soil
Data Release Authorized: MW
Reported: 05/18/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Analyzed: 05/12/12 12:18
Instrument/Analyst: PID1/JLW

Purge Volume: 10 mL
Sample Amount: 111 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	450	< 450 U
108-88-3	Toluene	450	< 450 U
100-41-4	Ethylbenzene	450	< 450 U
179601-23-1	m,p-Xylene	900	< 900 U
95-47-6	o-Xylene	450	< 450 U
1634-04-4	Methyl tert-Butyl Ether	450	< 450 U
109-66-0	n-Pentane	450	< 450 U
110-54-3	n-Hexane	450	< 450 U
111-65-9	n-Octane	450	< 450 U
124-18-5	n-Decane	450	< 450 U
112-40-3	n-Dodecane	450	< 450 U

Range	RL	Result
C8-C10 Aromatics	4,500	< 4,500 U
C10-C12 Aromatics	4,500	< 4,500 U
C12-C13 Aromatics	4,500	< 4,500 U
C5-C6 Aliphatics	4,500	< 4,500 U
C6-C8 Aliphatics	4,500	< 4,500 U
C8-C10 Aliphatics	4,500	< 4,500 U
C10-C12 Aliphatics	4,500	< 4,500 U

Values reported in µg/kg (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	110%
FID: 2,5-Dibromotoluene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH
Page 1 of 1

Sample ID: MB-051212
METHOD BLANK

Lab Sample ID: MB-051212
LIMS ID: 12-8342
Matrix: Water
Data Release Authorized: MW
Reported: 05/18/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Analyzed: 05/12/12 12:18
Instrument/Analyst: PID1/JLW

Purge Volume: 10 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	5.0	< 5.0 U
108-88-3	Toluene	5.0	< 5.0 U
100-41-4	Ethylbenzene	5.0	< 5.0 U
179601-23-1	m,p-Xylene	10	< 10 U
95-47-6	o-Xylene	5.0	< 5.0 U
1634-04-4	Methyl tert-Butyl Ether	5.0	< 5.0 U
109-66-0	n-Pentane	5.0	< 5.0 U
110-54-3	n-Hexane	5.0	< 5.0 U
111-65-9	n-Octane	5.0	< 5.0 U
124-18-5	n-Decane	5.0	< 5.0 U
112-40-3	n-Dodecane	5.0	< 5.0 U

Range	RL	Result
C8-C10 Aromatics	50	< 50 U
C10-C12 Aromatics	50	< 50 U
C12-C13 Aromatics	50	< 50 U
C5-C6 Aliphatics	50	< 50 U
C6-C8 Aliphatics	50	< 50 U
C8-C10 Aliphatics	50	< 50 U
C10-C12 Aliphatics	50	< 50 U

Values reported in µg/L (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	110%
FID: 2,5-Dibromotoluene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH

Sample ID: Trip Blank
SAMPLE

Lab Sample ID: UT57H
LIMS ID: 12-8342
Matrix: Water
Data Release Authorized: MW
Reported: 05/18/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Date Analyzed: 05/12/12 13:23
Instrument/Analyst: PID1/JLW

Purge Volume: 10 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
71-43-2	Benzene	5.0	< 5.0 U
108-88-3	Toluene	5.0	< 5.0 U
100-41-4	Ethylbenzene	5.0	< 5.0 U
179601-23-1	m,p-Xylene	10	< 10 U
95-47-6	o-Xylene	5.0	< 5.0 U
1634-04-4	Methyl tert-Butyl Ether	5.0	< 5.0 U
109-66-0	n-Pentane	5.0	< 5.0 U
110-54-3	n-Hexane	5.0	< 5.0 U
111-65-9	n-Octane	5.0	< 5.0 U
124-18-5	n-Decane	5.0	< 5.0 U
112-40-3	n-Dodecane	5.0	< 5.0 U

Range	RL	Result
C8-C10 Aromatics	50	< 50 U
C10-C12 Aromatics	50	< 50 U
C12-C13 Aromatics	50	< 50 U
C5-C6 Aliphatics	50	< 50 U
C6-C8 Aliphatics	50	< 50 U
C8-C10 Aliphatics	50	< 50 U
C10-C12 Aliphatics	50	< 50 U

Values reported in µg/L (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	122%
FID: 2,5-Dibromotoluene	111%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH
Page 1 of 1

Sample ID: MW3-S-1.9
SAMPLE

Lab Sample ID: UT57G
LIMS ID: 12-8341
Matrix: Soil
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Date Analyzed: 05/12/12 18:17
Instrument/Analyst: PID1/JLW

Purge Volume: 10 mL
Sample Amount: 34.2 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1500	< 1,500 U
108-88-3	Toluene	1500	< 1,500 U
100-41-4	Ethylbenzene	1500	< 1,500 U
179601-23-1	m,p-Xylene	2900	< 2,900 U
95-47-6	o-Xylene	1500	< 1,500 U
1634-04-4	Methyl tert-Butyl Ether	1500	< 1,500 U
109-66-0	n-Pentane	1500	< 1,500 U
110-54-3	n-Hexane	1500	< 1,500 U
111-65-9	n-Octane	1500	< 1,500 U
124-18-5	n-Decane	1500	< 1,500 U
112-40-3	n-Dodecane	1500	< 1,500 U

Range	RL	Result
C8-C10 Aromatics	15,000	< 15,000 U
C10-C12 Aromatics	15,000	< 15,000 U
C12-C13 Aromatics	15,000	< 15,000 U
C5-C6 Aliphatics	15,000	< 15,000 U
C6-C8 Aliphatics	15,000	< 15,000 U
C8-C10 Aliphatics	15,000	< 15,000 U
C10-C12 Aliphatics	15,000	< 15,000 U

Values reported in µg/kg (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	112%
FID: 2,5-Dibromotoluene	106%

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

VPH SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

ARI ID	Client ID	PDBT	FDBT	TOT OUT
MB-051212	Method Blank	110%	101%	0
LCS-051212	Lab Control	102%	101%	0
LCSD-051212	Lab Control Dup	103%	101%	0
UT57H	Trip Blank	122%	111%	0

	LCS/MB LIMITS	QC LIMITS
(PDBT) = 2,5-Dibromotoluene	(60-140)	(60-140)
(FDBT) = 2,5-Dibromotoluene	(60-140)	(60-140)

Prep Method: METHOD
Log Number Range: 12-8342 to 12-8342

ANALYTICAL RESOURCES INCORPORATED

VPH SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	PDBT	FDBT	TOT OUT
MB-051212	110%	101%	0
LCS-051212	102%	101%	0
LCSD-051212	103%	101%	0
MW1-S-3.1	107%	101%	0
MW3-S-1.9	112%	106%	0

	LCS/MB LIMITS	QC LIMITS
(PDBT) = 2,5-Dibromotoluene	(60-140)	(60-140)
(FDBT) = 2,5-Dibromotoluene	(60-140)	(60-140)

Prep Method: METHOD
Log Number Range: 12-8340 to 12-8341

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH
Page 1 of 1

Sample ID: LCS-051212
LCS/LCSD

Lab Sample ID: LCS-051212
LIMS ID: 12-8340
Matrix: Soil
Data Release Authorized: MW
Reported: 05/18/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 05/12/12 10:28
Date Analyzed LCSD: 05/12/12 11:14
Instrument/Analyst: PID1/JLW

Purge Volume: 10 mL
Sample Amount: 111 mg-dry-wt

Analyte/Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Benzene	4760	4500	106%	4690	4500	104%	1.5%
Toluene	4720	4500	105%	4670	4500	104%	1.1%
Ethylbenzene	4800	4500	107%	4740	4500	105%	1.3%
m,p-Xylene	9450	9010	105%	9360	9010	104%	1.0%
o-Xylene	4700	4500	104%	4670	4500	104%	0.6%
Methyl tert-Butyl Ether	4490	4500	99.8%	4540	4500	101%	1.1%
Naphthalene	4600	4500	102%	4650	4500	103%	1.1%
1,2,3-Trimethylbenzene	4720	4500	105%	4700	4500	104%	0.4%
1-Methylnaphthalene	5160	4500	115%	5350	4500	119%	3.6%
n-Pentane	5760	4500	128%	5730	4500	127%	0.5%
n-Hexane	4990	4500	111%	5000	4500	111%	0.2%
n-Octane	4700	4500	104%	4720	4500	105%	0.4%
n-Decane	5170	4500	115%	4820	4500	107%	7.0%
n-Dodecane	5250	4500	117%	5510	4500	122%	4.8%

Values reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

VPH Surrogate Recovery

	LCS	LCSD
PID: 2,5-Dibromotoluene	102%	103%
FID: 2,5-Dibromotoluene	101%	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH **Sample ID: LCS-051212**
Page 1 of 1 **LCS/LCSD**

Lab Sample ID: LCS-051212 QC Report No: UT57-Maul, Foster & Alongi
LIMS ID: 12-8342 Project: SIMS - N Cascade Ford
Matrix: Water 0747.01.01
Data Release Authorized: MW Date Sampled: NA
Reported: 05/18/12 Date Received: NA

Date Analyzed LCS: 05/12/12 10:28 Purge Volume: 10 mL
Date Analyzed LCSD: 05/12/12 11:14 Dilution Factor: 1.00
Instrument/Analyst: PID1/JLW

Analyte/Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Benzene	52.9	50.0	106%	52.1	50.0	104%	1.5%
Toluene	52.4	50.0	105%	51.9	50.0	104%	1.0%
Ethylbenzene	53.3	50.0	107%	52.7	50.0	105%	1.1%
m,p-Xylene	105	100	105%	104	100	104%	1.0%
o-Xylene	52.2	50.0	104%	51.9	50.0	104%	0.6%
Methyl tert-Butyl Ether	49.9	50.0	99.8%	50.5	50.0	101%	1.2%
Naphthalene	51.1	50.0	102%	51.7	50.0	103%	1.2%
1,2,3-Trimethylbenzene	52.5	50.0	105%	52.2	50.0	104%	0.6%
1-Methylnaphthalene	57.3	50.0	115%	59.4	50.0	119%	3.6%
n-Pentane	64.0	50.0	128%	63.7	50.0	127%	0.5%
n-Hexane	55.4	50.0	111%	55.5	50.0	111%	0.2%
n-Octane	52.2	50.0	104%	52.5	50.0	105%	0.6%
n-Decane	57.4	50.0	115%	53.6	50.0	107%	6.8%
n-Dodecane	58.3	50.0	117%	61.2	50.0	122%	4.9%

Values reported in µg/L (ppb)
RPD calculated using sample concentrations per SW846.

VPH Surrogate Recovery

	LCS	LCSD
PID: 2,5-Dibromotoluene	102%	103%
FID: 2,5-Dibromotoluene	101%	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: MW1-S-3.1**
 SAMPLE

Lab Sample ID: UT57A
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/17/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Date Extracted: 05/10/12
Date Analyzed: 05/16/12 22:05
Instrument/Analyst: NT6/JZ
GPC Cleanup: Yes

Sample Amount: 8.56 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 25.8%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	58	< 58 U
111-44-4	Bis-(2-Chloroethyl) Ether	58	< 58 U
95-57-8	2-Chlorophenol	58	< 58 U
541-73-1	1,3-Dichlorobenzene	58	< 58 U
106-46-7	1,4-Dichlorobenzene	58	< 58 U
100-51-6	Benzyl Alcohol	290	< 290 U
95-50-1	1,2-Dichlorobenzene	58	< 58 U
95-48-7	2-Methylphenol	58	< 58 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	58	< 58 U
106-44-5	4-Methylphenol	58	< 58 U
621-64-7	N-Nitroso-Di-N-Propylamine	58	< 58 U
67-72-1	Hexachloroethane	58	< 58 U
98-95-3	Nitrobenzene	58	< 58 U
78-59-1	Isophorone	58	< 58 U
88-75-5	2-Nitrophenol	58	< 58 U
105-67-9	2,4-Dimethylphenol	58	< 58 U
65-85-0	Benzoic Acid	580	< 580 U
111-91-1	bis(2-Chloroethoxy) Methane	58	< 58 U
120-83-2	2,4-Dichlorophenol	290	< 290 U
120-82-1	1,2,4-Trichlorobenzene	58	< 58 U
91-20-3	Naphthalene	58	< 58 U
106-47-8	4-Chloroaniline	290	< 290 U
87-68-3	Hexachlorobutadiene	58	< 58 U
59-50-7	4-Chloro-3-methylphenol	290	< 290 U
91-57-6	**2-Methylnaphthalene**	**58**	**29 J**
77-47-4	Hexachlorocyclopentadiene	290	< 290 U
88-06-2	2,4,6-Trichlorophenol	290	< 290 U
95-95-4	2,4,5-Trichlorophenol	290	< 290 U
91-58-7	2-Chloronaphthalene	58	< 58 U
88-74-4	2-Nitroaniline	290	< 290 U
131-11-3	Dimethylphthalate	58	< 58 U
208-96-8	Acenaphthylene	58	< 58 U
99-09-2	3-Nitroaniline	290	< 290 U
83-32-9	Acenaphthene	58	< 58 U
51-28-5	2,4-Dinitrophenol	580	< 580 U
100-02-7	4-Nitrophenol	290	< 290 U
132-64-9	Dibenzofuran	58	< 58 U
606-20-2	2,6-Dinitrotoluene	290	< 290 U
121-14-2	2,4-Dinitrotoluene	290	< 290 U
84-66-2	Diethylphthalate	58	< 58 U
7005-72-3	4-Chlorophenyl-phenylether	58	< 58 U
86-73-7	Fluorene	58	< 58 U
100-01-6	4-Nitroaniline	290	< 290 U
534-52-1	4,6-Dinitro-2-Methylphenol	580	< 580 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: MW1-S-3.1**
 SAMPLE

Lab Sample ID: UT57A
LIMS ID: 12-8335
Matrix: Soil
Date Analyzed: 05/16/12 22:05

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result
86-30-6	N-Nitrosodiphenylamine	58	< 58 U
101-55-3	4-Bromophenyl-phenylether	58	< 58 U
118-74-1	Hexachlorobenzene	58	< 58 U
87-86-5	Pentachlorophenol	290	< 290 U
85-01-8	Phenanthrene	58	< 58 U
86-74-8	Carbazole	58	< 58 U
120-12-7	Anthracene	58	< 58 U
84-74-2	Di-n-Butylphthalate	58	< 58 U
206-44-0	Fluoranthene	58	< 58 U
129-00-0	Pyrene	58	< 58 U
85-68-7	Butylbenzylphthalate	58	< 58 U
91-94-1	3,3'-Dichlorobenzidine	290	< 290 U
56-55-3	Benzo(a)anthracene	58	< 58 U
117-81-7	bis(2-Ethylhexyl)phthalate	58	< 58 U
218-01-9	Chrysene	58	< 58 U
117-84-0	Di-n-Octyl phthalate	58	< 58 U
50-32-8	Benzo(a)pyrene	58	< 58 U
193-39-5	Indeno(1,2,3-cd)pyrene	58	< 58 U
53-70-3	Dibenz(a,h)anthracene	58	< 58 U
191-24-2	Benzo(g,h,i)perylene	58	< 58 U
90-12-0	1-Methylnaphthalene	58	< 58 U
TOTBFA	Total Benzofluoranthenes	58	< 58 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	54.0%	2-Fluorobiphenyl	59.2%
d14-p-Terphenyl	62.4%	d4-1,2-Dichlorobenzene	52.0%
d5-Phenol	55.7%	2-Fluorophenol	54.4%
2,4,6-Tribromophenol	68.0%	d4-2-Chlorophenol	54.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-051012
METHOD BLANK

Lab Sample ID: MB-051012
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/17/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/10/12
Date Analyzed: 05/16/12 18:14
Instrument/Analyst: NT6/JZ
GPC Cleanup: Yes

Sample Amount: 7.50 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
108-95-2	Phenol	67	< 67 U
111-44-4	Bis-(2-Chloroethyl) Ether	67	< 67 U
95-57-8	2-Chlorophenol	67	< 67 U
541-73-1	1,3-Dichlorobenzene	67	< 67 U
106-46-7	1,4-Dichlorobenzene	67	< 67 U
100-51-6	Benzyl Alcohol	330	< 330 U
95-50-1	1,2-Dichlorobenzene	67	< 67 U
95-48-7	2-Methylphenol	67	< 67 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	67	< 67 U
106-44-5	4-Methylphenol	67	< 67 U
621-64-7	N-Nitroso-Di-N-Propylamine	67	< 67 U
67-72-1	Hexachloroethane	67	< 67 U
98-95-3	Nitrobenzene	67	< 67 U
78-59-1	Isophorone	67	< 67 U
88-75-5	2-Nitrophenol	67	< 67 U
105-67-9	2,4-Dimethylphenol	67	< 67 U
65-85-0	Benzoic Acid	670	< 670 U
111-91-1	bis(2-Chloroethoxy) Methane	67	< 67 U
120-83-2	2,4-Dichlorophenol	330	< 330 U
120-82-1	1,2,4-Trichlorobenzene	67	< 67 U
91-20-3	Naphthalene	67	< 67 U
106-47-8	4-Chloroaniline	330	< 330 U
87-68-3	Hexachlorobutadiene	67	< 67 U
59-50-7	4-Chloro-3-methylphenol	330	< 330 U
91-57-6	2-Methylnaphthalene	67	< 67 U
77-47-4	Hexachlorocyclopentadiene	330	< 330 U
88-06-2	2,4,6-Trichlorophenol	330	< 330 U
95-95-4	2,4,5-Trichlorophenol	330	< 330 U
91-58-7	2-Chloronaphthalene	67	< 67 U
88-74-4	2-Nitroaniline	330	< 330 U
131-11-3	Dimethylphthalate	67	< 67 U
208-96-8	Acenaphthylene	67	< 67 U
99-09-2	3-Nitroaniline	330	< 330 U
83-32-9	Acenaphthene	67	< 67 U
51-28-5	2,4-Dinitrophenol	670	< 670 U
100-02-7	4-Nitrophenol	330	< 330 U
132-64-9	Dibenzofuran	67	< 67 U
606-20-2	2,6-Dinitrotoluene	330	< 330 U
121-14-2	2,4-Dinitrotoluene	330	< 330 U
84-66-2	Diethylphthalate	67	< 67 U
7005-72-3	4-Chlorophenyl-phenylether	67	< 67 U
86-73-7	Fluorene	67	< 67 U
100-01-6	4-Nitroaniline	330	< 330 U
534-52-1	4,6-Dinitro-2-Methylphenol	670	< 670 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-051012
METHOD BLANK

Lab Sample ID: MB-051012
LIMS ID: 12-8335
Matrix: Soil
Date Analyzed: 05/16/12 18:14

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result
86-30-6	N-Nitrosodiphenylamine	67	< 67 U
101-55-3	4-Bromophenyl-phenylether	67	< 67 U
118-74-1	Hexachlorobenzene	67	< 67 U
87-86-5	Pentachlorophenol	330	< 330 U
85-01-8	Phenanthrene	67	< 67 U
86-74-8	Carbazole	67	< 67 U
120-12-7	Anthracene	67	< 67 U
84-74-2	Di-n-Butylphthalate	67	< 67 U
206-44-0	Fluoranthene	67	< 67 U
129-00-0	Pyrene	67	< 67 U
85-68-7	Butylbenzylphthalate	67	< 67 U
91-94-1	3,3'-Dichlorobenzidine	330	< 330 U
56-55-3	Benzo(a)anthracene	67	< 67 U
117-81-7	**bis(2-Ethylhexyl)phthalate**	**67**	**55 J**
218-01-9	Chrysene	67	< 67 U
117-84-0	Di-n-Octyl phthalate	67	< 67 U
50-32-8	Benzo(a)pyrene	67	< 67 U
193-39-5	Indeno(1,2,3-cd)pyrene	67	< 67 U
53-70-3	Dibenz(a,h)anthracene	67	< 67 U
191-24-2	Benzo(g,h,i)perylene	67	< 67 U
90-12-0	1-Methylnaphthalene	67	< 67 U
TOTBFA	Total Benzofluoranthenes	67	< 67 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	58.0%	2-Fluorobiphenyl	59.2%
d14-p-Terphenyl	72.8%	d4-1,2-Dichlorobenzene	56.4%
d5-Phenol	58.9%	2-Fluorophenol	60.3%
2,4,6-Tribromophenol	66.9%	d4-2-Chlorophenol	58.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-051012
LAB CONTROL

Lab Sample ID: LCS-051012
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/17/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Date Extracted: 05/10/12
Date Analyzed: 05/16/12 18:47
Instrument/Analyst: NT6/JZ
GPC Cleanup: Yes

Sample Amount: 7.50 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
Phenol	1050	1670	62.9%
Bis-(2-Chloroethyl) Ether	1080	1670	64.7%
2-Chlorophenol	990	1670	59.3%
1,3-Dichlorobenzene	955	1670	57.2%
1,4-Dichlorobenzene	978	1670	58.6%
Benzyl Alcohol	917	1670	54.9%
1,2-Dichlorobenzene	993	1670	59.5%
2-Methylphenol	945	1670	56.6%
2,2'-Oxybis(1-Chloropropane)	1060	1670	63.5%
4-Methylphenol	2000	3330	60.1%
N-Nitroso-Di-N-Propylamine	1060	1670	63.5%
Hexachloroethane	981	1670	58.7%
Nitrobenzene	986	1670	59.0%
Isophorone	1190	1670	71.3%
2-Nitrophenol	1000	1670	59.9%
2,4-Dimethylphenol	2080	5000	41.6%
Benzoic Acid	6230	9170	67.9%
bis(2-Chloroethoxy) Methane	1040	1670	62.3%
2,4-Dichlorophenol	3000	5000	60.0%
1,2,4-Trichlorobenzene	996	1670	59.6%
Naphthalene	959	1670	57.4%
4-Chloroaniline	2310	5000	46.2%
Hexachlorobutadiene	980	1670	58.7%
4-Chloro-3-methylphenol	3420	5000	68.4%
2-Methylnaphthalene	943	1670	56.5%
Hexachlorocyclopentadiene	2620	5000	52.4%
2,4,6-Trichlorophenol	3260	5000	65.2%
2,4,5-Trichlorophenol	3250	5000	65.0%
2-Chloronaphthalene	1050	1670	62.9%
2-Nitroaniline	3330	5000	66.6%
Dimethylphthalate	1350	1670	80.8%
Acenaphthylene	1070	1670	64.1%
3-Nitroaniline	3120	5000	62.4%
Acenaphthene	1030	1670	61.7%
2,4-Dinitrophenol	6170	9170	67.3%
4-Nitrophenol	3840	5000	76.8%
Dibenzofuran	1030	1670	61.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-051012
LAB CONTROL

Lab Sample ID: LCS-051012
LIMS ID: 12-8335
Matrix: Soil
Date Analyzed: 05/16/12 18:47

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Analyte	Lab Control	Spike Added	Recovery
2,6-Dinitrotoluene	3890	5000	77.8%
2,4-Dinitrotoluene	4200	5000	84.0%
Diethylphthalate	1410	1670	84.4%
4-Chlorophenyl-phenylether	1180	1670	70.7%
Fluorene	1110	1670	66.5%
4-Nitroaniline	3380	5000	67.6%
4,6-Dinitro-2-Methylphenol	7180	9170	78.3%
N-Nitrosodiphenylamine	1170	1670	70.1%
4-Bromophenyl-phenylether	1150	1670	68.9%
Hexachlorobenzene	1190	1670	71.3%
Pentachlorophenol	3550	5000	71.0%
Phenanthrene	1180	1670	70.7%
Carbazole	1310	1670	78.4%
Anthracene	1070	1670	64.1%
Di-n-Butylphthalate	1470	1670	88.0%
Fluoranthene	1330	1670	79.6%
Pyrene	1090	1670	65.3%
Butylbenzylphthalate	1340	1670	80.2%
3,3'-Dichlorobenzidine	2730	5000	54.6%
Benzo(a)anthracene	1190	1670	71.3%
bis(2-Ethylhexyl)phthalate	1330 B	1670	79.6%
Chrysene	1190	1670	71.3%
Di-n-Octyl phthalate	1320	1670	79.0%
Benzo(a)pyrene	1130	1670	67.7%
Indeno(1,2,3-cd)pyrene	1120	1670	67.1%
Dibenz(a,h)anthracene	1220	1670	73.1%
Benzo(g,h,i)perylene	1100	1670	65.9%
1-Methylnaphthalene	1280	1670	76.6%
Total Benzofluoranthenes	2490	3330	74.8%

Semivolatile Surrogate Recovery	
d5-Nitrobenzene	58.0%
2-Fluorobiphenyl	60.4%
d14-p-Terphenyl	70.8%
d4-1,2-Dichlorobenzene	55.2%
d5-Phenol	62.7%
2-Fluorophenol	62.9%
2,4,6-Tribromophenol	77.6%
d4-2-Chlorophenol	60.5%

Reported in µg/kg (ppb)

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-051012	58.0%	59.2%	72.8%	56.4%	58.9%	60.3%	66.9%	58.4%	0
LCS-051012	58.0%	60.4%	70.8%	55.2%	62.7%	62.9%	77.6%	60.5%	0
MW1-S-3.1	54.0%	59.2%	62.4%	52.0%	55.7%	54.4%	68.0%	54.4%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-102)	(32-106)
(FBP) = 2-Fluorobiphenyl	(51-105)	(39-107)
(TPH) = d14-p-Terphenyl	(55-124)	(31-130)
(DCB) = d4-1,2-Dichlorobenzene	(48-104)	(38-102)
(PHL) = d5-Phenol	(44-110)	(27-112)
(2FP) = 2-Fluorophenol	(38-112)	(22-108)
(TBP) = 2,4,6-Tribromophenol	(54-120)	(31-131)
(2CP) = d4-2-Chlorophenol	(50-103)	(36-104)

Prep Method: SW3546
Log Number Range: 12-8335 to 12-8335

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: MW1-S-3.1
SAMPLE

Lab Sample ID: UT57A
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Date Extracted: 05/15/12
Date Analyzed: 05/18/12 14:11
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.71 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 25.8%

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**4.7**	**4.5 J**
91-57-6	**2-Methylnaphthalene**	**4.7**	**8.8**
90-12-0	**1-Methylnaphthalene**	**4.7**	**6.7**
208-96-8	Acenaphthylene	4.7	< 4.7 U
83-32-9	Acenaphthene	4.7	< 4.7 U
86-73-7	Fluorene	4.7	< 4.7 U
85-01-8	**Phenanthrene**	**4.7**	**8.3**
120-12-7	Anthracene	4.7	< 4.7 U
206-44-0	**Fluoranthene**	**4.7**	**4.8**
129-00-0	**Pyrene**	**4.7**	**4.9**
56-55-3	Benzo(a)anthracene	4.7	< 4.7 U
218-01-9	**Chrysene**	**4.7**	**5.8**
50-32-8	Benzo(a)pyrene	4.7	< 4.7 U
193-39-5	Indeno(1,2,3-cd)pyrene	4.7	< 4.7 U
53-70-3	Dibenz(a,h)anthracene	4.7	< 4.7 U
191-24-2	**Benzo(g,h,i)perylene**	**4.7**	**4.1 J**
132-64-9	**Dibenzofuran**	**4.7**	**3.3 J**
TOTBFA	Total Benzofluoranthenes	4.7	< 4.7 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	65.3%
d14-Dibenzo(a,h)anthracen	79.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS

Sample ID: MB-051512
METHOD BLANK

Lab Sample ID: MB-051512
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/15/12
Date Analyzed: 05/18/12 10:25
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.00 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	5.0	< 5.0 U
90-12-0	1-Methylnaphthalene	5.0	< 5.0 U
208-96-8	Acenaphthylene	5.0	< 5.0 U
83-32-9	Acenaphthene	5.0	< 5.0 U
86-73-7	Fluorene	5.0	< 5.0 U
85-01-8	Phenanthrene	5.0	< 5.0 U
120-12-7	Anthracene	5.0	< 5.0 U
206-44-0	Fluoranthene	5.0	< 5.0 U
129-00-0	Pyrene	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	5.0	< 5.0 U
218-01-9	Chrysene	5.0	< 5.0 U
50-32-8	Benzo(a)pyrene	5.0	< 5.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	< 5.0 U
53-70-3	Dibenz(a,h)anthracene	5.0	< 5.0 U
191-24-2	Benzo(g,h,i)perylene	5.0	< 5.0 U
132-64-9	Dibenzofuran	5.0	< 5.0 U
TOTBFA	Total Benzofluoranthenes	5.0	< 5.0 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	64.0%
d14-Dibenzo(a,h)anthracen	86.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS

Sample ID: LCS-051512
LAB CONTROL SAMPLE

Lab Sample ID: LCS-051512
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/15/12
Date Analyzed LCS: 05/18/12 10:53
Instrument/Analyst LCS: NT4/JZ

Sample Amount LCS: 10.0 g-dry-wt
Final Extract Volume LCS: 0.50 mL
Dilution Factor LCS: 1.00

Analyte	LCS	Spike Added	Recovery
Naphthalene	81.2	150	54.1%
2-Methylnaphthalene	81.4	150	54.3%
1-Methylnaphthalene	89.5	150	59.7%
Acenaphthylene	80.6	150	53.7%
Acenaphthene	91.8	150	61.2%
Fluorene	92.0	150	61.3%
Phenanthrene	99.4	150	66.3%
Anthracene	94.8	150	63.2%
Fluoranthene	109	150	72.7%
Pyrene	115	150	76.7%
Benzo(a)anthracene	112	150	74.7%
Chrysene	119	150	79.3%
Benzo(a)pyrene	104	150	69.3%
Indeno(1,2,3-cd)pyrene	120	150	80.0%
Dibenz(a,h)anthracene	120	150	80.0%
Benzo(g,h,i)perylene	113	150	75.3%
Dibenzofuran	83.6	150	55.7%
Total Benzofluoranthenes	248	300	82.7%

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	61.7%
d14-Dibenzo(a,h)anthracen	81.0%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	MNP	DBA	TOT OUT
MB-051512	64.0%	86.7%	0
LCS-051512	61.7%	81.0%	0
MW1-S-3.1	65.3%	79.3%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(35-100)	(34-100)
(DBA) = d14-Dibenzo(a,h)anthracene	(37-120)	(10-117)

Prep Method: SW3546
Log Number Range: 12-8335 to 12-8335

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS

Sample ID: GP4-W-10
SAMPLE

Lab Sample ID: UT57D
LIMS ID: 12-8338
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Date Extracted: 05/12/12
Date Analyzed: 05/18/12 01:09
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	66.0%
d14-Dibenzo(a,h)anthracene	89.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS

Sample ID: MB-051212
METHOD BLANK

Lab Sample ID: MB-051212
LIMS ID: 12-8338
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/12/12
Date Analyzed: 05/18/12 15:08
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	55.3%
d14-Dibenzo(a,h)anthracene	56.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS

Sample ID: LCS-051212
LAB CONTROL SAMPLE

Lab Sample ID: LCS-051212
LIMS ID: 12-8338
Matrix: Water
Data Release Authorized:
Reported: 05/18/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 05/12/12
Date Analyzed LCS: 05/17/12 22:47
Instrument/Analyst LCS: NT4/JZ

Sample Amount LCS: 500 mL
Final Extract Volume LCS: 0.50 mL
Dilution Factor LCS: 1.00

Analyte	LCS	Spike Added	Recovery
Naphthalene	1.81	3.00	60.3%
2-Methylnaphthalene	1.67	3.00	55.7%
1-Methylnaphthalene	1.92	3.00	64.0%
Acenaphthylene	1.83	3.00	61.0%
Acenaphthene	2.06	3.00	68.7%
Fluorene	2.15	3.00	71.7%
Phenanthrene	2.46	3.00	82.0%
Anthracene	2.28	3.00	76.0%
Fluoranthene	2.61	3.00	87.0%
Pyrene	2.62	3.00	87.3%
Benzo(a)anthracene	2.56	3.00	85.3%
Chrysene	2.67	3.00	89.0%
Benzo(a)pyrene	2.26	3.00	75.3%
Indeno(1,2,3-cd)pyrene	2.47	3.00	82.3%
Dibenz(a,h)anthracene	2.08	3.00	69.3%
Benzo(g,h,i)perylene	2.28	3.00	76.0%
Dibenzofuran	1.97	3.00	65.7%
Total Benzofluoranthenes	5.19	6.00	86.5%

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	70.7%
d14-Dibenzo(a,h)anthracene	76.7%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	MNP	DBA	TOT OUT
MB-051212	55.3%	56.0%	0
LCS-051212	70.7%	76.7%	0
GP4-W-10	66.0%	89.0%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(40-110)	(33-107)
(DBA) = d14-Dibenzo(a,h)anthracene	(33-140)	(10-142)

Prep Method: SW3520C
Log Number Range: 12-8338 to 12-8338

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: MB-051612
METHOD BLANK

Lab Sample ID: MB-051612
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized: MW
Reported: 05/21/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/16/12
Date Analyzed: 05/18/12 10:32
Instrument/Analyst: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.0 g
Final Extract Volume: 4.00 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: NA

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	< 33 U
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	Aroclor 1248	33	< 33 U
11097-69-1	Aroclor 1254	33	< 33 U
11096-82-5	Aroclor 1260	33	< 33 U
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	97.2%
Tetrachlorometaxylene	82.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082

Sample ID: MW1-S-3.1
SAMPLE

Lab Sample ID: UT57A
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized: MW
Reported: 05/21/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Date Extracted: 05/16/12
Date Analyzed: 05/18/12 08:27
Instrument/Analyst: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.7 g-dry-wt
Final Extract Volume: 4.00 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 25.8%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	32	< 32 U
53469-21-9	Aroclor 1242	32	< 32 U
12672-29-6	Aroclor 1248	32	< 32 U
11097-69-1	Aroclor 1254	32	< 32 U
11096-82-5	Aroclor 1260	32	< 32 U
11104-28-2	Aroclor 1221	32	< 32 U
11141-16-5	Aroclor 1232	32	< 32 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	82.5%
Tetrachlorometaxylene	79.2%

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-051612	97.2%	49-126	82.8%	53-108	0
LCS-051612	93.5%	49-126	87.0%	53-108	0
LCSD-051612	96.5%	49-126	86.5%	53-108	0
MW1-S-3.1	82.5%	31-140	79.2%	39-122	0

Microwave (MARS) Control Limits PCBSMI
Prep Method: SW3546
Log Number Range: 12-8335 to 12-8335

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: LCS-051612
LCS/LCSD

Lab Sample ID: LCS-051612
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized: MW
Reported: 05/21/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 05/16/12

Date Analyzed LCS: 05/18/12 10:53
LCSD: 05/18/12 11:14
Instrument/Analyst LCS: ECD7/JGR
LCSD: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount LCS: 12.0 g-dry-wt
LCSD: 12.0 g-dry-wt
Final Extract Volume LCS: 4.00 mL
LCSD: 4.00 mL
Dilution Factor LCS: 1.00
LCSD: 1.00
Silica Gel: Yes

Percent Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Aroclor 1016	126	167	75.4%	129	167	77.2%	2.4%
Aroclor 1260	126	167	75.4%	133	167	79.6%	5.4%

PCB Surrogate Recovery

	LCS	LCSD
Decachlorobiphenyl	93.5%	96.5%
Tetrachlorometaxylene	87.0%	86.5%

Results reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Page 1 of 1
Matrix: Soil

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Received: 05/08/12

Data Release Authorized:
Reported: 05/15/12

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range/Surrogate	RL	Result
MB-051112	Method Blank	05/11/12	05/13/12	1.00	Diesel Range	5.0	< 5.0 U
12-8335	HC ID: ---		FID4A	1.0	Motor Oil Range	10	< 10 U
					o-Terphenyl		87.1%
UT57A	MW1-S-3.1	05/11/12	05/13/12	1.00	**Diesel Range**	**6.6**	**58**
12-8335	HC ID: **DRO/MOTOR OIL**		FID4A	1.0	**Motor Oil Range**	**13**	**160**
					o-Terphenyl		80.9%

Reported in mg/kg (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID

Sample ID: LCS-051112
LAB CONTROL

Lab Sample ID: LCS-051112
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/15/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/11/12
Date Analyzed: 05/13/12 08:33
Instrument/Analyst: FID4A/MH

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
Diesel	120	150	80.0%

TPHD Surrogate Recovery

o-Terphenyl	86.9%

Results reported in mg/kg

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

Matrix: Soil
Date Received: 05/08/12

ARI Job: UT57
Project: SIMS - N Cascade Ford
0747.01.01

ARI ID	Client ID	Client Amt	Final Vol	Basis	Prep Date
12-8335-051112MB1	Method Blank	10.0 g	1.00 mL	-	05/11/12
12-8335-051112LCS1	Lab Control	10.0 g	1.00 mL	-	05/11/12
12-8335-051012LCSD1	Lab Control Dup	500 g	1.00 mL	-	05/10/12
12-8335-UT57A	MW1-S-3.1	7.58 g	1.00 mL	D	05/11/12

Basis: D=Dry Weight W=As Received

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	OTER	TOT OUT
051112MBS	87.1%	0
051112LCS	86.9%	0
MW1-S-3.1	80.9%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3546
Log Number Range: 12-8335 to 12-8335

Data File: /chem3/fid4a.i/20120512a.b/0512a064.d

Date : 13-MAY-2012 08:09

Client ID: UT57MBS1

Sample Info: UT57MBS1

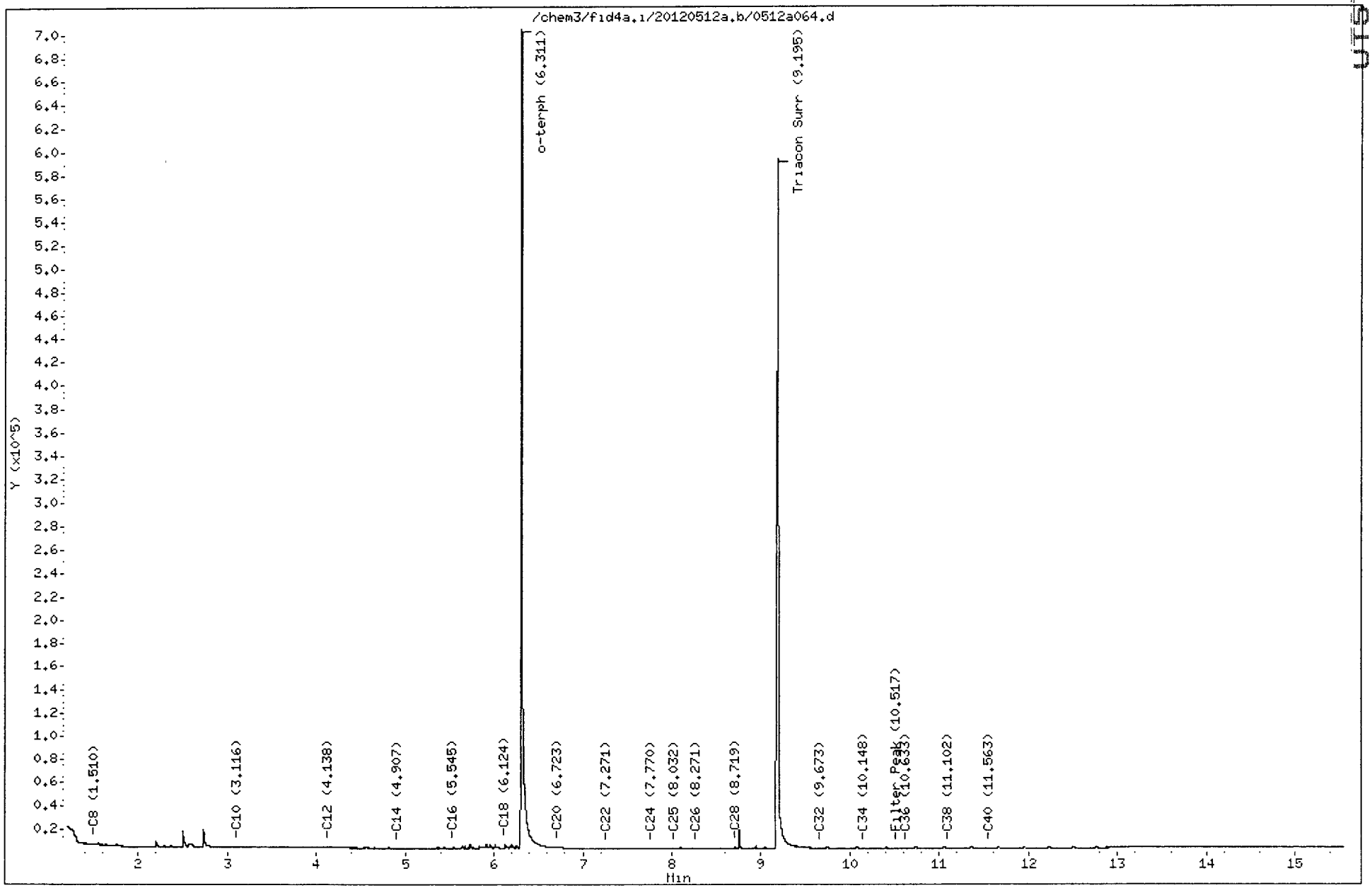
Column phase: RTX-1

Instrument: fid4a.i

Operator: MH

Column diameter: 0.25

UT57-00083



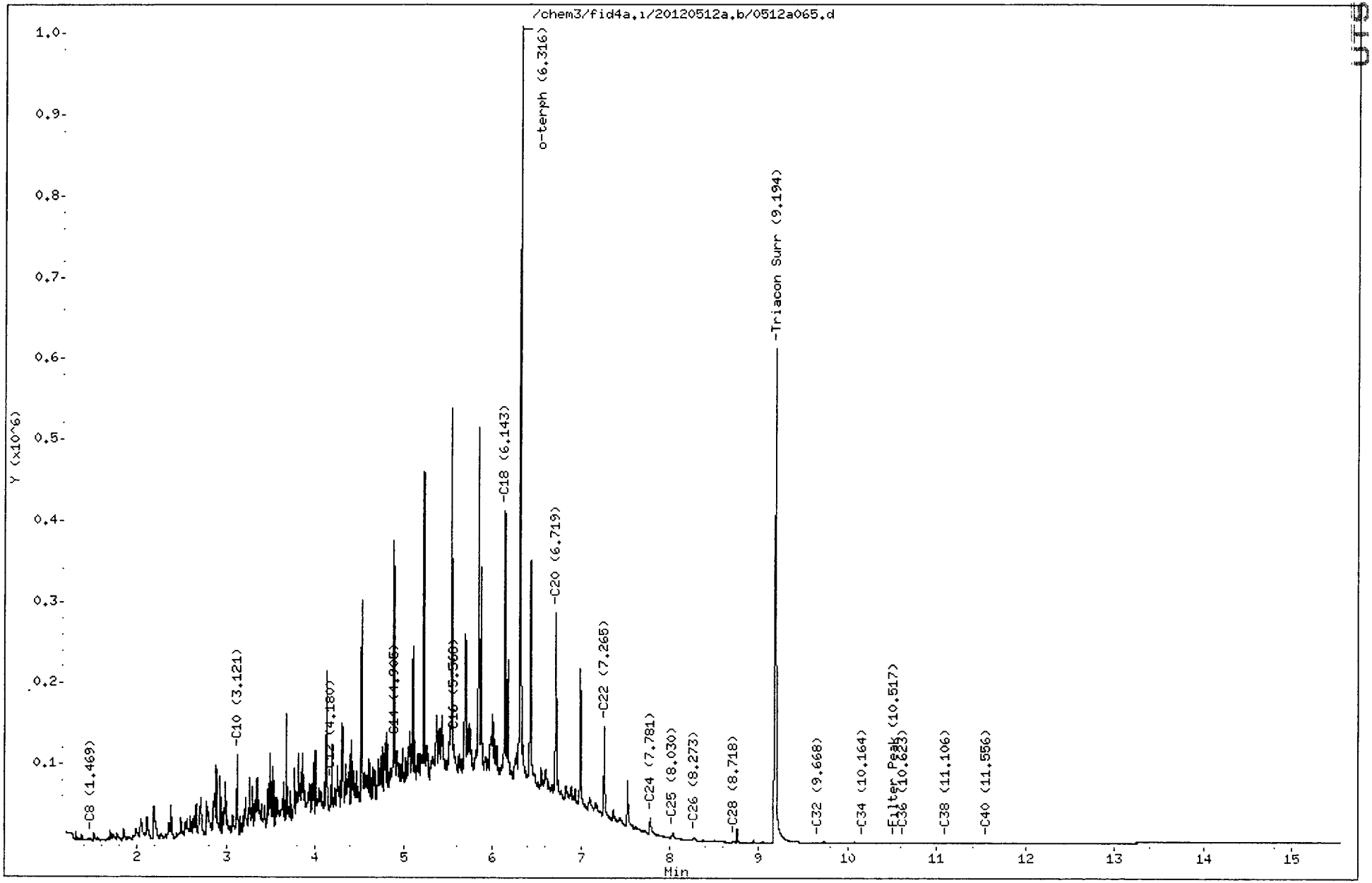
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Date : 13-MAY-2012 08:33
Client ID: UT57LCSS1
Sample Info: UT57LCSS1

Column phase: RTX-1

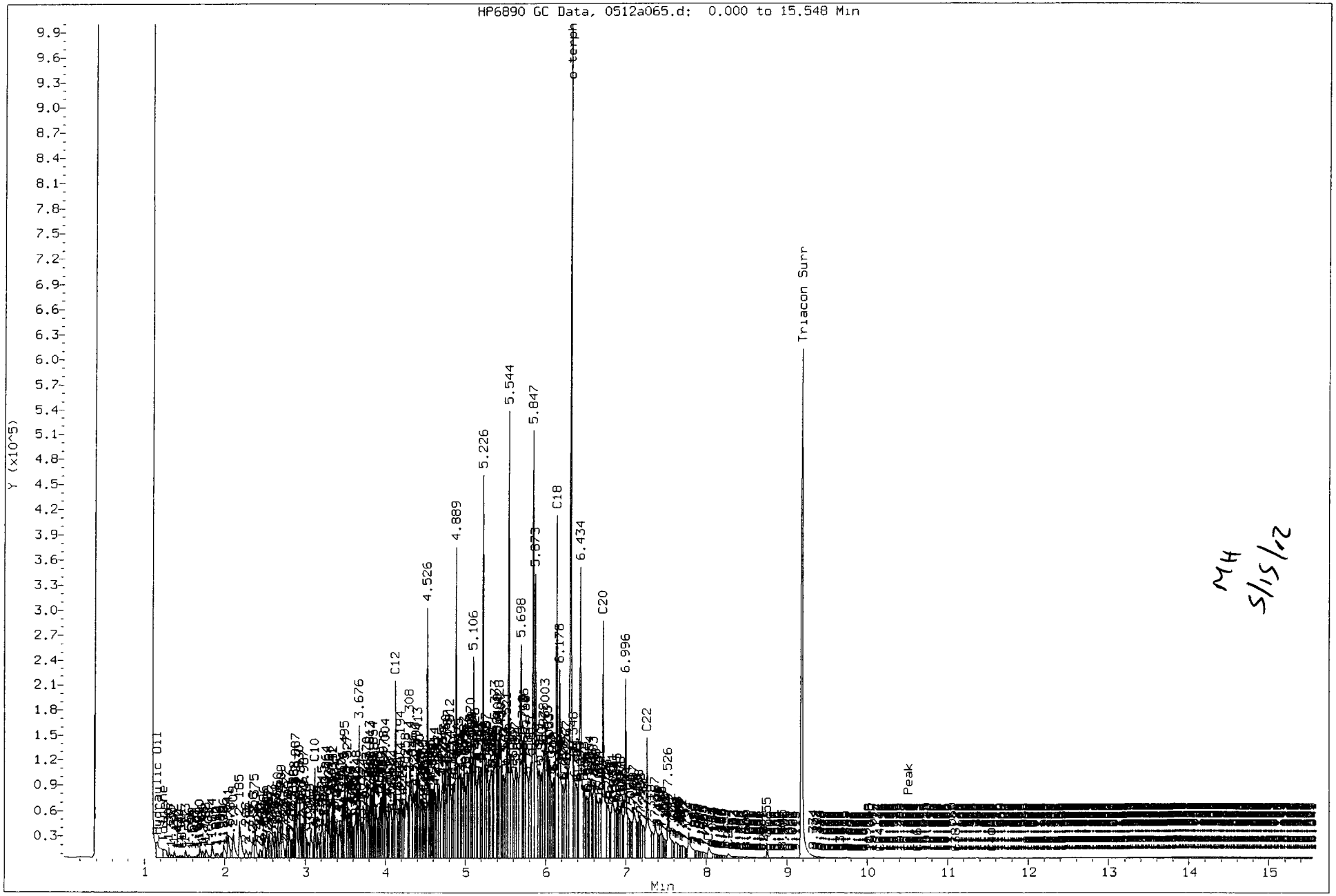
Instrument: fid4a.i

Operator: MH
Column diameter: 0.25

UT57 : 66099



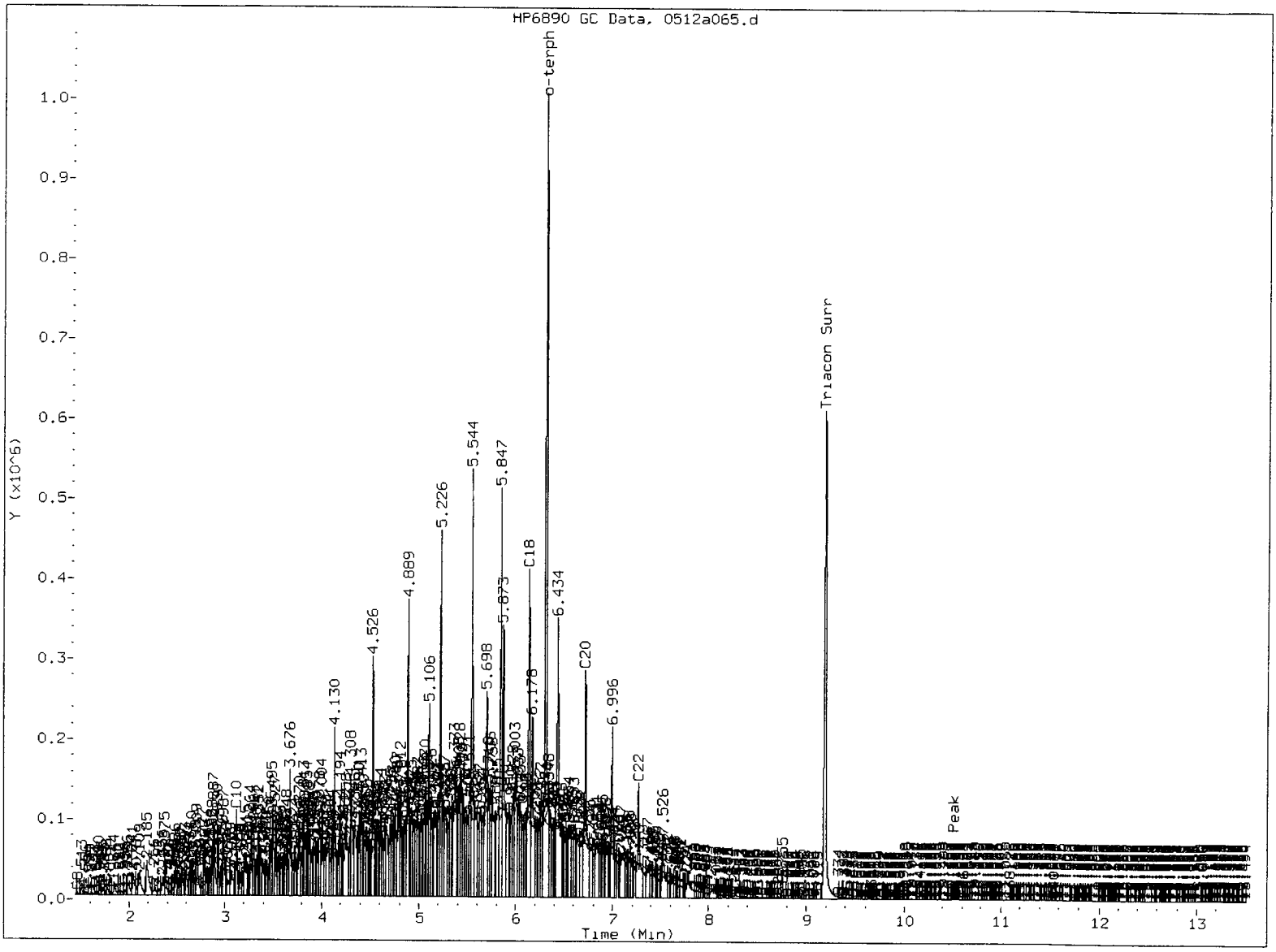
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Injection Date: 13-MAY-2012 08:33
Instrument: fid4a.i
Client Sample ID: UT57LCSS1



MH
5/15/12

UT57 001.00

FID:4A-2C/RTX-1 UT57LCSS1 FID:4A SIGNAL



MANUAL INTEGRATION

X 1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/15/12

Data File: /chem3/fid4a.i/20120512a.b/0512a066.d

Date : 13-MAY-2012 08:57

Client ID: MW1-S-3.1

Sample Info: UT57A

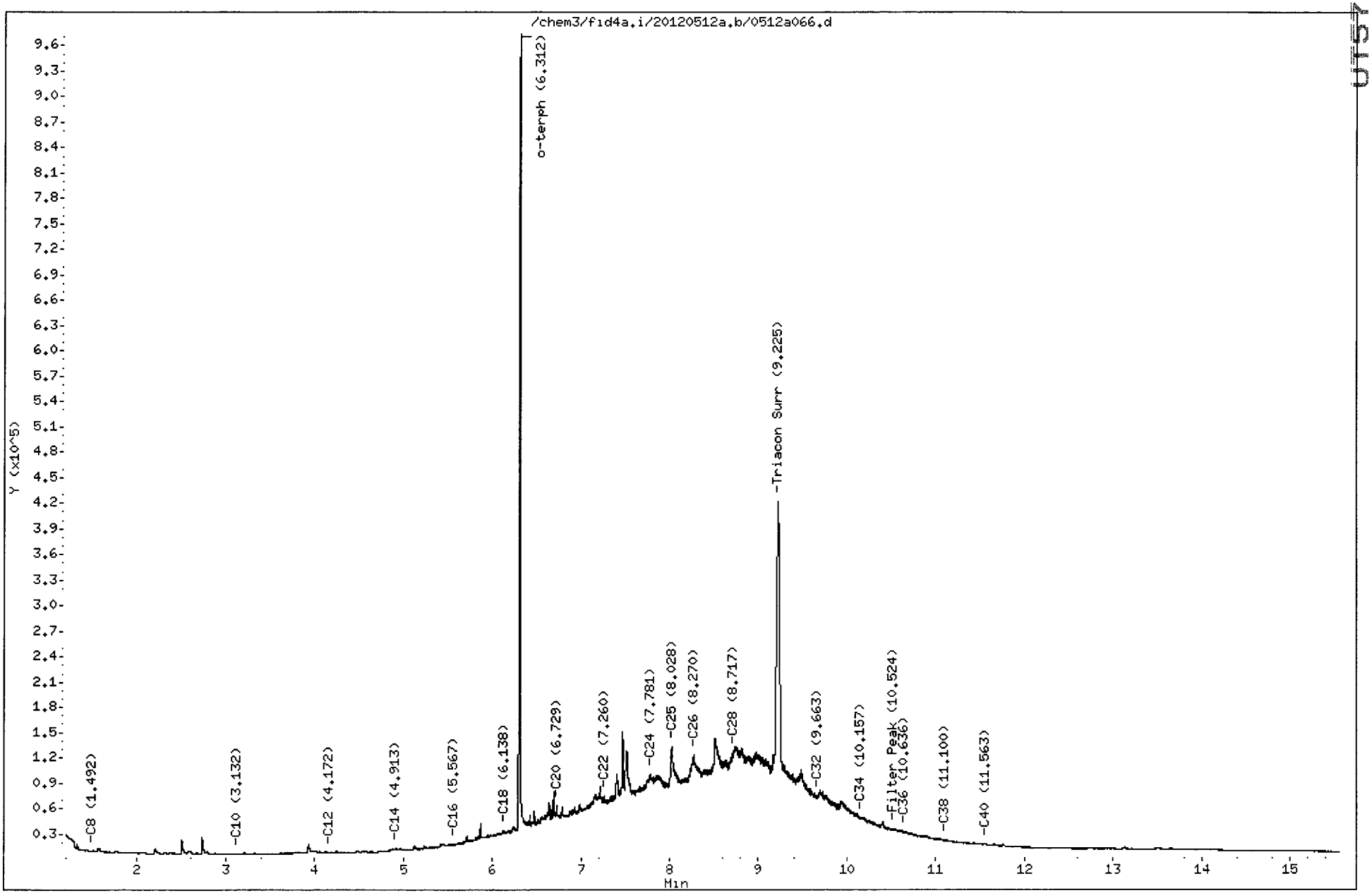
Column phase: RTX-1

Instrument: fid4a.i

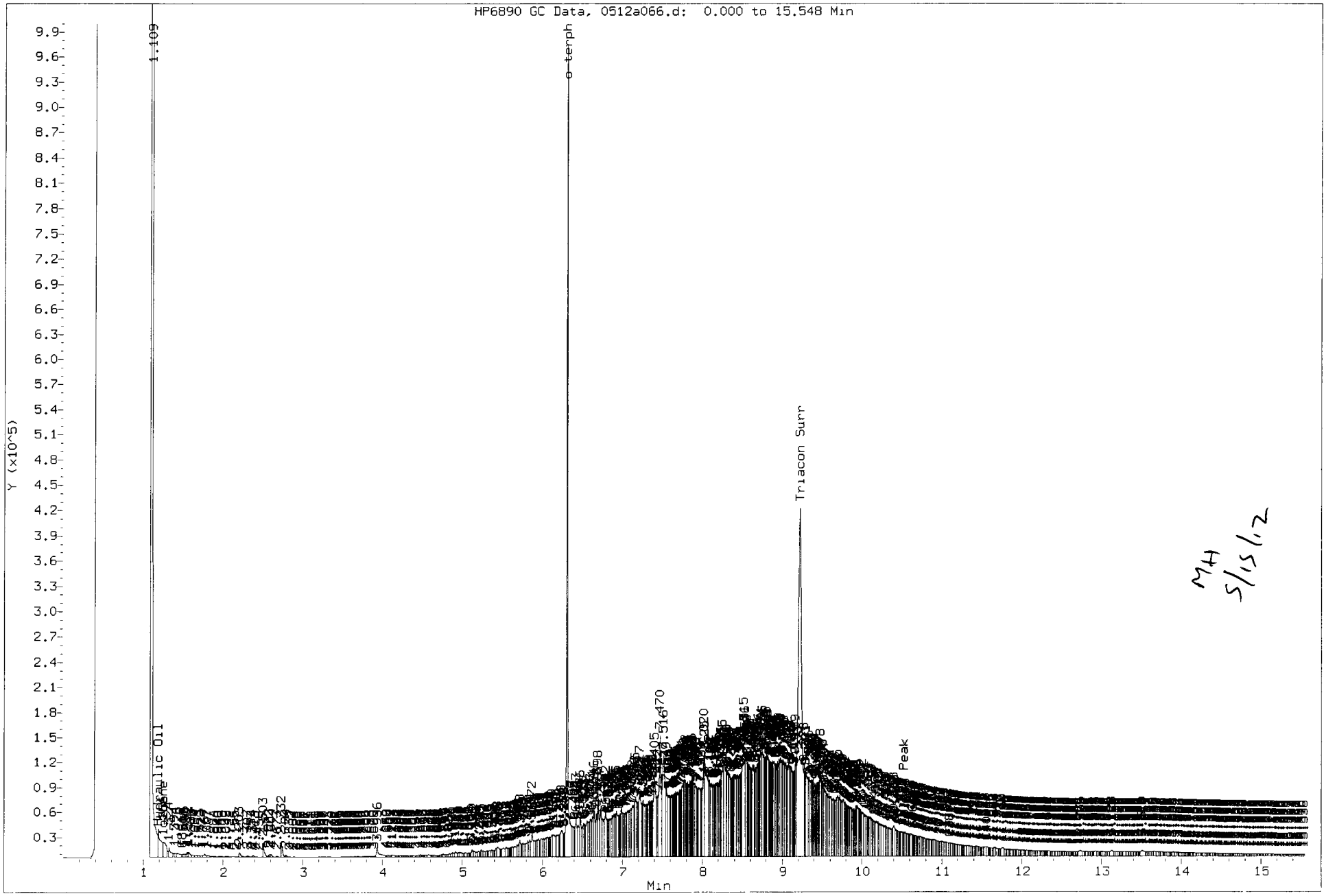
Operator: MH

Column diameter: 0.25

UT57 001.02



Data File: /chem3/fid4a.i/20120512a.b/0512a066.d
Injection Date: 13-MAY-2012 08:57
Instrument: fid4a.i
Client Sample ID: MW1-S-3.1

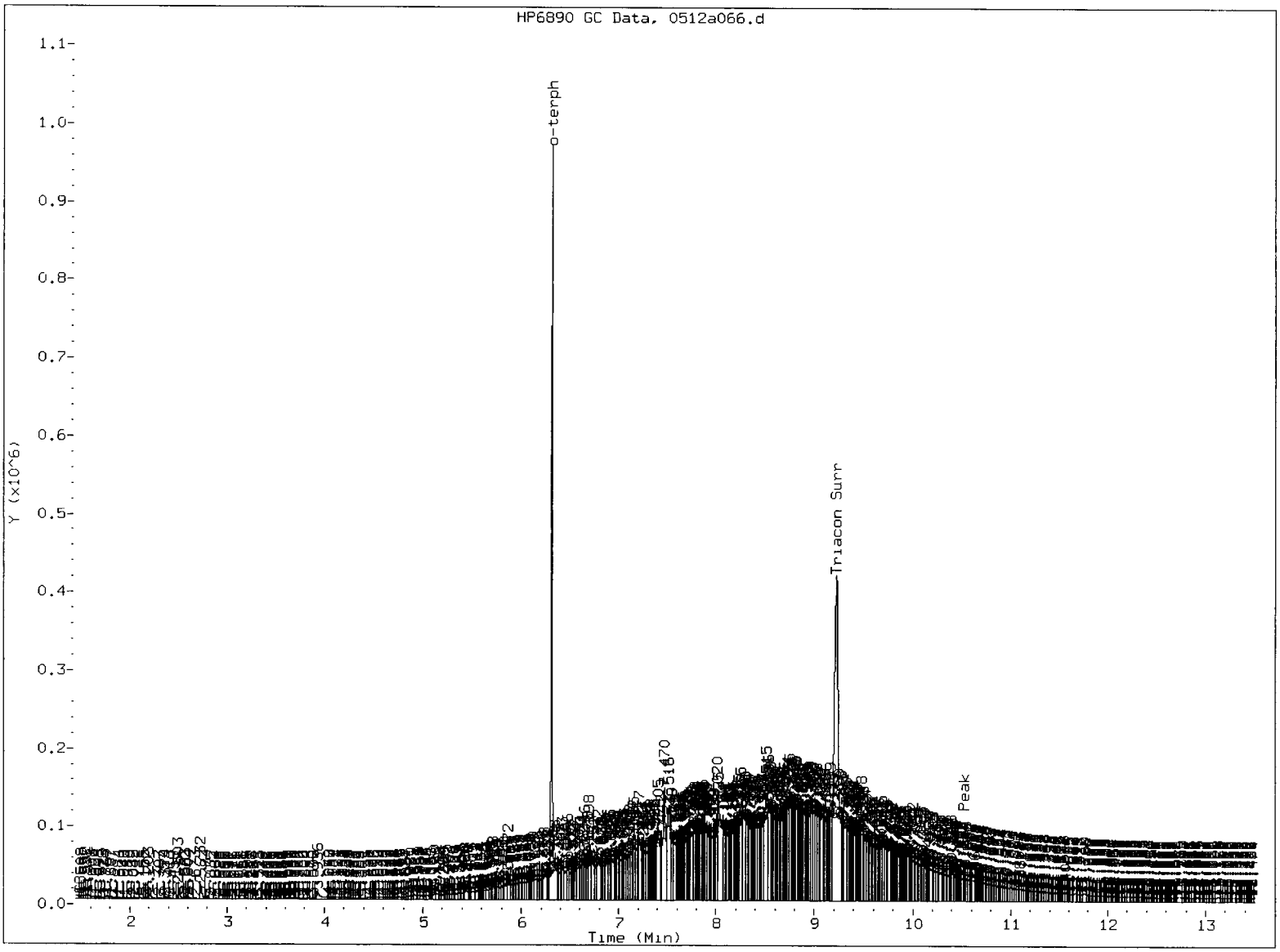


MH 5/15/12

UTS7:001103

FID:4A-2C/RTX-1 UT57A

FID:4A SIGNAL



MANUAL INTEGRATION

X 1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/15/12

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Page 1 of 1
Matrix: Water

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Received: 05/08/12

Data Release Authorized: MW
Reported: 05/14/12

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range/Surrogate	RL	Result
MB-051012	Method Blank	05/10/12	05/13/12	1.00	Diesel Range	0.10	< 0.10 U
12-8338	HC ID: ---		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		87.4%
UT57D	GP4-W-10	05/10/12	05/13/12	1.00	Diesel Range	0.10	< 0.10 U
12-8338	HC ID: ---		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		88.0%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	OTER	TOT OUT
MB-051012	87.4%	0
LCS-051012	81.2%	0
LCSD-051012	85.1%	0
GP4-W-10	88.0%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3510C
Log Number Range: 12-8338 to 12-8338

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: LCS-051012
LCS/LCSD

Lab Sample ID: LCS-051012
LIMS ID: 12-8338
Matrix: Water
Data Release Authorized: MW
Reported: 05/14/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 05/10/12

Date Analyzed LCS: 05/13/12 18:40
LCSD: 05/13/12 19:04
Instrument/Analyst LCS: FID4A/MH
LCSD: FID4A/MH

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 1.0 mL
LCSD: 1.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	2.36	3.00	78.7%	2.53	3.00	84.3%	7.0%

TPHD Surrogate Recovery

	LCS	LCSD
o-Terphenyl	81.2%	85.1%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: UT57
Matrix: Water Project: SIMS - N Cascade Ford
Date Received: 05/08/12 0747.01.01

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
12-8338-051012MB1	Method Blank	500 mL	1.00 mL	05/10/12
12-8338-051012LCS1	Lab Control	500 mL	1.00 mL	05/10/12
12-8338-051012LCSD1	Lab Control Dup	500 mL	1.00 mL	05/10/12
12-8338-UT57D	GP4-W-10	500 mL	1.00 mL	05/10/12

Data File: /chem3/fid4a.1/20120512a.b/0512a089.d

Date : 13-MAY-2012 18:15

Client ID: UT23MBW1

Sample Info: UT23MBW1

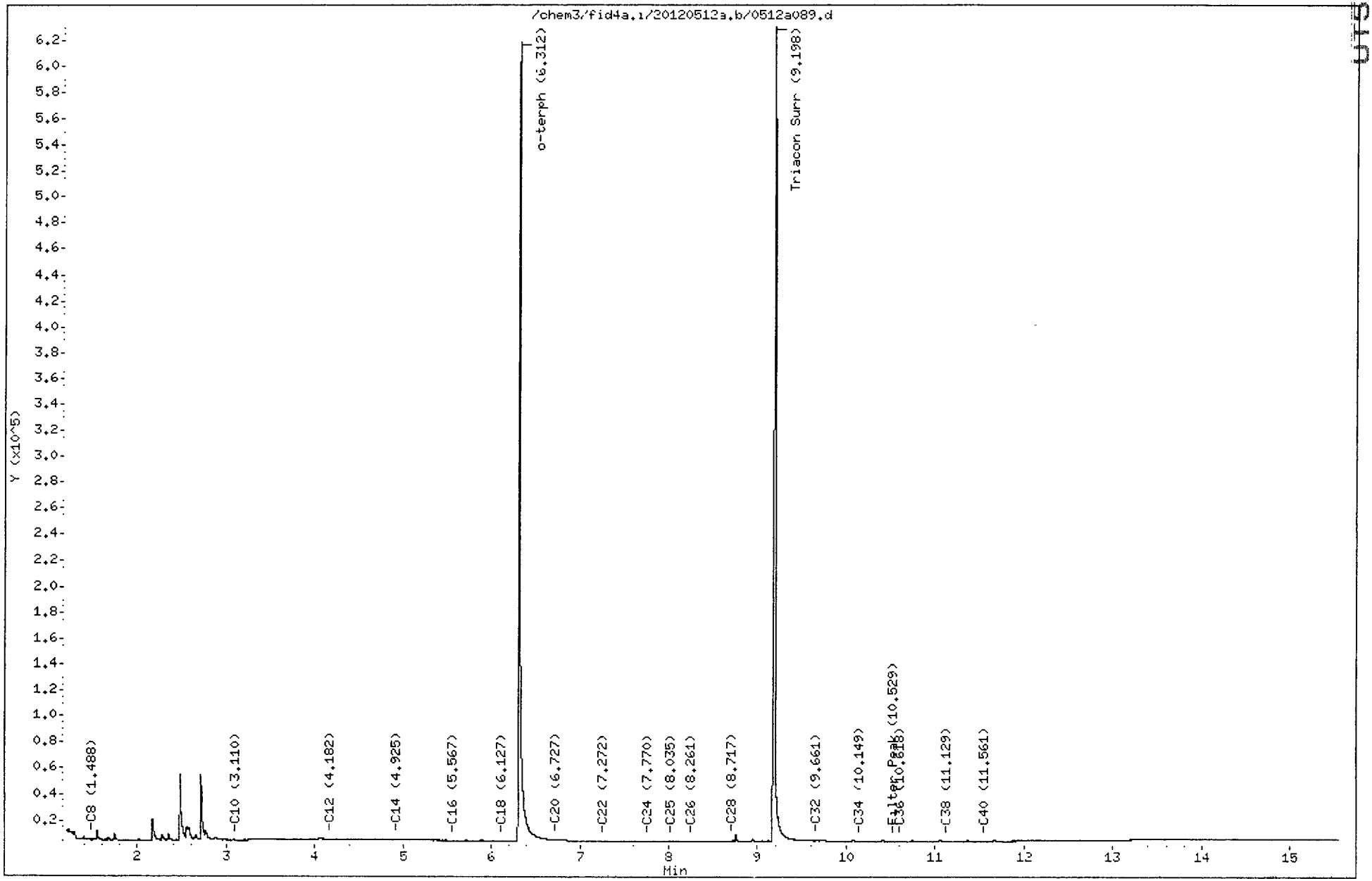
Instrument: fid4a.1

Operator: MH

Column phase: RTX-1

Column diameter: 0.25

UT57:00109



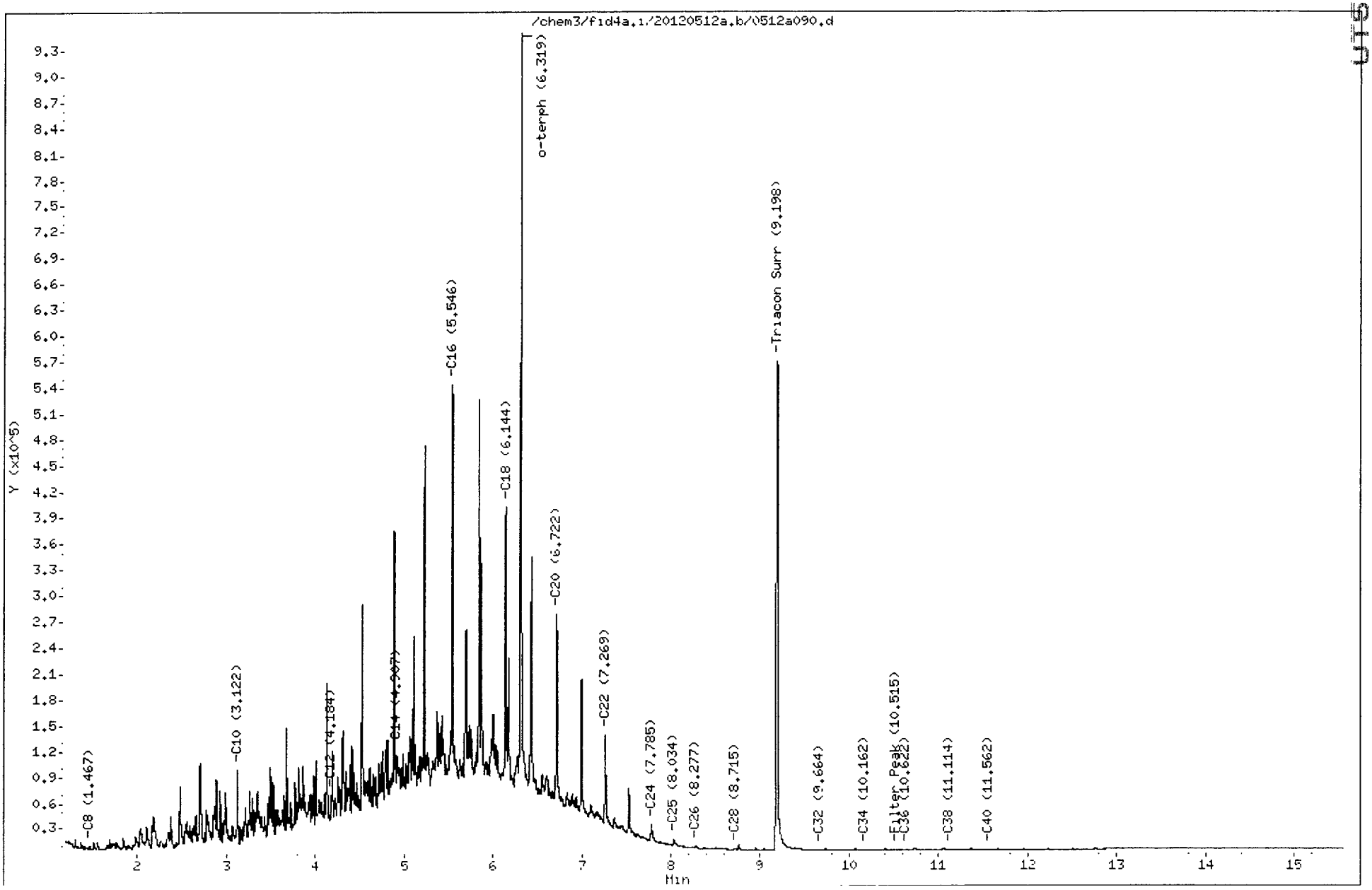
Data File: /chem3/fid4a.i/20120512a.b/0512a090.d
Date : 13-MAY-2012 18:40
Client ID: UT23LCSW1
Sample Info: UT23LCSW1

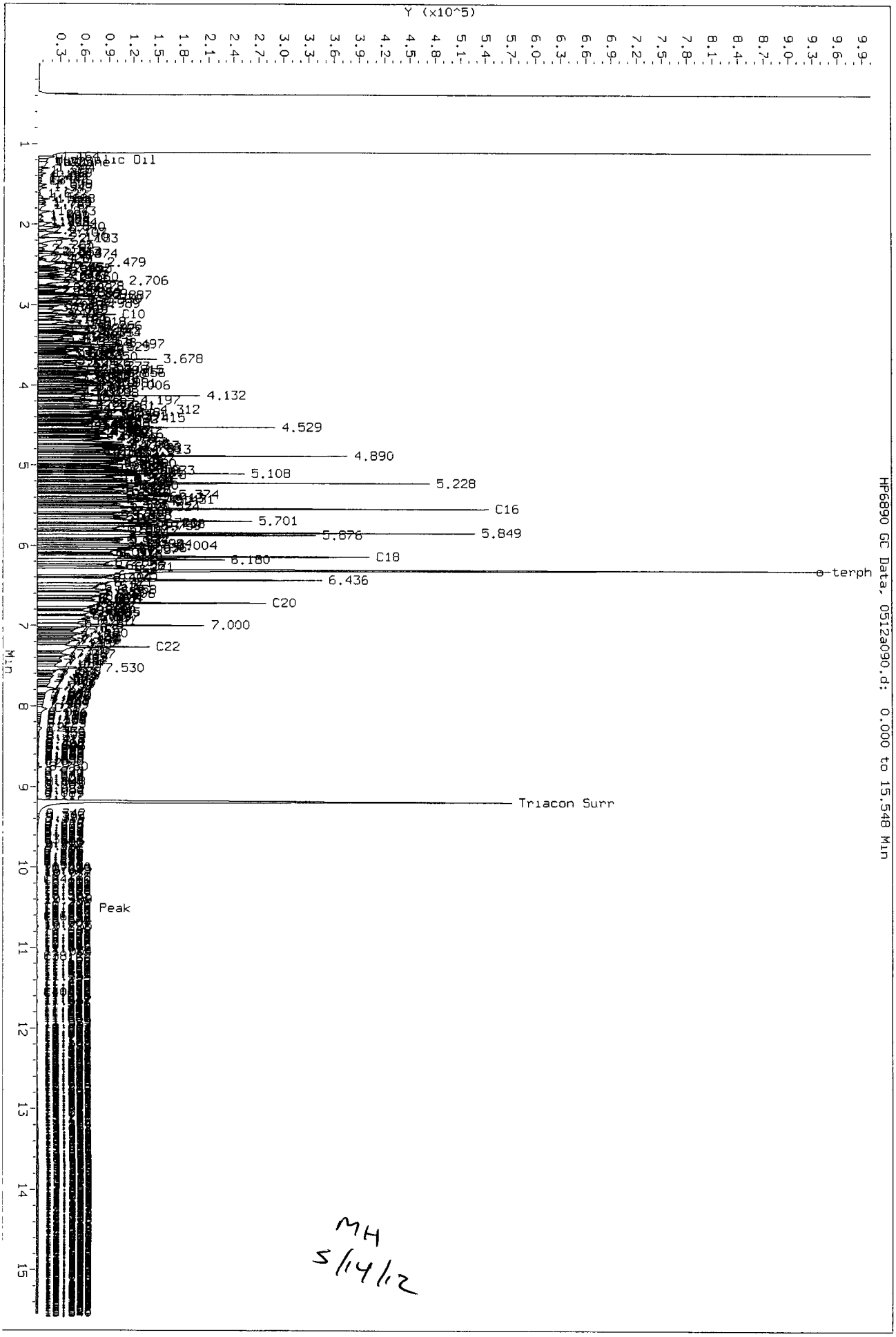
Instrument: fid4a.i

Operator: MH
Column diameter: 0.25

Column phase: RTX-1

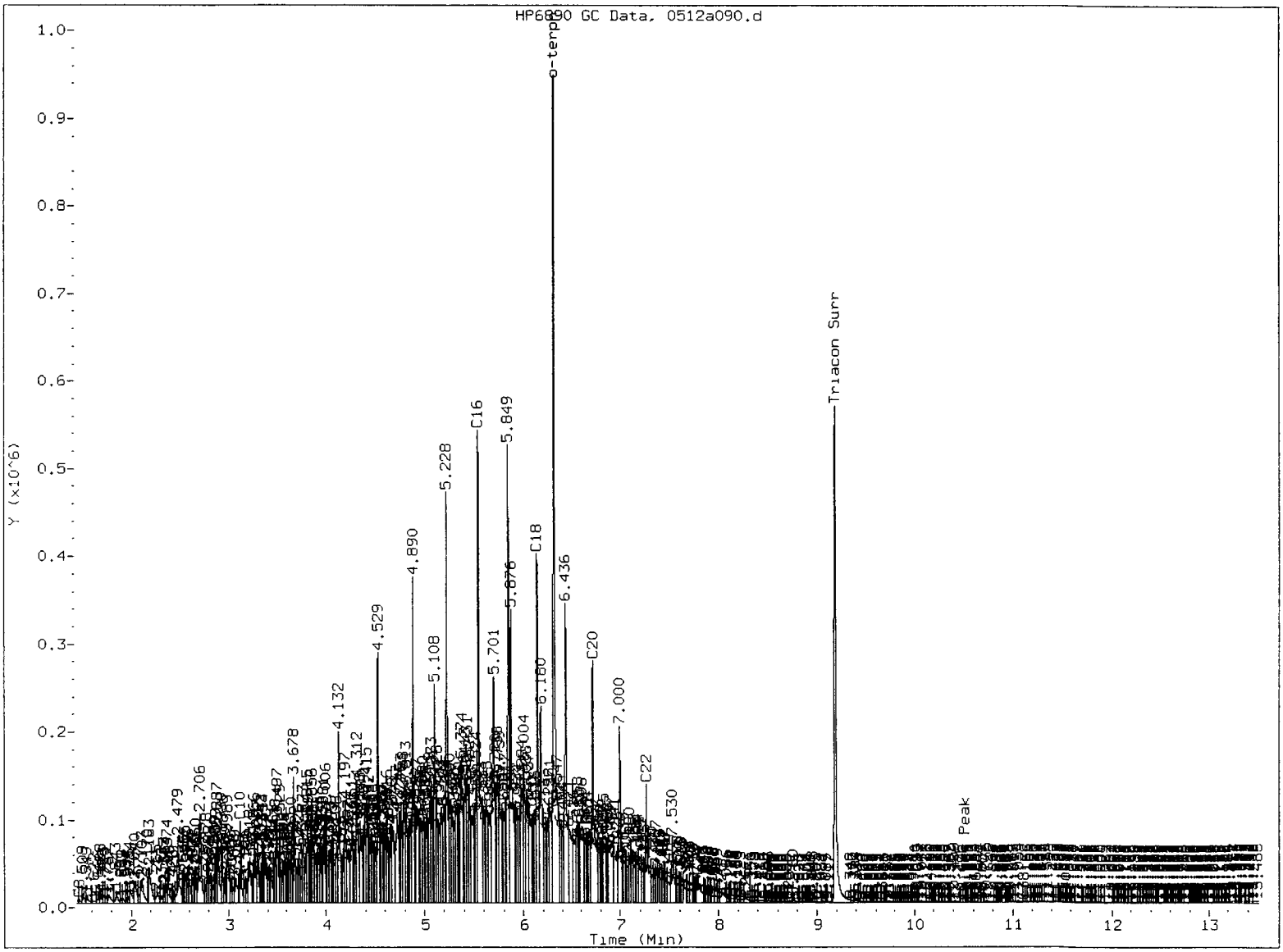
UT57.00110




Data File: /chem3/fid4a.i/20120512a.b/0512a090.d
Injection Date: 13-MAY-2012 18:40
Instrument: fid4a.i
Client Sample ID: UT23LCSW1
Y (x10^5)
Mineral Oil
2.479
2.706
C10
3.678
4.132
4.197
4.312
4.529
4.890
5.108
5.228
C16
5.701
5.849
5.876
6.004
6.180
C18
o-terph
6.436
C20
7.000
C22
7.530
Triacon Surr
Peak
Min
HP6890 GC Data, 0512a090.d: 0.000 to 15.548 Min

MH
5/14/12

FID:4A-2C/RTX-1 UT23LCSW1 FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/14/12

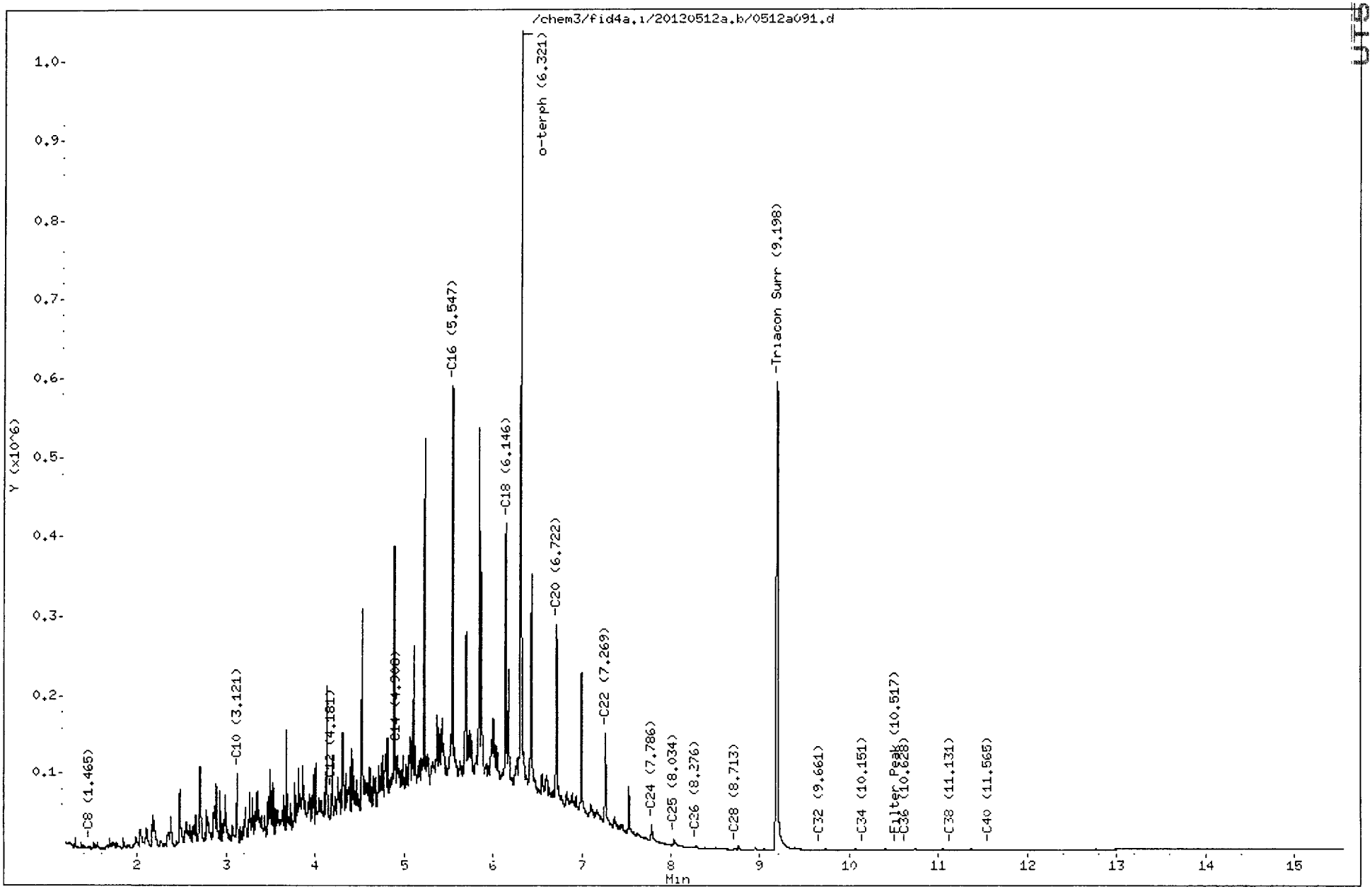
Data File: /chem3/fid4a.i/20120512a.b/0512av91.d
Date : 13-MAY-2012 19:04
Client ID: UT23LCSDW1
Sample Info: UT23LCSDW1

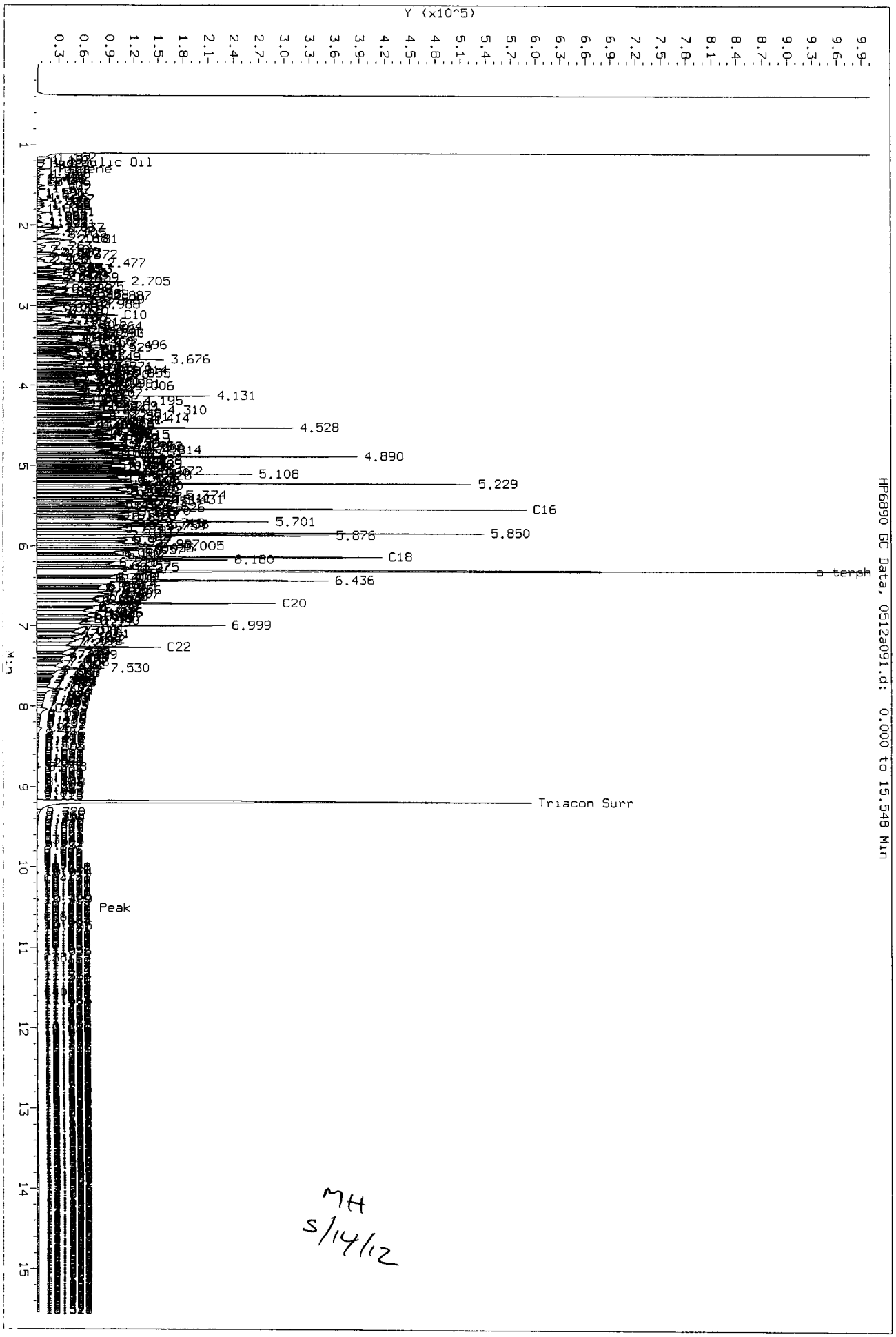
Column phase: RTX-1

Instrument: fid4a.i

Operator: MH
Column diameter: 0.25

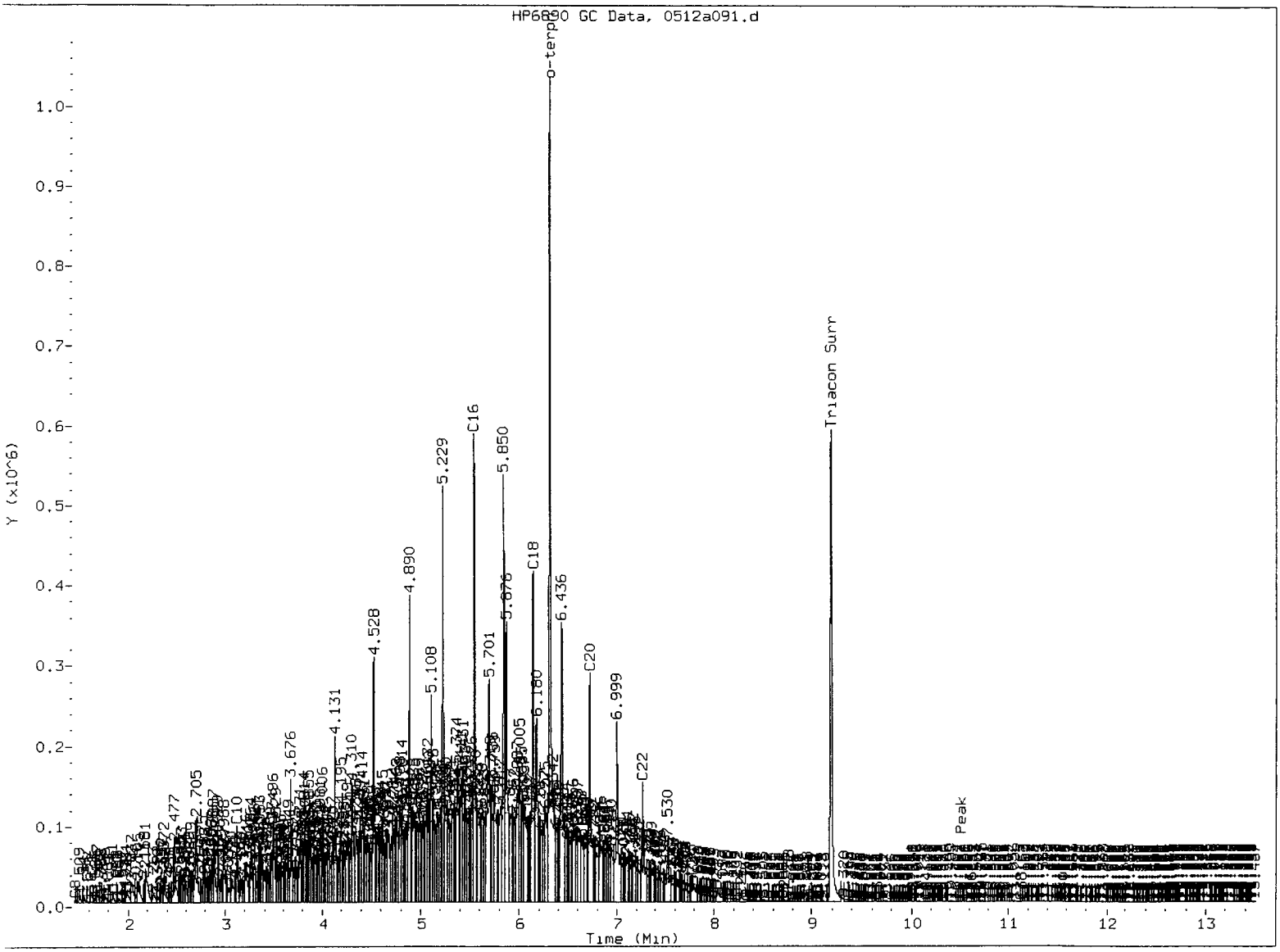
UT57:00113




Y (x10^5)
Min
Data File: /chem3/fid4a.i/20120512a.b/0512a091.d
Injection Date: 13-MAY-2012 19:04
Instrument: fid4a.i
Client Sample ID: UT23LCSDW1
HP6890 GC Data, 0512a091.d: 0.000 to 15.548 Min
c 011
2.477
2.705
C10
3.676
4.131
4.310
4.528
4.890
5.108
5.229
C16
5.701
5.876
5.850
6.180
C18
o-terph
6.436
C20
6.999
C22
7.530
Triacon Surr
Peak

MH
5/14/12

FID:4A-2C/RTX-1 UT23LCSDW1 FID:4A SIGNAL



MANUAL INTEGRATION

X 1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/14/02

Data File: /chem3/fid4a.i/20120512a.b/0512a103.d

Date : 13-MAY-2012 23:54

Client ID: GP4-W-10

Sample Info: UT57D

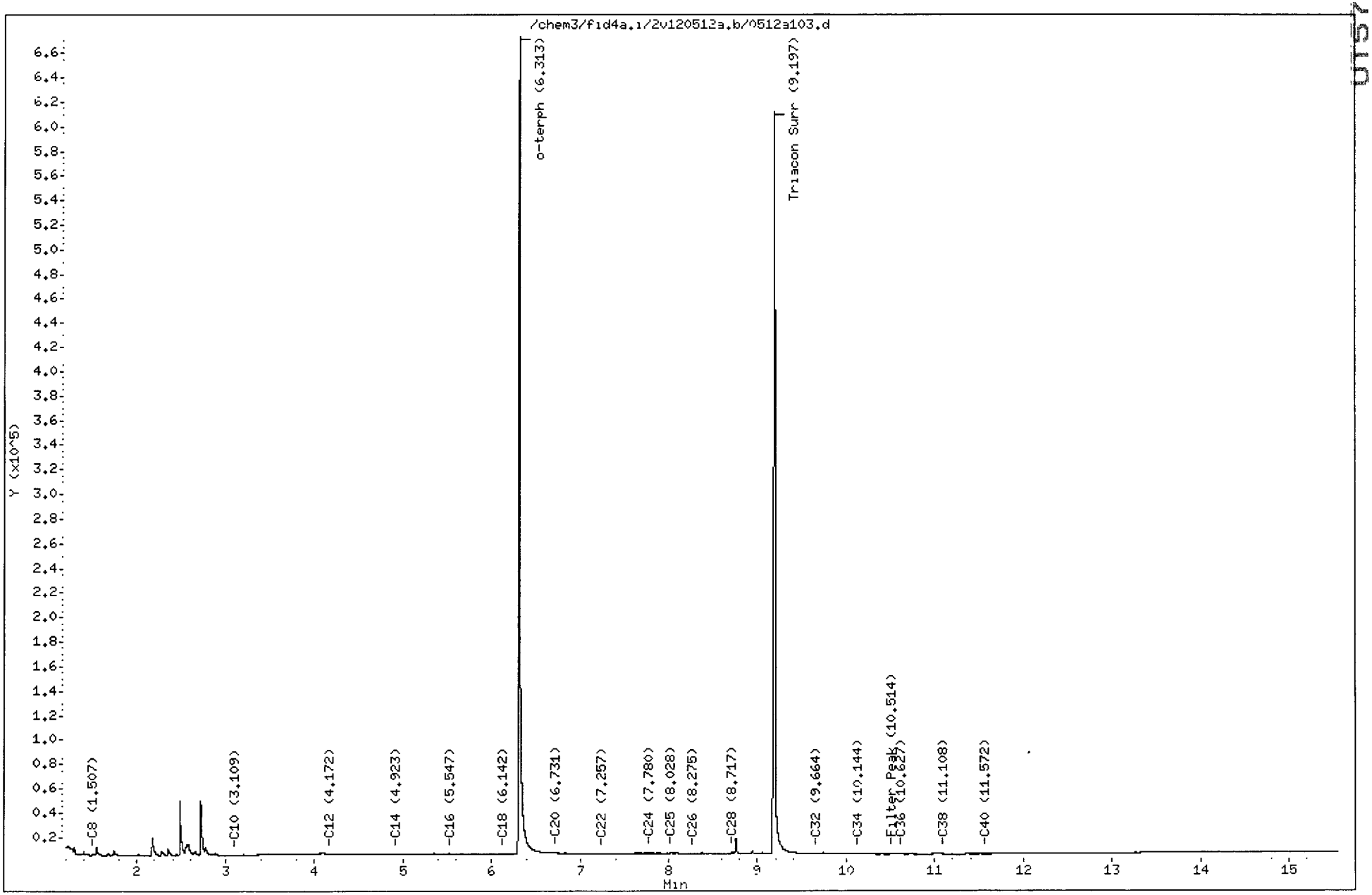
Column phase: RTX-1

Instrument: fid4a.i

Operator: MH

Column diameter: 0.25

UT57 : 2015



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH
Page 1 of 1

Sample ID: MW1-S-3.1
SAMPLE

Lab Sample ID: UT57A
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Date Extracted: 05/15/12
Percent Moisture: 25.8%

Sample Amount: 7.61 g-dry-wt
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 05/18/12 15:50
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Aromatic
Date Analyzed: 05/19/12 00:56
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Range	RL	Result	
C8-C10 Aliphatics	**2,600**	**3,800**	**B**
C10-C12 Aliphatics	2,600	< 2,600	U
C12-C16 Aliphatics	2,600	< 2,600	U
C16-C21 Aliphatics	**2,600**	**6,300**	
C21-C34 Aliphatics	**2,600**	**10,000**	
C8-C10 Aromatics	2,600	< 2,600	U
C10-C12 Aromatics	2,600	< 2,600	U
C12-C16 Aromatics	2,600	< 2,600	U
C16-C21 Aromatics	2,600	< 2,600	U
C21-C34 Aromatics	2,600	< 2,600	U

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	86.0%
Aromatic	o-Terphenyl	90.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH
Page 1 of 1

Sample ID: MB-051512
METHOD BLANK

Lab Sample ID: MB-051512
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/15/12
Percent Moisture: NA

Sample Amount: 10.0 g-as-rec
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 05/18/12 14:36
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Aromatic
Date Analyzed: 05/18/12 23:42
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	**2,000**	**2,000**
C10-C12 Aliphatics	2,000	< 2,000 U
C12-C16 Aliphatics	2,000	< 2,000 U
C16-C21 Aliphatics	2,000	< 2,000 U
C21-C34 Aliphatics	2,000	< 2,000 U
C8-C10 Aromatics	2,000	< 2,000 U
C10-C12 Aromatics	2,000	< 2,000 U
C12-C16 Aromatics	2,000	< 2,000 U
C16-C21 Aromatics	2,000	< 2,000 U
C21-C34 Aromatics	2,000	< 2,000 U

Reported in µg/kg (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	90.9%
Aromatic	o-Terphenyl	90.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH
Page 1 of 1

Sample ID: LCS-051512
LAB CONTROL

Lab Sample ID: LCS-051512
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/15/12

Sample Amount: 10.0 g-as-rec
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 05/18/12 15:01
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Aromatic
Date Analyzed: 05/19/12 00:07
Instrument/Analyst: FID8/MH

Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
C8-C10 Aliphatics	12000 B	15000	80.0%
C10-C12 Aliphatics	12000	15000	80.0%
C12-C16 Aliphatics	16000	15000	107%
C16-C21 Aliphatics	15000	15000	100%
C10-C12 Aromatics	12200	15000	81.3%
C12-C16 Aromatics	12900	15000	86.0%
C16-C21 Aromatics	27300	30000	91.0%
C21-C34 Aromatics	29700	30000	99.0%

Results reported in µg/kg

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	92.6%
Aromatic	o-Terphenyl	95.3%

ANALYTICAL RESOURCES INCORPORATED

AREPH SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	OTER	TOT OUT
MB-051512	90.3%	0
LCS-051512	95.3%	0
MW1-S-3.1	90.8%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(34-133)	(10-143)

Prep Method: SW3580A
Log Number Range: 12-8335 to 12-8335

FORM-II AREPH

ANALYTICAL RESOURCES INCORPORATED

ALEPH SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	COD	TOT OUT
MB-051512	90.9%	0
LCS-051512	92.6%	0
MW1-S-3.1	86.0%	0

	LCS/MB LIMITS	QC LIMITS
(COD) = 1-Chlorooctadecane	(27-128)	(39-131)

Prep Method: SW3580A
Log Number Range: 12-8335 to 12-8335

UT57:00121

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW1-S-3.1
SAMPLE

Lab Sample ID: UT57A
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/17/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Percent Total Solids: 73.9%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/10/12	200.8	05/16/12	**7440-38-2**	**Arsenic**	0.3	**4.3**	
3050B	05/10/12	200.8	05/16/12	**7440-39-3**	**Barium**	0.6	**71.0**	
3050B	05/10/12	200.8	05/16/12	7440-43-9	Cadmium	0.1	0.1	U
3050B	05/10/12	200.8	05/16/12	**7440-47-3**	**Chromium**	0.6	**20.2**	
3050B	05/10/12	200.8	05/16/12	**7439-92-1**	**Lead**	0.1	**7.9**	
CLP	05/10/12	7471A	05/11/12	**7439-97-6**	**Mercury**	0.03	**0.03**	
3050B	05/10/12	200.8	05/16/12	7782-49-2	Selenium	0.6	0.6	U
3050B	05/10/12	200.8	05/16/12	7440-22-4	Silver	0.3	0.3	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW2-S-2
SAMPLE

Lab Sample ID: UT57B
LIMS ID: 12-8336
Matrix: Soil
Data Release Authorized:
Reported: 05/17/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Percent Total Solids: 88.0%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/10/12	200.8	05/16/12	**7440-38-2**	**Arsenic**	0.2	**3.2**	
3050B	05/10/12	200.8	05/16/12	**7440-39-3**	**Barium**	0.6	**114**	
3050B	05/10/12	200.8	05/16/12	**7440-43-9**	**Cadmium**	0.1	**0.1**	
3050B	05/10/12	200.8	05/16/12	**7440-47-3**	**Chromium**	0.6	**14.6**	
3050B	05/10/12	200.8	05/16/12	**7439-92-1**	**Lead**	0.1	**31.4**	
CLP	05/10/12	7471A	05/11/12	**7439-97-6**	**Mercury**	0.02	**0.05**	
3050B	05/10/12	200.8	05/16/12	7782-49-2	Selenium	0.6	0.6	U
3050B	05/10/12	200.8	05/16/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: MW3-S-1.9
SAMPLE

Lab Sample ID: UT57C
LIMS ID: 12-8337
Matrix: Soil
Data Release Authorized:
Reported: 05/17/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Percent Total Solids: 77.1%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/10/12	200.8	05/16/12	**7439-92-1**	**Lead**	0.1	**3.5**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: LAB CONTROL**

Lab Sample ID: UT57LCS
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/17/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	25.1	25.0	100%	
Barium	200.8	25.0	25.0	100%	
Cadmium	200.8	24.9	25.0	99.6%	
Chromium	200.8	24.7	25.0	98.8%	
Lead	200.8	24.6	25.0	98.4%	
Mercury	7471A	0.50	0.50	100%	
Selenium	200.8	78.7	80.0	98.4%	
Silver	200.8	25.7	25.0	103%	

Reported in mg/kg-dry

N-Control limit not met
NA-Not Applicable, Analyte Not Spiked
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: METHOD BLANK**

Lab Sample ID: UT57MB
LIMS ID: 12-8335
Matrix: Soil
Data Release Authorized:
Reported: 05/17/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/10/12	200.8	05/16/12	7440-38-2	Arsenic	0.2	0.2	U
3050B	05/10/12	200.8	05/16/12	7440-39-3	Barium	0.5	0.5	U
3050B	05/10/12	200.8	05/16/12	7440-43-9	Cadmium	0.1	0.1	U
3050B	05/10/12	200.8	05/16/12	7440-47-3	Chromium	0.5	0.5	U
3050B	05/10/12	200.8	05/16/12	7439-92-1	Lead	0.1	0.1	U
CLP	05/10/12	7471A	05/11/12	7439-97-6	Mercury	0.02	0.02	U
3050B	05/10/12	200.8	05/16/12	7782-49-2	Selenium	0.5	0.5	U
3050B	05/10/12	200.8	05/16/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: GP4-W-10
SAMPLE

Lab Sample ID: UT57D
LIMS ID: 12-8338
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/07/12
Date Received: 05/08/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/11/12	200.8	05/16/12	**7440-38-2**	**Arsenic**	0.2	**0.3**	
200.8	05/11/12	200.8	05/16/12	**7440-39-3**	**Barium**	0.5	**42.8**	
200.8	05/11/12	200.8	05/16/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/11/12	200.8	05/16/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/11/12	200.8	05/16/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/10/12	7470A	05/14/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/11/12	200.8	05/16/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/11/12	200.8	05/16/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: UT57LCS
LIMS ID: 12-8338
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	25.5	25.0	102%	
Barium	200.8	25.6	25.0	102%	
Cadmium	200.8	24.8	25.0	99.2%	
Chromium	200.8	25.1	25.0	100%	
Lead	200.8	25.1	25.0	100%	
Mercury	7470A	1.9	2.0	95.0%	
Selenium	200.8	78.5	80.0	98.1%	
Silver	200.8	26.1	25.0	104%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: METHOD BLANK

Lab Sample ID: UT57MB
LIMS ID: 12-8338
Matrix: Water
Data Release Authorized:
Reported: 05/17/12

QC Report No: UT57-Maul, Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/11/12	200.8	05/16/12	7440-38-2	Arsenic	0.2	0.2	U
200.8	05/11/12	200.8	05/16/12	7440-39-3	Barium	0.5	0.5	U
200.8	05/11/12	200.8	05/16/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/11/12	200.8	05/16/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/11/12	200.8	05/16/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/10/12	7470A	05/14/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/11/12	200.8	05/16/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/11/12	200.8	05/16/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

Analytical Resources, Incorporated
Analytical Chemists and Consultants

10 May 2012

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: Sims-N Cascade Ford, 0747.01.01
ARI Job No.: UT73

Dear Heather:

Please find enclosed a copy of the original Chain-of-Custody (COC) record and the final results for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted four soil samples and two water samples on May 9, 2012. The samples were analyzed for NWTPH-HCID as requested. (The data for the remaining samples will be mailed under separate cover.)

These analyses proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file UT73

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: UT73	Turn-around Requested: NWTPH-HCID = 48-HR TAT; OTHERS = STD.	Page: 1 of 2	
ARI Client Company: Maul Foster & Alongi	Phone: 360-927-1397	Date: 5/8/12	Ice Present? Y
Client Contact: Heather Hirsch		No. of Coolers: 3	Cooler Temps: 4.1, 2.4, 1.0
Client Project Name: SIMS - N. CASCADE FORD			
Client Project #: 0747.01.01	Samplers: H. Hirsch		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: NWTPH-Gx	NWTPH-Dx	Metals (RCRA 8 by 6020)	VOCs (low level by 8260B)	SVOCs (8270C)	PAHs (8270SIM)	PCBs (8082)	NWTPH-VPH	Notes/Comments: NWTPH-HCID	Lead (by 6020)
GP5-S-2	5/8/12	0800	SOIL	9	Hold	Hold	X	Hold	Hold	X	Hold	—	X	—
GP5-S-5.6		0805		9	Hold	Hold	X	Hold	Hold	X	Hold	—	X	—
GP6-S-2.9		1030		10	X	—	—	X	—	—	—	X	—	X
GP7-S-2.9		1145		10	X	—	—	X	—	—	—	X	—	X
GP8-S-2.8		1315		10	X	—	—	X	—	—	—	X	—	X
GP9-S-2		1450		9	Hold	Hold	X	Hold	Hold	X	Hold	—	X	—
GP9-S-5.6	↓	1500	↓	9	Hold	Hold	X	Hold	Hold	X	Hold	—	X	—

Comments/Special Instructions: edd's in Equis format; pdf lab report (no hard copy). Hold = hold pending HCID results. X = analyze, — = do not analyze	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: Heather Hirsch	Printed Name: Rachel Kelle	Printed Name:	Printed Name:
	Company: Maul Foster & Alongi	Company: ARI	Company:	Company:
	Date & Time: 5/9/12 0700	Date & Time: 7/9/12 8:47	Date & Time:	Date & Time:

UT73 SSSS

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: UT73	Turn-around Requested: NWTPH-HCID= 48-HR TAT; OTHERS= STD.	Page: 2 of 2	
ARI Client Company: Maul Foster & Alongi	Phone: 360-927-1309	Date: 5/8/12	Ice Present? Y
Client Contact: Heather Hirsch		No. of Coolers: 3	Cooler Temps: 4.1, 2.4, 1.0
Client Project Name: SIMS - N. CASCADE FORD			
Client Project #: 0747.01.01	Samplers: H. Hirsch		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: NWTPH-Gx	NWTPH-Dx	VOCs (low level by 8260)	SVOCs (8270C)	PAHs (8270SIM)	Metals (RCRA 8 by 6020)	NWTPH-HCID	Lead (6020)	Notes/Comments
GP5-W-10	5/8/12	0830	WATER	14	Hold	Hold	Hold	Hold	X	X	X	—	
GP6-W-9		1100		6	X	—	X	—	—	—	—	X	
GP7-W-8		1215		6	X	—	X	—	—	—	—	X	
GP8-W-8		1330		6	X	—	X	—	—	—	—	X	
GP9-W-10		1600		14	Hold	Hold	Hold	Hold	X	X	X	—	
Equipment Blank	↓	1730		12	X	X	X	X	X	X	—	—	
TRIP BLANK	4/30/12		↓	3									

Comments/Special Instructions: add's in Equis format; pdf lab report (no hardcopy). Hold = Hold pending HCID results. X = analyze; — = do not analyze	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: Heather Hirsch	Printed Name: Rachel Relle	Printed Name:	Printed Name:
	Company: Maul Foster & Alongi	Company: AR	Company:	Company:
	Date & Time: 5/9/12 0900	Date & Time: 5/9/12 8:47	Date & Time:	Date & Time:

UT73 00003

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Maul, Foster + Alongi
Project Name: SIMS - N Cascade Ford
COC No(s): _____ (NA)
Delivered by: Fed-Ex UPS (Courier) Hand Delivered Other: _____
Assigned ARI Job No: UT73
Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	(YES)	NO
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 4.1 2.4 1.0 ___ ___
If cooler temperature is out of compliance fill out form 00070F
Temp Gun ID#: 90877952

Cooler Accepted by: JM Date: 5/9/12 Time: 847

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO) JM
What kind of packing material was used? (Bubble Wrap) (Wet Ice) Gel Packs (Baggies) Foam Block Paper Other: _____			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	YES	(NO)
Were all VOC vials free of air bubbles?	(NA)	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

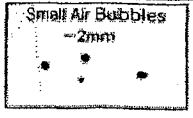
Samples Logged by: JM Date: 5/9/12 Time: 1125

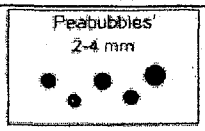
***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:







Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: UT73
Client: Maul Foster & Alongi
Project Event: 0747.01.01
Project Name: SIMS - N Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	GP5-S-2	UT73A	12-8431	Soil	05/08/12 08:00	05/09/12 08:47
2.	GP5-S-5.6	UT73B	12-8432	Soil	05/08/12 08:05	05/09/12 08:47
3.	GP9-S-2	UT73C	12-8433	Soil	05/08/12 14:50	05/09/12 08:47
4.	GP9-S-5.6	UT73D	12-8434	Soil	05/08/12 15:00	05/09/12 08:47
5.	GP5-W-10	UT73E	12-8435	Water	05/08/12 08:30	05/09/12 08:47
6.	GP9-W-10	UT73F	12-8436	Water	05/08/12 16:00	05/09/12 08:47

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Duplicate RPD is not within established control limits
B	Reported value is less than the CRDL but ≥ the Reporting Limit
N	Matrix Spike recovery not within established control limits
NA	Not Applicable, analyte not spiked
H	The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
L	Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Flagged value is not within established control limits
B	Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
J	Estimated concentration when the value is less than ARI's established reporting limits
D	The spiked compound was not detected due to sample extract dilution
E	Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

UT73:00006

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

UT73 : 00007

Geotechnical Data

A	The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
F	Samples were frozen prior to particle size determination
SM	Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
SS	Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
W	Weight of sample in some pipette aliquots was below the level required for accurate weighting

UT73:00008

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPH-HCID Method by GC/FID
Page 1 of 1
Matrix: Water

QC Report No: UT73-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Data Release Authorized:
Reported: 05/11/12

ARI ID	Sample ID	Extraction Date	Analysis Date	DL	Range	Result
MB-051012	Method Blank	05/10/12	05/10/12	1.0	Gas	< 0.25 U
12-8435					Diesel	< 0.50 U
					Oil	< 0.50 U
					o-Terphenyl	80.0%
UT73E	GP5-W-10	05/10/12	05/10/12	1.0	Gas	< 0.25 U
12-8435	HC ID: ---				Diesel	< 0.50 U
					Oil	< 0.50 U
					o-Terphenyl	81.4%
UT73F	GP9-W-10	05/10/12	05/10/12	1.0	Gas	< 0.25 U
12-8436	HC ID: ---				Diesel	< 0.50 U
					Oil	< 0.50 U
					o-Terphenyl	85.2%

Reported in mg/L (ppm)

Gas value based on total peaks in the range from Toluene to C12.
Diesel value based on the total peaks in the range from C12 to C24.
Oil value based on the total peaks in the range from C24 to C38.

ANALYTICAL RESOURCES INCORPORATED

HCID SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UT73-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	O-TER	TOT OUT
MB-051012	80.0%	0
GP5-W-10	81.4%	0
GP9-W-10	85.2%	0

	LCS/MB LIMITS	QC LIMITS
(O-TER) = o-Terphenyl	(55-110)	(50-150)

Prep Method: SW3510C
Log Number Range: 12-8435 to 12-8436

ANALYTICAL RESOURCES INCORPORATED

TOTAL HCID RANGE HYDROCARBONS-EXTRACTION REPORT

Matrix: Water
Date Received: 05/09/12

ARI Job: UT73
Project: SIMS - N Cascade Ford
0747.01.01

ARI ID	Client ID	Sample Amt	Final Vol	Prep Date
12-8435-051012MB	Method Blank	500 mL	1.00 mL	05/10/12
12-8435-UT73E	GP5-W-10	500 mL	1.00 mL	05/10/12
12-8436-UT73F	GP9-W-10	500 mL	1.00 mL	05/10/12

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPH-HCID Method by GC/FID
Page 1 of 1
Matrix: Soil

QC Report No: UT73-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Data Release Authorized:
Reported: 05/10/12

ARI ID	Sample ID	Extraction Date	Analysis Date	DL	Range	Result
MB-050912	Method Blank	05/09/12	05/10/12	1.0	Gas	< 20 U
12-8431					Diesel	< 50 U
					Oil	< 100 U
					o-Terphenyl	101%
UT73A	GP5-S-2	05/09/12	05/10/12	1.0	Gas	< 20 U
12-8431	HC ID: **DRO/MO**				**Diesel**	**> 50**
					Oil	**> 100**
					o-Terphenyl	110%
UT73B	GP5-S-5.6	05/09/12	05/10/12	1.0	Gas	< 20 U
12-8432	HC ID: ---				Diesel	< 50 U
					Oil	< 100 U
					o-Terphenyl	102%
UT73C	GP9-S-2	05/09/12	05/10/12	1.0	Gas	< 20 U
12-8433	HC ID: ---				Diesel	< 50 U
					Oil	< 100 U
					o-Terphenyl	97.5%
UT73D	GP9-S-5.6	05/09/12	05/10/12	1.0	Gas	< 20 U
12-8434	HC ID: ---				Diesel	< 50 U
					Oil	< 100 U
					o-Terphenyl	98.8%

Reported in mg/kg (ppm)

Gas value based on total peaks in the range from Toluene to C12.
Diesel value based on the total peaks in the range from C12 to C24.
Oil value based on the total peaks in the range from C24 to C38.

ANALYTICAL RESOURCES INCORPORATED

HCID SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT73-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	O-TER	TOT OUT
050912MB	101%	0
GP5-S-2	110%	0
GP5-S-5.6	102%	0
GP9-S-2	97.5%	0
GP9-S-5.6	98.8%	0

	LCS/MB LIMITS	QC LIMITS
(O-TER) = o-Terphenyl	(68-122)	(50-150)

Prep Method: SW3550B
Log Number Range: 12-8431 to 12-8434

ANALYTICAL RESOURCES INCORPORATED

TOTAL HCID RANGE HYDROCARBONS-EXTRACTION REPORT

Matrix: Soil
Date Received: 05/09/12

ARI Job: UT73
Project: SIMS - N Cascade Ford
0747.01.01

ARI ID	Client ID	Sample Amt	Final Vol	Basis	Prep Date
12-8431-050912MB	Method Blank	10.0 g	5.00 mL	-	05/09/12
12-8431-UT73A	GP5-S-2	7.53 g	5.00 mL	D	05/09/12
12-8432-UT73B	GP5-S-5.6	7.61 g	5.00 mL	D	05/09/12
12-8433-UT73C	GP9-S-2	6.97 g	5.00 mL	D	05/09/12
12-8434-UT73D	GP9-S-5.6	7.49 g	5.00 mL	D	05/09/12

Basis: D=Dry Weight W=As Received

Analytical Resources, Incorporated
Analytical Chemists and Consultants

4 June 2012

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: Sims-N Cascade Ford, 0747.01.01
ARI Job No.: UT95

Dear Heather:

Please find enclosed corrected reports for the samples from the project referenced above.

The sampling date for the soil samples has been corrected.

If you have any further questions, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
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Enclosures

cc: file UT95

MDH/mdh

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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP6-S-2.9**
Page 1 of 2 **SAMPLE**

Lab Sample ID: UT95C
LIMS ID: 12-8592
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Instrument/Analyst: NT9/PAB
Date Analyzed: 05/16/12 17:01

Sample Amount: 4.48 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 19.2%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.1	< 1.1	U
74-83-9	Bromomethane	1.1	< 1.1	U
75-01-4	Vinyl Chloride	1.1	< 1.1	U
75-00-3	Chloroethane	1.1	< 1.1	U
75-09-2	**Methylene Chloride**	**2.2**	**4.2**	
67-64-1	**Acetone**	**5.6**	**37**	**B**
75-15-0	Carbon Disulfide	1.1	< 1.1	U
75-35-4	1,1-Dichloroethene	1.1	< 1.1	U
75-34-3	1,1-Dichloroethane	1.1	< 1.1	U
156-60-5	trans-1,2-Dichloroethene	1.1	< 1.1	U
156-59-2	cis-1,2-Dichloroethene	1.1	< 1.1	U
67-66-3	Chloroform	1.1	< 1.1	U
107-06-2	1,2-Dichloroethane	1.1	< 1.1	U
78-93-3	2-Butanone	5.6	< 5.6	U
71-55-6	1,1,1-Trichloroethane	1.1	< 1.1	U
56-23-5	Carbon Tetrachloride	1.1	< 1.1	U
108-05-4	Vinyl Acetate	5.6	< 5.6	U
75-27-4	Bromodichloromethane	1.1	< 1.1	U
78-87-5	1,2-Dichloropropane	1.1	< 1.1	U
10061-01-5	cis-1,3-Dichloropropene	1.1	< 1.1	U
79-01-6	Trichloroethene	1.1	< 1.1	U
124-48-1	Dibromochloromethane	1.1	< 1.1	U
79-00-5	1,1,2-Trichloroethane	1.1	< 1.1	U
71-43-2	Benzene	1.1	< 1.1	U
10061-02-6	trans-1,3-Dichloropropene	1.1	< 1.1	U
110-75-8	2-Chloroethylvinylether	5.6	< 5.6	U
75-25-2	Bromoform	1.1	< 1.1	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.6	< 5.6	U
591-78-6	2-Hexanone	5.6	< 5.6	U
127-18-4	Tetrachloroethene	1.1	< 1.1	U
79-34-5	1,1,2,2-Tetrachloroethane	1.1	< 1.1	U
108-88-3	**Toluene**	**1.1**	**0.8**	**J**
108-90-7	Chlorobenzene	1.1	< 1.1	U
100-41-4	Ethylbenzene	1.1	< 1.1	U
100-42-5	Styrene	1.1	< 1.1	U
75-69-4	Trichlorofluoromethane	1.1	< 1.1	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.2	< 2.2	U
179601-23-1	m,p-Xylene	1.1	< 1.1	U
95-47-6	o-Xylene	1.1	< 1.1	U
95-50-1	1,2-Dichlorobenzene	1.1	< 1.1	U
541-73-1	1,3-Dichlorobenzene	1.1	< 1.1	U
106-46-7	1,4-Dichlorobenzene	1.1	< 1.1	U
107-02-8	Acrolein	56	< 56	U
74-88-4	Methyl Iodide	1.1	< 1.1	U
74-96-4	Bromoethane	2.2	< 2.2	U
107-13-1	Acrylonitrile	5.6	< 5.6	U
563-58-6	1,1-Dichloropropene	1.1	< 1.1	U
74-95-3	Dibromomethane	1.1	< 1.1	U
630-20-6	1,1,1,2-Tetrachloroethane	1.1	< 1.1	U
96-12-8	1,2-Dibromo-3-chloropropane	5.6	< 5.6	U
96-18-4	1,2,3-Trichloropropane	2.2	< 2.2	U
110-57-6	trans-1,4-Dichloro-2-butene	5.6	< 5.6	U
108-67-8	1,3,5-Trimethylbenzene	1.1	< 1.1	U

Lab Sample ID: UT95C
LIMS ID: 12-8592
Matrix: Soil
Date Analyzed: 05/16/12 17:01

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	1.1	< 1.1	U
87-68-3	Hexachlorobutadiene	5.6	< 5.6	U
106-93-4	Ethylene Dibromide	1.1	< 1.1	U
74-97-5	Bromochloromethane	1.1	< 1.1	U
594-20-7	2,2-Dichloropropane	1.1	< 1.1	U
142-28-9	1,3-Dichloropropane	1.1	< 1.1	U
98-82-8	Isopropylbenzene	1.1	< 1.1	U
103-65-1	n-Propylbenzene	1.1	< 1.1	U
108-86-1	Bromobenzene	1.1	< 1.1	U
95-49-8	2-Chlorotoluene	1.1	< 1.1	U
106-43-4	4-Chlorotoluene	1.1	< 1.1	U
98-06-6	tert-Butylbenzene	1.1	< 1.1	U
135-98-8	sec-Butylbenzene	1.1	< 1.1	U
99-87-6	4-Isopropyltoluene	1.1	< 1.1	U
104-51-8	n-Butylbenzene	1.1	< 1.1	U
120-82-1	1,2,4-Trichlorobenzene	5.6	< 5.6	U
91-20-3	Naphthalene	5.6	< 5.6	U
87-61-6	1,2,3-Trichlorobenzene	5.6	< 5.6	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	116%
d8-Toluene	100%
Bromofluorobenzene	102%
d4-1,2-Dichlorobenzene	103%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP7-S-2.9**
 SAMPLE

Lab Sample ID: UT95D
LIMS ID: 12-8593
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Instrument/Analyst: NT9/PAB
Date Analyzed: 05/16/12 17:22

Sample Amount: 4.65 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 21.4%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.1	< 1.1	U
74-83-9	Bromomethane	1.1	< 1.1	U
75-01-4	Vinyl Chloride	1.1	< 1.1	U
75-00-3	Chloroethane	1.1	< 1.1	U
75-09-2	**Methylene Chloride**	**2.2**	**3.2**	
67-64-1	**Acetone**	**5.4**	**82**	**B**
75-15-0	Carbon Disulfide	1.1	< 1.1	U
75-35-4	1,1-Dichloroethene	1.1	< 1.1	U
75-34-3	1,1-Dichloroethane	1.1	< 1.1	U
156-60-5	trans-1,2-Dichloroethene	1.1	< 1.1	U
156-59-2	cis-1,2-Dichloroethene	1.1	< 1.1	U
67-66-3	Chloroform	1.1	< 1.1	U
107-06-2	1,2-Dichloroethane	1.1	< 1.1	U
78-93-3	2-Butanone	5.4	< 5.4	U
71-55-6	1,1,1-Trichloroethane	1.1	< 1.1	U
56-23-5	Carbon Tetrachloride	1.1	< 1.1	U
108-05-4	Vinyl Acetate	5.4	< 5.4	U
75-27-4	Bromodichloromethane	1.1	< 1.1	U
78-87-5	1,2-Dichloropropane	1.1	< 1.1	U
10061-01-5	cis-1,3-Dichloropropene	1.1	< 1.1	U
79-01-6	Trichloroethene	1.1	< 1.1	U
124-48-1	Dibromochloromethane	1.1	< 1.1	U
79-00-5	1,1,2-Trichloroethane	1.1	< 1.1	U
71-43-2	Benzene	1.1	< 1.1	U
10061-02-6	trans-1,3-Dichloropropene	1.1	< 1.1	U
110-75-8	2-Chloroethylvinylether	5.4	< 5.4	U
75-25-2	Bromoform	1.1	< 1.1	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.4	< 5.4	U
591-78-6	2-Hexanone	5.4	< 5.4	U
127-18-4	Tetrachloroethene	1.1	< 1.1	U
79-34-5	1,1,2,2-Tetrachloroethane	1.1	< 1.1	U
108-88-3	Toluene	1.1	< 1.1	U
108-90-7	Chlorobenzene	1.1	< 1.1	U
100-41-4	Ethylbenzene	1.1	< 1.1	U
100-42-5	Styrene	1.1	< 1.1	U
75-69-4	Trichlorofluoromethane	1.1	< 1.1	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.2	< 2.2	U
179601-23-1	m,p-Xylene	1.1	< 1.1	U
95-47-6	o-Xylene	1.1	< 1.1	U
95-50-1	1,2-Dichlorobenzene	1.1	< 1.1	U
541-73-1	1,3-Dichlorobenzene	1.1	< 1.1	U
106-46-7	1,4-Dichlorobenzene	1.1	< 1.1	U
107-02-8	Acrolein	54	< 54	U
74-88-4	Methyl Iodide	1.1	< 1.1	U
74-96-4	Bromoethane	2.2	< 2.2	U
107-13-1	Acrylonitrile	5.4	< 5.4	U
563-58-6	1,1-Dichloropropene	1.1	< 1.1	U
74-95-3	Dibromomethane	1.1	< 1.1	U
630-20-6	1,1,1,2-Tetrachloroethane	1.1	< 1.1	U
96-12-8	1,2-Dibromo-3-chloropropane	5.4	< 5.4	U
96-18-4	1,2,3-Trichloropropane	2.2	< 2.2	U
110-57-6	trans-1,4-Dichloro-2-butene	5.4	< 5.4	U
108-67-8	1,3,5-Trimethylbenzene	1.1	< 1.1	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP7-S-2.9**
 SAMPLE

Lab Sample ID: UT95D
LIMS ID: 12-8593
Matrix: Soil
Date Analyzed: 05/16/12 17:22

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	1.1	< 1.1	U
87-68-3	Hexachlorobutadiene	5.4	< 5.4	U
106-93-4	Ethylene Dibromide	1.1	< 1.1	U
74-97-5	Bromochloromethane	1.1	< 1.1	U
594-20-7	2,2-Dichloropropane	1.1	< 1.1	U
142-28-9	1,3-Dichloropropane	1.1	< 1.1	U
98-82-8	Isopropylbenzene	1.1	< 1.1	U
103-65-1	n-Propylbenzene	1.1	< 1.1	U
108-86-1	Bromobenzene	1.1	< 1.1	U
95-49-8	2-Chlorotoluene	1.1	< 1.1	U
106-43-4	4-Chlorotoluene	1.1	< 1.1	U
98-06-6	tert-Butylbenzene	1.1	< 1.1	U
135-98-8	sec-Butylbenzene	1.1	< 1.1	U
99-87-6	4-Isopropyltoluene	1.1	< 1.1	U
104-51-8	n-Butylbenzene	1.1	< 1.1	U
120-82-1	1,2,4-Trichlorobenzene	5.4	< 5.4	U
91-20-3	Naphthalene	5.4	< 5.4	U
87-61-6	1,2,3-Trichlorobenzene	5.4	< 5.4	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	126%
d8-Toluene	99.8%
Bromofluorobenzene	99.8%
d4-1,2-Dichlorobenzene	108%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP8-S-2.8**
Page 1 of 2 **SAMPLE**

Lab Sample ID: UT95E
LIMS ID: 12-8594
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Instrument/Analyst: NT9/PAB
Date Analyzed: 05/16/12 17:43

Sample Amount: 3.94 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 21.8%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.3	< 1.3	U
74-83-9	Bromomethane	1.3	< 1.3	U
75-01-4	Vinyl Chloride	1.3	< 1.3	U
75-00-3	Chloroethane	1.3	< 1.3	U
75-09-2	**Methylene Chloride**	**2.5**	**3.6**	
67-64-1	**Acetone**	**6.3**	**45**	**B**
75-15-0	Carbon Disulfide	1.3	< 1.3	U
75-35-4	1,1-Dichloroethene	1.3	< 1.3	U
75-34-3	1,1-Dichloroethane	1.3	< 1.3	U
156-60-5	trans-1,2-Dichloroethene	1.3	< 1.3	U
156-59-2	cis-1,2-Dichloroethene	1.3	< 1.3	U
67-66-3	Chloroform	1.3	< 1.3	U
107-06-2	1,2-Dichloroethane	1.3	< 1.3	U
78-93-3	2-Butanone	6.3	< 6.3	U
71-55-6	1,1,1-Trichloroethane	1.3	< 1.3	U
56-23-5	Carbon Tetrachloride	1.3	< 1.3	U
108-05-4	Vinyl Acetate	6.3	< 6.3	U
75-27-4	Bromodichloromethane	1.3	< 1.3	U
78-87-5	1,2-Dichloropropane	1.3	< 1.3	U
10061-01-5	cis-1,3-Dichloropropene	1.3	< 1.3	U
79-01-6	Trichloroethene	1.3	< 1.3	U
124-48-1	Dibromochloromethane	1.3	< 1.3	U
79-00-5	1,1,2-Trichloroethane	1.3	< 1.3	U
71-43-2	Benzene	1.3	< 1.3	U
10061-02-6	trans-1,3-Dichloropropene	1.3	< 1.3	U
110-75-8	2-Chloroethylvinylether	6.3	< 6.3	U
75-25-2	Bromoform	1.3	< 1.3	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	6.3	< 6.3	U
591-78-6	2-Hexanone	6.3	< 6.3	U
127-18-4	Tetrachloroethene	1.3	< 1.3	U
79-34-5	1,1,2,2-Tetrachloroethane	1.3	< 1.3	U
108-88-3	**Toluene**	**1.3**	**1.0**	**J**
108-90-7	Chlorobenzene	1.3	< 1.3	U
100-41-4	Ethylbenzene	1.3	< 1.3	U
100-42-5	Styrene	1.3	< 1.3	U
75-69-4	Trichlorofluoromethane	1.3	< 1.3	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	< 2.5	U
179601-23-1	m,p-Xylene	1.3	< 1.3	U
95-47-6	o-Xylene	1.3	< 1.3	U
95-50-1	1,2-Dichlorobenzene	1.3	< 1.3	U
541-73-1	1,3-Dichlorobenzene	1.3	< 1.3	U
106-46-7	1,4-Dichlorobenzene	1.3	< 1.3	U
107-02-8	Acrolein	63	< 63	U
74-88-4	Methyl Iodide	1.3	< 1.3	U
74-96-4	Bromoethane	2.5	< 2.5	U
107-13-1	Acrylonitrile	6.3	< 6.3	U
563-58-6	1,1-Dichloropropene	1.3	< 1.3	U
74-95-3	Dibromomethane	1.3	< 1.3	U
630-20-6	1,1,1,2-Tetrachloroethane	1.3	< 1.3	U
96-12-8	1,2-Dibromo-3-chloropropane	6.3	< 6.3	U
96-18-4	1,2,3-Trichloropropane	2.5	< 2.5	U
110-57-6	trans-1,4-Dichloro-2-butene	6.3	< 6.3	U
108-67-8	1,3,5-Trimethylbenzene	1.3	< 1.3	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP8-S-2.8**
Page 2 of 2 **SAMPLE**

Lab Sample ID: UT95E
LIMS ID: 12-8594
Matrix: Soil
Date Analyzed: 05/16/12 17:43

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	1.3	< 1.3	U
87-68-3	Hexachlorobutadiene	6.3	< 6.3	U
106-93-4	Ethylene Dibromide	1.3	< 1.3	U
74-97-5	Bromochloromethane	1.3	< 1.3	U
594-20-7	2,2-Dichloropropane	1.3	< 1.3	U
142-28-9	1,3-Dichloropropane	1.3	< 1.3	U
98-82-8	Isopropylbenzene	1.3	< 1.3	U
103-65-1	n-Propylbenzene	1.3	< 1.3	U
108-86-1	Bromobenzene	1.3	< 1.3	U
95-49-8	2-Chlorotoluene	1.3	< 1.3	U
106-43-4	4-Chlorotoluene	1.3	< 1.3	U
98-06-6	tert-Butylbenzene	1.3	< 1.3	U
135-98-8	sec-Butylbenzene	1.3	< 1.3	U
99-87-6	4-Isopropyltoluene	1.3	< 1.3	U
104-51-8	n-Butylbenzene	1.3	< 1.3	U
120-82-1	1,2,4-Trichlorobenzene	6.3	< 6.3	U
91-20-3	Naphthalene	6.3	< 6.3	U
87-61-6	1,2,3-Trichlorobenzene	6.3	< 6.3	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	96.9%
Bromofluorobenzene	96.4%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-051612A**
 METHOD BLANK

Lab Sample ID: MB-051612A
LIMS ID: 12-8592
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT9/PAB
Date Analyzed: 05/16/12 12:08

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.0	< 1.0	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	Methylene Chloride	2.0	< 2.0	U
67-64-1	**Acetone**	**5.0**	**2.8**	**J**
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	5.0	< 5.0	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	< 2.0	U
179601-23-1	m,p-Xylene	1.0	< 1.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
107-02-8	Acrolein	50	< 50	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	5.0	< 5.0	U
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0	U
96-18-4	1,2,3-Trichloropropane	2.0	< 2.0	U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-051612A**
 METHOD BLANK

Lab Sample ID: MB-051612A
LIMS ID: 12-8592
Matrix: Soil
Date Analyzed: 05/16/12 12:08

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	5.0	< 5.0	U
106-93-4	Ethylene Dibromide	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
91-20-3	**Naphthalene**	**5.0**	**0.6**	**J**
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	98.0%
Bromofluorobenzene	93.7%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-051612A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-051612A
LIMS ID: 12-8592
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT9/PAB
LCSD: NT9/PAB
Date Analyzed LCS: 05/16/12 11:26
LCSD: 05/16/12 11:47

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	47.5	50.0	95.0%	49.3	50.0	98.6%	3.7%
Bromomethane	40.7 Q	50.0	81.4%	43.0 Q	50.0	86.0%	5.5%
Vinyl Chloride	51.9	50.0	104%	53.2	50.0	106%	2.5%
Chloroethane	65.7 Q	50.0	131%	64.5 Q	50.0	129%	1.8%
Methylene Chloride	45.5	50.0	91.0%	45.3	50.0	90.6%	0.4%
Acetone	240 B	250	96.0%	248 B	250	99.2%	3.3%
Carbon Disulfide	55.8	50.0	112%	56.9	50.0	114%	2.0%
1,1-Dichloroethene	50.8	50.0	102%	51.6	50.0	103%	1.6%
1,1-Dichloroethane	49.0	50.0	98.0%	49.1	50.0	98.2%	0.2%
trans-1,2-Dichloroethene	47.6	50.0	95.2%	48.0	50.0	96.0%	0.8%
cis-1,2-Dichloroethene	46.6	50.0	93.2%	47.0	50.0	94.0%	0.9%
Chloroform	46.3	50.0	92.6%	46.5	50.0	93.0%	0.4%
1,2-Dichloroethane	46.7	50.0	93.4%	49.0	50.0	98.0%	4.8%
2-Butanone	212	250	84.8%	231	250	92.4%	8.6%
1,1,1-Trichloroethane	45.9	50.0	91.8%	46.5	50.0	93.0%	1.3%
Carbon Tetrachloride	47.8	50.0	95.6%	51.6	50.0	103%	7.6%
Vinyl Acetate	46.2	50.0	92.4%	51.8	50.0	104%	11.4%
Bromodichloromethane	48.7	50.0	97.4%	50.6	50.0	101%	3.8%
1,2-Dichloropropane	46.4	50.0	92.8%	48.5	50.0	97.0%	4.4%
cis-1,3-Dichloropropene	49.1	50.0	98.2%	50.8	50.0	102%	3.4%
Trichloroethene	45.4	50.0	90.8%	47.8	50.0	95.6%	5.2%
Dibromochloromethane	47.7	50.0	95.4%	50.7	50.0	101%	6.1%
1,1,2-Trichloroethane	46.5	50.0	93.0%	48.6	50.0	97.2%	4.4%
Benzene	46.1	50.0	92.2%	49.0	50.0	98.0%	6.1%
trans-1,3-Dichloropropene	51.0	50.0	102%	52.7	50.0	105%	3.3%
2-Chloroethylvinylether	41.8	50.0	83.6%	45.3	50.0	90.6%	8.0%
Bromoform	45.9	50.0	91.8%	50.9	50.0	102%	10.3%
4-Methyl-2-Pentanone (MIBK)	244	250	97.6%	270	250	108%	10.1%
2-Hexanone	244	250	97.6%	278	250	111%	13.0%
Tetrachloroethene	44.7	50.0	89.4%	47.3	50.0	94.6%	5.7%
1,1,2,2-Tetrachloroethane	43.7	50.0	87.4%	49.8	50.0	99.6%	13.0%
Toluene	45.5	50.0	91.0%	47.8	50.0	95.6%	4.9%
Chlorobenzene	44.8	50.0	89.6%	47.0	50.0	94.0%	4.8%
Ethylbenzene	46.2	50.0	92.4%	49.0	50.0	98.0%	5.9%
Styrene	49.3	50.0	98.6%	51.6	50.0	103%	4.6%
Trichlorofluoromethane	71.7 Q	50.0	143%	71.5 Q	50.0	143%	0.3%
1,1,2-Trichloro-1,2,2-trifluoroetha	50.2	50.0	100%	49.7	50.0	99.4%	1.0%
m,p-Xylene	95.1	100	95.1%	101	100	101%	6.0%
o-Xylene	48.2	50.0	96.4%	51.4	50.0	103%	6.4%
1,2-Dichlorobenzene	44.9	50.0	89.8%	48.4	50.0	96.8%	7.5%
1,3-Dichlorobenzene	44.8	50.0	89.6%	47.8	50.0	95.6%	6.5%
1,4-Dichlorobenzene	44.3	50.0	88.6%	46.8	50.0	93.6%	5.5%
Acrolein	248	250	99.2%	257	250	103%	3.6%
Methyl Iodide	45.1	50.0	90.2%	44.4	50.0	88.8%	1.6%
Bromoethane	50.9	50.0	102%	50.1	50.0	100%	1.6%
Acrylonitrile	45.1	50.0	90.2%	50.1	50.0	100%	10.5%
1,1-Dichloropropene	45.5	50.0	91.0%	49.1	50.0	98.2%	7.6%

Lab Sample ID: LCS-051612A QC Report No: UT95-Maul Foster & Alongi
LIMS ID: 12-8592 Project: SIMS - N Cascade Ford
Matrix: Soil 0747.01.01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Dibromomethane	46.1	50.0	92.2%	49.4	50.0	98.8%	6.9%
1,1,1,2-Tetrachloroethane	46.7	50.0	93.4%	49.3	50.0	98.6%	5.4%
1,2-Dibromo-3-chloropropane	47.9 Q	50.0	95.8%	58.0 Q	50.0	116%	19.1%
1,2,3-Trichloropropane	42.4	50.0	84.8%	48.4	50.0	96.8%	13.2%
trans-1,4-Dichloro-2-butene	45.6	50.0	91.2%	51.0	50.0	102%	11.2%
1,3,5-Trimethylbenzene	46.2	50.0	92.4%	49.7	50.0	99.4%	7.3%
1,2,4-Trimethylbenzene	46.6	50.0	93.2%	50.2	50.0	100%	7.4%
Hexachlorobutadiene	44.2	50.0	88.4%	48.4	50.0	96.8%	9.1%
Ethylene Dibromide	46.4	50.0	92.8%	49.5	50.0	99.0%	6.5%
Bromochloromethane	46.8	50.0	93.6%	46.7	50.0	93.4%	0.2%
2,2-Dichloropropane	45.9	50.0	91.8%	46.6	50.0	93.2%	1.5%
1,3-Dichloropropane	45.4	50.0	90.8%	48.7	50.0	97.4%	7.0%
Isopropylbenzene	44.8	50.0	89.6%	49.9	50.0	99.8%	10.8%
n-Propylbenzene	45.1	50.0	90.2%	49.2	50.0	98.4%	8.7%
Bromobenzene	42.9	50.0	85.8%	46.2	50.0	92.4%	7.4%
2-Chlorotoluene	44.4	50.0	88.8%	47.8	50.0	95.6%	7.4%
4-Chlorotoluene	44.4	50.0	88.8%	47.9	50.0	95.8%	7.6%
tert-Butylbenzene	45.6	50.0	91.2%	50.3	50.0	101%	9.8%
sec-Butylbenzene	46.0	50.0	92.0%	50.6	50.0	101%	9.5%
4-Isopropyltoluene	47.8	50.0	95.6%	51.5	50.0	103%	7.5%
n-Butylbenzene	49.4	50.0	98.8%	52.0	50.0	104%	5.1%
1,2,4-Trichlorobenzene	50.0	50.0	100%	53.3	50.0	107%	6.4%
Naphthalene	48.5 QB	50.0	97.0%	56.7 QB	50.0	113%	15.6%
1,2,3-Trichlorobenzene	49.0	50.0	98.0%	53.4	50.0	107%	8.6%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	101%	97.3%
d8-Toluene	100%	99.7%
Bromofluorobenzene	98.4%	99.0%
d4-1,2-Dichlorobenzene	102%	103%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-051612A	Method Blank	Low	100%	98.0%	93.7%	102%	0
LCS-051612A	Lab Control	Low	101%	100%	98.4%	102%	0
LCSD-051612A	Lab Control Dup	Low	97.3%	99.7%	99.0%	103%	0
UT95C	GP6-S-2.9	Low	116%	100%	102%	103%	0
UT95D	GP7-S-2.9	Low	126%	99.8%	99.8%	108%	0
UT95E	GP8-S-2.8	Low	108%	96.9%	96.4%	104%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260C	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	79-121	76-120	75-152	69-120
(TOL) = d8-Toluene	80-120	80-120	82-115	80-120
(BFB) = Bromofluorobenzene	80-120	80-120	64-120	76-128
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-120	80-120	80-120

Log Number Range: 12-8592 to 12-8594

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Matrix: Soil

Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

ARI ID	Client ID	Analysis Date	Basis	Range	Result
MB-051412	Method Blank	05/14/12	Dry	Gasoline	< 5.0 U
12-8592		PID2		HC ID	---
				Trifluorotoluene	94.0%
				Bromobenzene	95.9%
UT95C	GP6-S-2.9	05/14/12	Dry	Gasoline	< 12 U
12-8592		PID2		HC ID	---
				Trifluorotoluene	88.8%
				Bromobenzene	90.4%
UT95D	GP7-S-2.9	05/14/12	Dry	Gasoline	< 8.1 U
12-8593		PID2		HC ID	---
				Trifluorotoluene	101%
				Bromobenzene	102%
UT95E	GP8-S-2.8	05/14/12	Dry	Gasoline	< 8.3 U
12-8594		PID2		HC ID	---
				Trifluorotoluene	102%
				Bromobenzene	103%

Gasoline values reported in mg/kg (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-051412
LAB CONTROL SAMPLE

Lab Sample ID: LCS-051412
LIMS ID: 12-8592
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 05/14/12 11:04
LCSD: 05/14/12 11:32
Instrument/Analyst LCS: PID2/JLW
LCSD: PID2/JLW

Purge Volume: 5.0 mL

Sample Amount LCS: 100 mg-dry-wt
LCSD: 100 mg-dry-wt

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	47.7	50.0	95.4%	55.0	50.0	110%	14.2%

Reported in mg/kg (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	94.6%	102%
Bromobenzene	92.3%	99.8%

ANALYTICAL RESOURCES INCORPORATED

TPHG SOIL SURROGATE RECOVERY SUMMARY

ARI Job: UT95
Matrix: Soil

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01

Client ID	BFB	TFT	BBZ	TOT OUT
MB-051412	NA	94.0%	95.9%	0
LCS-051412	NA	94.6%	92.3%	0
LCSD-051412	NA	102%	99.8%	0
GP6-S-2.9	NA	88.8%	90.4%	0
GP7-S-2.9	NA	101%	102%	0
GP8-S-2.8	NA	102%	103%	0

	LCS/MB LIMITS	QC LIMITS
(BFB) = Bromofluorobenzene	(70-130)	(70-130)
(TFT) = Trifluorotoluene	(80-120)	(66-123)
(BBZ) = Bromobenzene	(80-120)	(62-130)

Log Number Range: 12-8592 to 12-8594

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH
Page 1 of 1

Sample ID: GP6-S-2.9
SAMPLE

Lab Sample ID: UT95H
LIMS ID: 12-8597
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Date Analyzed: 05/12/12 19:22
Instrument/Analyst: PID1/JLW

Purge Volume: 10 mL
Sample Amount: 30.8 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1600	< 1,600 U
108-88-3	Toluene	1600	< 1,600 U
100-41-4	Ethylbenzene	1600	< 1,600 U
179601-23-1	m,p-Xylene	3200	< 3,200 U
95-47-6	o-Xylene	1600	< 1,600 U
1634-04-4	Methyl tert-Butyl Ether	1600	< 1,600 U
109-66-0	n-Pentane	1600	< 1,600 U
110-54-3	n-Hexane	1600	< 1,600 U
111-65-9	n-Octane	1600	< 1,600 U
124-18-5	n-Decane	1600	< 1,600 U
112-40-3	n-Dodecane	1600	< 1,600 U

Range	RL	Result
C8-C10 Aromatics	16,000	< 16,000 U
C10-C12 Aromatics	16,000	< 16,000 U
C12-C13 Aromatics	16,000	< 16,000 U
C5-C6 Aliphatics	16,000	< 16,000 U
C6-C8 Aliphatics	16,000	< 16,000 U
C8-C10 Aliphatics	16,000	< 16,000 U
C10-C12 Aliphatics	16,000	< 16,000 U

Values reported in µg/kg (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	111%
FID: 2,5-Dibromotoluene	99.6%

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH **Sample ID: GP7-S-2.9**
Page 1 of 1 **SAMPLE**

Lab Sample ID: UT95I
LIMS ID: 12-8598
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Date Analyzed: 05/12/12 19:54
Instrument/Analyst: PID1/JLW

Purge Volume: 10 mL
Sample Amount: 35.4 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1400	< 1,400 U
108-88-3	Toluene	1400	< 1,400 U
100-41-4	Ethylbenzene	1400	< 1,400 U
179601-23-1	m,p-Xylene	2800	< 2,800 U
95-47-6	o-Xylene	1400	< 1,400 U
1634-04-4	Methyl tert-Butyl Ether	1400	< 1,400 U
109-66-0	n-Pentane	1400	< 1,400 U
110-54-3	n-Hexane	1400	< 1,400 U
111-65-9	n-Octane	1400	< 1,400 U
124-18-5	n-Decane	1400	< 1,400 U
112-40-3	n-Dodecane	1400	< 1,400 U

Range	RL	Result
C8-C10 Aromatics	14,000	< 14,000 U
C10-C12 Aromatics	14,000	< 14,000 U
C12-C13 Aromatics	14,000	< 14,000 U
C5-C6 Aliphatics	14,000	< 14,000 U
C6-C8 Aliphatics	14,000	< 14,000 U
C8-C10 Aliphatics	14,000	< 14,000 U
C10-C12 Aliphatics	14,000	< 14,000 U

Values reported in µg/kg (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	99.8%
FID: 2,5-Dibromotoluene	97.6%

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH
Page 1 of 1

Sample ID: GP8-S-2.8
SAMPLE

Lab Sample ID: UT95J
LIMS ID: 12-8599
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Date Analyzed: 05/12/12 20:27
Instrument/Analyst: PID1/JLW

Purge Volume: 10 mL
Sample Amount: 33.3 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	1500	< 1,500 U
108-88-3	Toluene	1500	< 1,500 U
100-41-4	Ethylbenzene	1500	< 1,500 U
179601-23-1	m,p-Xylene	3000	< 3,000 U
95-47-6	o-Xylene	1500	< 1,500 U
1634-04-4	Methyl tert-Butyl Ether	1500	< 1,500 U
109-66-0	n-Pentane	1500	< 1,500 U
110-54-3	n-Hexane	1500	< 1,500 U
111-65-9	n-Octane	1500	< 1,500 U
124-18-5	n-Decane	1500	< 1,500 U
112-40-3	n-Dodecane	1500	< 1,500 U

Range	RL	Result
C8-C10 Aromatics	15,000	< 15,000 U
C10-C12 Aromatics	15,000	< 15,000 U
C12-C13 Aromatics	15,000	< 15,000 U
C5-C6 Aliphatics	15,000	< 15,000 U
C6-C8 Aliphatics	15,000	< 15,000 U
C8-C10 Aliphatics	15,000	< 15,000 U
C10-C12 Aliphatics	15,000	< 15,000 U

Values reported in µg/kg (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	111%
FID: 2,5-Dibromotoluene	103%

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH
Page 1 of 1

Sample ID: MB-051212
METHOD BLANK

Lab Sample ID: MB-051212
LIMS ID: 12-8597
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

Date Analyzed: 05/12/12 12:18
Instrument/Analyst: PID1/JLW

Purge Volume: 10 mL
Sample Amount: 111 mg-dry-wt

CAS Number	Analyte	RL	Result
71-43-2	Benzene	450	< 450 U
108-88-3	Toluene	450	< 450 U
100-41-4	Ethylbenzene	450	< 450 U
179601-23-1	m,p-Xylene	900	< 900 U
95-47-6	o-Xylene	450	< 450 U
1634-04-4	Methyl tert-Butyl Ether	450	< 450 U
109-66-0	n-Pentane	450	< 450 U
110-54-3	n-Hexane	450	< 450 U
111-65-9	n-Octane	450	< 450 U
124-18-5	n-Decane	450	< 450 U
112-40-3	n-Dodecane	450	< 450 U

Range	RL	Result
C8-C10 Aromatics	4,500	< 4,500 U
C10-C12 Aromatics	4,500	< 4,500 U
C12-C13 Aromatics	4,500	< 4,500 U
C5-C6 Aliphatics	4,500	< 4,500 U
C6-C8 Aliphatics	4,500	< 4,500 U
C8-C10 Aliphatics	4,500	< 4,500 U
C10-C12 Aliphatics	4,500	< 4,500 U

Values reported in µg/kg (ppb)

VPH Surrogate Recovery

PID: 2,5-Dibromotoluene	110%
FID: 2,5-Dibromotoluene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
VPH by Method WA VPH
Page 1 of 1

Sample ID: LCS-051212
LCS/LCSD

Lab Sample ID: LCS-051212
LIMS ID: 12-8597
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 05/12/12 10:28
Date Analyzed LCSD: 05/12/12 11:14
Instrument/Analyst: PID1/JLW

Purge Volume: 10 mL
Sample Amount: 111 mg-dry-wt

Analyte/Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Benzene	4760	4500	106%	4690	4500	104%	1.5%
Toluene	4720	4500	105%	4670	4500	104%	1.1%
Ethylbenzene	4800	4500	107%	4740	4500	105%	1.3%
m,p-Xylene	9450	9010	105%	9360	9010	104%	1.0%
o-Xylene	4700	4500	104%	4670	4500	104%	0.6%
Methyl tert-Butyl Ether	4490	4500	99.8%	4540	4500	101%	1.1%
Naphthalene	4600	4500	102%	4650	4500	103%	1.1%
1,2,3-Trimethylbenzene	4720	4500	105%	4700	4500	104%	0.4%
1-Methylnaphthalene	5160	4500	115%	5350	4500	119%	3.6%
n-Pentane	5760	4500	128%	5730	4500	127%	0.5%
n-Hexane	4990	4500	111%	5000	4500	111%	0.2%
n-Octane	4700	4500	104%	4720	4500	105%	0.4%
n-Decane	5170	4500	115%	4820	4500	107%	7.0%
n-Dodecane	5250	4500	117%	5510	4500	122%	4.8%

Values reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

VPH Surrogate Recovery

	LCS	LCSD
PID: 2,5-Dibromotoluene	102%	103%
FID: 2,5-Dibromotoluene	101%	101%

FORM III

ANALYTICAL RESOURCES INCORPORATED

VPH SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	PDBT	FDBT	TOT OUT
MB-051212	110%	101%	0
LCS-051212	102%	101%	0
LCSD-051212	103%	101%	0
GP6-S-2.9	111%	99.6%	0
GP7-S-2.9	99.8%	97.6%	0
GP8-S-2.8	111%	103%	0

	LCS/MB LIMITS	QC LIMITS
(PDBT) = 2,5-Dibromotoluene	(60-140)	(60-140)
(FDBT) = 2,5-Dibromotoluene	(60-140)	(60-140)

Prep Method: METHOD
Log Number Range: 12-8597 to 12-8599

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546
Page 1 of 1

Sample ID: GP5-S-2
SAMPLE

Lab Sample ID: UT95A
LIMS ID: 12-8590
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Date Extracted: 05/15/12
Date Analyzed: 05/18/12 17:03
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.34 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 10.0
Percent Moisture: 31.9%

CAS Number	Analyte	RL	Result	
91-20-3	**Naphthalene**	**97**	**1,900**	
91-57-6	**2-Methylnaphthalene**	**97**	**2,400**	
90-12-0	**1-Methylnaphthalene**	**97**	**1,900**	
208-96-8	**Acenaphthylene**	**97**	**430**	
83-32-9	Acenaphthene	97	< 97	U
86-73-7	**Fluorene**	**97**	**230**	
85-01-8	**Phenanthrene**	**97**	**4,800**	
120-12-7	**Anthracene**	**97**	**1,100**	
206-44-0	**Fluoranthene**	**97**	**14,000**	**E**
129-00-0	**Pyrene**	**97**	**14,000**	**E**
56-55-3	**Benzo(a)anthracene**	**97**	**7,400**	
218-01-9	**Chrysene**	**97**	**7,700**	
50-32-8	**Benzo(a)pyrene**	**97**	**8,700**	
193-39-5	**Indeno(1,2,3-cd)pyrene**	**97**	**5,600**	
53-70-3	**Dibenz(a,h)anthracene**	**97**	**1,500**	
191-24-2	**Benzo(g,h,i)perylene**	**97**	**6,400**	
132-64-9	**Dibenzofuran**	**97**	**570**	
TOTBFA	**Total Benzofluoranthenes**	**97**	**14,000**	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	86.7%
d14-Dibenzo(a,h)anthracen	86.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546
Page 1 of 1

Sample ID: GP5-S-2
DILUTION

Lab Sample ID: UT95A
LIMS ID: 12-8590
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Date Extracted: 05/15/12
Date Analyzed: 05/18/12 20:50
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.34 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 30.0
Percent Moisture: 31.9%

CAS Number	Analyte	RL	Result	
91-20-3	**Naphthalene**	**290**	**2,000**	
91-57-6	**2-Methylnaphthalene**	**290**	**2,400**	
90-12-0	**1-Methylnaphthalene**	**290**	**2,000**	
208-96-8	**Acenaphthylene**	**290**	**420**	
83-32-9	Acenaphthene	290	< 290	U
86-73-7	**Fluorene**	**290**	**220**	**J**
85-01-8	**Phenanthrene**	**290**	**5,400**	
120-12-7	**Anthracene**	**290**	**1,000**	
206-44-0	**Fluoranthene**	**290**	**16,000**	
129-00-0	**Pyrene**	**290**	**15,000**	
56-55-3	**Benzo(a)anthracene**	**290**	**7,900**	
218-01-9	**Chrysene**	**290**	**8,100**	
50-32-8	**Benzo(a)pyrene**	**290**	**9,300**	
193-39-5	**Indeno(1,2,3-cd)pyrene**	**290**	**6,100**	
53-70-3	**Dibenz(a,h)anthracene**	**290**	**1,400**	
191-24-2	**Benzo(g,h,i)perylene**	**290**	**6,600**	
132-64-9	**Dibenzofuran**	**290**	**560**	
TOTBFA	**Total Benzofluoranthenes**	**290**	**15,000**	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	D
d14-Dibenzo(a,h)anthracen	D

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP5-S-5.6
SAMPLE

Lab Sample ID: UT95B
LIMS ID: 12-8591
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Date Extracted: 05/15/12
Date Analyzed: 05/18/12 17:32
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.45 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 27.5%

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**4.8**	**2.5 J**
91-57-6	**2-Methylnaphthalene**	**4.8**	**2.6 J**
90-12-0	**1-Methylnaphthalene**	**4.8**	**2.5 J**
208-96-8	Acenaphthylene	4.8	< 4.8 U
83-32-9	Acenaphthene	4.8	< 4.8 U
86-73-7	Fluorene	4.8	< 4.8 U
85-01-8	Phenanthrene	4.8	< 4.8 U
120-12-7	Anthracene	4.8	< 4.8 U
206-44-0	**Fluoranthene**	**4.8**	**4.0 J**
129-00-0	**Pyrene**	**4.8**	**4.4 J**
56-55-3	**Benzo(a)anthracene**	**4.8**	**2.5 J**
218-01-9	**Chrysene**	**4.8**	**2.5 J**
50-32-8	**Benzo(a)pyrene**	**4.8**	**2.4 J**
193-39-5	Indeno(1,2,3-cd)pyrene	4.8	< 4.8 U
53-70-3	Dibenz(a,h)anthracene	4.8	< 4.8 U
191-24-2	**Benzo(g,h,i)perylene**	**4.8**	**3.2 J**
132-64-9	Dibenzofuran	4.8	< 4.8 U
TOTBFA	Total Benzofluoranthenes	4.8	< 4.8 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	63.3%
d14-Dibenzo(a,h)anthracen	80.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS **Sample ID: MB-051512**
Extraction Method: SW3546 **METHOD BLANK**

Lab Sample ID: MB-051512
LIMS ID: 12-8590
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/15/12
Date Analyzed: 05/18/12 10:25
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.00 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	5.0	< 5.0 U
90-12-0	1-Methylnaphthalene	5.0	< 5.0 U
208-96-8	Acenaphthylene	5.0	< 5.0 U
83-32-9	Acenaphthene	5.0	< 5.0 U
86-73-7	Fluorene	5.0	< 5.0 U
85-01-8	Phenanthrene	5.0	< 5.0 U
120-12-7	Anthracene	5.0	< 5.0 U
206-44-0	Fluoranthene	5.0	< 5.0 U
129-00-0	Pyrene	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	5.0	< 5.0 U
218-01-9	Chrysene	5.0	< 5.0 U
50-32-8	Benzo(a)pyrene	5.0	< 5.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	< 5.0 U
53-70-3	Dibenz(a,h)anthracene	5.0	< 5.0 U
191-24-2	Benzo(g,h,i)perylene	5.0	< 5.0 U
132-64-9	Dibenzofuran	5.0	< 5.0 U
TOTBFA	Total Benzofluoranthenes	5.0	< 5.0 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	64.0%
d14-Dibenzo(a,h)anthracen	86.7%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	MNP	DBA	TOT OUT
MB-051512	64.0%	86.7%	0
LCS-051512	61.7%	81.0%	0
GP5-S-2	86.7%	86.7%	0
GP5-S-2 DL	D	D	0
GP5-S-5.6	63.3%	80.0%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(35-100)	(34-100)
(DBA) = d14-Dibenzo(a,h)anthracene	(37-120)	(10-117)

Prep Method: SW3546
Log Number Range: 12-8590 to 12-8591

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS

Sample ID: LCS-051512
LAB CONTROL SAMPLE

Lab Sample ID: LCS-051512
LIMS ID: 12-8590
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/15/12
Date Analyzed LCS: 05/18/12 10:53
Instrument/Analyst LCS: NT4/JZ

Sample Amount LCS: 10.0 g-dry-wt
Final Extract Volume LCS: 0.50 mL
Dilution Factor LCS: 1.00

Analyte	LCS	Spike Added	Recovery
Naphthalene	81.2	150	54.1%
2-Methylnaphthalene	81.4	150	54.3%
1-Methylnaphthalene	89.5	150	59.7%
Acenaphthylene	80.6	150	53.7%
Acenaphthene	91.8	150	61.2%
Fluorene	92.0	150	61.3%
Phenanthrene	99.4	150	66.3%
Anthracene	94.8	150	63.2%
Fluoranthene	109	150	72.7%
Pyrene	115	150	76.7%
Benzo(a)anthracene	112	150	74.7%
Chrysene	119	150	79.3%
Benzo(a)pyrene	104	150	69.3%
Indeno(1,2,3-cd)pyrene	120	150	80.0%
Dibenz(a,h)anthracene	120	150	80.0%
Benzo(g,h,i)perylene	113	150	75.3%
Dibenzofuran	83.6	150	55.7%
Total Benzofluoranthenes	248	300	82.7%

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	61.7%
d14-Dibenzo(a,h)anthracen	81.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP9-S-2
SAMPLE

Lab Sample ID: UT95F
LIMS ID: 12-8595
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Date Extracted: 05/15/12
Date Analyzed: 05/18/12 18:00
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.38 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 32.3%

CAS Number	Analyte	RL	Result	
91-20-3	**Naphthalene**	**4.8**	**380**	
91-57-6	**2-Methylnaphthalene**	**4.8**	**800**	**E**
90-12-0	**1-Methylnaphthalene**	**4.8**	**810**	**E**
208-96-8	Acenaphthylene	4.8	< 4.8	U
83-32-9	Acenaphthene	4.8	< 4.8	U
86-73-7	**Fluorene**	**4.8**	**15**	
85-01-8	**Phenanthrene**	**4.8**	**510**	**E**
120-12-7	**Anthracene**	**4.8**	**51**	
206-44-0	**Fluoranthene**	**4.8**	**88**	
129-00-0	**Pyrene**	**4.8**	**99**	
56-55-3	**Benzo(a)anthracene**	**4.8**	**69**	
218-01-9	**Chrysene**	**4.8**	**130**	
50-32-8	**Benzo(a)pyrene**	**4.8**	**54**	
193-39-5	**Indeno(1,2,3-cd)pyrene**	**4.8**	**18**	
53-70-3	**Dibenz(a,h)anthracene**	**4.8**	**12**	
191-24-2	**Benzo(g,h,i)perylene**	**4.8**	**26**	
132-64-9	**Dibenzofuran**	**4.8**	**190**	
TOTBFA	**Total Benzofluoranthenes**	**4.8**	**67**	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	71.7%
d14-Dibenzo(a,h)anthracen	71.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS **Sample ID: GP9-S-2**
Extraction Method: SW3546 **DILUTION**

Lab Sample ID: UT95F
LIMS ID: 12-8595
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Date Extracted: 05/15/12
Date Analyzed: 05/18/12 21:19
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.38 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 3.00
Percent Moisture: 32.3%

CAS Number	Analyte	RL	Result	
91-20-3	**Naphthalene**	**14**	**360**	
91-57-6	**2-Methylnaphthalene**	**14**	**780**	
90-12-0	**1-Methylnaphthalene**	**14**	**800**	
208-96-8	Acenaphthylene	14	< 14	U
83-32-9	Acenaphthene	14	< 14	U
86-73-7	Fluorene	14	< 14	U
85-01-8	**Phenanthrene**	**14**	**530**	
120-12-7	**Anthracene**	**14**	**42**	
206-44-0	**Fluoranthene**	**14**	**88**	
129-00-0	**Pyrene**	**14**	**95**	
56-55-3	**Benzo(a)anthracene**	**14**	**66**	
218-01-9	**Chrysene**	**14**	**140**	
50-32-8	**Benzo(a)pyrene**	**14**	**80**	
193-39-5	**Indeno(1,2,3-cd)pyrene**	**14**	**18**	
53-70-3	**Dibenz(a,h)anthracene**	**14**	**15**	
191-24-2	**Benzo(g,h,i)perylene**	**14**	**19**	
132-64-9	**Dibenzofuran**	**14**	**200**	
TOTBFA	**Total Benzofluoranthenes**	**14**	**77**	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	68.0%
d14-Dibenzo(a,h)anthracen	66.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS **Sample ID: GP9-S-5.6**
Extraction Method: SW3546 **SAMPLE**

Lab Sample ID: UT95G
LIMS ID: 12-8596
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Date Extracted: 05/15/12
Date Analyzed: 05/18/12 18:28
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.15 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 28.2%

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**4.9**	**2.7 J**
91-57-6	**2-Methylnaphthalene**	**4.9**	**3.2 J**
90-12-0	**1-Methylnaphthalene**	**4.9**	**3.7 J**
208-96-8	Acenaphthylene	4.9	< 4.9 U
83-32-9	Acenaphthene	4.9	< 4.9 U
86-73-7	Fluorene	4.9	< 4.9 U
85-01-8	**Phenanthrene**	**4.9**	**2.9 J**
120-12-7	Anthracene	4.9	< 4.9 U
206-44-0	Fluoranthene	4.9	< 4.9 U
129-00-0	Pyrene	4.9	< 4.9 U
56-55-3	Benzo(a)anthracene	4.9	< 4.9 U
218-01-9	Chrysene	4.9	< 4.9 U
50-32-8	Benzo(a)pyrene	4.9	< 4.9 U
193-39-5	Indeno(1,2,3-cd)pyrene	4.9	< 4.9 U
53-70-3	Dibenz(a,h)anthracene	4.9	< 4.9 U
191-24-2	Benzo(g,h,i)perylene	4.9	< 4.9 U
132-64-9	Dibenzofuran	4.9	< 4.9 U
TOTBFA	Total Benzofluoranthenes	4.9	< 4.9 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	50.0%
d14-Dibenzo(a,h)anthracen	75.0%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	MNP	DBA	TOT OUT
GP9-S-2	71.7%	71.3%	0
GP9-S-2 DL	68.0%	66.0%	0
GP9-S-5.6	50.0%	75.0%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(35-100)	(34-100)
(DBA) = d14-Dibenzo(a,h)anthracene	(37-120)	(10-117)

Prep Method: SW3546
Log Number Range: 12-8595 to 12-8596

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP5-S-2
SAMPLE

Lab Sample ID: UT95A
LIMS ID: 12-8590
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Percent Total Solids: 64.7%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/10/12	200.8	05/16/12	**7440-38-2**	**Arsenic**	0.3	**26.4**	
3050B	05/10/12	200.8	05/17/12	**7440-39-3**	**Barium**	4	**681**	
3050B	05/10/12	200.8	05/16/12	**7440-43-9**	**Cadmium**	0.1	**1.9**	
3050B	05/10/12	200.8	05/17/12	**7440-47-3**	**Chromium**	4	**33**	
3050B	05/10/12	200.8	05/17/12	**7439-92-1**	**Lead**	0.7	**452**	
CLP	05/10/12	7471A	05/11/12	**7439-97-6**	**Mercury**	0.03	**0.39**	
3050B	05/10/12	200.8	05/16/12	7782-49-2	Selenium	0.7	0.7	U
3050B	05/10/12	200.8	05/16/12	**7440-22-4**	**Silver**	0.3	**0.3**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: METHOD BLANK**

Lab Sample ID: UT95MB
LIMS ID: 12-8591
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/10/12	200.8	05/16/12	7440-38-2	Arsenic	0.2	0.2	U
3050B	05/10/12	200.8	05/16/12	7440-39-3	Barium	0.5	0.5	U
3050B	05/10/12	200.8	05/16/12	7440-43-9	Cadmium	0.1	0.1	U
3050B	05/10/12	200.8	05/16/12	7440-47-3	Chromium	0.5	0.5	U
3050B	05/10/12	200.8	05/16/12	7439-92-1	Lead	0.1	0.1	U
CLP	05/10/12	7471A	05/11/12	7439-97-6	Mercury	0.02	0.02	U
3050B	05/10/12	200.8	05/16/12	7782-49-2	Selenium	0.5	0.5	U
3050B	05/10/12	200.8	05/16/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP5-S-5.6
SAMPLE

Lab Sample ID: UT95B
LIMS ID: 12-8591
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Percent Total Solids: 72.5%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/10/12	200.8	05/16/12	**7440-38-2**	**Arsenic**	0.3	**1.9**	
3050B	05/10/12	200.8	05/16/12	**7440-39-3**	**Barium**	0.7	**36.7**	
3050B	05/10/12	200.8	05/16/12	7440-43-9	Cadmium	0.1	0.1	U
3050B	05/10/12	200.8	05/16/12	**7440-47-3**	**Chromium**	0.7	**10.3**	
3050B	05/10/12	200.8	05/16/12	**7439-92-1**	**Lead**	0.1	**2.0**	
CLP	05/10/12	7471A	05/11/12	7439-97-6	Mercury	0.02	0.02	U
3050B	05/10/12	200.8	05/16/12	7782-49-2	Selenium	0.7	0.7	U
3050B	05/10/12	200.8	05/16/12	7440-22-4	Silver	0.3	0.3	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP6-S-2.9
SAMPLE

Lab Sample ID: UT95C
LIMS ID: 12-8592
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Percent Total Solids: 80.8%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/10/12	200.8	05/16/12	**7439-92-1**	**Lead**	0.1	**2.1**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP7-S-2.9
SAMPLE

Lab Sample ID: UT95D
LIMS ID: 12-8593
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Percent Total Solids: 78.6%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/10/12	200.8	05/16/12	**7439-92-1**	**Lead**	0.1	**0.9**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP8-S-2.8
SAMPLE

Lab Sample ID: UT95E
LIMS ID: 12-8594
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Percent Total Solids: 78.2%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/10/12	200.8	05/16/12	**7439-92-1**	**Lead**	0.1	**1.1**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP9-S-2
SAMPLE

Lab Sample ID: UT95F
LIMS ID: 12-8595
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Percent Total Solids: 71.0%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/10/12	200.8	05/16/12	**7440-38-2**	**Arsenic**	0.3	**3.5**	
3050B	05/10/12	200.8	05/16/12	**7440-39-3**	**Barium**	0.7	**386**	
3050B	05/10/12	200.8	05/16/12	**7440-43-9**	**Cadmium**	0.1	**0.2**	
3050B	05/10/12	200.8	05/16/12	**7440-47-3**	**Chromium**	0.7	**13.2**	
3050B	05/10/12	200.8	05/16/12	**7439-92-1**	**Lead**	0.1	**16.1**	
CLP	05/10/12	7471A	05/11/12	**7439-97-6**	**Mercury**	0.03	**0.03**	
3050B	05/10/12	200.8	05/16/12	7782-49-2	Selenium	0.7	0.7	U
3050B	05/10/12	200.8	05/16/12	7440-22-4	Silver	0.3	0.3	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP9-S-5.6
SAMPLE

Lab Sample ID: UT95G
LIMS ID: 12-8596
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Percent Total Solids: 68.8%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/kg-dry	Q
3050B	05/10/12	200.8	05/16/12	**7440-38-2**	**Arsenic**	0.3	**8.6**	
3050B	05/10/12	200.8	05/16/12	**7440-39-3**	**Barium**	0.7	**66.8**	
3050B	05/10/12	200.8	05/16/12	7440-43-9	Cadmium	0.1	0.1	U
3050B	05/10/12	200.8	05/16/12	**7440-47-3**	**Chromium**	0.7	**33.2**	
3050B	05/10/12	200.8	05/16/12	**7439-92-1**	**Lead**	0.1	**14.7**	
CLP	05/10/12	7471A	05/11/12	**7439-97-6**	**Mercury**	0.03	**0.05**	
3050B	05/10/12	200.8	05/16/12	7782-49-2	Selenium	0.7	0.7	U
3050B	05/10/12	200.8	05/16/12	7440-22-4	Silver	0.3	0.3	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP5-S-2
DUPLICATE

Lab Sample ID: UT95A
LIMS ID: 12-8590
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	26.4	26.6	0.8%	+/- 20%	
Barium	200.8	681	645	5.4%	+/- 20%	
Cadmium	200.8	1.9	1.7	11.1%	+/- 20%	
Chromium	200.8	33	24	31.6%	+/- 20%	*
Lead	200.8	452	428	5.5%	+/- 20%	
Mercury	7471A	0.39	0.42	7.4%	+/- 20%	
Selenium	200.8	0.7 U	0.7 U	0.0%	+/- 0.7	L
Silver	200.8	0.3	0.3	0.0%	+/- 0.3	L

Reported in mg/kg-dry

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP5-S-2
MATRIX SPIKE

Lab Sample ID: UT95A
LIMS ID: 12-8590
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	26.4	54.7	37.0	76.5%	
Barium	200.8	681	608	37.0	-197%	H
Cadmium	200.8	1.9	33.6	37.0	85.7%	
Chromium	200.8	33	55	37.0	59.5%	N
Lead	200.8	452	441	37.0	-29.7%	H
Mercury	7471A	0.39	0.77	0.309	123%	
Selenium	200.8	0.7 U	94.6	118	80.2%	
Silver	200.8	0.3	26.6	37.0	71.1%	N

Reported in mg/kg-dry

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: LAB CONTROL**

Lab Sample ID: UT95LCS
LIMS ID: 12-8591
Matrix: Soil
Data Release Authorized:
Reported: 06/04/12

QC Report No: UT95-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	26.4	25.0	106%	
Barium	200.8	26.7	25.0	107%	
Cadmium	200.8	25.5	25.0	102%	
Chromium	200.8	25.2	25.0	101%	
Lead	200.8	25.5	25.0	102%	
Mercury	7471A	0.51	0.50	102%	
Selenium	200.8	83.3	80.0	104%	
Silver	200.8	26.5	25.0	106%	

Reported in mg/kg-dry

N-Control limit not met
NA-Not Applicable, Analyte Not Spiked
Control Limits: 80-120%

Analytical Resources, Incorporated
Analytical Chemists and Consultants

25 May 2012

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: Sims-N Cascade Ford, 0747.01.01
ARI Job No.: UU22

Dear Heather:

Please find enclosed and the final results for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted this sample on May 9, 2012. The sample was analyzed for SVOAs, PCBs and NWTPH-Dx as requested on 05/11/12.

This sample was initially analyzed for PCBs on 05/18/12. The percent difference (%D) for Aroclor 1260 was for the CCAL that bracketed the analysis of this sample. The sample was re-analyzed on 05/21/12. The %D for Aroclor 1260 was high for the re-analysis. It was concluded that the sample matrix was the cause of the high %Ds. No further corrective actions were taken. The results for the original analysis only have been submitted.

The remaining analyses proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file UU22

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Subject: Re: UT73-Sims
From: "Heather Hirsch" <hhirsch@maulfoster.com>
Date: 5/11/2012 9:44 AM
To: "Mark Harris" <markh@arilabs.com>

Based on these results, can you please run NWTPH-Dx, SVOCs, and PCBs on the GP5-S-2 sample?

Thanks!

Sent from my iPhone

On May 11, 2012, at 9:35 AM, "Mark Harris" <markh@arilabs.com> wrote:

> Final report.
>
> --
>
> Mark Harris
> Project Manager
> Analytical Resources, Inc.
> 206/695-6210
> markh@arilabs.com
>
> This correspondence contains confidential information from
> Analytical Resources, Inc. (ARI) The information contained herein is
> intended solely for the use of the individual(s) named above. If you are
> not the intended recipient, any copying, distribution, disclosure,
> or use of the text and/or attached document(s) is strictly
> prohibited.
>
> If you have received this correspondence in error, please
> notify sender immediately. Thank you.
>
> <UT73_Sims-NCascadeFord_rpt.pdf>
> <ut73.zip>

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: UU22
Client: Maul Foster & Alongi
Project Event: 0747.01.01
Project Name: SIMS - N Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	GP5-S-2	UU22A	12-8749	Soil	05/08/12 08:00	05/09/12 08:47

UU22:03R BC 6/8/12

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U — Indicates that the target analyte was not detected at the reported concentration

* — Duplicate RPD is not within established control limits

B — Reported value is less than the CRDL but ≥ the Reporting Limit

N — Matrix Spike recovery not within established control limits

NA — Not Applicable, analyte not spiked

H — The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible

L — Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U — Indicates that the target analyte was not detected at the reported concentration

* — Flagged value is not within established control limits

B — Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.

J — Estimated concentration when the value is less than ARI's established reporting limits

D — The spiked compound was not detected due to sample extract dilution

E — Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Q — Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

UU22 : 00004

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

UU22 : 00005

Geotechnical Data

A	The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
F	Samples were frozen prior to particle size determination
SM	Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
SS	Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
W	Weight of sample in some pipette aliquots was below the level required for accurate weighting

UU22 : 00006

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-051612
METHOD BLANK

Lab Sample ID: MB-051612
LIMS ID: 12-8749
Matrix: Soil
Data Release Authorized: MW
Reported: 05/25/12

QC Report No: UU22-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/16/12
Date Analyzed: 05/19/12 00:39
Instrument/Analyst: NT6/JZ
GPC Cleanup: Yes

Sample Amount: 7.50 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
108-95-2	Phenol	67	< 67 U
111-44-4	Bis-(2-Chloroethyl) Ether	67	< 67 U
95-57-8	2-Chlorophenol	67	< 67 U
541-73-1	1,3-Dichlorobenzene	67	< 67 U
106-46-7	1,4-Dichlorobenzene	67	< 67 U
100-51-6	Benzyl Alcohol	330	< 330 U
95-50-1	1,2-Dichlorobenzene	67	< 67 U
95-48-7	2-Methylphenol	67	< 67 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	67	< 67 U
106-44-5	4-Methylphenol	67	< 67 U
621-64-7	N-Nitroso-Di-N-Propylamine	67	< 67 U
67-72-1	Hexachloroethane	67	< 67 U
98-95-3	Nitrobenzene	67	< 67 U
78-59-1	Isophorone	67	< 67 U
88-75-5	2-Nitrophenol	67	< 67 U
105-67-9	2,4-Dimethylphenol	67	< 67 U
65-85-0	Benzoic Acid	670	< 670 U
111-91-1	bis(2-Chloroethoxy) Methane	67	< 67 U
120-83-2	2,4-Dichlorophenol	330	< 330 U
120-82-1	1,2,4-Trichlorobenzene	67	< 67 U
91-20-3	Naphthalene	67	< 67 U
106-47-8	4-Chloroaniline	330	< 330 U
87-68-3	Hexachlorobutadiene	67	< 67 U
59-50-7	4-Chloro-3-methylphenol	330	< 330 U
91-57-6	2-Methylnaphthalene	67	< 67 U
77-47-4	Hexachlorocyclopentadiene	330	< 330 U
88-06-2	2,4,6-Trichlorophenol	330	< 330 U
95-95-4	2,4,5-Trichlorophenol	330	< 330 U
91-58-7	2-Chloronaphthalene	67	< 67 U
88-74-4	2-Nitroaniline	330	< 330 U
131-11-3	Dimethylphthalate	67	< 67 U
208-96-8	Acenaphthylene	67	< 67 U
99-09-2	3-Nitroaniline	330	< 330 U
83-32-9	Acenaphthene	67	< 67 U
51-28-5	2,4-Dinitrophenol	670	< 670 U
100-02-7	4-Nitrophenol	330	< 330 U
132-64-9	Dibenzofuran	67	< 67 U
606-20-2	2,6-Dinitrotoluene	330	< 330 U
121-14-2	2,4-Dinitrotoluene	330	< 330 U
84-66-2	Diethylphthalate	67	< 67 U
7005-72-3	4-Chlorophenyl-phenylether	67	< 67 U
86-73-7	Fluorene	67	< 67 U
100-01-6	4-Nitroaniline	330	< 330 U
534-52-1	4,6-Dinitro-2-Methylphenol	670	< 670 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: MB-051612**
 METHOD BLANK

Lab Sample ID: MB-051612 QC Report No: UU22-Maul Foster & Alongi
LIMS ID: 12-8749 Project: SIMS - N Cascade Ford
Matrix: Soil 0747.01.01
Date Analyzed: 05/19/12 00:39

CAS Number	Analyte	RL	Result
86-30-6	N-Nitrosodiphenylamine	67	< 67 U
101-55-3	4-Bromophenyl-phenylether	67	< 67 U
118-74-1	Hexachlorobenzene	67	< 67 U
87-86-5	Pentachlorophenol	330	< 330 U
85-01-8	Phenanthrene	67	< 67 U
86-74-8	Carbazole	67	< 67 U
120-12-7	Anthracene	67	< 67 U
84-74-2	Di-n-Butylphthalate	67	< 67 U
206-44-0	Fluoranthene	67	< 67 U
129-00-0	Pyrene	67	< 67 U
85-68-7	Butylbenzylphthalate	67	< 67 U
91-94-1	3,3'-Dichlorobenzidine	330	< 330 U
56-55-3	Benzo(a)anthracene	67	< 67 U
117-81-7	bis(2-Ethylhexyl)phthalate	67	< 67 U
218-01-9	Chrysene	67	< 67 U
117-84-0	Di-n-Octyl phthalate	67	< 67 U
50-32-8	Benzo(a)pyrene	67	< 67 U
193-39-5	Indeno(1,2,3-cd)pyrene	67	< 67 U
53-70-3	Dibenz(a,h)anthracene	67	< 67 U
191-24-2	Benzo(g,h,i)perylene	67	< 67 U
90-12-0	1-Methylnaphthalene	67	< 67 U
TOTBFA	Total Benzofluoranthenes	67	< 67 U

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	63.2%	2-Fluorobiphenyl	62.4%
d14-p-Terphenyl	68.8%	d4-1,2-Dichlorobenzene	60.4%
d5-Phenol	61.3%	2-Fluorophenol	63.7%
2,4,6-Tribromophenol	63.5%	d4-2-Chlorophenol	61.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: GP5-S-2**
Extraction Method: SW3546 **SAMPLE**

Lab Sample ID: UU22A
LIMS ID: 12-8749
Matrix: Soil
Data Release Authorized:
Reported: 06/07/12

QC Report No: UU22-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Date Extracted: 05/16/12
Date Analyzed: 05/24/12 17:01
Instrument/Analyst: NT6/JZ
GPC Cleanup: No

Sample Amount: 8.32 g-dry-wt
Final Extract Volume: 2.5 mL
Dilution Factor: 1.00
Percent Moisture: 31.9%

CAS Number	Analyte	RL	Result
108-95-2	Phenol	300	< 300 U
111-44-4	Bis-(2-Chloroethyl) Ether	300	< 300 U
95-57-8	2-Chlorophenol	300	< 300 U
541-73-1	1,3-Dichlorobenzene	300	< 300 U
106-46-7	1,4-Dichlorobenzene	300	< 300 U
100-51-6	Benzyl Alcohol	1,500	< 1,500 U
95-50-1	1,2-Dichlorobenzene	300	< 300 U
95-48-7	2-Methylphenol	300	< 300 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	300	< 300 U
106-44-5	4-Methylphenol	300	< 300 U
621-64-7	N-Nitroso-Di-N-Propylamine	300	< 300 U
67-72-1	Hexachloroethane	300	< 300 U
98-95-3	Nitrobenzene	300	< 300 U
78-59-1	Isophorone	300	< 300 U
88-75-5	2-Nitrophenol	300	< 300 U
105-67-9	2,4-Dimethylphenol	300	< 300 U
65-85-0	Benzoic Acid	3,000	< 3,000 U
111-91-1	bis(2-Chloroethoxy) Methane	300	< 300 U
120-83-2	2,4-Dichlorophenol	1,500	< 1,500 U
120-82-1	1,2,4-Trichlorobenzene	300	< 300 U
91-20-3	**Naphthalene**	**300**	**1,500**
106-47-8	4-Chloroaniline	1,500	< 1,500 U
87-68-3	Hexachlorobutadiene	300	< 300 U
59-50-7	4-Chloro-3-methylphenol	1,500	< 1,500 U
91-57-6	**2-Methylnaphthalene**	**300**	**1,400**
77-47-4	Hexachlorocyclopentadiene	1,500	< 1,500 U
88-06-2	2,4,6-Trichlorophenol	1,500	< 1,500 U
95-95-4	2,4,5-Trichlorophenol	1,500	< 1,500 U
91-58-7	2-Chloronaphthalene	300	< 300 U
88-74-4	2-Nitroaniline	1,500	< 1,500 U
131-11-3	Dimethylphthalate	300	< 300 U
208-96-8	**Acenaphthylene**	**300**	**540**
99-09-2	3-Nitroaniline	1,500	< 1,500 U
83-32-9	Acenaphthene	300	< 300 U
51-28-5	2,4-Dinitrophenol	3,000	< 3,000 U
100-02-7	4-Nitrophenol	1,500	< 1,500 U
132-64-9	**Dibenzofuran**	**300**	**400**
606-20-2	2,6-Dinitrotoluene	1,500	< 1,500 U
121-14-2	2,4-Dinitrotoluene	1,500	< 1,500 U
84-66-2	Diethylphthalate	300	< 300 U
7005-72-3	4-Chlorophenyl-phenylether	300	< 300 U
86-73-7	Fluorene	300	< 300 U
100-01-6	4-Nitroaniline	1,500	< 1,500 U

UU22:09R BC 6/8/12

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: GP5-S-2**
Extraction Method: SW3546 **SAMPLE**

Lab Sample ID: UU22A
LIMS ID: 12-8749
Matrix: Soil
Date Analyzed: 05/24/12 17:01

QC Report No: UU22-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result
534-52-1	4,6-Dinitro-2-Methylphenol	3,000	< 3,000 U
86-30-6	N-Nitrosodiphenylamine	300	< 300 U
101-55-3	4-Bromophenyl-phenylether	300	< 300 U
118-74-1	Hexachlorobenzene	300	< 300 U
87-86-5	Pentachlorophenol	1,500	< 1,500 U
85-01-8	**Phenanthrene**	**300**	**5,500**
86-74-8	**Carbazole**	**300**	**850**
120-12-7	**Anthracene**	**300**	**1,200**
84-74-2	Di-n-Butylphthalate	300	< 300 U
206-44-0	**Fluoranthene**	**300**	**16,000**
129-00-0	**Pyrene**	**300**	**10,000**
85-68-7	Butylbenzylphthalate	300	< 300 U
91-94-1	3,3'-Dichlorobenzidine	1,500	< 1,500 U
56-55-3	**Benzo(a)anthracene**	**300**	**7,000**
117-81-7	bis(2-Ethylhexyl)phthalate	300	< 300 U
218-01-9	**Chrysene**	**300**	**7,300**
117-84-0	Di-n-Octyl phthalate	300	< 300 U
50-32-8	**Benzo(a)pyrene**	**300**	**8,200**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**300**	**5,300**
53-70-3	**Dibenz(a,h)anthracene**	**300**	**2,300**
191-24-2	**Benzo(g,h,i)perylene**	**300**	**6,000**
90-12-0	**1-Methylnaphthalene**	**300**	**1,400**
TOTBFA	**Total Benzofluoranthenes**	**300**	**13,000**

Reported in µg/kg (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	59.2%	2-Fluorobiphenyl	65.2%
d14-p-Terphenyl	56.6%	d4-1,2-Dichlorobenzene	60.6%
d5-Phenol	62.1%	2-Fluorophenol	66.0%
2,4,6-Tribromophenol	64.8%	d4-2-Chlorophenol	60.9%

UU22:10R BL 6/8/12

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UU22-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-051612	63.2%	62.4%	68.8%	60.4%	61.3%	63.7%	63.5%	61.1%	0
LCS-051612	58.0%	58.8%	60.8%	55.6%	59.7%	58.9%	70.4%	59.2%	0
GP5-S-2	59.2%	65.2%	56.6%	60.6%	62.1%	66.0%	64.8%	60.9%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(46-102)	(32-106)
(FBP) = 2-Fluorobiphenyl	(51-105)	(39-107)
(TPH) = d14-p-Terphenyl	(55-124)	(31-130)
(DCB) = d4-1,2-Dichlorobenzene	(48-104)	(38-102)
(PHL) = d5-Phenol	(44-110)	(27-112)
(2FP) = 2-Fluorophenol	(38-112)	(22-108)
(TBP) = 2,4,6-Tribromophenol	(54-120)	(31-131)
(2CP) = d4-2-Chlorophenol	(50-103)	(36-104)

Prep Method: SW3546
Log Number Range: 12-8749 to 12-8749

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-051612
LAB CONTROL

Lab Sample ID: LCS-051612
LIMS ID: 12-8749
Matrix: Soil
Data Release Authorized:
Reported: 05/25/12

QC Report No: UU22-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/09/12
Date Received: 05/09/12

Date Extracted: 05/16/12
Date Analyzed: 05/19/12 01:12
Instrument/Analyst: NT6/JZ
GPC Cleanup: Yes

Sample Amount: 7.50 g
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
Phenol	1030	1670	61.7%
Bis-(2-Chloroethyl) Ether	1020	1670	61.1%
2-Chlorophenol	931	1670	55.7%
1,3-Dichlorobenzene	912	1670	54.6%
1,4-Dichlorobenzene	934	1670	55.9%
Benzyl Alcohol	747	1670	44.7%
1,2-Dichlorobenzene	939	1670	56.2%
2-Methylphenol	887	1670	53.1%
2,2'-Oxybis(1-Chloropropane)	1020	1670	61.1%
4-Methylphenol	1850	3330	55.6%
N-Nitroso-Di-N-Propylamine	1020	1670	61.1%
Hexachloroethane	941	1670	56.3%
Nitrobenzene	955	1670	57.2%
Isophorone	1110	1670	66.5%
2-Nitrophenol	923	1670	55.3%
2,4-Dimethylphenol	2500	5000	50.0%
Benzoic Acid	4830	9170	52.7%
bis(2-Chloroethoxy) Methane	991	1670	59.3%
2,4-Dichlorophenol	2830	5000	56.6%
1,2,4-Trichlorobenzene	956	1670	57.2%
Naphthalene	913	1670	54.7%
4-Chloroaniline	2060	5000	41.2%
Hexachlorobutadiene	960	1670	57.5%
4-Chloro-3-methylphenol	3150	5000	63.0%
2-Methylnaphthalene	901	1670	54.0%
Hexachlorocyclopentadiene	2340	5000	46.8%
2,4,6-Trichlorophenol	3050	5000	61.0%
2,4,5-Trichlorophenol	3040	5000	60.8%
2-Chloronaphthalene	1000	1670	59.9%
2-Nitroaniline	2910	5000	58.2%
Dimethylphthalate	1190	1670	71.3%
Acenaphthylene	1010	1670	60.5%
3-Nitroaniline	2680	5000	53.6%
Acenaphthene	964	1670	57.7%
2,4-Dinitrophenol	4610 Q	9170	50.3%
4-Nitrophenol	3330	5000	66.6%
Dibenzofuran	939	1670	56.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: LCS-051612**
Page 2 of 2 **LAB CONTROL**

Lab Sample ID: LCS-051612 QC Report No: UU22-Maul Foster & Alongi
LIMS ID: 12-8749 Project: SIMS - N Cascade Ford
Matrix: Soil 0747.01.01
Date Analyzed: 05/19/12 01:12

Analyte	Lab Control	Spike Added	Recovery
2,6-Dinitrotoluene	3440	5000	68.8%
2,4-Dinitrotoluene	3610	5000	72.2%
Diethylphthalate	1270	1670	76.0%
4-Chlorophenyl-phenylether	1070	1670	64.1%
Fluorene	1000	1670	59.9%
4-Nitroaniline	3090	5000	61.8%
4,6-Dinitro-2-Methylphenol	6380	9170	69.6%
N-Nitrosodiphenylamine	1100	1670	65.9%
4-Bromophenyl-phenylether	1070	1670	64.1%
Hexachlorobenzene	1110	1670	66.5%
Pentachlorophenol	3190	5000	63.8%
Phenanthrene	1080	1670	64.7%
Carbazole	1270	1670	76.0%
Anthracene	1030	1670	61.7%
Di-n-Butylphthalate	1340	1670	80.2%
Fluoranthene	1250	1670	74.9%
Pyrene	955	1670	57.2%
Butylbenzylphthalate	1160	1670	69.5%
3,3'-Dichlorobenzidine	2960	5000	59.2%
Benzo(a)anthracene	1070	1670	64.1%
bis(2-Ethylhexyl)phthalate	1060	1670	63.5%
Chrysene	1100	1670	65.9%
Di-n-Octyl phthalate	1020	1670	61.1%
Benzo(a)pyrene	1050	1670	62.9%
Indeno(1,2,3-cd)pyrene	962	1670	57.6%
Dibenz(a,h)anthracene	976	1670	58.4%
Benzo(g,h,i)perylene	941	1670	56.3%
1-Methylnaphthalene	1200	1670	71.9%
Total Benzofluoranthenes	2160	3330	64.9%

Semivolatile Surrogate Recovery	
d5-Nitrobenzene	58.0%
2-Fluorobiphenyl	58.8%
d14-p-Terphenyl	60.8%
d4-1,2-Dichlorobenzene	55.6%
d5-Phenol	59.7%
2-Fluorophenol	58.9%
2,4,6-Tribromophenol	70.4%
d4-2-Chlorophenol	59.2%

Reported in µg/kg (ppb)

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt6.i Injection Date: 18-MAY-2012 15:06
Lab File ID: 05181201.D Init. Cal. Date(s): 07-MAY-2012 07-MAY-2012
Analysis Type: WATER Init. Cal. Times: 18:47 22:13
Lab Sample ID: CC0518 Quant Type: ISTD
Method: /chem2/nt6.i/20120518.b/SW846050712.m

DB 05/23/12

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
$ 1 2-Fluorophenol	1.22315	1.24424	1.24424	0.010	1.72420	20.00000	Averaged
$ 2 Phenol-d5	1.45682	1.43867	1.43867	0.010	-1.24615	20.00000	Averaged
3 Phenol	1.61511	1.62454	1.62454	0.800	0.58417	20.00000	Averaged
$ 5 2-Chlorophenol-d4	1.37829	1.37269	1.37269	0.010	-0.40582	20.00000	Averaged
4 Bis(2-Chloroethyl)ether	1.18151	1.24290	1.24290	0.700	5.19668	20.00000	Averaged
6 2-Chlorophenol	1.45785	1.44354	1.44354	0.800	-0.98134	20.00000	Averaged
7 1,3-Dichlorobenzene	1.57854	1.65627	1.65627	0.100	4.92395	20.00000	Averaged
9 1,4-Dichlorobenzene	1.58020	1.67206	1.67206	0.100	5.81284	20.00000	Averaged
$ 10 1,2-Dichlorobenzene-d4	0.99343	0.98778	0.98778	0.010	-0.56874	20.00000	Averaged
12 1,2-Dichlorobenzene	1.51695	1.61381	1.61381	0.100	6.38500	20.00000	Averaged
11 Benzyl alcohol	0.98107	1.00954	1.00954	0.100	2.90204	20.00000	Averaged
14 2,2'-oxybis(1-Chloropropane	1.28076	1.39260	1.39260	0.010	8.73285	20.00000	Averaged
13 2-Methylphenol	1.23942	1.24000	1.24000	0.700	0.04746	20.00000	Averaged
17 Hexachloroethane	0.55712	0.60073	0.60073	0.300	7.82824	20.00000	Averaged
16 N-Nitroso-di-n-propylamine	0.77311	0.83131	0.83131	0.500	7.52712	20.00000	Averaged
15 4-Methylphenol	1.29335	1.28673	1.28673	0.600	-0.51199	20.00000	Averaged
$ 18 Nitrobenzene-d5	0.32722	0.32517	0.32517	0.010	-0.62767	20.00000	Averaged
19 Nitrobenzene	0.33127	0.35045	0.35045	0.200	5.79023	20.00000	Averaged
20 Isophorone	0.48634	0.52129	0.52129	0.400	7.18647	20.00000	Averaged
21 2-Nitrophenol	0.22098	0.22039	0.22039	0.100	-0.26703	20.00000	Averaged
22 2,4-Dimethylphenol	0.33796	0.34107	0.34107	0.200	0.91966	20.00000	Averaged
23 Bis(2-Chloroethoxy)methane	0.37377	0.38841	0.38841	0.300	3.91649	20.00000	Averaged
24 Benzoic acid	0.22110	0.20425	0.20425	0.100	-7.62057	20.00000	Averaged
25 2,4-Dichlorophenol	0.34502	0.34517	0.34517	0.200	0.04413	20.00000	Averaged
26 1,2,4-Trichlorobenzene	0.37480	0.39205	0.39205	0.100	4.60285	20.00000	Averaged
28 Naphthalene	1.09765	1.11762	1.11762	0.700	1.81975	20.00000	Averaged
29 4-Chloroaniline	0.47790	0.47597	0.47597	0.010	-0.40335	20.00000	Averaged
30 Hexachlorobutadiene	0.22570	0.23751	0.23751	0.010	5.22989	20.00000	Averaged
31 4-Chloro-3-methylphenol	0.27765	0.27178	0.27178	0.200	-2.11153	20.00000	Averaged
32 2-Methylnaphthalene	0.64615	0.66477	0.66477	0.400	2.88181	20.00000	Averaged
33 Hexachlorocyclopentadiene	0.35407	0.28693	0.28693	0.050	-18.96073	20.00000	Averaged
34 2,4,6-Trichlorophenol	0.40767	0.38282	0.38282	0.200	-6.09396	20.00000	Averaged
35 2,4,5-Trichlorophenol	0.43319	0.42346	0.42346	0.200	-2.24434	20.00000	Averaged
$ 36 2-Fluorobiphenyl	1.25635	1.19908	1.19908	0.010	-4.55886	20.00000	Averaged
37 2-Chloronaphthalene	1.08452	1.17383	1.17383	0.800	8.23572	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt6.i
Lab File ID: 05181201.D
Analysis Type: WATER
Lab Sample ID: CC0518
Method: /chem2/nt6.i/20120518.b/SW846050712.m

Injection Date: 18-MAY-2012 15:06
Init. Cal. Date(s): 07-MAY-2012 07-MAY-2012
Init. Cal. Times: 18:47 22:13
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
38 2-Nitroaniline	0.27582	0.27992	0.27992	0.010	1.48434	20.00000	Averaged
39 Dimethylphthalate	1.10621	1.15421	1.15421	0.010	4.33930	20.00000	Averaged
40 Acenaphthylene	1.71882	1.81667	1.81667	0.900	5.69271	20.00000	Averaged
41 2,6-Dinitrotoluene	0.27383	0.29004	0.29004	0.200	5.91885	20.00000	Averaged
43 3-Nitroaniline	0.30723	0.33665	0.33665	0.010	9.57539	20.00000	Averaged
44 Acenaphthene	1.13066	1.17404	1.17404	0.900	3.83700	20.00000	Averaged
45 2,4-Dinitrophenol	32.56601	50.00000	0.11216	0.010	-34.86798	20.00000	Quadratic<-
46 Dibenzofuran	1.65120	1.64899	1.64899	0.800	-0.13409	20.00000	Averaged
47 4-Nitrophenol	0.10953	0.09787	0.09787	0.010	-10.64790	20.00000	Averaged
48 2,4-Dinitrotoluene	0.34898	0.38420	0.38420	0.200	10.09196	20.00000	Averaged
50 Diethylphthalate	1.03991	1.16502	1.16502	0.010	12.03107	20.00000	Averaged
49 Fluorene	1.32095	1.39661	1.39661	0.900	5.72803	20.00000	Averaged
51 4-Chlorophenyl-phenylether	0.64289	0.65721	0.65721	0.400	2.22719	20.00000	Averaged
52 4-Nitroaniline	0.29680	0.32707	0.32707	0.010	10.19590	20.00000	Averaged
53 4,6-Dinitro-2-methylphenol	0.14692	0.14150	0.14150	0.010	-3.69104	20.00000	Averaged
54 N-Nitrosodiphenylamine	0.54832	0.55612	0.55612	0.010	1.42331	20.00000	Averaged
$ 55 2,4,6-Tribromophenol	0.27900	0.28754	0.28754	0.010	3.06242	20.00000	Averaged
56 4-Bromophenyl-phenylether	0.26811	0.26793	0.26793	0.100	-0.06624	20.00000	Averaged
57 Hexachlorobenzene	0.33253	0.34089	0.34089	0.100	2.51644	20.00000	Averaged
58 Pentachlorophenol	0.16447	0.14058	0.14058	0.050	-14.52730	20.00000	Averaged
60 Phenanthrene	1.11450	1.16128	1.16128	0.700	4.19719	20.00000	Averaged
61 Anthracene	1.13186	1.19563	1.19563	0.700	5.63436	20.00000	Averaged
62 Carbazole	0.86277	0.92638	0.92638	0.010	7.37387	20.00000	Averaged
63 Di-n-butylphthalate	0.98612	1.13748	1.13748	0.010	15.34826	20.00000	Averaged
64 Fluoranthene	1.13077	1.32735	1.32735	0.600	17.38471	20.00000	Averaged
65 Pyrene	1.18027	1.08775	1.08775	0.600	-7.83856	20.00000	Averaged
$ 66 Terphenyl-d14	0.75650	0.67926	0.67926	0.010	-10.21052	20.00000	Averaged
67 Butylbenzylphthalate	0.40159	0.42537	0.42537	0.010	5.92070	20.00000	Averaged
68 Benzo(a)anthracene	1.07397	1.12186	1.12186	0.800	4.45911	20.00000	Averaged
70 3,3'-Dichlorobenzidine	0.37057	0.41420	0.41420	0.010	11.77528	20.00000	Averaged
71 Chrysene	1.03052	1.05982	1.05982	0.700	2.84346	20.00000	Averaged
72 bis(2-Ethylhexyl)phthalate	0.60004	0.59701	0.59701	0.010	-0.50447	20.00000	Averaged
73 Di-n-octylphthalate	1.00537	1.02713	1.02713	0.010	2.16389	20.00000	Averaged
74 Benzo(b)fluoranthene	1.11963	1.11781	1.11781	0.700	-0.16178	20.00000	Averaged
75 Benzo(k)fluoranthene	1.12284	1.19424	1.19424	0.700	6.35912	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt6.i
Lab File ID: 05181201.D
Analysis Type: WATER
Lab Sample ID: CC0518
Method: /chem2/nt6.i/20120518.b/SW846050712.m

Injection Date: 18-MAY-2012 15:06
Init. Cal. Date(s): 07-MAY-2012 07-MAY-2012
Init. Cal. Times: 18:47 22:13
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
187 Total Benzofluoranthenes	1.05368	1.08539	1.08539	0.010	3.00996	20.00000	Averaged
76 Benzo(a)pyrene	0.98439	1.04523	1.04523	0.700	6.18141	20.00000	Averaged
78 Indeno(1,2,3-cd)pyrene	1.49646	1.48853	1.48853	0.500	-0.53043	20.00000	Averaged
79 Dibenzo(a,h)anthracene	1.20475	1.21883	1.21883	0.400	1.16874	20.00000	Averaged
80 Benzo(g,h,i)perylene	1.29678	1.21645	1.21645	0.500	-6.19468	20.00000	Averaged
90 N-Nitrosodimethylamine	0.73393	0.72448	0.72448	0.010	-1.28758	20.00000	Averaged
103 Pyridine	1.25626	1.23938	1.23938	0.010	-1.34327	20.00000	Averaged
91 Aniline	1.92112	1.76775	1.76775	0.010	-7.98329	20.00000	Averaged
105 1-methylnaphthalene	0.49228	0.49545	0.49545	0.010	0.64464	20.00000	Averaged
111 Azobenzene (1,2-DP-Hydrazin	0.96066	1.05969	1.05969	0.010	10.30781	20.00000	Averaged
143 1,4-Dioxane	0.46331	0.42772	0.42772	0.010	-7.68293	20.00000	Averaged
$ 137 d8-1,4-Dioxane	0.48724	0.45320	0.45320	0.010	-6.98617	20.00000	Averaged
144 alpha-Terpineol	0.19333	0.19995	0.19995	0.010	3.42796	20.00000	Averaged
99 Perylene	0.97667	0.95531	0.95531	0.010	-2.18706	20.00000	Averaged
120 2,3,4,6-Tetrachlorophenol	0.33094	0.31179	0.31179	0.010	-5.78605	20.00000	Averaged

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Extraction Method: SW3546
Page 1 of 1

Sample ID: GP5-S-2
SAMPLE

Lab Sample ID: UU22A
LIMS ID: 12-8749
Matrix: Soil
Data Release Authorized:
Reported: 06/07/12

QC Report No: UU22-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/08/12
Date Received: 05/09/12

Date Extracted: 05/16/12
Date Analyzed: 05/18/12 18:42
Instrument/Analyst: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.3 g-dry-wt
Final Extract Volume: 4.00 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: 31.9%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	32	< 32 U
53469-21-9	Aroclor 1242	32	< 32 U
12672-29-6	Aroclor 1248	32	< 32 U
11097-69-1	**Aroclor 1254**	**32**	**45**
11096-82-5	**Aroclor 1260**	**32**	**35**
11104-28-2	Aroclor 1221	32	< 32 U
11141-16-5	Aroclor 1232	32	< 32 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	NR
Tetrachlorometaxylene	93.2%

UU22:17R BC 6/8/12

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082

Sample ID: MB-051612
METHOD BLANK

Lab Sample ID: MB-051612
LIMS ID: 12-8749
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UU22-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/16/12
Date Analyzed: 05/18/12 10:32
Instrument/Analyst: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.0 g
Final Extract Volume: 4.00 mL
Dilution Factor: 1.00
Silica Gel: Yes

Percent Moisture: NA

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	< 33 U
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	Aroclor 1248	33	< 33 U
11097-69-1	Aroclor 1254	33	< 33 U
11096-82-5	Aroclor 1260	33	< 33 U
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	97.2%
Tetrachlorometaxylene	82.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082
Page 1 of 1

Sample ID: LCS-051612
LCS/LCSD

Lab Sample ID: LCS-051612
LIMS ID: 12-8749
Matrix: Soil
Data Release Authorized:
Reported: 05/21/12

QC Report No: UU22-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 05/16/12

Date Analyzed LCS: 05/18/12 10:53
LCSD: 05/18/12 11:14
Instrument/Analyst LCS: ECD7/JGR
LCSD: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount LCS: 12.0 g-dry-wt
LCSD: 12.0 g-dry-wt
Final Extract Volume LCS: 4.00 mL
LCSD: 4.00 mL
Dilution Factor LCS: 1.00
LCSD: 1.00
Silica Gel: Yes

Percent Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Aroclor 1016	126	167	75.4%	129	167	77.2%	2.4%
Aroclor 1260	126	167	75.4%	133	167	79.6%	5.4%

PCB Surrogate Recovery

	LCS	LCSD
Decachlorobiphenyl	93.5%	96.5%
Tetrachlorometaxylene	87.0%	86.5%

Results reported in µg/kg (ppb)
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UU22-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-051612	97.2%	49-126	82.8%	53-108	0
LCS-051612	93.5%	49-126	87.0%	53-108	0
LCSD-051612	96.5%	49-126	86.5%	53-108	0
GP5-S-2	NR	31-140	93.2%	39-122	0

Microwave (MARS) Control Limits PCBSMI
Prep Method: SW3546
Log Number Range: 12-8749 to 12-8749

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Page 1 of 1
Matrix: Soil

QC Report No: UU22-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Received: 05/09/12

Data Release Authorized:
Reported: 05/17/12

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range/Surrogate	RL	Result
MB-051512	Method Blank	05/15/12	05/16/12	1.00	Diesel Range	5.0	< 5.0 U
12-8749	HC ID: ---		FID4A	1.0	Motor Oil Range	10	< 10 U
					o-Terphenyl		88.2%
UU22A	GP5-S-2	05/15/12	05/16/12	1.00	**Diesel Range**	**71**	**460**
12-8749	HC ID: **DRO/MOTOR OIL**		FID4A	10	**Motor Oil Range**	**140**	**710**
					o-Terphenyl		72.4%

Reported in mg/kg (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: LCS-051512
LAB CONTROL

Lab Sample ID: LCS-051512
LIMS ID: 12-8749
Matrix: Soil
Data Release Authorized:
Reported: 05/17/12

QC Report No: UU22-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/15/12
Date Analyzed: 05/16/12 10:15
Instrument/Analyst: FID4A/MH

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
Diesel	125	150	83.3%

TPHD Surrogate Recovery

o-Terphenyl	92.7%

Results reported in mg/kg

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: UU22
Matrix: Soil Project: SIMS - N Cascade Ford
Date Received: 05/09/12 0747.01.01

ARI ID	Client ID	Client Amt	Final Vol	Basis	Prep Date
12-8749-051512MB1	Method Blank	10.0 g	1.00 mL	-	05/15/12
12-8749-051512LCS1	Lab Control	10.0 g	1.00 mL	-	05/15/12
12-8749-UU22A	GP5-S-2	7.01 g	1.00 mL	D	05/15/12

Basis: D=Dry Weight W=As Received

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: UU22-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	OTER	TOT OUT
051512MBS	88.2%	0
051512LCS	92.7%	0
GP5-S-2	72.4%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3546
Log Number Range: 12-8749 to 12-8749

Data File: /chem3/fid4a.1/20120516.b/0516a007.d

Date : 16-MAY-2012 09:51

Client ID: UU22MBS1

Sample Info: UU22MBS1

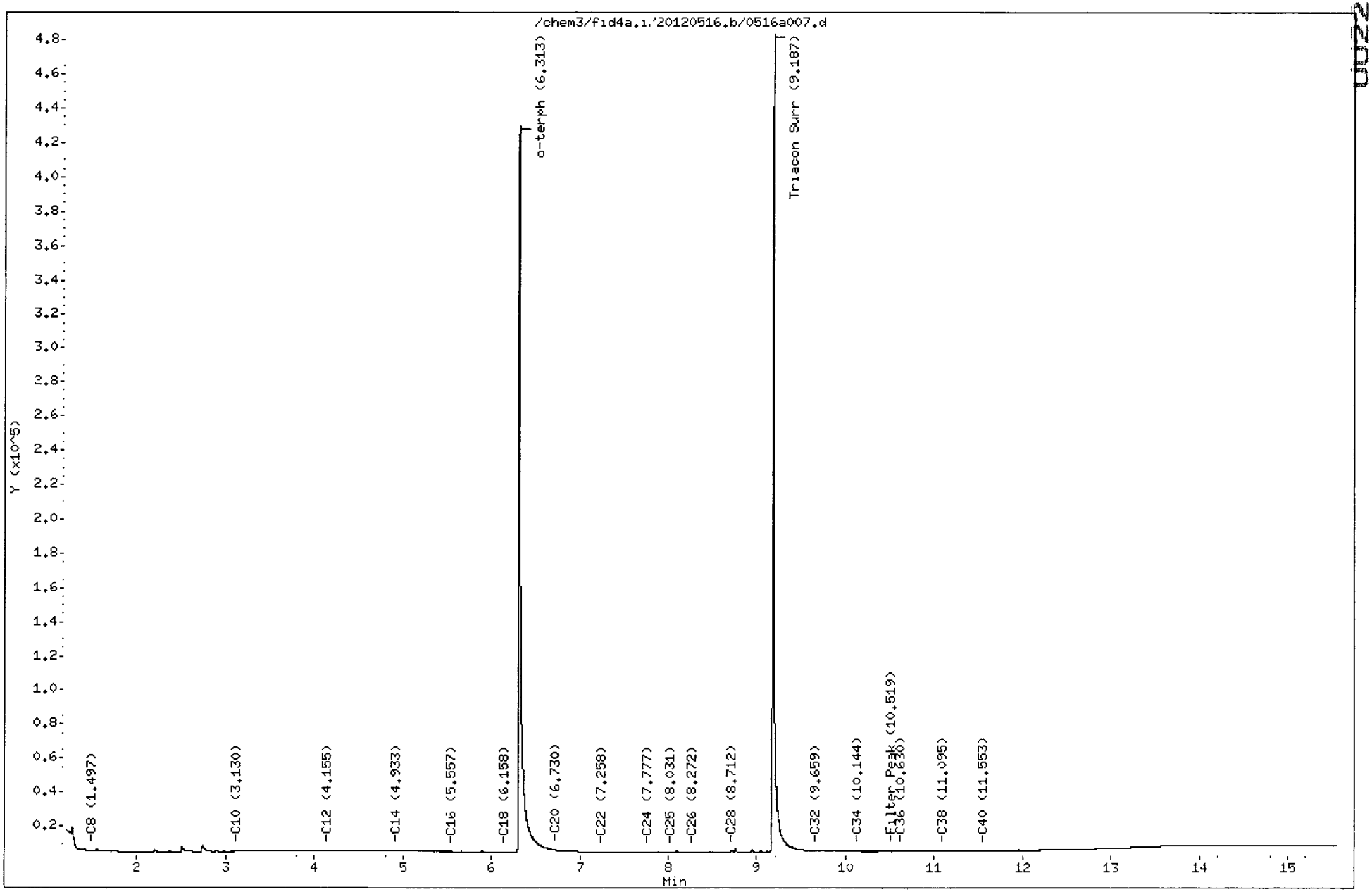
Column phase: RTX-1

Instrument: fid4a.1

Operator: MH

Column diameter: 0.25

UU22 : 00025



Data File: /chem3/fid4a.i/20120516.b/0516a008.d

Date : 16-MAY-2012 10:15

Client ID: UU22LCSS1

Sample Info: UU22LCSS1

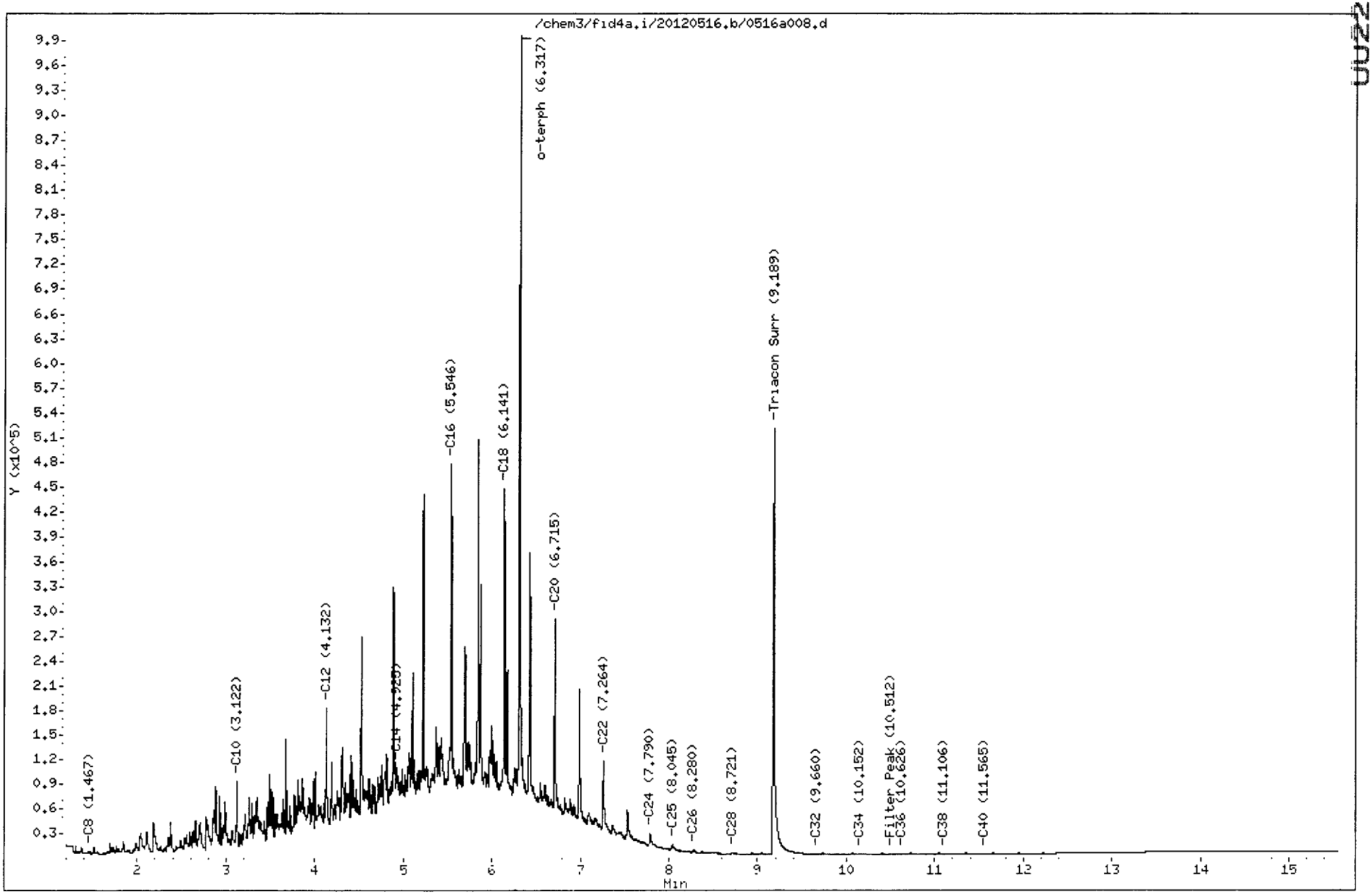
Column phase: RTX-1

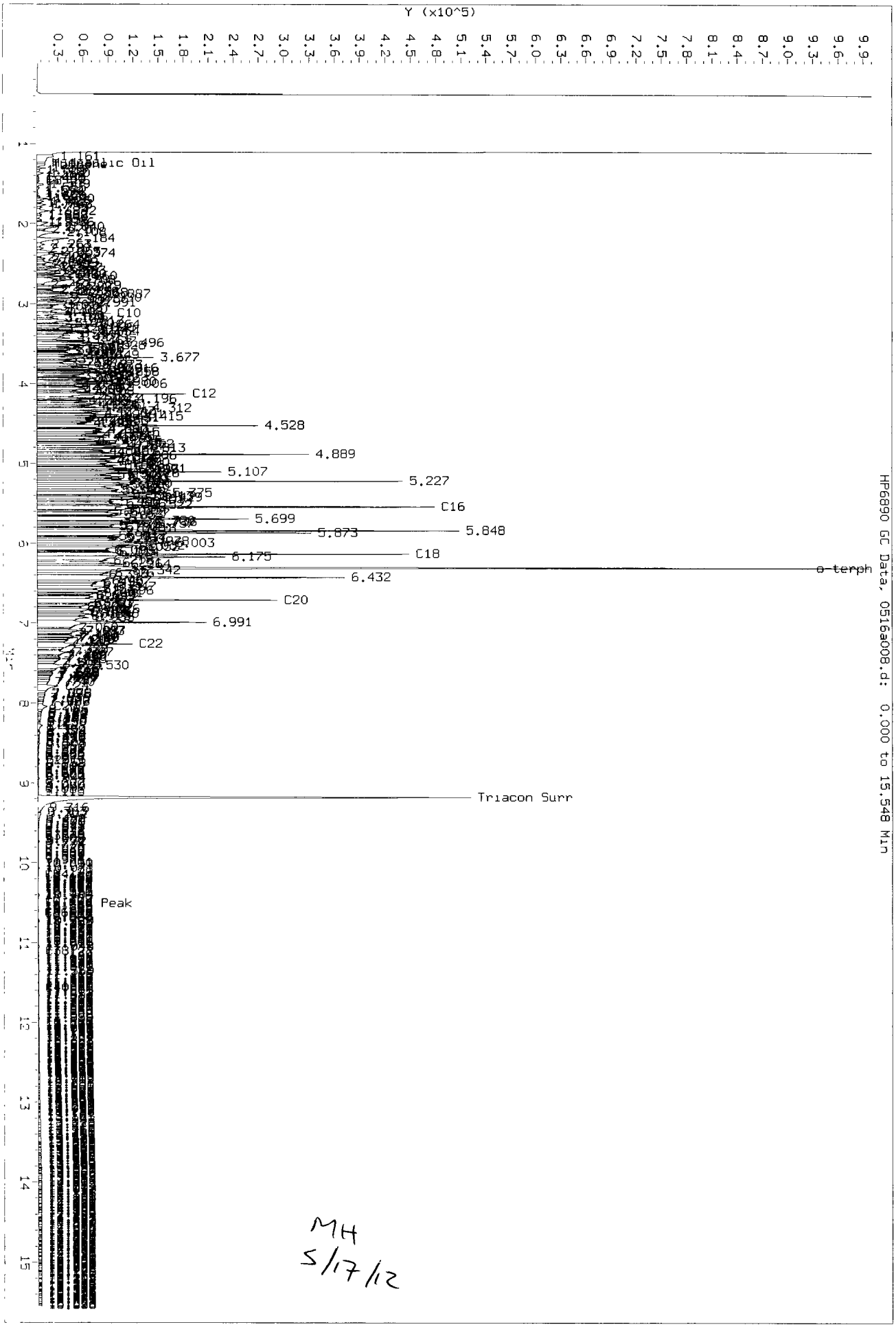
Instrument: fid4a.i

Operator: MH

Column diameter: 0.25

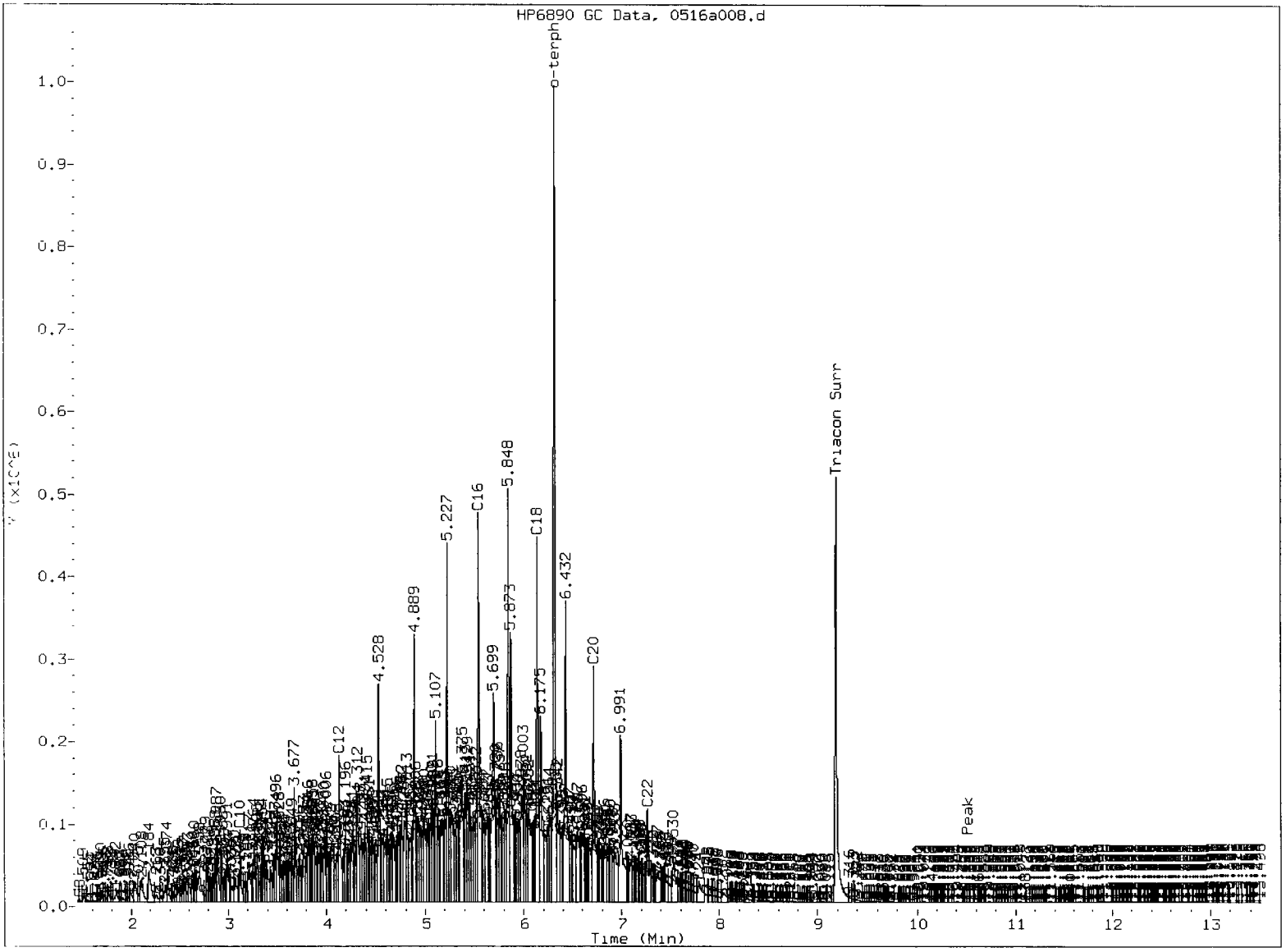
UU22:00026




Data File: /chem3/fid4a.i/20120516.b/0516a008.d
Injection Date: 16-MAY-2012 10:15
Instrument: fid4a.i
Client Sample ID: UU22LCSS1
Y (x10^5)
Mineral Oil
C10
3.677
C12
4.528
4.889
5.107
5.227
C16
5.699
5.848
C18
o-terph
6.432
C20
6.991
C22
Triacon Surr
Peak
HP6890 GC Data, 0516a008.d: 0.000 to 15.548 Min

MH
5/17/12

FID:4A-2C/RTX-1 UU22LCSS1 FID:4A SIGNAL



MANUAL INTEGRATION

X 1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/17/12

Data File: /chem3/fid4a.i/20120516.b/0516a011.d

Date : 16-MAY-2012 11:28

Client ID: GP5-S-2

Sample Info: UU22A,10

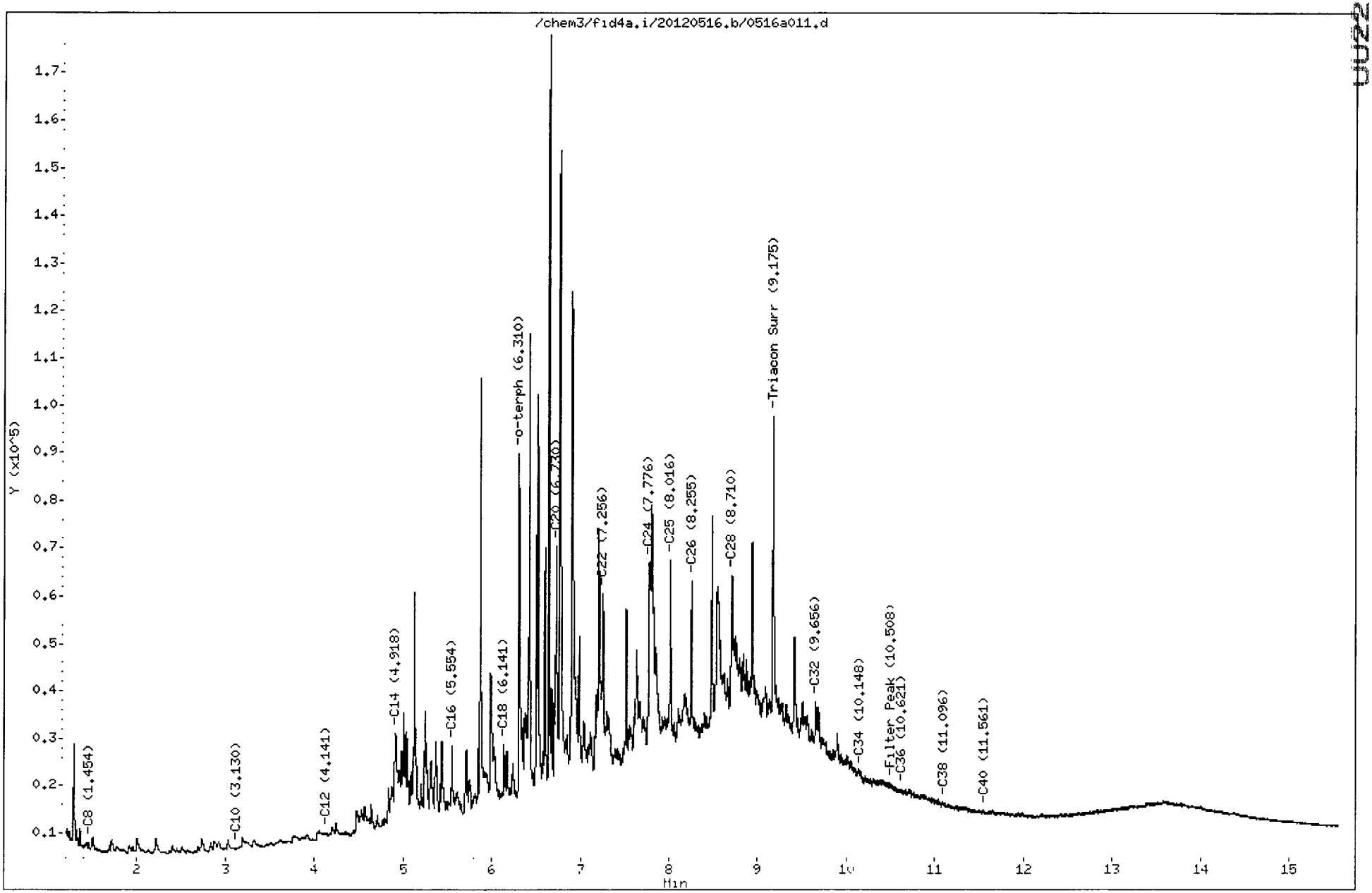
Column phase: RTX-1

Instrument: fid4a.i

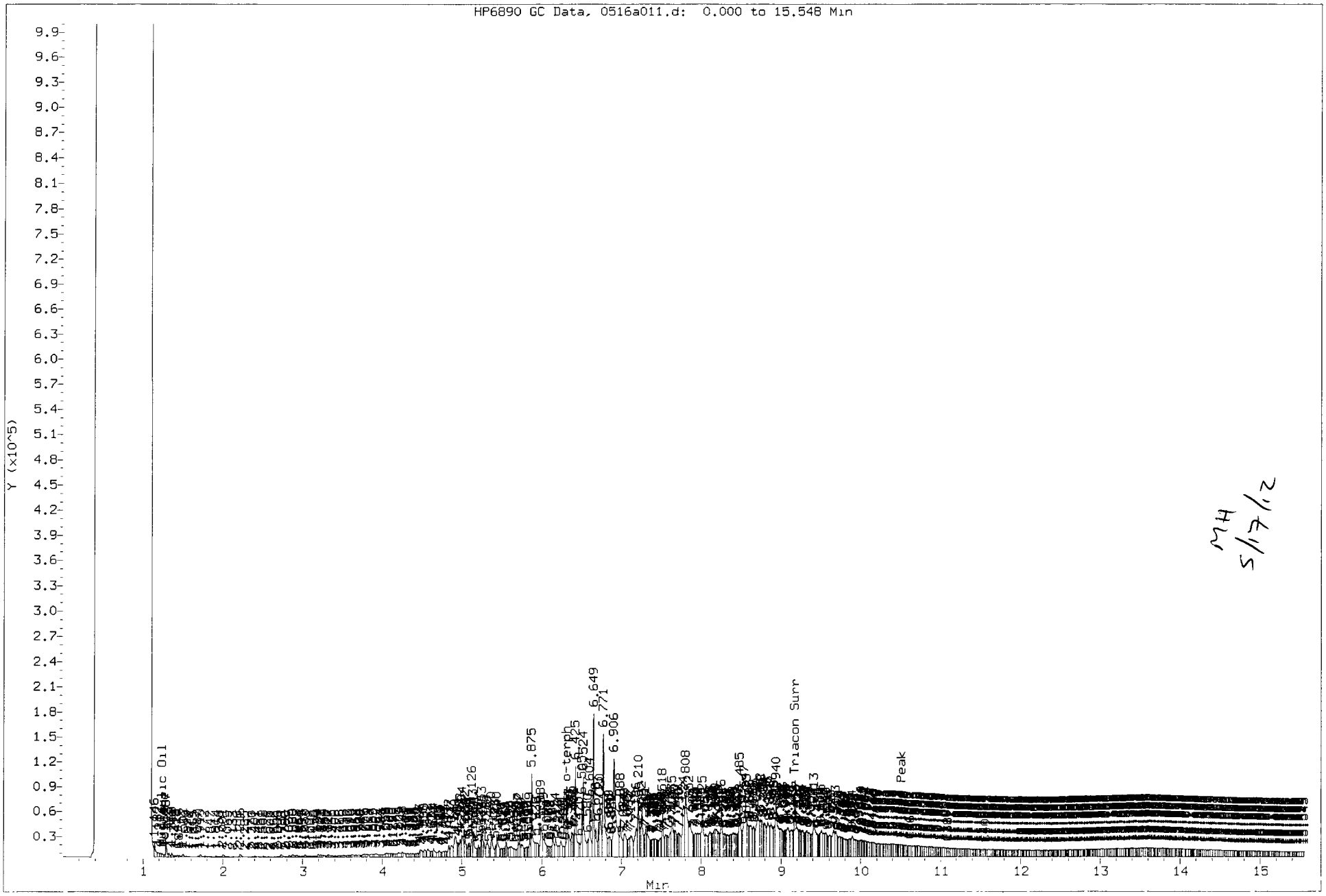
Operator: MH

Column diameter: 0.25

UU22 : 00029



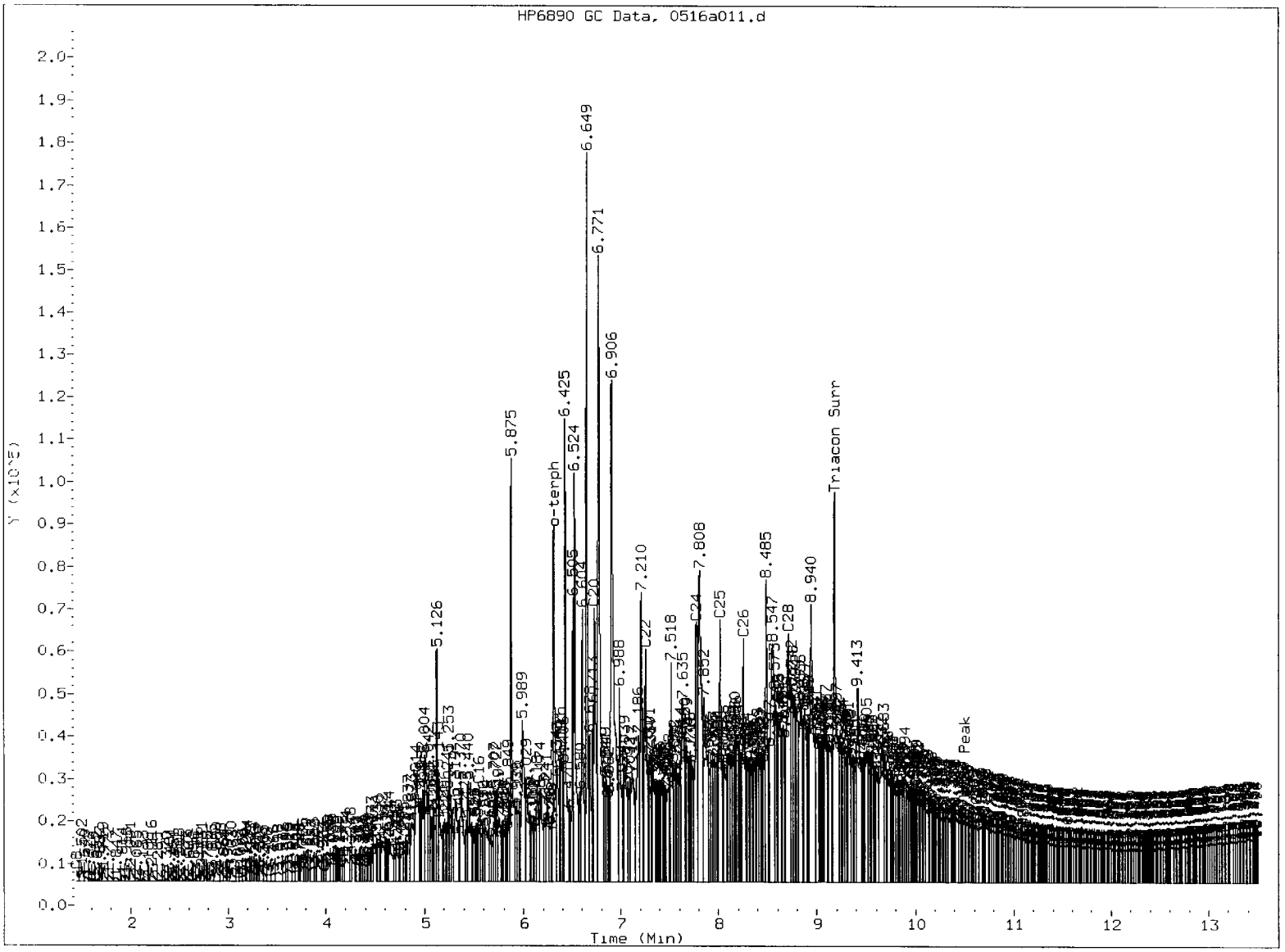
Data File: /chem3/fid4a.i/20120516.b/0516a011.d
Injection Date: 16-MAY-2012 11:28
Instrument: fid4a.i
Client Sample ID: GP5-S-2



MH 5/17/12

UU22:00030

FID:4A-2C/RTX-1 UU22A FID:4A SIGNAL



MANUAL INTEGRATION

X 1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/17/12

Analytical Resources, Incorporated
Analytical Chemists and Consultants

1 June 2012

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: Sims-N Cascade Ford, 0747.01.01
ARI Job Nos.: UU66, UU68

Dear Heather:

Please find enclosed the original chain-of-custody records and the final results for the samples from the project referenced above. Analytical Resources, Inc. (ARI) received three water samples, one field duplicate and two trip blanks on May 16-17, 2012. The samples analyzed for VOAs, NWTPH-G, SVOAs, SIM-PAHs, NWTPH-Dx and dissolved metals as requested.

The percent recoveries for the surrogate, d4-1,2-dichloroethane, were slightly high following the initial VOA analyses of samples MW1-W-8.5, Field Duplicate, MW2-W-9 and the trip blank associated with SDG UU66. Since no target compounds were detected in sample MW2-W-9 and the trip blank, the high bias does not compromise any RL. No corrective actions were taken for these samples. The remaining two samples were re-analyzed. The percent recoveries for all surrogates were within established QC limits for the re-analyses. The results for both analyses have been submitted.

The remaining analyses proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: files UU66, UU68

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 11466	Turn-around Requested: STANDARD	Page: 1 of 1	
ARI Client Company: MAUL FOSTER & ALONGI	Phone: 360-927-1307	Date: 5/15/12	Ice Present? Y
Client Contact: HEATHER HIRSCH		No. of Coolers: 1	Cooler Temps: 4.1 C
Client Project Name: SIMS - N. CASCADE FORD			
Client Project #: 0747.01.01	Samplers: H. HIRSCH		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: NWTPH-Gx	NWTPH-Dx	Metals* (RCRA 8 by 6020)	VOCs (8260B)	SVOCs (8270C)	PAHs (8270 SIM)	Lead* (by 6020)		Notes/Comments
MW1-W-8.5	5/15/12	1230	WATER	12	X	X	X	X	X	X	—		*Metals are field filtered - report as dissolved.
MW3-W-9		1455		6	X	—	—	X	—	—	X		
FIELD DUPLICATE		1235		12	X	X	X	X	X	X	—		
TRIP BLANK	4/30/12			3									

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
X = analyze - = do not analyze edd's in Eqi's format	Printed Name: Heather Hirsch	Printed Name: Steve Potter	Printed Name:	Printed Name:
	Company: MFA	Company: ARI	Company:	Company:
	Date & Time: 5/16/12 0830	Date & Time: 5/16/12 11:15AM	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Maul foster & Alongi
Project Name: SIMS - W Cascade Ford
COC No(s): NA
Delivered by: Fed-Ex UPS Courier Hand Delivered Other:
Assigned ARI Job No: UU66
Tracking No: NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	NO
Were custody papers included with the cooler?	YES	NO
Were custody papers properly filled out (ink, signed, etc.)	YES	NO
Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)	4.8	

If cooler temperature is out of compliance fill out form 00070F — Temp Gun ID#: 90411518

Cooler Accepted by: JS Date: 5-16-12 Time: 11 15

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used?	Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other:		
Was sufficient ice used (if appropriate)?	NA	YES	NO
Were all bottles sealed in individual plastic bags?		YES	NO
Did all bottles arrive in good condition (unbroken)?		YES	NO
Were all bottle labels complete and legible?		YES	NO
Did the number of containers listed on COC match with the number of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?		YES	NO
Were all bottles used correct for the requested analyses?		YES	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		YES	NO
Date VOC Trip Blank was made at ARI	NA	4/30/12	

Was Sample Split by ARI: NA YES Date/Time: Equipment: Split by:

Samples Logged by: JM Date: 5/17/12 Time: 1218

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

MW1-W-S.5 = 3M in 1 of 5
Field Duplicate - 3M in 1 of 5
Trip Blank - 3M in 3 of 3.

By: JM Date: 5/17/12



Small → "sm"	
Peabubbles → "pb"	
Large → "lg"	
Headspace → "hs"	

PRESERVATION VERIFICATION 05/17/12
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: **UU66**

Inquiry Number: NONE
Analysis Requested: 05/16/12
Contact: Hirsch, Heather
Client: Maul Foster & Alongi
Logged by: JM
Sample Set Used: Yes-481
Validatable Package: No
Deliverables:

PC: Mark
VTSR: 05/16/12

Project #: 0747.01.01
Project: SIMS - N Cascade Ford
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	AK102 <2	Fe2+ <2	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
12-8973 **UU66A**	MW1-W-8.5						DIS pass									Y						
12-8974 **UU66B**	FIELD DUPLICATE						DIS pass									Y						
12-8975 **UU66C**	MW3-W-9						DIS pass									Y						

Checked By JM Date 5/17/12

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: UU66
Client: Maul Foster & Alongi
Project Event: 0747.01.01
Project Name: SIMS - N Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	MW1-W-8.5	UU66A	12-8973	Water	05/15/12 12:30	05/16/12 11:15
2.	FIELD DUPLICATE	UU66B	12-8974	Water	05/15/12 12:35	05/16/12 11:15
3.	MW3-W-9	UU66C	12-8975	Water	05/15/12 14:55	05/16/12 11:15
4.	TRIP BLANK	UU66D	12-8976	Water	05/15/12	05/16/12 11:15

UU66 : 00005

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW1-W-8.5**
Page 1 of 2 **SAMPLE**

Lab Sample ID: UU66A
LIMS ID: 12-8973
Matrix: Water
Data Release Authorized:
Reported: 05/29/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/15/12
Date Received: 05/16/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/23/12 19:29

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	**Benzene**	**0.2**	**0.3**	
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	**Chlorobenzene**	**0.2**	**4.3**	
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW1-W-8.5**
Page 2 of 2 **SAMPLE**

Lab Sample ID: UU66A
LIMS ID: 12-8973
Matrix: Water
Date Analyzed: 05/23/12 19:29

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	**Isopropylbenzene**	**0.2**	**2.6**	
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	**tert-Butylbenzene**	**0.2**	**0.3**	
135-98-8	**sec-Butylbenzene**	**0.2**	**1.8**	
99-87-6	**4-Isopropyltoluene**	**0.2**	**0.8**	
104-51-8	**n-Butylbenzene**	**0.2**	**0.4**	
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	**Naphthalene**	**0.5**	**0.7**	
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	126%
d8-Toluene	98.4%
Bromofluorobenzene	96.2%
d4-1,2-Dichlorobenzene	104%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW1-W-8.5**
Page 1 of 2 **REANALYSIS**

Lab Sample ID: UU66A
LIMS ID: 12-8973
Matrix: Water
Data Release Authorized:
Reported: 05/29/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/15/12
Date Received: 05/16/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/25/12 16:01

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	**Benzene**	**0.2**	**0.3**	
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	**Chlorobenzene**	**0.2**	**4.6**	
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW1-W-8.5**
Page 2 of 2 **REANALYSIS**

Lab Sample ID: UU66A
LIMS ID: 12-8973
Matrix: Water
Date Analyzed: 05/25/12 16:01

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	**Isopropylbenzene**	**0.2**	**2.8**	
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	**tert-Butylbenzene**	**0.2**	**0.3**	
135-98-8	**sec-Butylbenzene**	**0.2**	**2.0**	
99-87-6	**4-Isopropyltoluene**	**0.2**	**0.9**	
104-51-8	**n-Butylbenzene**	**0.2**	**0.5**	
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	**Naphthalene**	**0.5**	**0.7**	
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.3%
d8-Toluene	95.9%
Bromofluorobenzene	105%
d4-1,2-Dichlorobenzene	107%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: FIELD DUPLICATE SAMPLE**

Lab Sample ID: UU66B
LIMS ID: 12-8974
Matrix: Water
Data Release Authorized:
Reported: 05/29/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/15/12
Date Received: 05/16/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/23/12 19:55

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	**Benzene**	**0.2**	**0.3**	
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	**Chlorobenzene**	**0.2**	**4.4**	
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

Lab Sample ID: UU66B
LIMS ID: 12-8974
Matrix: Water
Date Analyzed: 05/23/12 19:55

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	**Isopropylbenzene**	**0.2**	**2.7**	
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	**tert-Butylbenzene**	**0.2**	**0.3**	
135-98-8	**sec-Butylbenzene**	**0.2**	**1.9**	
99-87-6	**4-Isopropyltoluene**	**0.2**	**0.8**	
104-51-8	**n-Butylbenzene**	**0.2**	**0.4**	
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	**Naphthalene**	**0.5**	**0.8**	
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	122%
d8-Toluene	98.1%
Bromofluorobenzene	100%
d4-1,2-Dichlorobenzene	105%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: FIELD DUPLICATE REANALYSIS**

Lab Sample ID: UU66B
LIMS ID: 12-8974
Matrix: Water
Data Release Authorized:
Reported: 05/29/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/15/12
Date Received: 05/16/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/25/12 16:27

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	**Benzene**	**0.2**	**0.3**	
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	**Chlorobenzene**	**0.2**	**4.8**	
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: FIELD DUPLICATE REANALYSIS**

Lab Sample ID: UU66B
LIMS ID: 12-8974
Matrix: Water
Date Analyzed: 05/25/12 16:27

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	**Isopropylbenzene**	**0.2**	**3.2**	
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	**tert-Butylbenzene**	**0.2**	**0.3**	
135-98-8	**sec-Butylbenzene**	**0.2**	**2.2**	
99-87-6	**4-Isopropyltoluene**	**0.2**	**1.0**	
104-51-8	**n-Butylbenzene**	**0.2**	**0.5**	
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	**Naphthalene**	**0.5**	**1.0**	
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	96.7%
d8-Toluene	96.2%
Bromofluorobenzene	106%
d4-1,2-Dichlorobenzene	108%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW3-W-9**
Page 1 of 2 **SAMPLE**

Lab Sample ID: UU66C
LIMS ID: 12-8975
Matrix: Water
Data Release Authorized:
Reported: 05/29/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/15/12
Date Received: 05/16/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/23/12 20:22

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW3-W-9**
Page 2 of 2 **SAMPLE**

Lab Sample ID: UU66C
LIMS ID: 12-8975
Matrix: Water
Date Analyzed: 05/23/12 20:22

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	**2-Chlorotoluene**	**0.2**	**0.2**	
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	**sec-Butylbenzene**	**0.2**	**0.4**	
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	120%
d8-Toluene	97.9%
Bromofluorobenzene	98.3%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: TRIP BLANK**
 SAMPLE

Lab Sample ID: UU66D
LIMS ID: 12-8976
Matrix: Water
Data Release Authorized:
Reported: 05/29/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/15/12
Date Received: 05/16/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/23/12 20:48

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: TRIP BLANK SAMPLE**

Lab Sample ID: UU66D
LIMS ID: 12-8976
Matrix: Water
Date Analyzed: 05/23/12 20:48

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	125%
d8-Toluene	96.5%
Bromofluorobenzene	95.8%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-052312A**
 METHOD BLANK

Lab Sample ID: MB-052312A
LIMS ID: 12-8973
Matrix: Water
Data Release Authorized:
Reported: 05/29/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/23/12 11:18

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-052312A**
 METHOD BLANK

Lab Sample ID: MB-052312A
LIMS ID: 12-8973
Matrix: Water
Date Analyzed: 05/23/12 11:18

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	112%
d8-Toluene	98.2%
Bromofluorobenzene	104%
d4-1,2-Dichlorobenzene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-052512A**
 METHOD BLANK

Lab Sample ID: MB-052512A
LIMS ID: 12-8974
Matrix: Water
Data Release Authorized:
Reported: 05/29/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/25/12 12:54

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-052512A**
 METHOD BLANK

Lab Sample ID: MB-052512A
LIMS ID: 12-8974
Matrix: Water
Date Analyzed: 05/25/12 12:54

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	95.9%
Bromofluorobenzene	99.4%
d4-1,2-Dichlorobenzene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-052312A**
Page 1 of 2 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-052312A
LIMS ID: 12-8973
Matrix: Water
Data Release Authorized:
Reported: 05/29/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PKC
LCSD: NT2/PKC
Date Analyzed LCS: 05/23/12 10:24
LCSD: 05/23/12 10:51

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	10.7	10.0	107%	10.6	10.0	106%	0.9%
Bromomethane	10.9	10.0	109%	10.8	10.0	108%	0.9%
Vinyl Chloride	10.3	10.0	103%	10.3	10.0	103%	0.0%
Chloroethane	9.9	10.0	99.0%	9.9	10.0	99.0%	0.0%
Methylene Chloride	10.4	10.0	104%	10.4	10.0	104%	0.0%
Acetone	55.5	50.0	111%	57.5	50.0	115%	3.5%
Carbon Disulfide	10.5	10.0	105%	10.6	10.0	106%	0.9%
1,1-Dichloroethene	10.2	10.0	102%	10.1	10.0	101%	1.0%
1,1-Dichloroethane	10.3	10.0	103%	10.4	10.0	104%	1.0%
trans-1,2-Dichloroethene	10.0	10.0	100%	10.1	10.0	101%	1.0%
cis-1,2-Dichloroethene	9.8	10.0	98.0%	9.9	10.0	99.0%	1.0%
Chloroform	10.3	10.0	103%	10.4	10.0	104%	1.0%
1,2-Dichloroethane	10.8	10.0	108%	11.0	10.0	110%	1.8%
2-Butanone	44.3	50.0	88.6%	48.9	50.0	97.8%	9.9%
1,1,1-Trichloroethane	10.8	10.0	108%	11.0	10.0	110%	1.8%
Carbon Tetrachloride	11.6	10.0	116%	11.6	10.0	116%	0.0%
Vinyl Acetate	8.2 Q	10.0	82.0%	8.9 Q	10.0	89.0%	8.2%
Bromodichloromethane	10.1	10.0	101%	10.2	10.0	102%	1.0%
1,2-Dichloropropane	9.7	10.0	97.0%	9.8	10.0	98.0%	1.0%
cis-1,3-Dichloropropene	8.9	10.0	89.0%	9.2	10.0	92.0%	3.3%
Trichloroethene	9.7	10.0	97.0%	9.9	10.0	99.0%	2.0%
Dibromochloromethane	9.6	10.0	96.0%	10.1	10.0	101%	5.1%
1,1,2-Trichloroethane	9.0	10.0	90.0%	9.4	10.0	94.0%	4.3%
Benzene	10.3	10.0	103%	10.3	10.0	103%	0.0%
trans-1,3-Dichloropropene	8.9	10.0	89.0%	9.4	10.0	94.0%	5.5%
2-Chloroethylvinylether	7.1 Q	10.0	71.0%	7.7 Q	10.0	77.0%	8.1%
Bromoform	9.5	10.0	95.0%	9.7	10.0	97.0%	2.1%
4-Methyl-2-Pentanone (MIBK)	50.7	50.0	101%	51.5	50.0	103%	1.6%
2-Hexanone	46.8	50.0	93.6%	49.7	50.0	99.4%	6.0%
Tetrachloroethene	10.0	10.0	100%	10.2	10.0	102%	2.0%
1,1,2,2-Tetrachloroethane	9.4	10.0	94.0%	9.6	10.0	96.0%	2.1%
Toluene	9.6	10.0	96.0%	9.8	10.0	98.0%	2.1%
Chlorobenzene	9.7	10.0	97.0%	9.9	10.0	99.0%	2.0%
Ethylbenzene	10.0	10.0	100%	10.2	10.0	102%	2.0%
Styrene	9.7	10.0	97.0%	10.1	10.0	101%	4.0%
Trichlorofluoromethane	11.8 Q	10.0	118%	11.8 Q	10.0	118%	0.0%
1,1,2-Trichloro-1,2,2-trifluoroetha	10.8	10.0	108%	10.8	10.0	108%	0.0%
m,p-Xylene	20.6	20.0	103%	21.1	20.0	106%	2.4%
o-Xylene	10.5	10.0	105%	10.7	10.0	107%	1.9%
1,2-Dichlorobenzene	10.1	10.0	101%	10.2	10.0	102%	1.0%
1,3-Dichlorobenzene	9.7	10.0	97.0%	9.8	10.0	98.0%	1.0%
1,4-Dichlorobenzene	9.5	10.0	95.0%	9.6	10.0	96.0%	1.0%
Acrolein	46.1	50.0	92.2%	48.4	50.0	96.8%	4.9%
Methyl Iodide	10.5	10.0	105%	10.7	10.0	107%	1.9%
Bromoethane	10.5	10.0	105%	10.6	10.0	106%	0.9%
Acrylonitrile	10.0	10.0	100%	10.6	10.0	106%	5.8%
1,1-Dichloropropene	10.5	10.0	105%	10.6	10.0	106%	0.9%
Dibromomethane	10.3	10.0	103%	10.5	10.0	105%	1.9%

UU66:00022

Lab Sample ID: LCS-052312A
LIMS ID: 12-8973
Matrix: Water

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,1,1,2-Tetrachloroethane	11.3	10.0	113%	11.2	10.0	112%	0.9%
1,2-Dibromo-3-chloropropane	10.4	10.0	104%	10.4	10.0	104%	0.0%
1,2,3-Trichloropropane	9.5	10.0	95.0%	9.9	10.0	99.0%	4.1%
trans-1,4-Dichloro-2-butene	11.0	10.0	110%	11.7	10.0	117%	6.2%
1,3,5-Trimethylbenzene	10.4	10.0	104%	10.4	10.0	104%	0.0%
1,2,4-Trimethylbenzene	10.2	10.0	102%	10.3	10.0	103%	1.0%
Hexachlorobutadiene	10.4	10.0	104%	10.2	10.0	102%	1.9%
Ethylene Dibromide	8.8	10.0	88.0%	9.4	10.0	94.0%	6.6%
Bromochloromethane	9.8	10.0	98.0%	10.0	10.0	100%	2.0%
2,2-Dichloropropane	11.1	10.0	111%	11.1	10.0	111%	0.0%
1,3-Dichloropropane	8.9	10.0	89.0%	9.5	10.0	95.0%	6.5%
Isopropylbenzene	10.2	10.0	102%	10.2	10.0	102%	0.0%
n-Propylbenzene	10.0	10.0	100%	10.0	10.0	100%	0.0%
Bromobenzene	9.4	10.0	94.0%	9.4	10.0	94.0%	0.0%
2-Chlorotoluene	9.8	10.0	98.0%	9.9	10.0	99.0%	1.0%
4-Chlorotoluene	9.5	10.0	95.0%	9.6	10.0	96.0%	1.0%
tert-Butylbenzene	10.2	10.0	102%	10.2	10.0	102%	0.0%
sec-Butylbenzene	10.3	10.0	103%	10.3	10.0	103%	0.0%
4-Isopropyltoluene	10.3	10.0	103%	10.4	10.0	104%	1.0%
n-Butylbenzene	10.4	10.0	104%	10.4	10.0	104%	0.0%
1,2,4-Trichlorobenzene	11.0	10.0	110%	10.6	10.0	106%	3.7%
Naphthalene	10.3	10.0	103%	10.4	10.0	104%	1.0%
1,2,3-Trichlorobenzene	10.9	10.0	109%	10.9	10.0	109%	0.0%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	108%	109%
d8-Toluene	102%	101%
Bromofluorobenzene	101%	101%
d4-1,2-Dichlorobenzene	108%	103%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-052512A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-052512A
LIMS ID: 12-8974
Matrix: Water
Data Release Authorized:
Reported: 05/29/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PKC
LCSD: NT2/PKC
Date Analyzed LCS: 05/25/12 11:34
LCSD: 05/25/12 12:01

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.4	10.0	94.0%	10.1	10.0	101%	7.2%
Bromomethane	9.7	10.0	97.0%	10.4	10.0	104%	7.0%
Vinyl Chloride	9.3	10.0	93.0%	10.2	10.0	102%	9.2%
Chloroethane	10.5	10.0	105%	11.3	10.0	113%	7.3%
Methylene Chloride	9.6	10.0	96.0%	10.0	10.0	100%	4.1%
Acetone	50.6	50.0	101%	54.6	50.0	109%	7.6%
Carbon Disulfide	9.4	10.0	94.0%	10.1	10.0	101%	7.2%
1,1-Dichloroethene	9.3	10.0	93.0%	9.9	10.0	99.0%	6.2%
1,1-Dichloroethane	10.0	10.0	100%	10.5	10.0	105%	4.9%
trans-1,2-Dichloroethene	9.9	10.0	99.0%	10.0	10.0	100%	1.0%
cis-1,2-Dichloroethene	10.3	10.0	103%	10.3	10.0	103%	0.0%
Chloroform	9.9	10.0	99.0%	10.5	10.0	105%	5.9%
1,2-Dichloroethane	10.2	10.0	102%	11.3	10.0	113%	10.2%
2-Butanone	50.9	50.0	102%	57.4	50.0	115%	12.0%
1,1,1-Trichloroethane	10.2	10.0	102%	10.6	10.0	106%	3.8%
Carbon Tetrachloride	10.6	10.0	106%	10.0	10.0	100%	5.8%
Vinyl Acetate	8.4	10.0	84.0%	9.8	10.0	98.0%	15.4%
Bromodichloromethane	10.1	10.0	101%	11.4	10.0	114%	12.1%
1,2-Dichloropropane	9.4	10.0	94.0%	10.6	10.0	106%	12.0%
cis-1,3-Dichloropropene	9.5	10.0	95.0%	12.6	10.0	126%	28.1%
Trichloroethene	10.1	10.0	101%	10.4	10.0	104%	2.9%
Dibromochloromethane	10.5	10.0	105%	11.5	10.0	115%	9.1%
1,1,2-Trichloroethane	9.3	10.0	93.0%	11.2	10.0	112%	18.5%
Benzene	10.4	10.0	104%	10.1	10.0	101%	2.9%
trans-1,3-Dichloropropene	9.5	10.0	95.0%	12.9	10.0	129%	30.4%
2-Chloroethylvinylether	7.0 Q	10.0	70.0%	9.2 Q	10.0	92.0%	27.2%
Bromoform	8.7 Q	10.0	87.0%	9.4 Q	10.0	94.0%	7.7%
4-Methyl-2-Pentanone (MIBK)	48.2	50.0	96.4%	53.4	50.0	107%	10.2%
2-Hexanone	51.5	50.0	103%	56.3	50.0	113%	8.9%
Tetrachloroethene	9.5	10.0	95.0%	9.9	10.0	99.0%	4.1%
1,1,2,2-Tetrachloroethane	10.7	10.0	107%	11.0	10.0	110%	2.8%
Toluene	9.0	10.0	90.0%	10.4	10.0	104%	14.4%
Chlorobenzene	10.3	10.0	103%	10.5	10.0	105%	1.9%
Ethylbenzene	10.9	10.0	109%	10.5	10.0	105%	3.7%
Styrene	11.3	10.0	113%	11.0	10.0	110%	2.7%
Trichlorofluoromethane	10.3	10.0	103%	11.0	10.0	110%	6.6%
1,1,2-Trichloro-1,2,2-trifluoroetha	9.3	10.0	93.0%	10.4	10.0	104%	11.2%
m,p-Xylene	22.2	20.0	111%	21.3	20.0	106%	4.1%
o-Xylene	11.2	10.0	112%	10.3	10.0	103%	8.4%
1,2-Dichlorobenzene	10.6	10.0	106%	10.4	10.0	104%	1.9%
1,3-Dichlorobenzene	10.6	10.0	106%	10.6	10.0	106%	0.0%
1,4-Dichlorobenzene	10.0	10.0	100%	10.3	10.0	103%	3.0%
Acrolein	44.9	50.0	89.8%	49.1	50.0	98.2%	8.9%
Methyl Iodide	9.4	10.0	94.0%	10.0	10.0	100%	6.2%
Bromoethane	9.3	10.0	93.0%	10.1	10.0	101%	8.2%
Acrylonitrile	10.2	10.0	102%	10.2	10.0	102%	0.0%
1,1-Dichloropropene	10.7	10.0	107%	10.2	10.0	102%	4.8%
Dibromomethane	9.6	10.0	96.0%	10.9	10.0	109%	12.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-052512A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-052512A QC Report No: UU66-Maul Foster & Alongi
LIMS ID: 12-8974 Project: SIMS - N Cascade Ford
Matrix: Water 0747.01.01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,1,1,2-Tetrachloroethane	11.6	10.0	116%	10.6	10.0	106%	9.0%
1,2-Dibromo-3-chloropropane	11.4	10.0	114%	11.4	10.0	114%	0.0%
1,2,3-Trichloropropane	10.1	10.0	101%	11.3	10.0	113%	11.2%
trans-1,4-Dichloro-2-butene	11.0	10.0	110%	11.9	10.0	119%	7.9%
1,3,5-Trimethylbenzene	10.9	10.0	109%	11.4	10.0	114%	4.5%
1,2,4-Trimethylbenzene	11.6	10.0	116%	11.5	10.0	115%	0.9%
Hexachlorobutadiene	10.3	10.0	103%	10.5	10.0	105%	1.9%
Ethylene Dibromide	9.6	10.0	96.0%	11.5	10.0	115%	18.0%
Bromochloromethane	10.4	10.0	104%	10.4	10.0	104%	0.0%
2,2-Dichloropropane	10.3	10.0	103%	10.6	10.0	106%	2.9%
1,3-Dichloropropane	10.0	10.0	100%	11.3	10.0	113%	12.2%
Isopropylbenzene	11.4	10.0	114%	11.3	10.0	113%	0.9%
n-Propylbenzene	10.8	10.0	108%	11.2	10.0	112%	3.6%
Bromobenzene	9.7	10.0	97.0%	10.6	10.0	106%	8.9%
2-Chlorotoluene	10.4	10.0	104%	11.0	10.0	110%	5.6%
4-Chlorotoluene	10.5	10.0	105%	11.0	10.0	110%	4.7%
tert-Butylbenzene	11.6	10.0	116%	11.6	10.0	116%	0.0%
sec-Butylbenzene	11.3	10.0	113%	11.3	10.0	113%	0.0%
4-Isopropyltoluene	11.2	10.0	112%	11.3	10.0	113%	0.9%
n-Butylbenzene	11.1	10.0	111%	11.1	10.0	111%	0.0%
1,2,4-Trichlorobenzene	11.7	10.0	117%	11.2	10.0	112%	4.4%
Naphthalene	11.8	10.0	118%	11.5	10.0	115%	2.6%
1,2,3-Trichlorobenzene	11.4	10.0	114%	11.1	10.0	111%	2.7%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	94.9%	114%
d8-Toluene	88.4%	101%
Bromofluorobenzene	101%	100%
d4-1,2-Dichlorobenzene	105%	100%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-052312A	Method Blank	10	112%	98.2%	104%	105%	0
LCS-052312A	Lab Control	10	108%	102%	101%	108%	0
LCSD-052312A	Lab Control Dup	10	109%	101%	101%	103%	0
UU66A	MW1-W-8.5	10	126%*	98.4%	96.2%	104%	1
UU66ARE	MW1-W-8.5	10	96.3%	95.9%	105%	107%	0
MB-052512A	Method Blank	10	105%	95.9%	99.4%	105%	0
LCS-052512A	Lab Control	10	94.9%	88.4%	101%	105%	0
LCSD-052512A	Lab Control Dup	10	114%	101%	100%	100%	0
UU66B	FIELD DUPLICATE	10	122%*	98.1%	100%	105%	1
UU66BRE	FIELD DUPLICATE	10	96.7%	96.2%	106%	108%	0
UU66C	MW3-W-9	10	120%	97.9%	98.3%	103%	0
UU66D	TRIP BLANK	10	125%*	96.5%	95.8%	103%	1

SW8260C	LCS/MB LIMITS	QC LIMITS
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-120)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 12-8973 to 12-8976

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Matrix: Water

Data Release Authorized: MW
Reported: 05/22/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/15/12
Date Received: 05/16/12

ARI ID	Client ID	Analysis Date	DL	Range	Result
MB-051812	Method Blank	05/18/12	1.0	Gasoline	< 0.25 U
12-8973		PID1		HC ID	---
				Trifluorotoluene	99.6%
				Bromobenzene	97.7%
UU66A	MW1-W-8.5	05/18/12	1.0	**Gasoline**	**0.40**
12-8973		PID1		HC ID	GRO
				Trifluorotoluene	97.8%
				Bromobenzene	98.5%
UU66B	FIELD DUPLICATE	05/18/12	1.0	**Gasoline**	**0.38**
12-8974		PID1		HC ID	GRO
				Trifluorotoluene	101%
				Bromobenzene	101%
UU66C	MW3-W-9	05/18/12	1.0	Gasoline	< 0.25 U
12-8975		PID1		HC ID	---
				Trifluorotoluene	100%
				Bromobenzene	99.8%
UU66D	TRIP BLANK	05/18/12	1.0	Gasoline	< 0.25 U
12-8976		PID1		HC ID	---
				Trifluorotoluene	97.7%
				Bromobenzene	96.6%

Gasoline values reported in mg/L (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-051812
LAB CONTROL SAMPLE

Lab Sample ID: LCS-051812
LIMS ID: 12-8973
Matrix: Water
Data Release Authorized: MW
Reported: 05/22/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 05/18/12 12:13
LCSD: 05/18/12 11:15
Instrument/Analyst LCS: PID1/JLW
LCSD: PID1/JLW

Purge Volume: 5.0 mL

Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	0.92	1.00	92.0%	0.95	1.00	95.0%	3.2%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	103%	96.4%
Bromobenzene	98.7%	92.1%

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: UU66
Matrix: Water

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01

Client ID	TFT	BBZ	TOT OUT
MB-051812	99.6%	97.7%	0
LCS-051812	103%	98.7%	0
LCSD-051812	96.4%	92.1%	0
MW1-W-8.5	97.8%	98.5%	0
FIELD DUPLICATE	101%	101%	0
MW3-W-9	100%	99.8%	0
TRIP BLANK	97.7%	96.6%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 12-8973 to 12-8976

Data File: /chem3/pid1.i/vpcc051812-1.b/0518a006.d

Page 1

Date : 18-MAY-2012 11:44

Client ID:

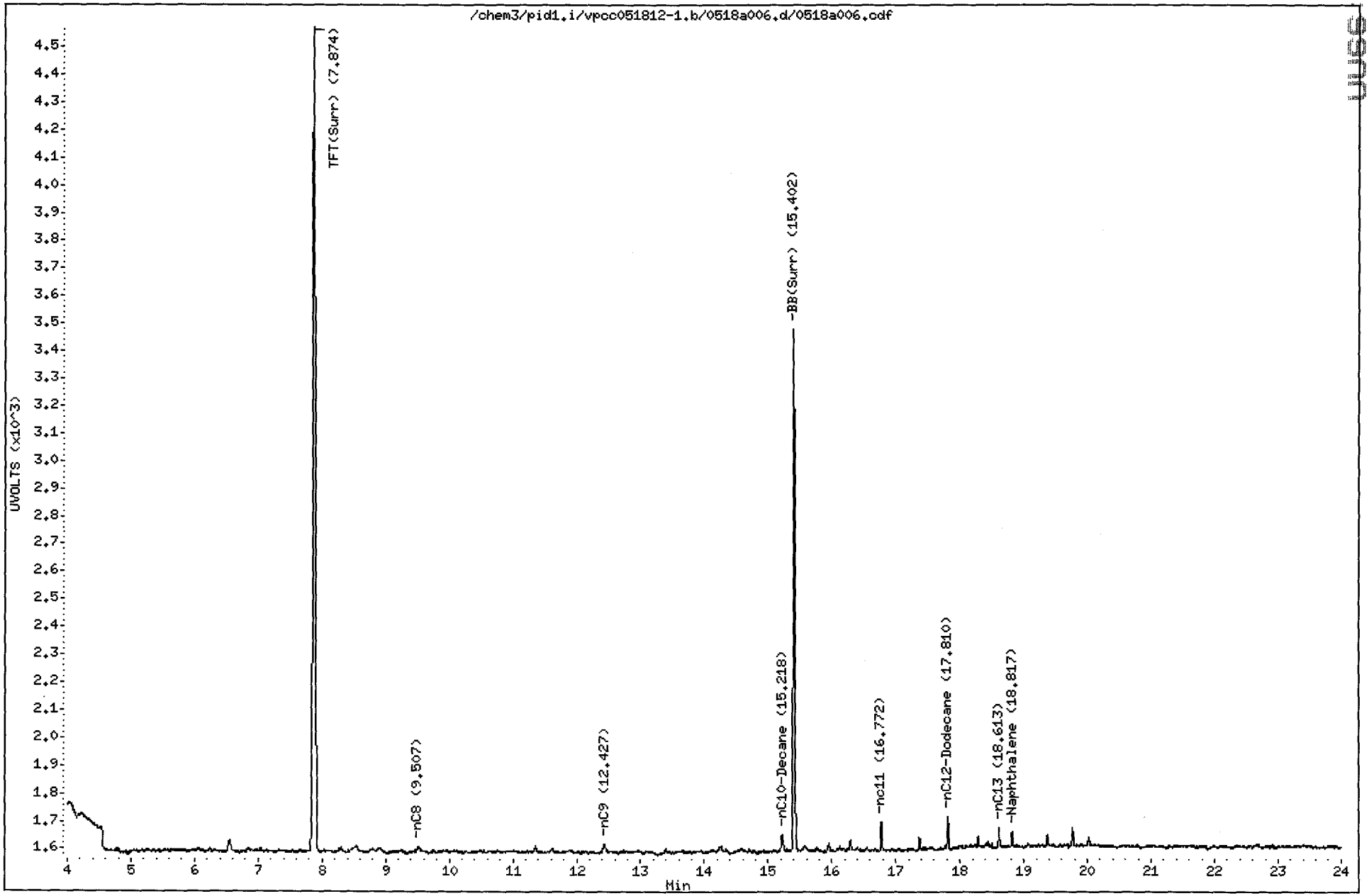
Instrument: pid1.i

Sample Info: MB0518

Operator: JW

Column phase: RTX 502-2 FID

Column diameter: 0.18



Data File: /chem3/pid1.i/vpcc051812-2.b/0518a006.d

Page 1

Date : 18-MAY-2012 11:44

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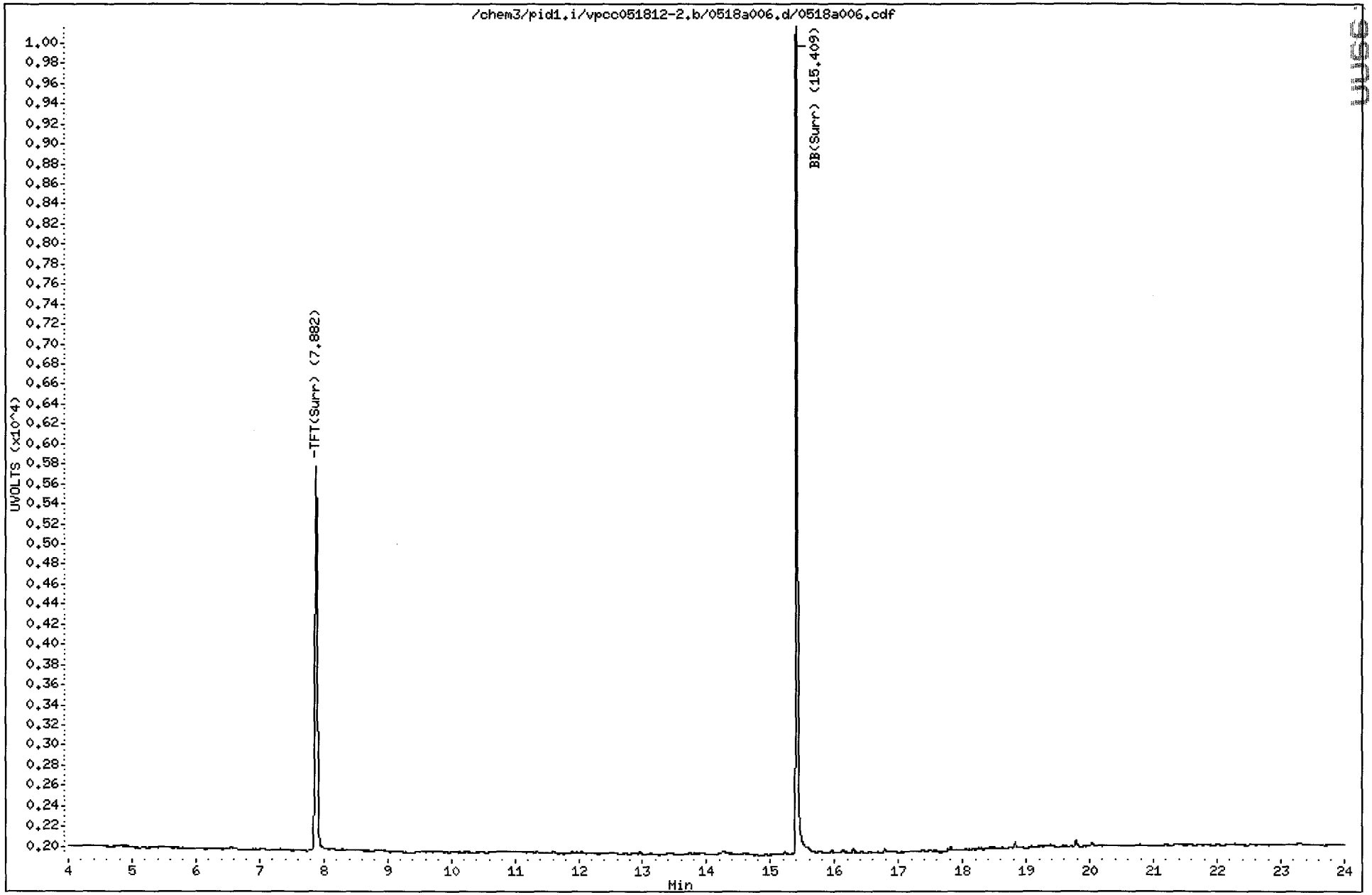
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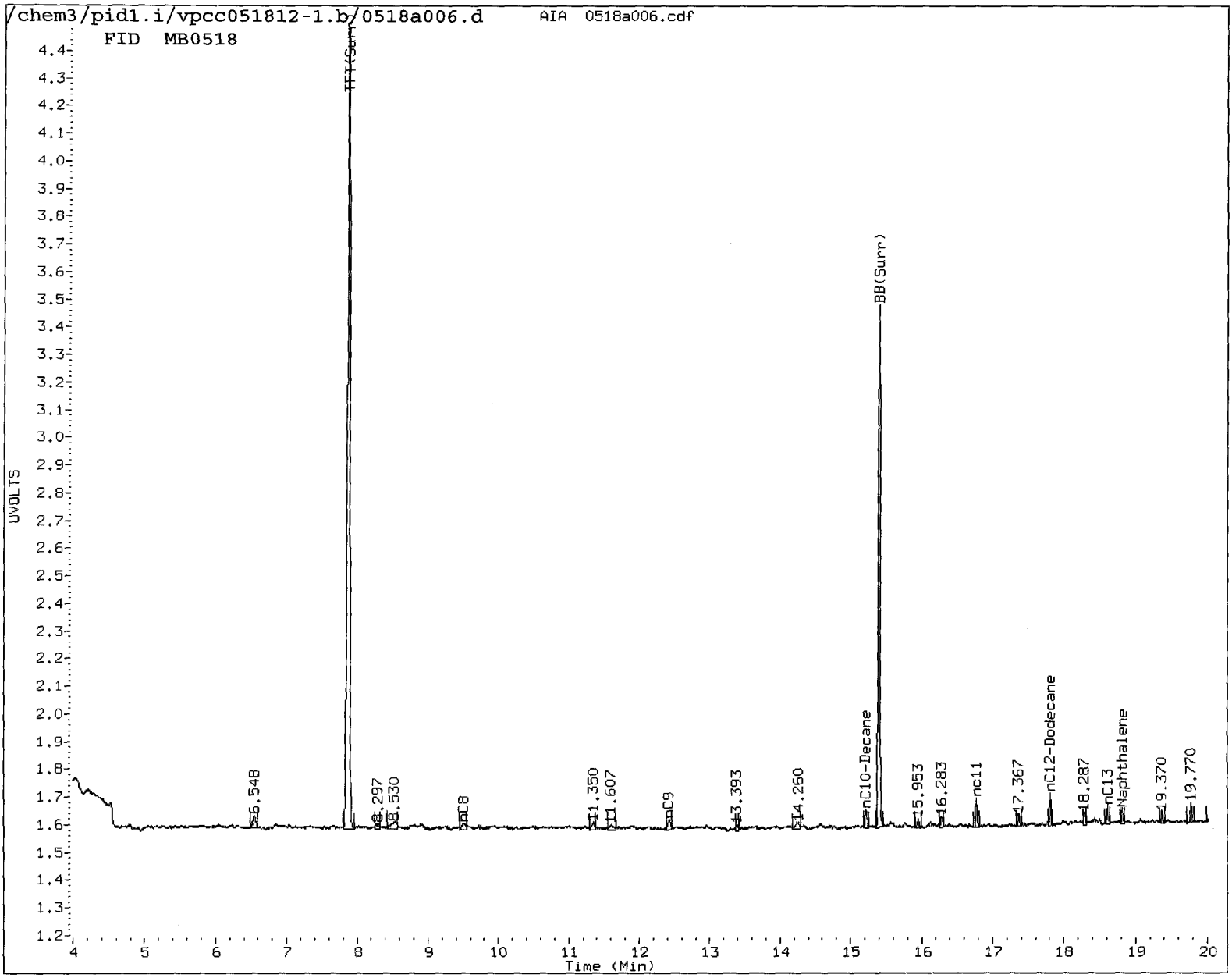
Sample Info: MB0518

Operator: JW

Column phase: RTX 502-2 PID

Column diameter: 0.18





MANUAL INTEGRATION

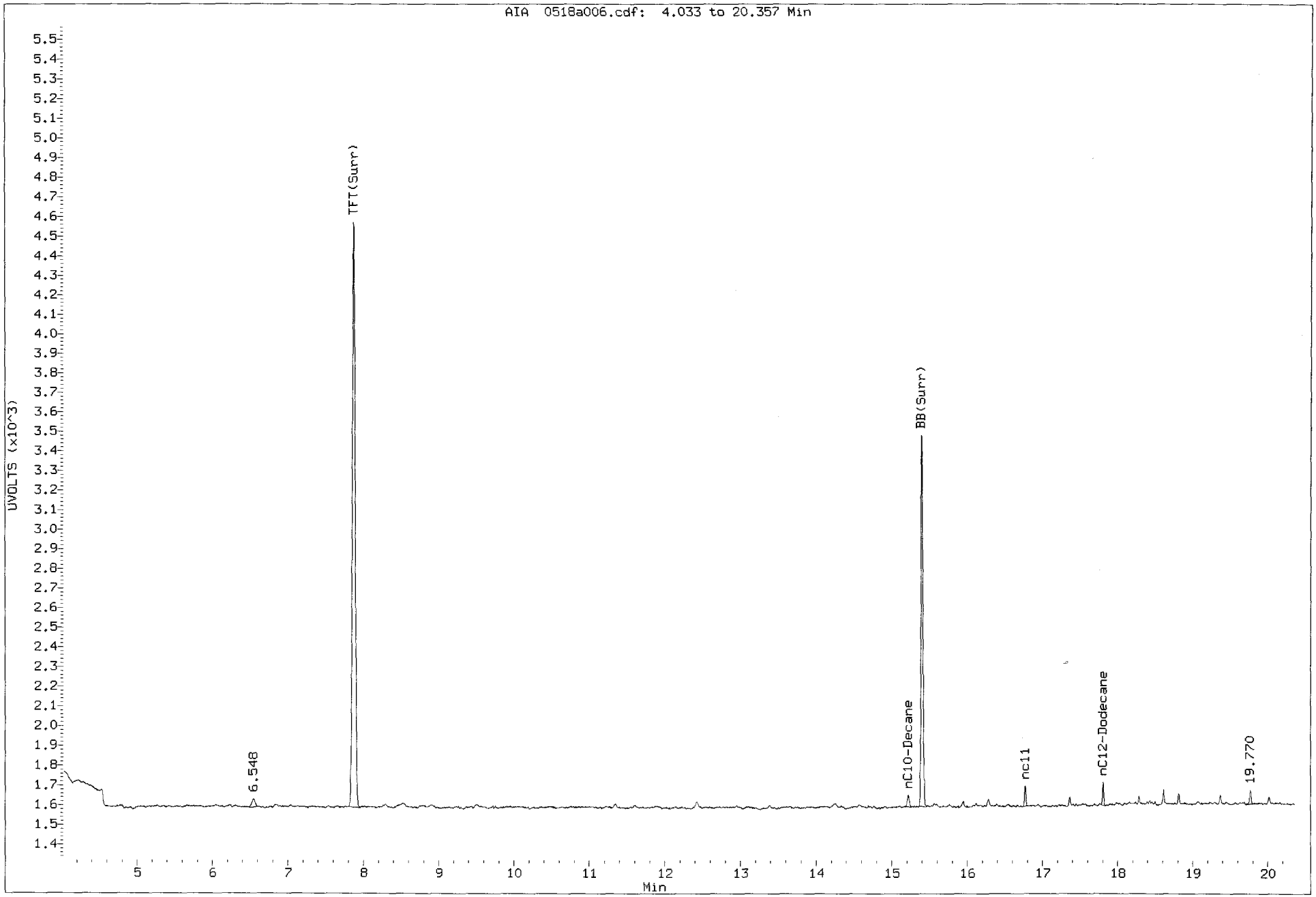
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: JC Date: 5/22/12

Before
JW
5/22/12

Data File: /chem3/pid1.i/vpcc051812-1.b/0518a006.d/0518a006.cdf
Injection Date: 18-MAY-2012 11:44
Instrument: pid1.i
Client Sample ID:



UES : 00533

Data File: /chem3/pid1.i/vpcc051812-1.b/0518a007.d

Page 1

Date : 18-MAY-2012 12:13

Client ID:

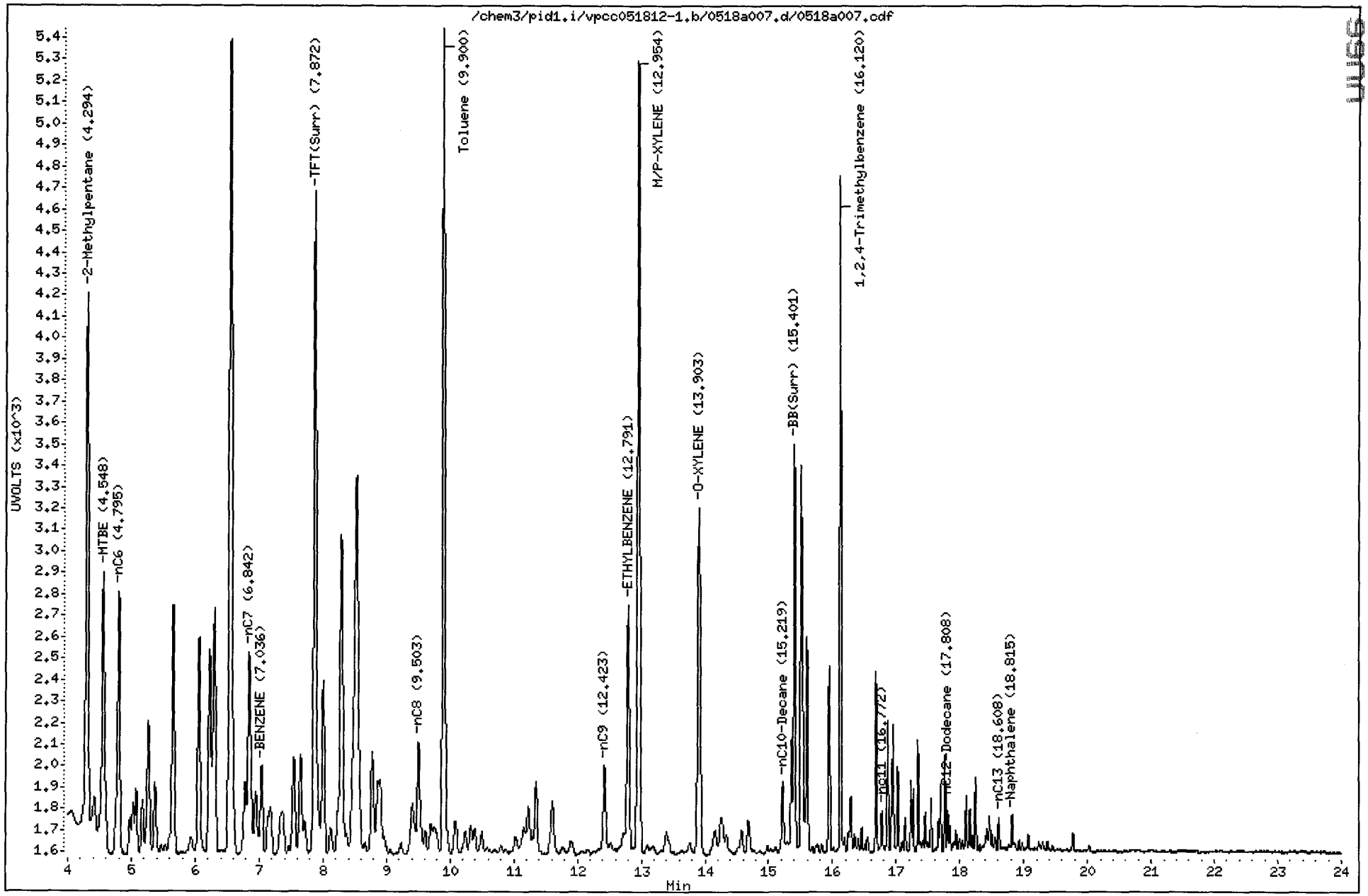
Instrument: pid1.i

Sample Info: LCS0518

Operator: JW

Column phase: RTX 502-2 FID

Column diameter: 0.18



Data File: /chem3/pid1.i/vpcc051812-2.b/0518a007.d

Page 1

Date : 18-MAY-2012 12:13

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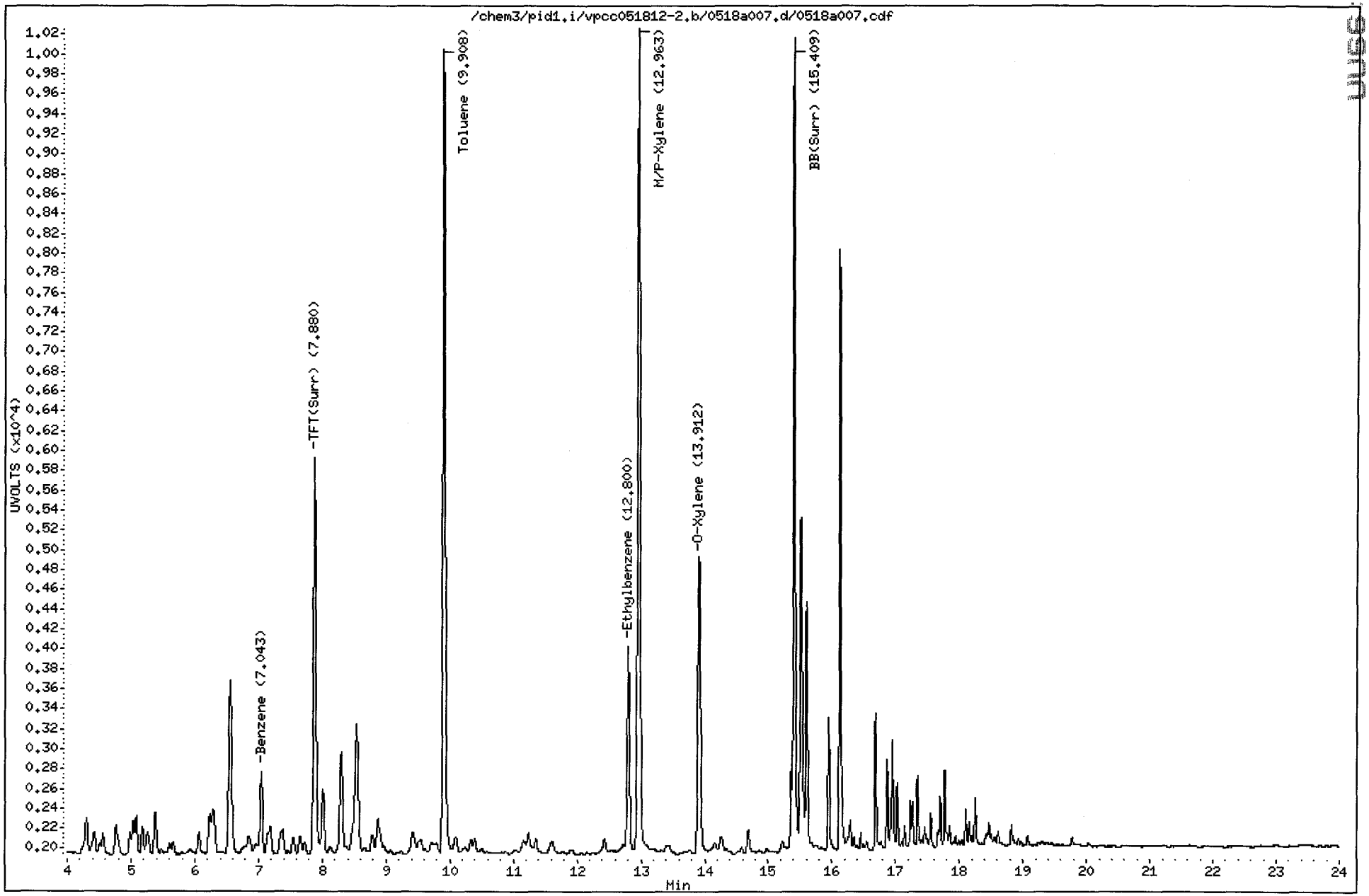
Instrument: pid1.i

Sample Info: LCS0518

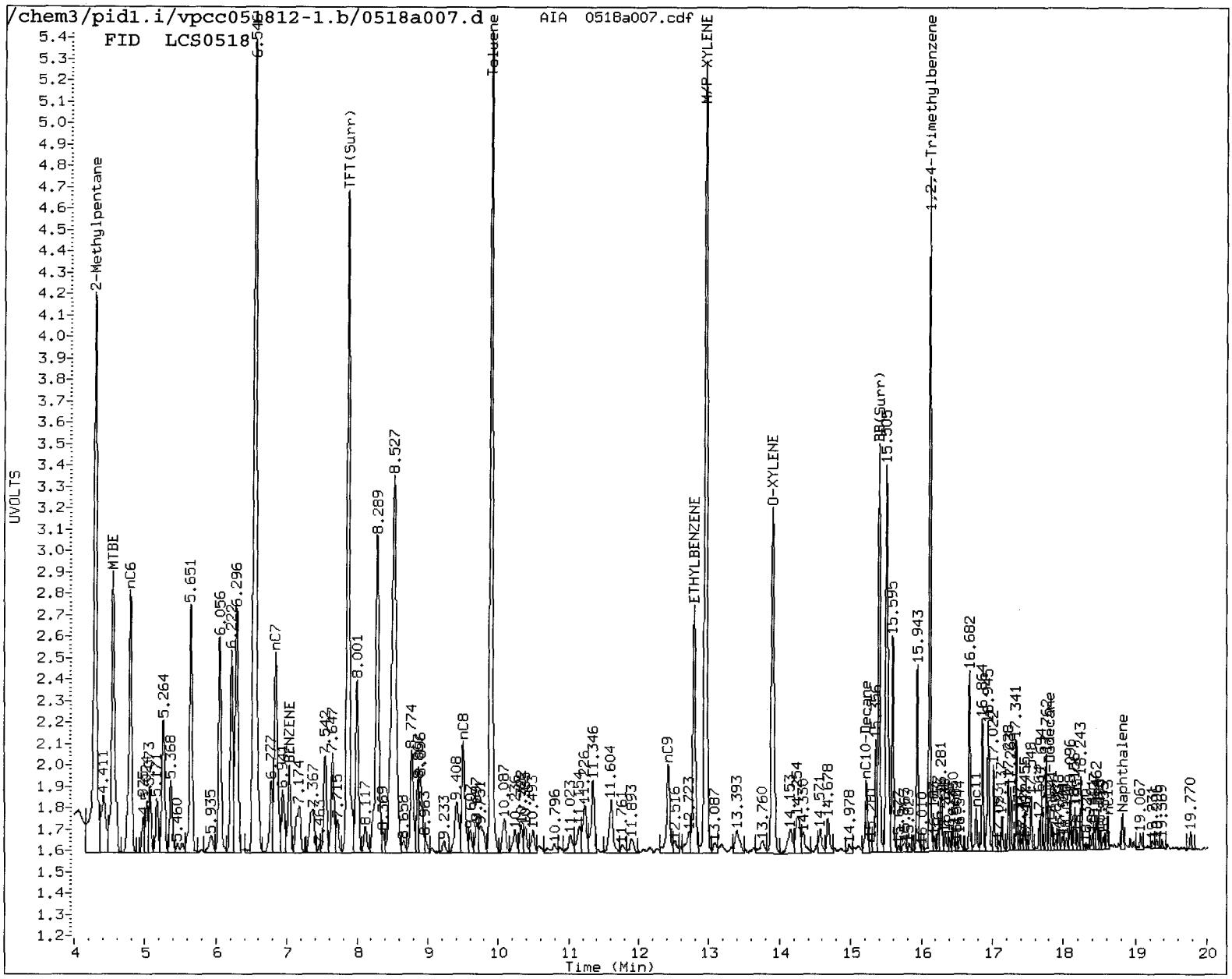
Operator: JW

Column phase: RTX 502-2 PID

Column diameter: 0.18



LUCS 0035

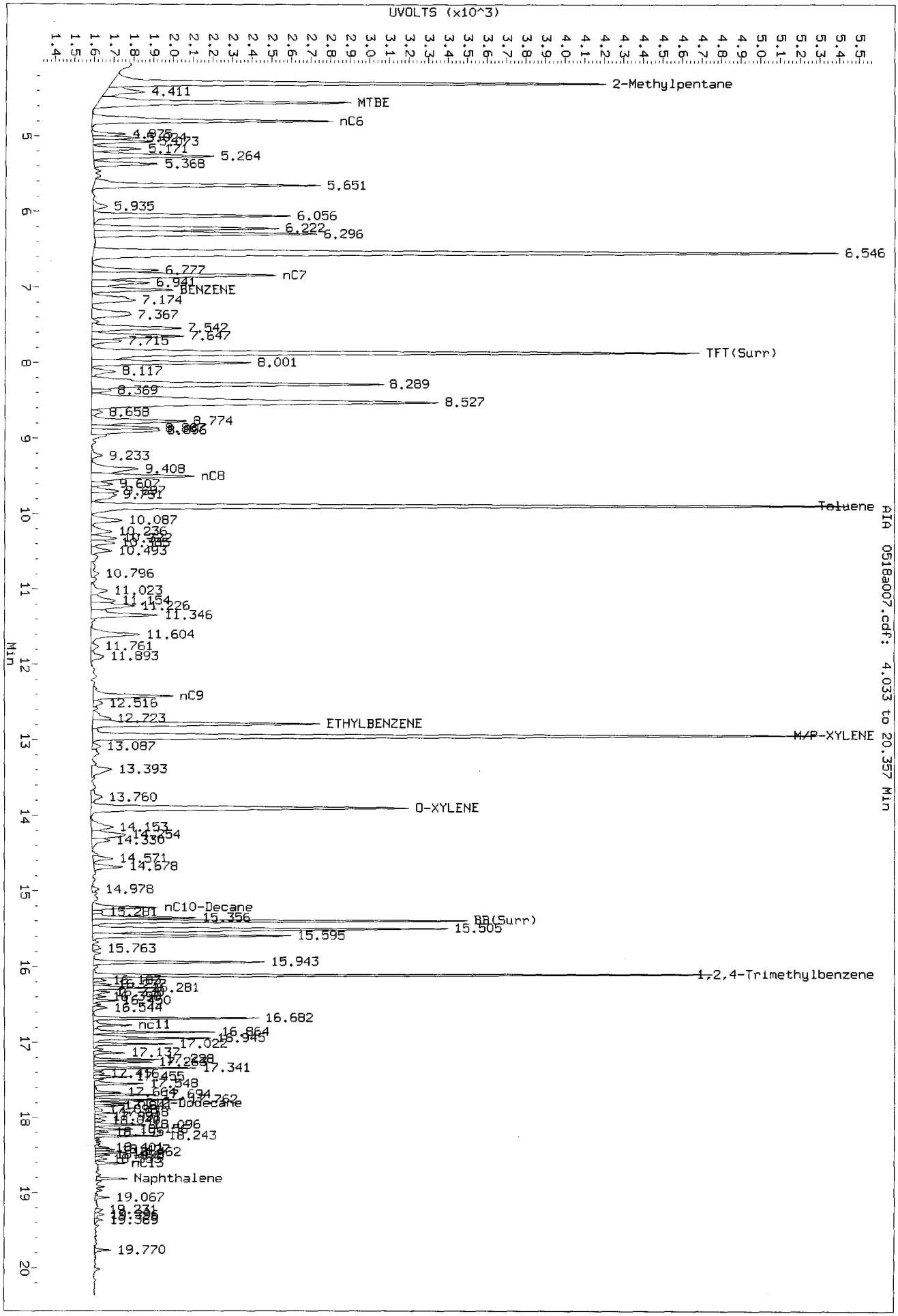


MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

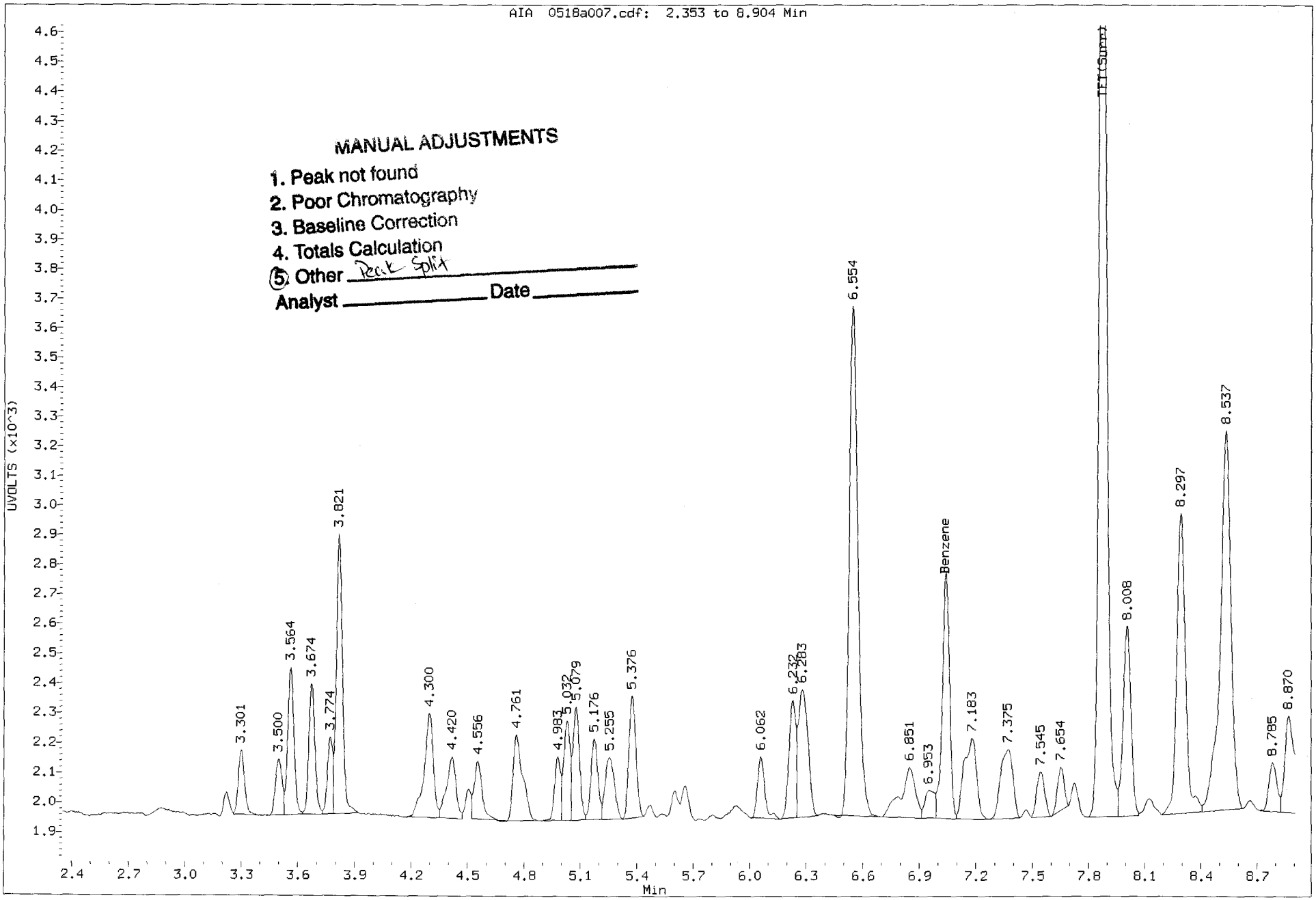
Analyst: JCJ Date: 5/22/12



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Injection Date: 18-MAY-2012 12:13
Instrument: pid1.i
Client Sample ID:

Reviewed JSW 5/22/12

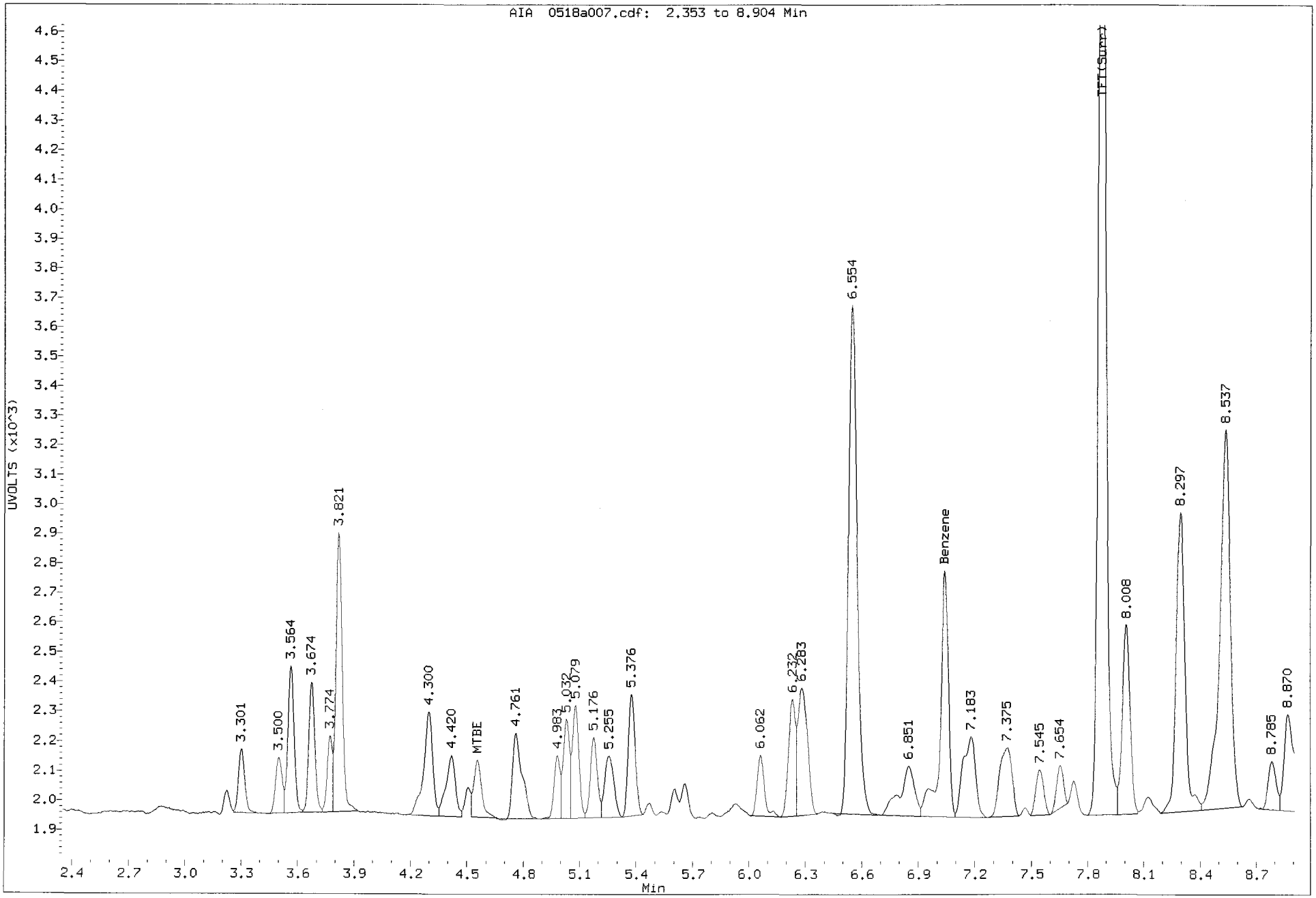
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Injection Date: 18-MAY-2012 12:13
Instrument: pid1.i
Client Sample ID:



UJG : 050338

Data File: /chem3/pid1.i/vpcc051812-2.b/0518a007.d/0518a007.cdf
Injection Date: 18-MAY-2012 12:13
Instrument: pid1.i
Client Sample ID:

Before JW 5/22/12



UU66 : 90039

Data File: /chem3/pid1.i/vpcc051812-1.b/0518a005.d

Page 1

Date : 18-MAY-2012 11:15

Client ID:

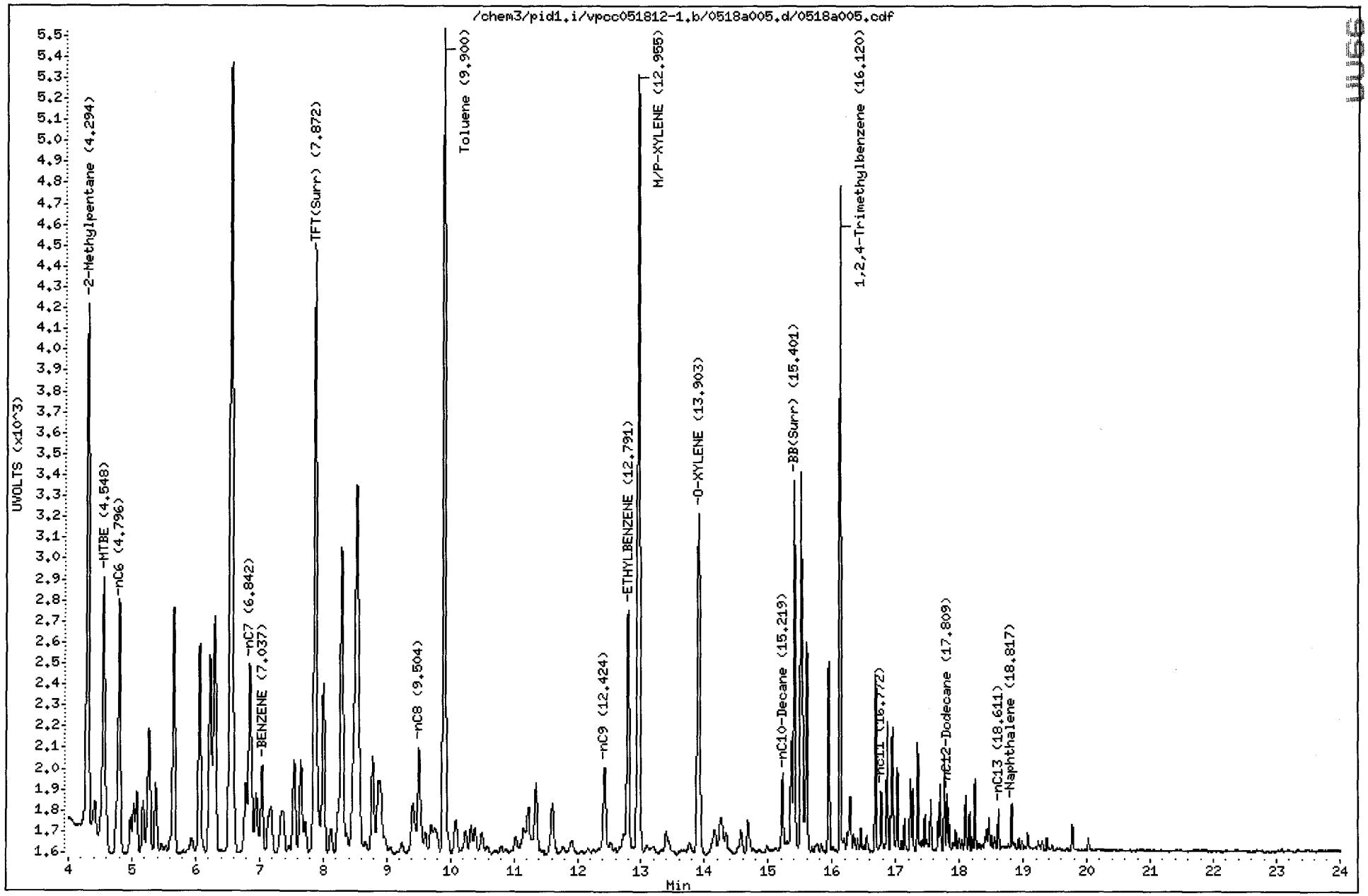
Instrument: pid1.i

Sample Info: LCSD0518

Operator: JW

Column phase: RTX 502-2 FID

Column diameter: 0.18



Data File: /chem3/pid1.i/vpcc051812-2.b/0518a005.d

Page 1

Date : 18-MAY-2012 11:15

Client ID:

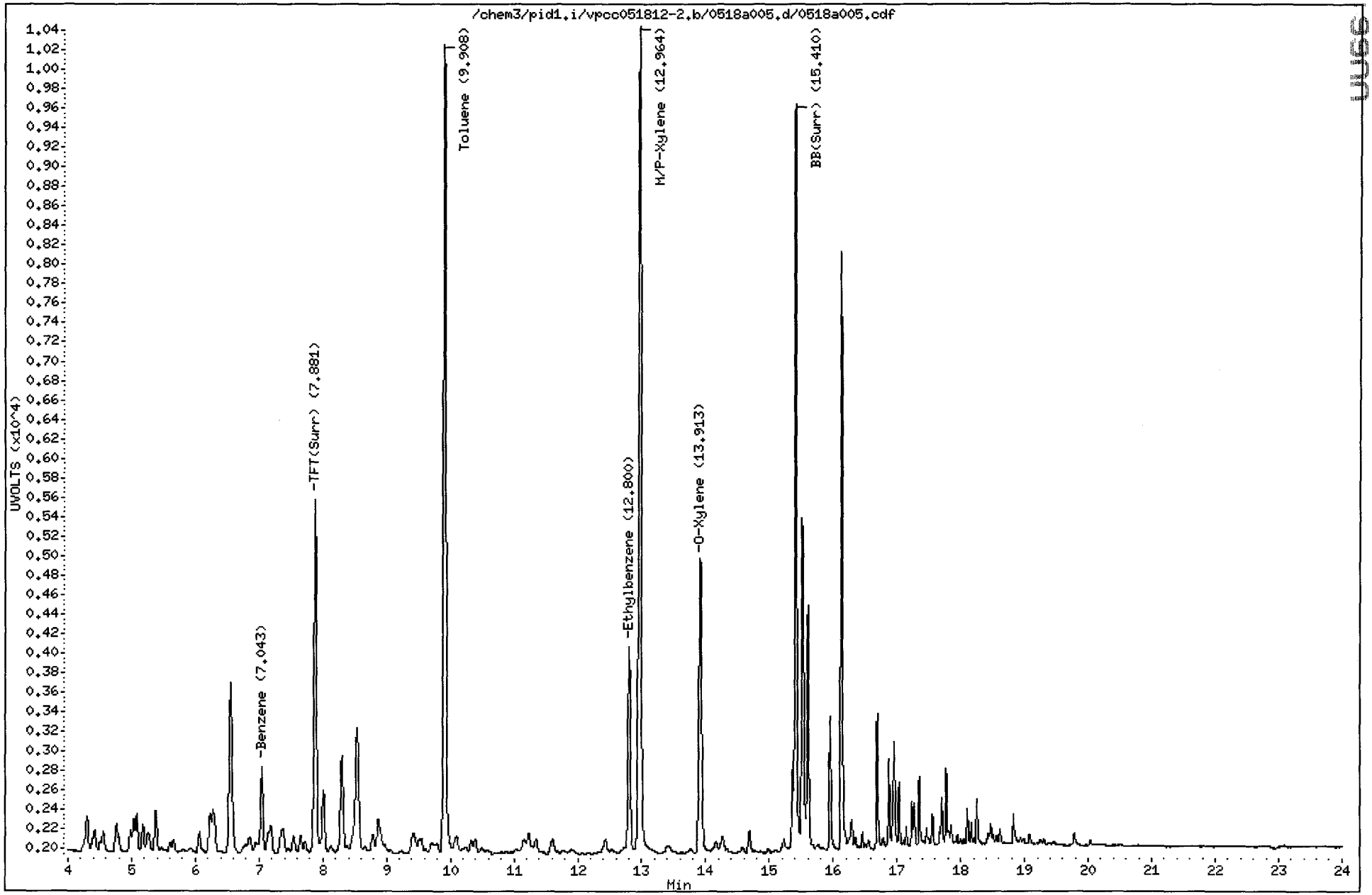
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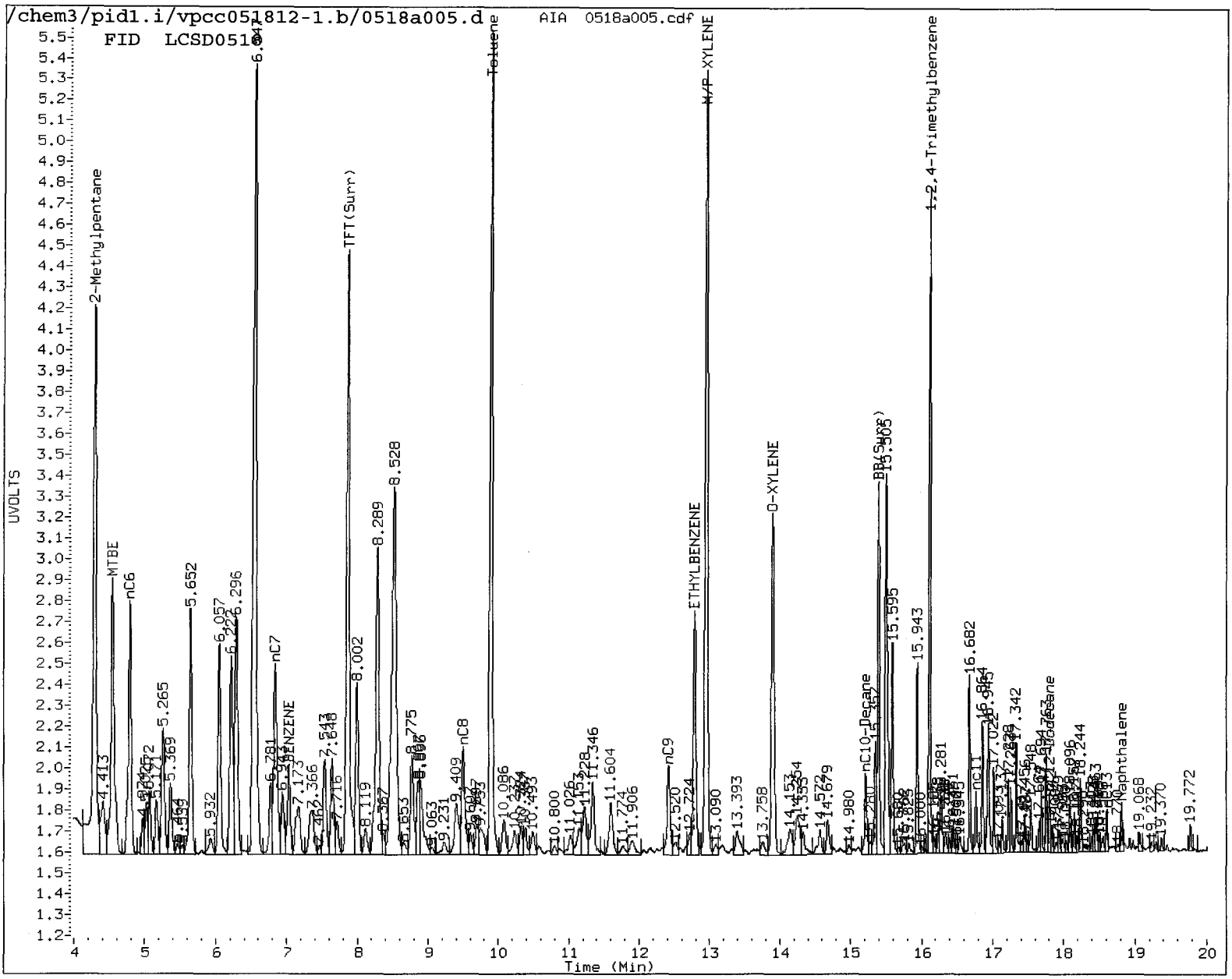
Sample Info: LCSD0518

Operator: JW

Column phase: RTX 502-2 PID

Column diameter: 0.18



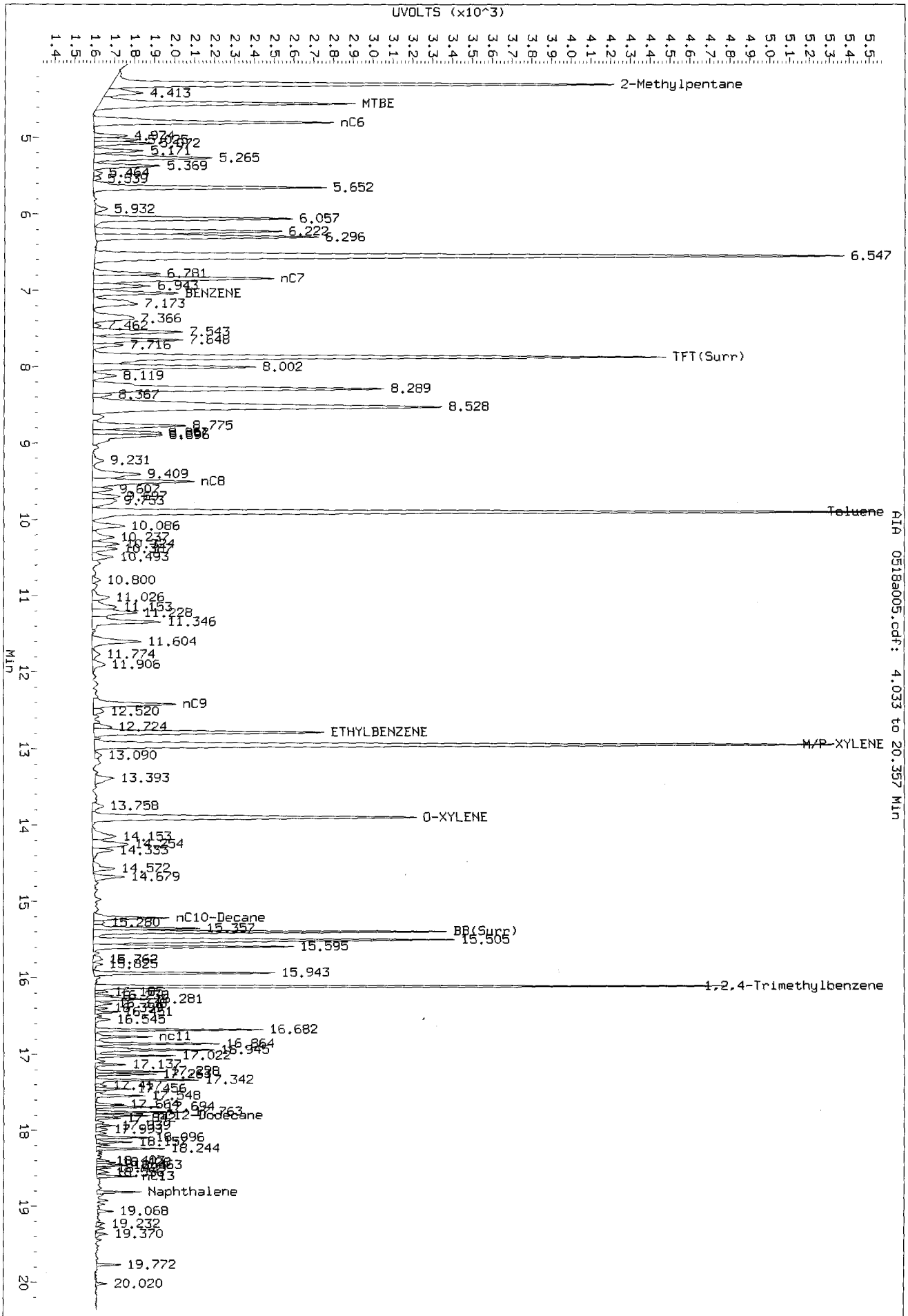


MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

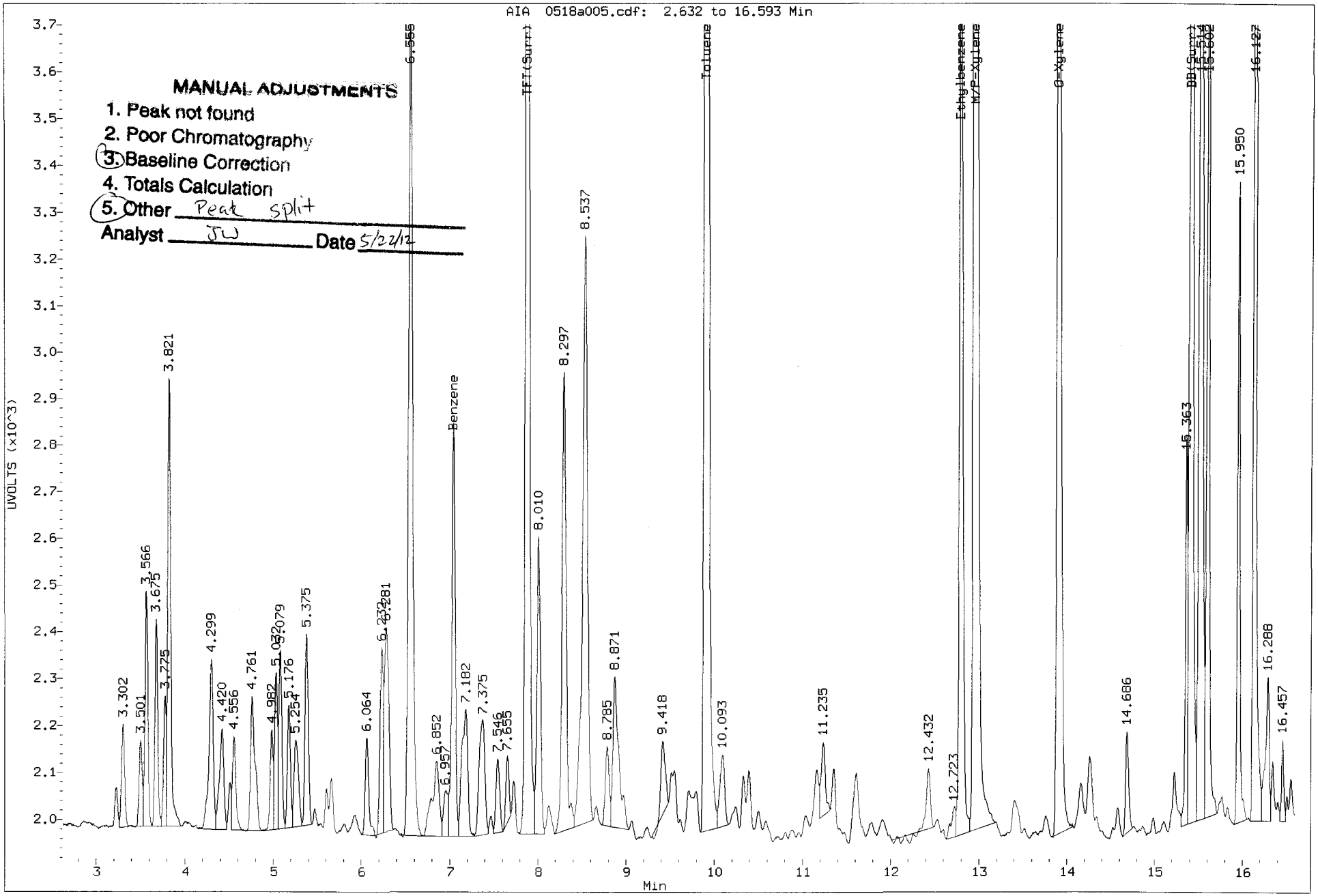
5. Other _____

Analyst: JW Date: 5/22/12



Before 5/22/12

Data File: /chem3/pid1.i/vpcc051812-2.b/0518a005.d/0518a005.cdf
Injection Date: 18-MAY-2012 11:15
Instrument: pid1.i
Client Sample ID:

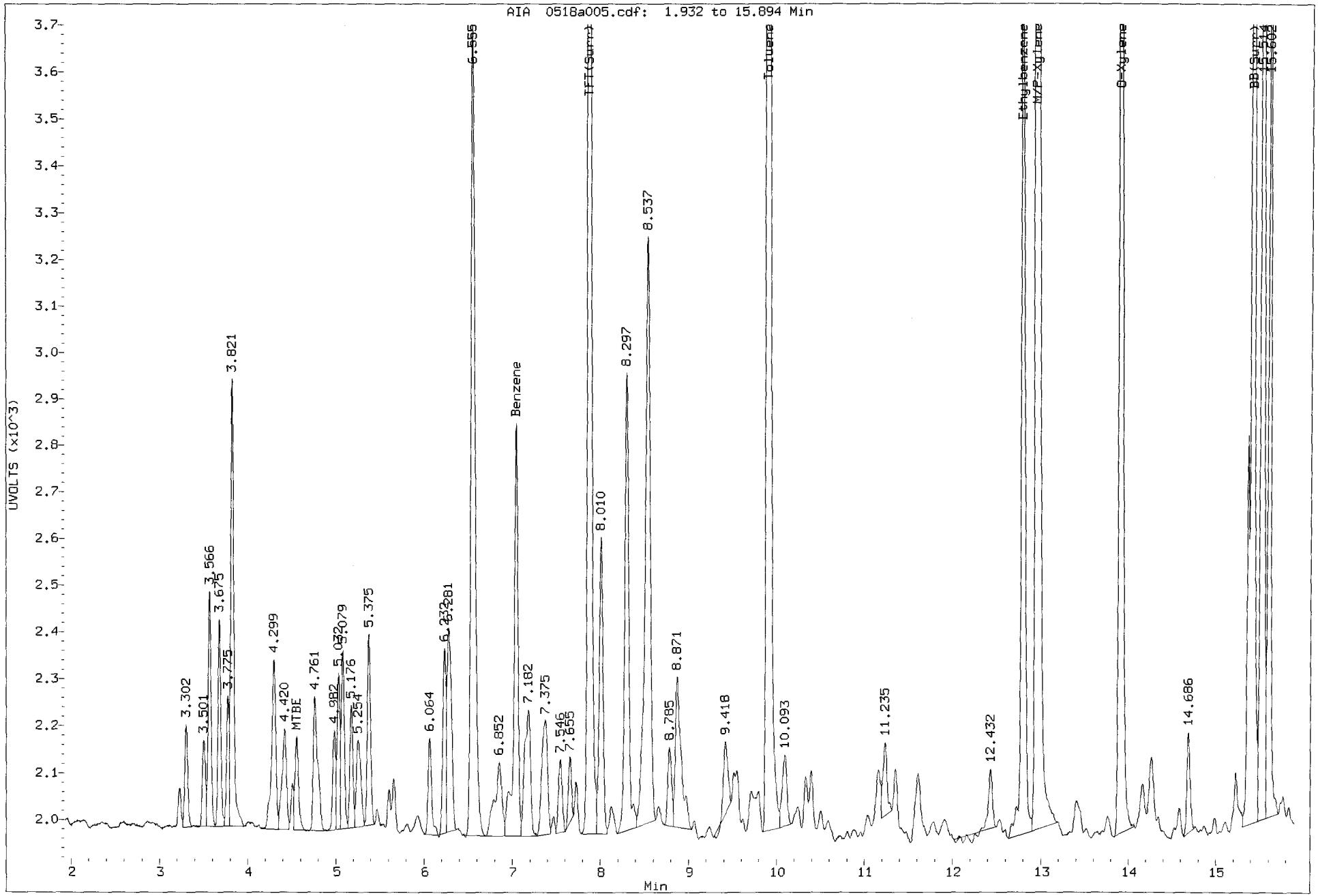


JUG6 : 050511

Data File: /chem3/pid1.i/vpcc051812-2.b/0518a005.d/0518a005.cdf
Injection Date: 18-MAY-2012 11:15
Instrument: pid1.i
Client Sample ID:

Before SW 5/22/12

UJG6:00015



Data File: /chem3/pid1.i/vpcc051812-1.b/0518a021.d

Page 1

Date : 18-MAY-2012 19:25

Client ID: MW1-W-8.5

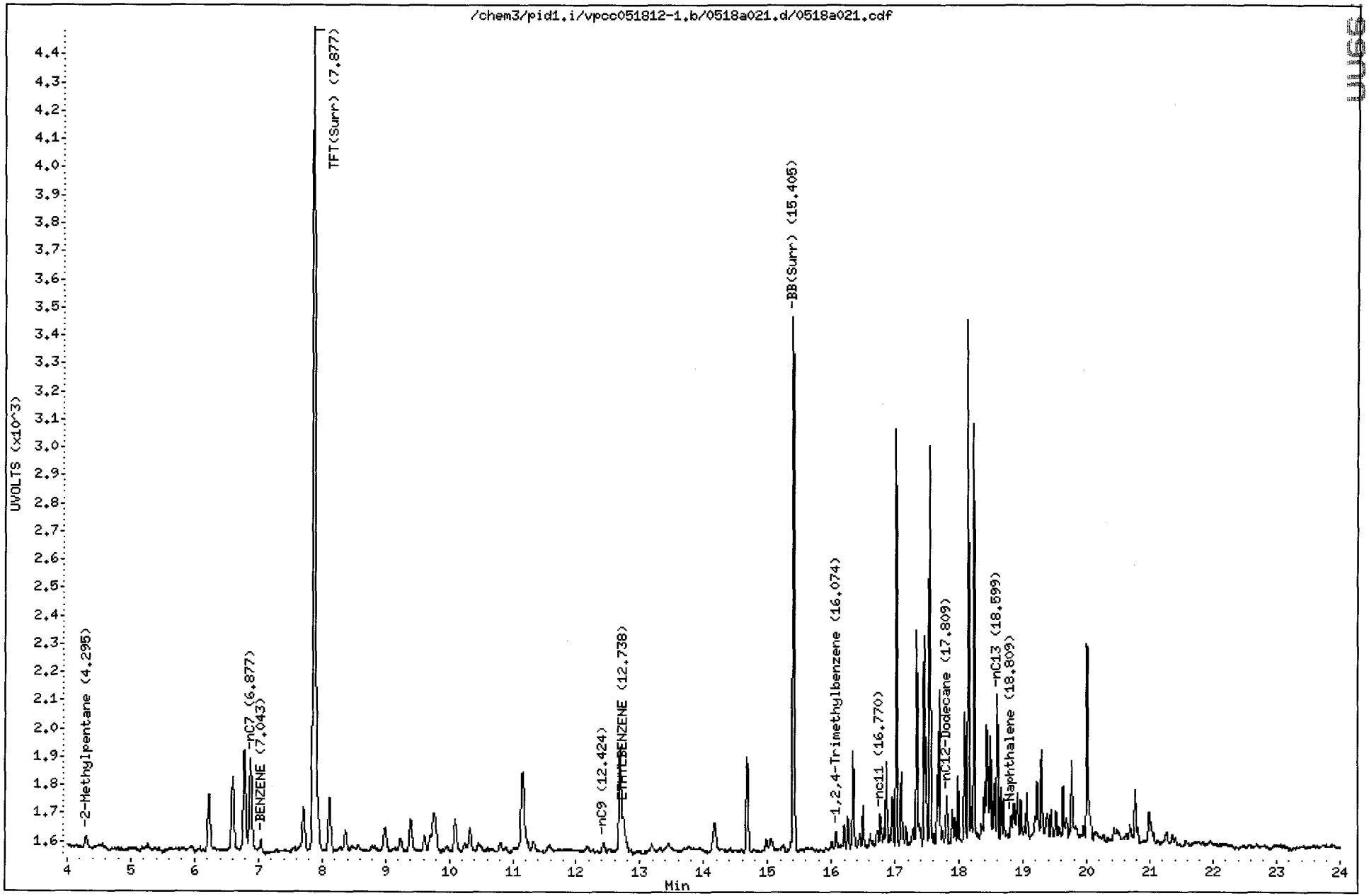
Instrument: pid1.i

Sample Info: UU66A

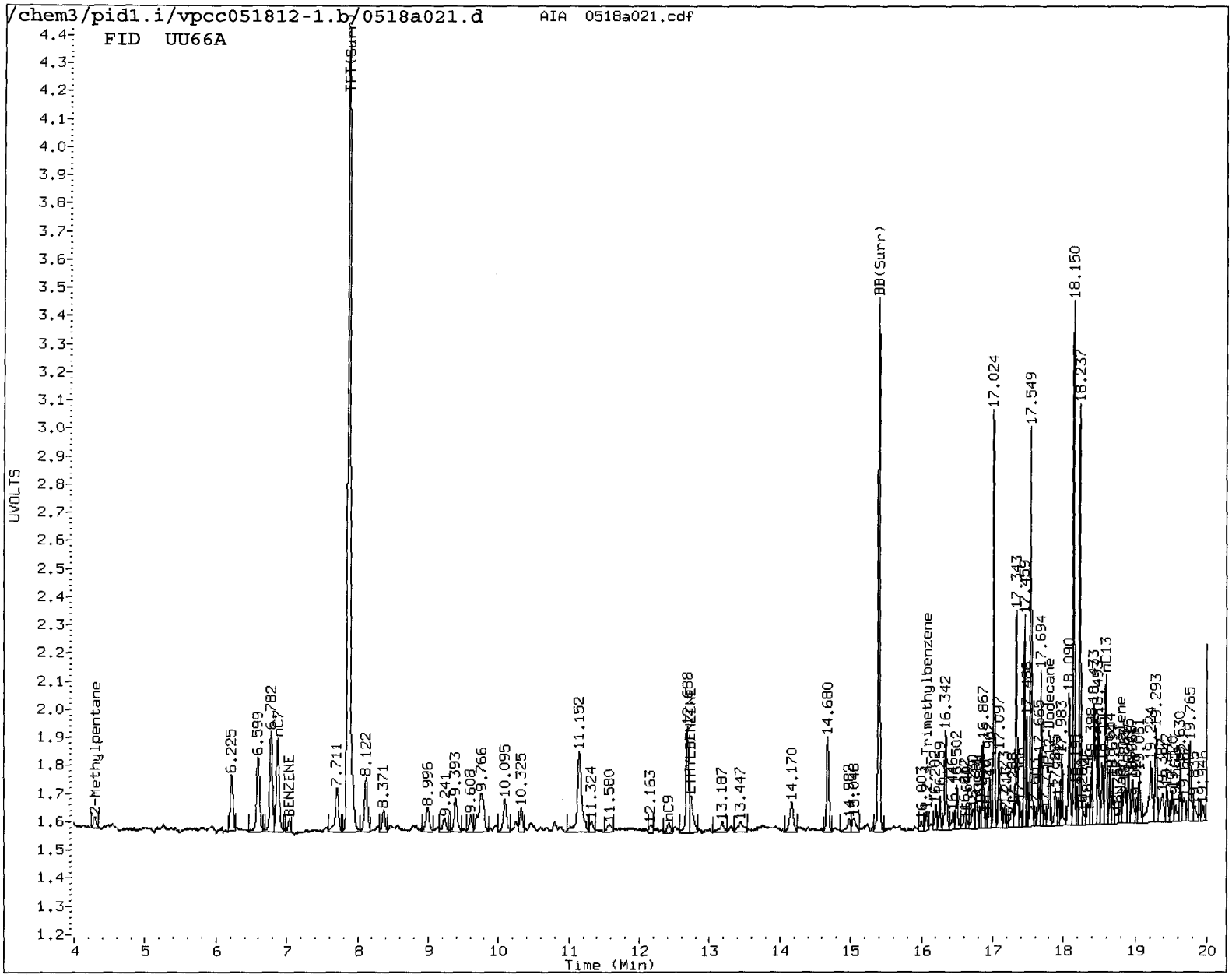
Operator: JW

Column phase: RTX 502-2 FID

Column diameter: 0.18



UU66

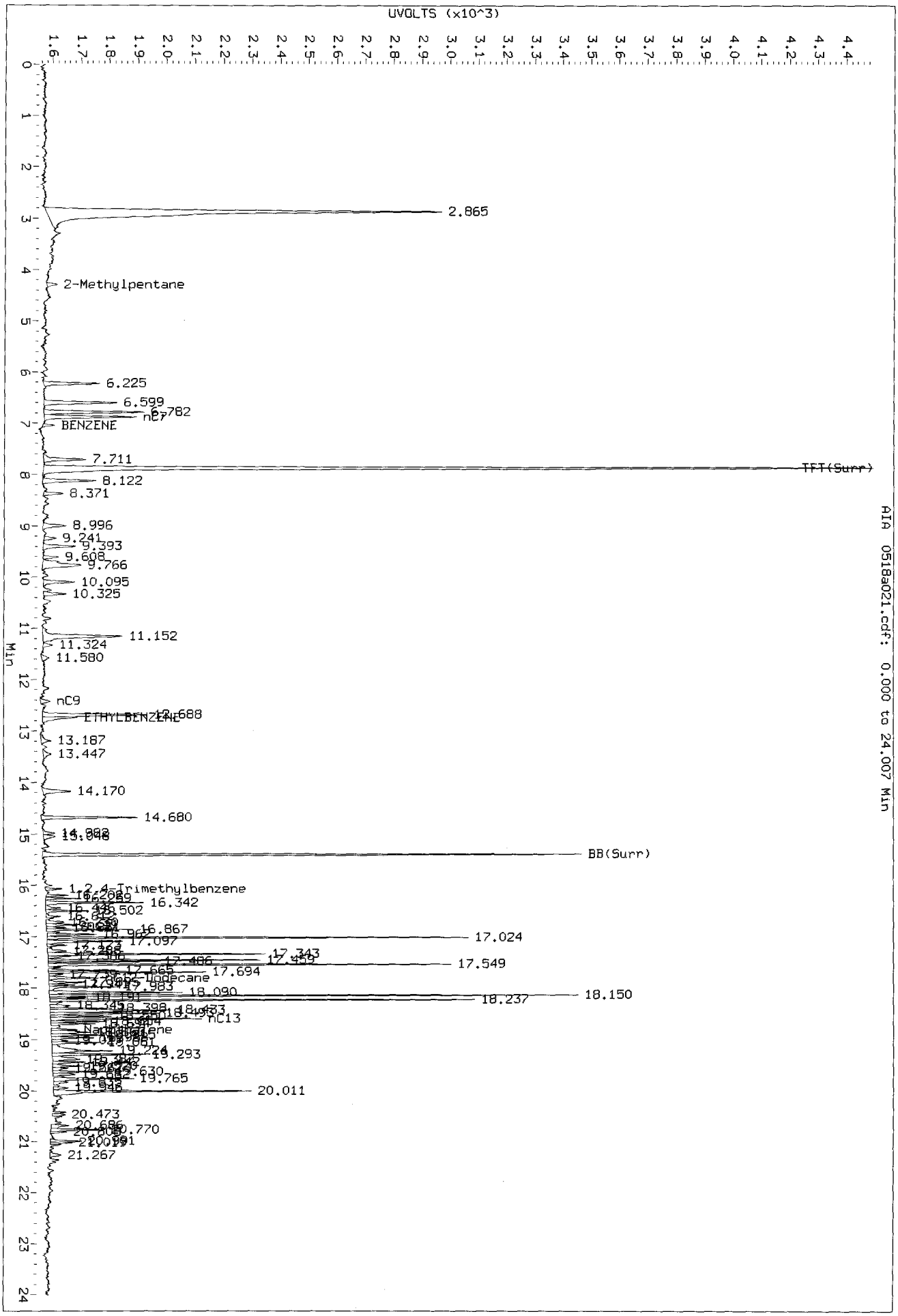


MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: SW Date: 5/22/12



Data File: /chem3/pid1.i/vpcc051812-1.b/0518a021.d/0518a021.cdf
Injection Date: 18-MAY-2012 19:25
Instrument: pid1.i
Client Sample ID: MW1-W-8.5

Before
JW
5/22/12

Data File: /chem3/pid1.i/vpcc051812-1.b/0518a019.d

Page 1

Date : 18-MAY-2012 18:27

Client ID: FIELD DUPLICATE

Instrument: pid1.i

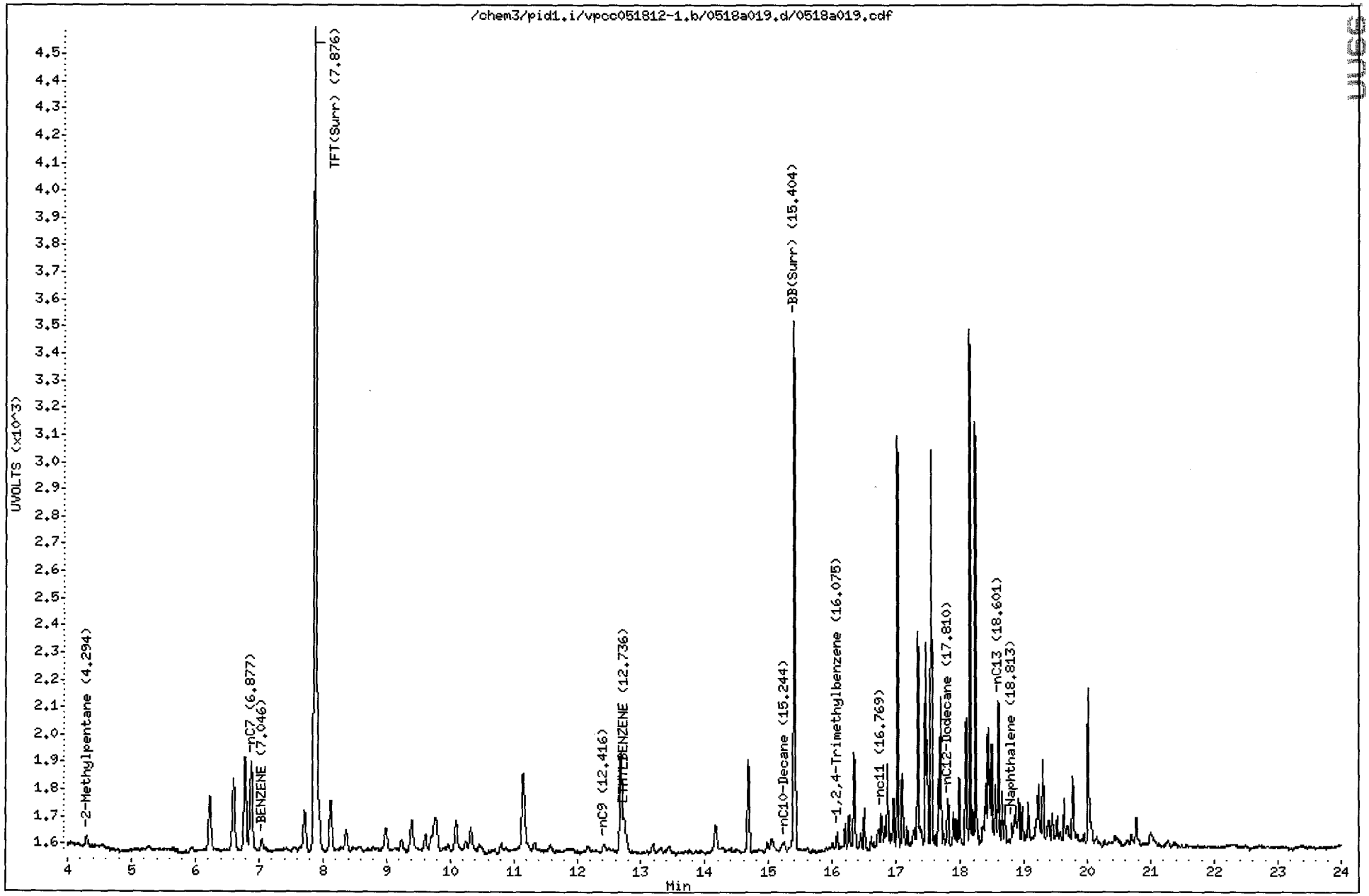
Sample Info: UU66B

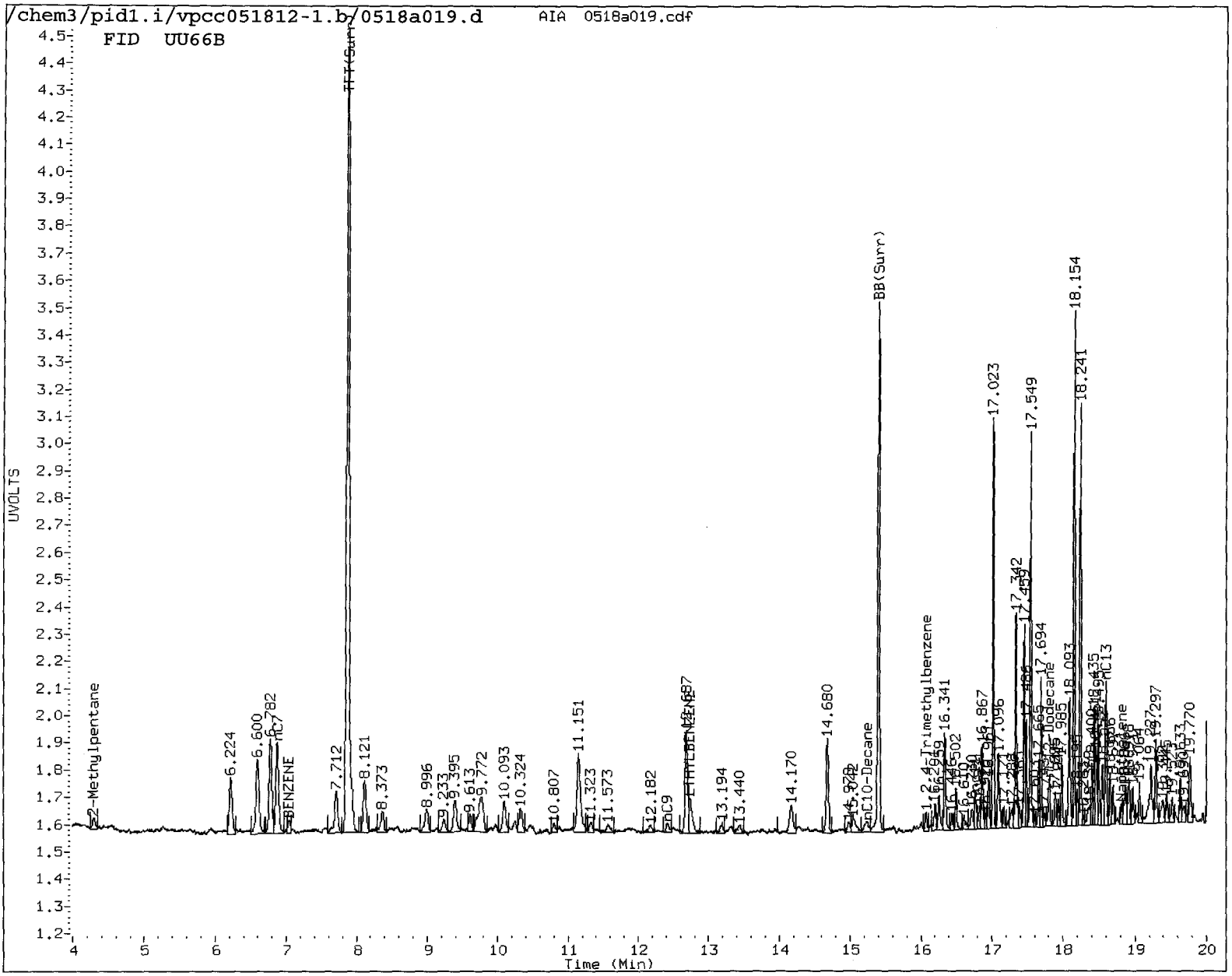
Operator: JW

Column phase: RTX 502-2 FID

Column diameter: 0.18

UU66 69019



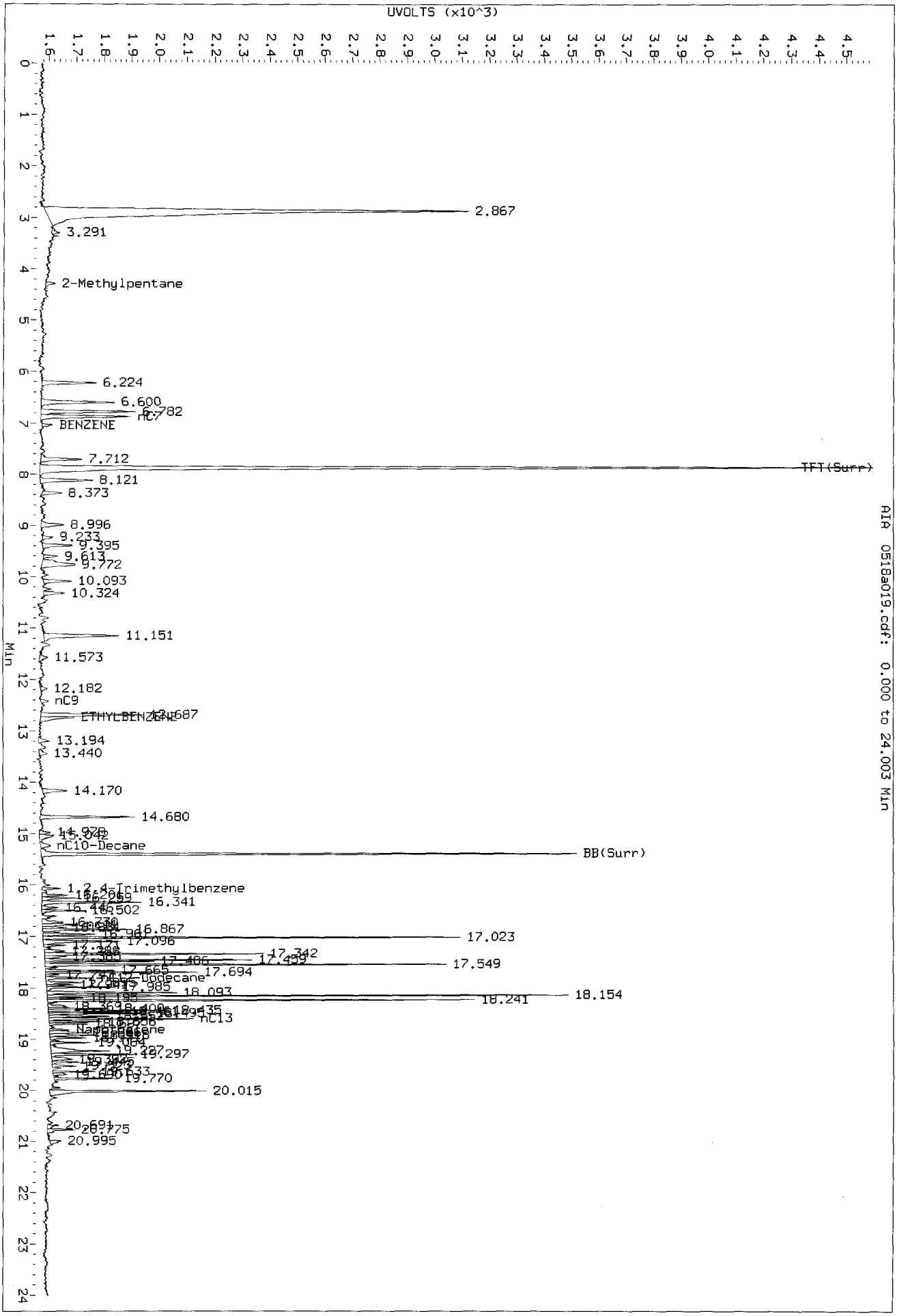


MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: JW Date: 5/22/12



Data File: /chem3/pid1.i/vpcc051812-1.b/0518a019.d/0518a019.cdf
Injection Date: 18-MAY-2012 18:27
Instrument: pid1.i
Client Sample ID: FIELD DUPLICATE

AIA 0518a019.cdf: 0.000 to 24.003 Min

Before
JW
5/22/12

Data File: /chem3/pid1.i/vpcc051812-1.b/0518a022.d

Page 1

Date : 18-MAY-2012 19:54

Client ID: MW3-W-9

Instrument: pid1.i

Sample Info: UU66C

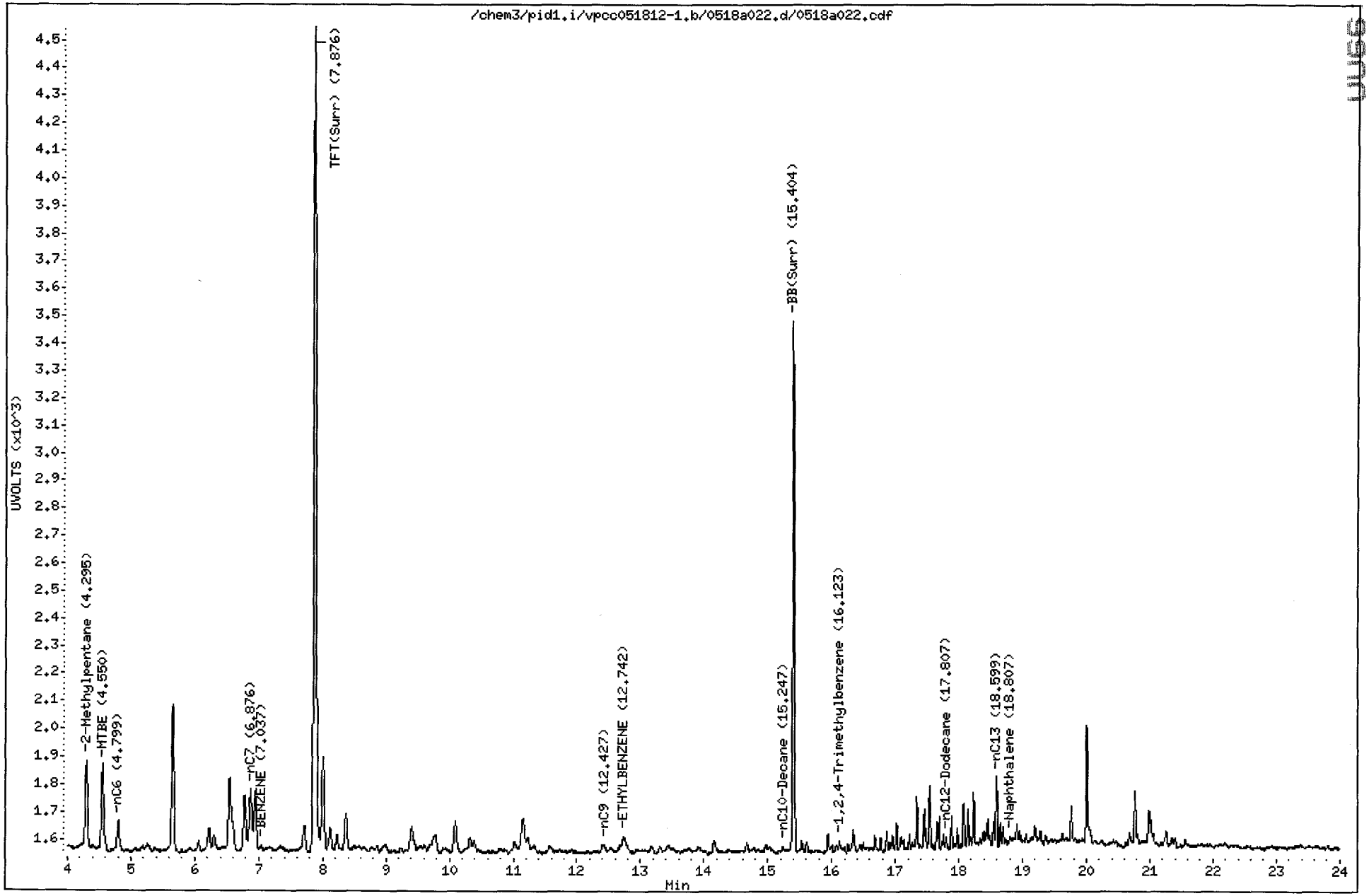
Operator: JW

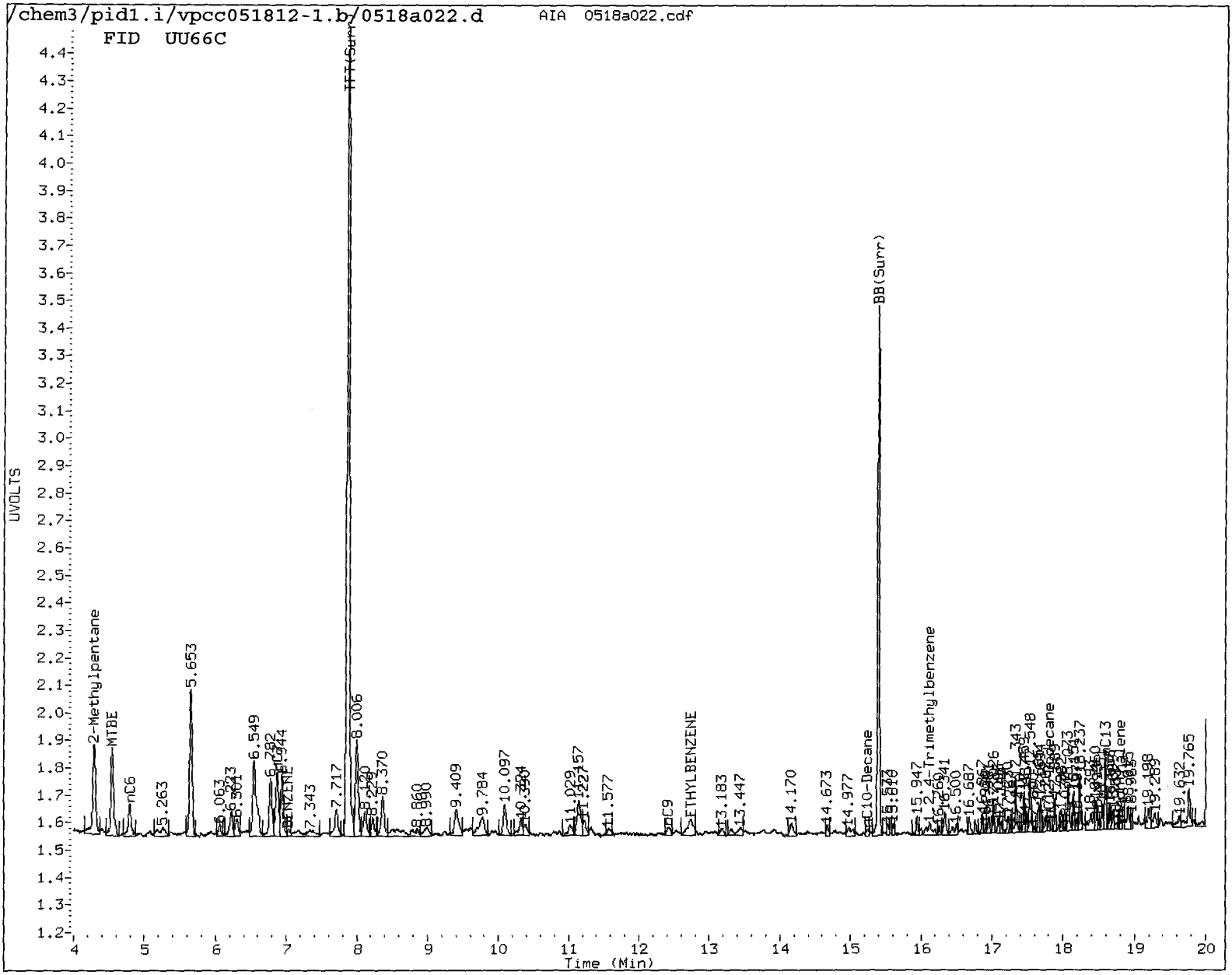
Column phase: RTX 502-2 FID

Column diameter: 0.18

UU66 00052

/chem3/pid1.i/vpcc051812-1.b/0518a022.d/0518a022.cdf



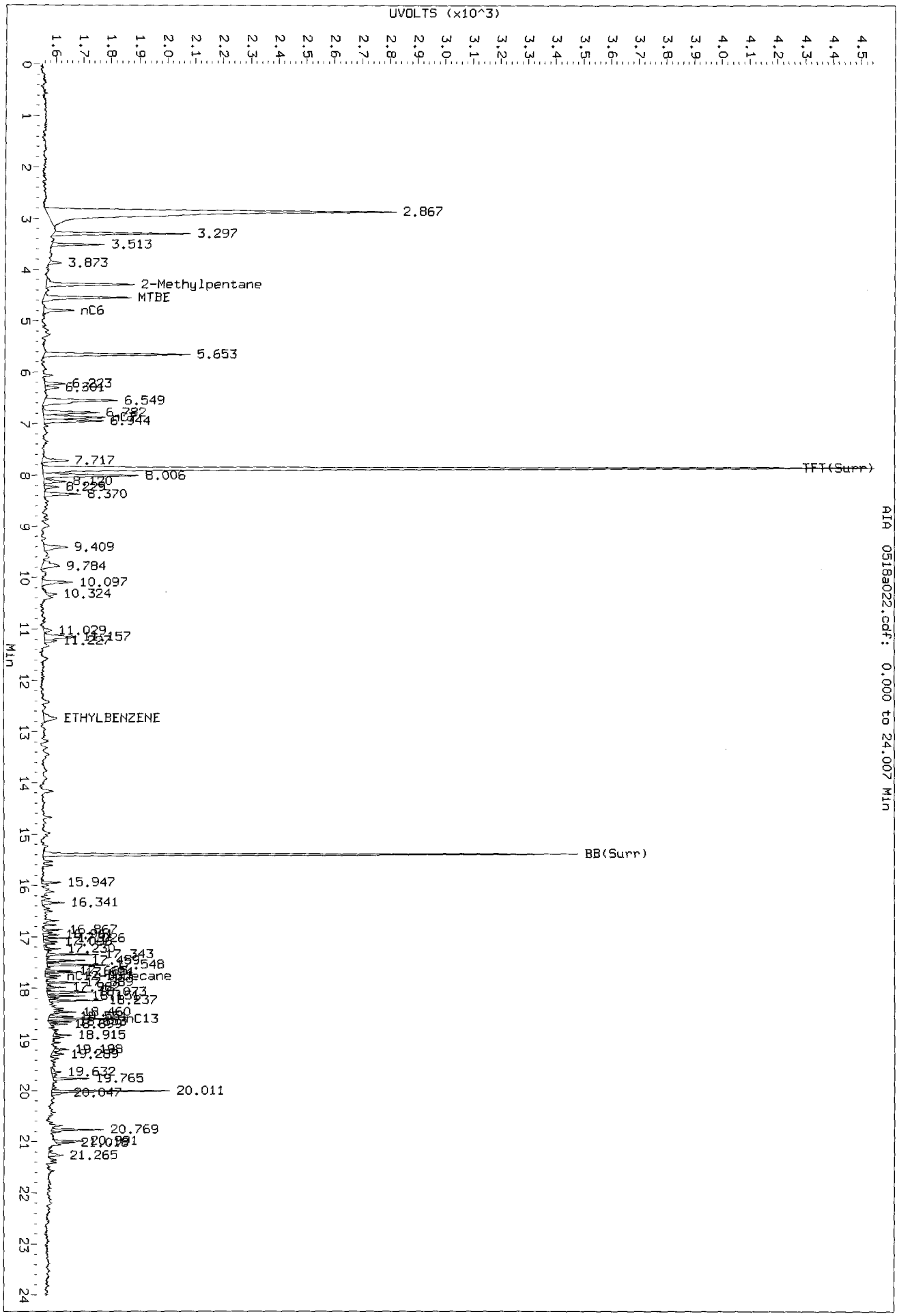


MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 5/22/12



Data File: /chem3/pid1.i/vpcc051812-1.b/0518a022.d/0518a022.cdf
Injection Date: 18-MAY-2012 19:54
Instrument: pid1.i
Client Sample ID: MW3-W-9

AIA 0518a022.cdf: 0.000 to 24.007 Min

Before
JW
5/22/12

Data File: /chem3/pid1.i/vpcc051812-1.b/0518a018.d

Date : 18-MAY-2012 17:58

Client ID: TRIP BLANK

Sample Info: UU66D

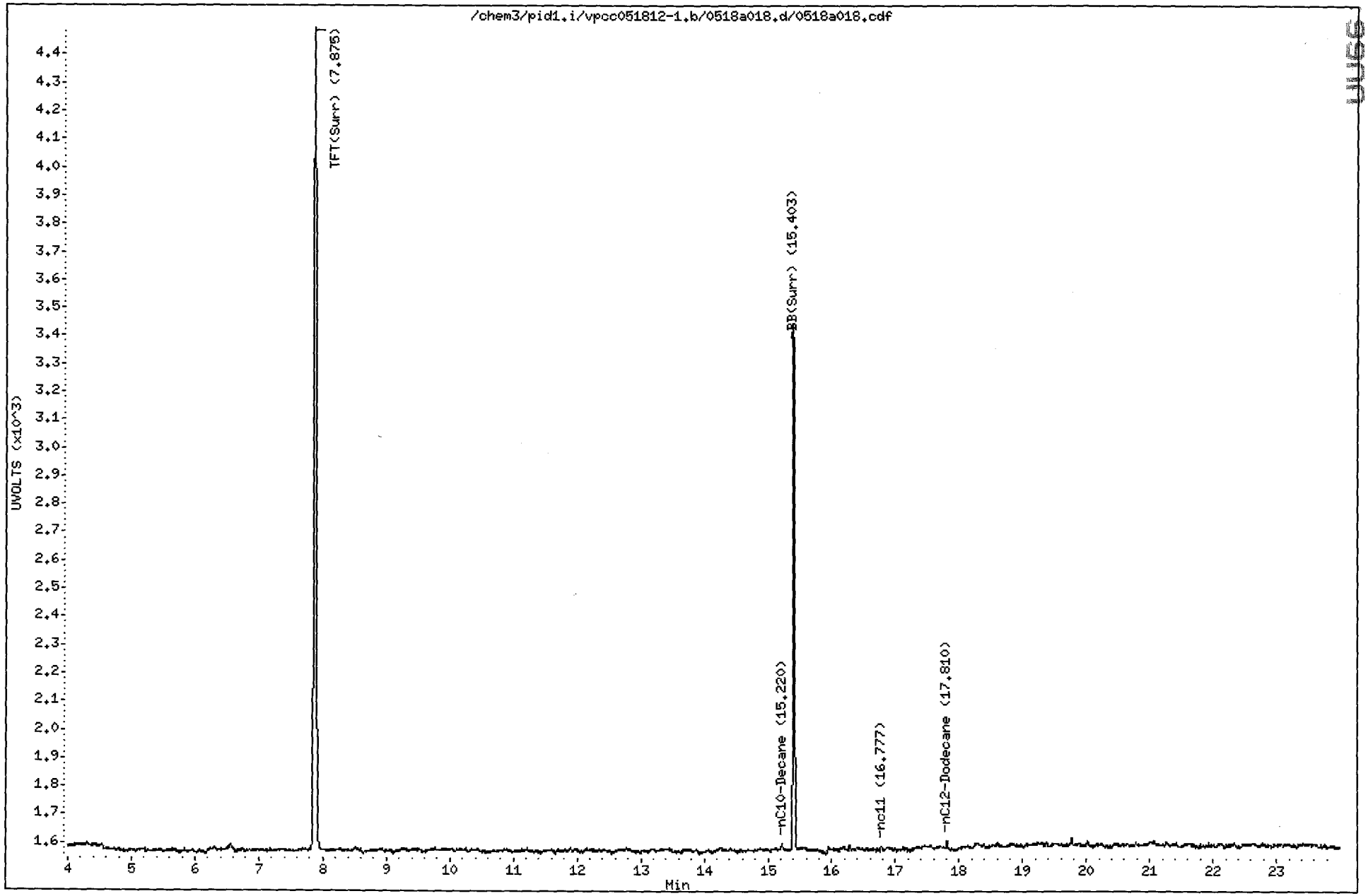
Column phase: RTX 502-2 FID

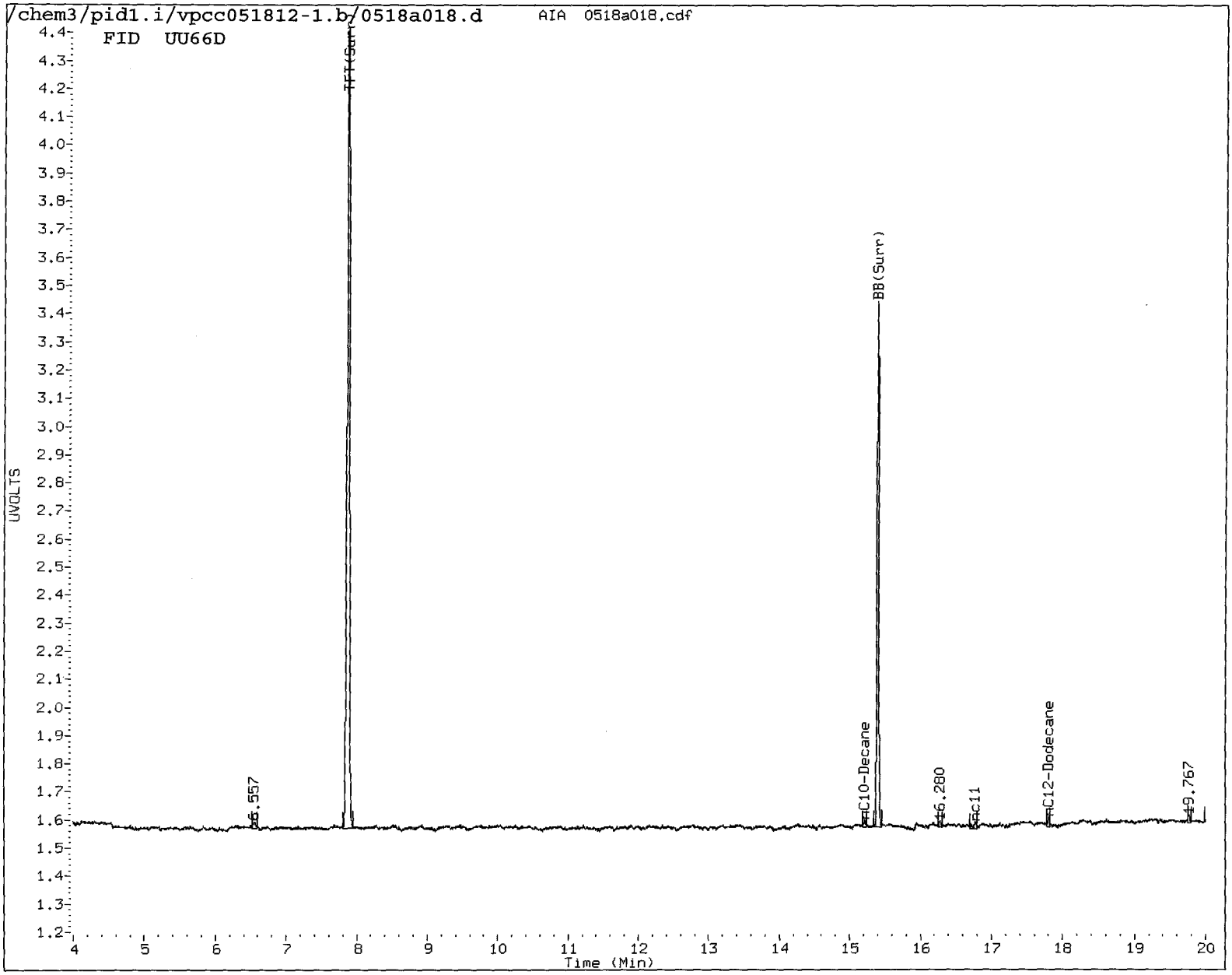
Instrument: pid1.i

Operator: JW

Column diameter: 0.18

UU66 00055





MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

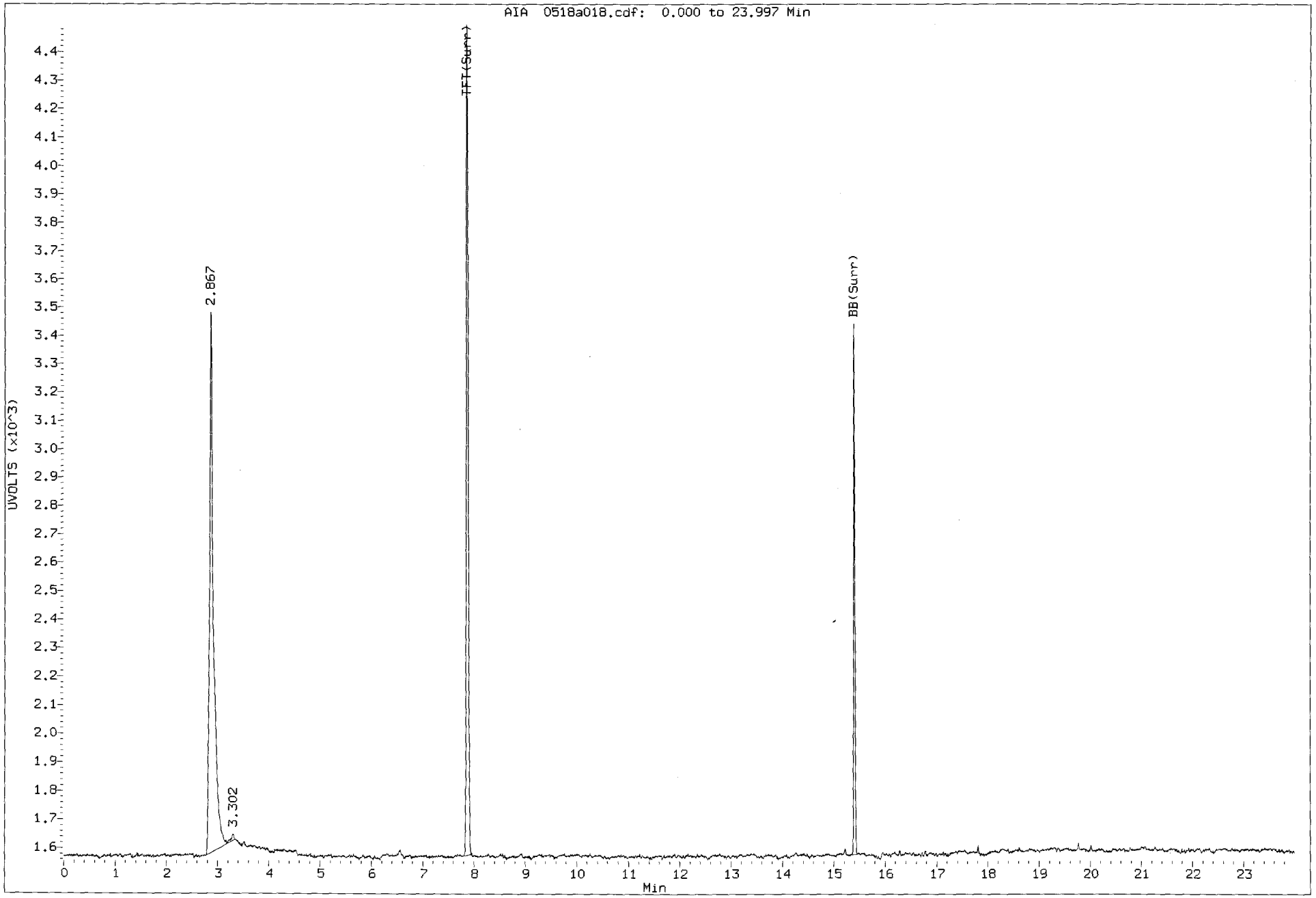
5. Other _____

Analyst: JW Date: 5/22/12

Data File: /chem3/pid1.i/vpcc051812-1.b/0518a018.d/0518a018.cdf
Injection Date: 18-MAY-2012 17:58
Instrument: pid1.i
Client Sample ID: TRIP BLANK

Before JD 6/22/12

USGS 00057



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 2

Sample ID: MW1-W-8.5
SAMPLE

Lab Sample ID: UU66A
LIMS ID: 12-8973
Matrix: Water
Data Release Authorized:
Reported: 05/25/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/15/12
Date Received: 05/16/12

Date Extracted: 05/21/12
Date Analyzed: 05/24/12 15:54
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	1.0	< 1.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	**2-Methylnaphthalene**	**1.0**	**1.9**
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: MW1-W-8.5**
 SAMPLE

Lab Sample ID: UU66A
LIMS ID: 12-8973
Matrix: Water
Date Analyzed: 05/24/12 15:54

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	**Fluorene**	**1.0**	**2.0**
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	**Phenanthrene**	**1.0**	**1.4**
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	**1-Methylnaphthalene**	**1.0**	**11**
TOTBFA	Total Benzofluoranthenes	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	64.4%	2-Fluorobiphenyl	69.6%
d14-p-Terphenyl	68.4%	d4-1,2-Dichlorobenzene	50.4%
d5-Phenol	68.3%	2-Fluorophenol	66.9%
2,4,6-Tribromophenol	87.2%	d4-2-Chlorophenol	65.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 2

Sample ID: FIELD DUPLICATE SAMPLE

Lab Sample ID: UU66B
LIMS ID: 12-8974
Matrix: Water
Data Release Authorized:
Reported: 05/25/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/15/12
Date Received: 05/16/12

Date Extracted: 05/21/12
Date Analyzed: 05/24/12 16:27
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	1.0	< 1.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	**2-Methylnaphthalene**	**1.0**	**2.1**
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: FIELD DUPLICATE SAMPLE

Lab Sample ID: UU66B
LIMS ID: 12-8974
Matrix: Water
Date Analyzed: 05/24/12 16:27

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	**Fluorene**	**1.0**	**2.0**
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	**Phenanthrene**	**1.0**	**1.5**
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	**1-Methylnaphthalene**	**1.0**	**12**
TOTBFA	Total Benzofluoranthenes	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	68.4%	2-Fluorobiphenyl	70.0%
d14-p-Terphenyl	76.0%	d4-1,2-Dichlorobenzene	54.0%
d5-Phenol	71.5%	2-Fluorophenol	73.1%
2,4,6-Tribromophenol	83.7%	d4-2-Chlorophenol	69.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-052112
METHOD BLANK

Lab Sample ID: MB-052112
LIMS ID: 12-8973
Matrix: Water
Data Release Authorized:
Reported: 05/25/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/21/12
Date Analyzed: 05/24/12 11:26
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	1.0	< 1.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U
84-66-2	Diethylphthalate	1.0	< 1.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-052112
METHOD BLANK

Lab Sample ID: MB-052112
LIMS ID: 12-8973
Matrix: Water
Date Analyzed: 05/24/12 11:26

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	72.8%	2-Fluorobiphenyl	68.4%
d14-p-Terphenyl	80.8%	d4-1,2-Dichlorobenzene	59.2%
d5-Phenol	73.3%	2-Fluorophenol	75.5%
2,4,6-Tribromophenol	72.3%	d4-2-Chlorophenol	72.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 2

Sample ID: LCS-052112
LCS/LCSD

Lab Sample ID: LCS-052112
LIMS ID: 12-8973
Matrix: Water
Data Release Authorized:
Reported: 05/25/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/15/12
Date Received: 05/16/12

Date Extracted LCS/LCSD: 05/21/12

Date Analyzed LCS: 05/24/12 11:59
LCSD: 05/24/12 12:33
Instrument/Analyst LCS: NT6/JZ
LCSD: NT6/JZ
GPC Cleanup: NO

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Phenol	16.6	25.0	66.4%	16.1	25.0	64.4%	3.1%
Bis-(2-Chloroethyl) Ether	17.9	25.0	71.6%	17.4	25.0	69.6%	2.8%
2-Chlorophenol	15.6	25.0	62.4%	15.0	25.0	60.0%	3.9%
1,3-Dichlorobenzene	10.8	25.0	43.2%	10.8	25.0	43.2%	0.0%
1,4-Dichlorobenzene	11.4	25.0	45.6%	11.3	25.0	45.2%	0.9%
Benzyl Alcohol	15.8	25.0	63.2%	16.1	25.0	64.4%	1.9%
1,2-Dichlorobenzene	11.9	25.0	47.6%	12.0	25.0	48.0%	0.8%
2-Methylphenol	15.4	25.0	61.6%	14.8	25.0	59.2%	4.0%
2,2'-Oxybis(1-Chloropropane)	17.1	25.0	68.4%	16.7	25.0	66.8%	2.4%
4-Methylphenol	32.1	50.0	64.2%	31.2	50.0	62.4%	2.8%
N-Nitroso-Di-N-Propylamine	18.1	25.0	72.4%	17.9	25.0	71.6%	1.1%
Hexachloroethane	9.7	25.0	38.8%	9.5	25.0	38.0%	2.4%
Nitrobenzene	16.8	25.0	67.2%	16.4	25.0	65.6%	2.4%
Isophorone	19.7	25.0	78.8%	20.1	25.0	80.4%	2.0%
2-Nitrophenol	15.9	25.0	63.6%	15.4	25.0	61.6%	3.2%
2,4-Dimethylphenol	42.7	75.0	56.9%	37.0	75.0	49.3%	14.3%
Benzoic Acid	102	138	73.9%	103	138	74.6%	1.0%
bis(2-Chloroethoxy) Methane	17.7	25.0	70.8%	17.7	25.0	70.8%	0.0%
2,4-Dichlorophenol	50.0	75.0	66.7%	47.9	75.0	63.9%	4.3%
1,2,4-Trichlorobenzene	12.3	25.0	49.2%	12.4	25.0	49.6%	0.8%
Naphthalene	15.2	25.0	60.8%	14.9	25.0	59.6%	2.0%
4-Chloroaniline	46.9	75.0	62.5%	45.9	75.0	61.2%	2.2%
Hexachlorobutadiene	9.7	25.0	38.8%	9.5	25.0	38.0%	2.0%
4-Chloro-3-methylphenol	56.2	75.0	74.9%	55.4	75.0	73.9%	1.4%
2-Methylnaphthalene	13.9	25.0	55.6%	14.0	25.0	56.0%	0.7%
Hexachlorocyclopentadiene	28.5	75.0	38.0%	27.8	75.0	37.1%	2.5%
2,4,6-Trichlorophenol	56.8	75.0	75.7%	53.9	75.0	71.9%	5.2%
2,4,5-Trichlorophenol	60.5	75.0	80.7%	59.3	75.0	79.1%	2.0%
2-Chloronaphthalene	17.0	25.0	68.0%	16.8	25.0	67.2%	1.2%
2-Nitroaniline	56.6	75.0	75.5%	57.2	75.0	76.3%	1.1%
Dimethylphthalate	21.8	25.0	87.2%	22.1	25.0	88.4%	1.4%
Acenaphthylene	18.3	25.0	73.2%	18.0	25.0	72.0%	1.7%
3-Nitroaniline	60.0	75.0	80.0%	60.4	75.0	80.5%	0.7%
Acenaphthene	17.2	25.0	68.8%	17.0	25.0	68.0%	1.2%
2,4-Dinitrophenol	108	138	78.3%	108	138	78.3%	0.0%
4-Nitrophenol	62.8	75.0	83.7%	63.1	75.0	84.1%	0.5%
Dibenzofuran	17.6	25.0	70.4%	17.2	25.0	68.8%	2.3%
2,6-Dinitrotoluene	64.0	75.0	85.3%	64.5	75.0	86.0%	0.8%
2,4-Dinitrotoluene	66.3	75.0	88.4%	66.8	75.0	89.1%	0.8%
Diethylphthalate	22.0	25.0	88.0%	22.3	25.0	89.2%	1.4%
4-Chlorophenyl-phenylether	19.3	25.0	77.2%	19.1	25.0	76.4%	1.0%
Fluorene	18.6	25.0	74.4%	18.3	25.0	73.2%	1.6%
4-Nitroaniline	61.1	75.0	81.5%	60.5	75.0	80.7%	1.0%
4,6-Dinitro-2-Methylphenol	118	138	85.5%	121	138	87.7%	2.5%
N-Nitrosodiphenylamine	18.6	25.0	74.4%	19.0	25.0	76.0%	2.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: LCS-052112**
 LCS/LCSD

Lab Sample ID: LCS-052112 QC Report No: UU66-Maul Foster & Alongi
LIMS ID: 12-8973 Project: SIMS - N Cascade Ford
Matrix: Water 0747.01.01
Date Analyzed LCS: 05/24/12 11:59
LCSD: 05/24/12 12:33

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
4-Bromophenyl-phenylether	19.5	25.0	78.0%	19.8	25.0	79.2%	1.5%
Hexachlorobenzene	19.9	25.0	79.6%	20.2	25.0	80.8%	1.5%
Pentachlorophenol	60.6	75.0	80.8%	62.5	75.0	83.3%	3.1%
Phenanthrene	19.8	25.0	79.2%	19.9	25.0	79.6%	0.5%
Carbazole	22.4	25.0	89.6%	22.1	25.0	88.4%	1.3%
Anthracene	19.2	25.0	76.8%	19.4	25.0	77.6%	1.0%
Di-n-Butylphthalate	23.2	25.0	92.8%	23.3	25.0	93.2%	0.4%
Fluoranthene	21.6	25.0	86.4%	21.3	25.0	85.2%	1.4%
Pyrene	19.3	25.0	77.2%	19.9	25.0	79.6%	3.1%
Butylbenzylphthalate	21.0	25.0	84.0%	21.6	25.0	86.4%	2.8%
3,3'-Dichlorobenzidine	51.2	75.0	68.3%	49.9	75.0	66.5%	2.6%
Benzo(a)anthracene	18.4	25.0	73.6%	18.6	25.0	74.4%	1.1%
bis(2-Ethylhexyl)phthalate	21.3	25.0	85.2%	21.6	25.0	86.4%	1.4%
Chrysene	19.9	25.0	79.6%	20.0	25.0	80.0%	0.5%
Di-n-Octyl phthalate	21.6	25.0	86.4%	21.5	25.0	86.0%	0.5%
Benzo(a)pyrene	18.2	25.0	72.8%	18.1	25.0	72.4%	0.6%
Indeno(1,2,3-cd)pyrene	18.2	25.0	72.8%	18.9	25.0	75.6%	3.8%
Dibenz(a,h)anthracene	17.9	25.0	71.6%	19.2	25.0	76.8%	7.0%
Benzo(g,h,i)perylene	19.0	25.0	76.0%	19.4	25.0	77.6%	2.1%
1-Methylnaphthalene	19.2	25.0	76.8%	19.2	25.0	76.8%	0.0%
Total Benzofluoranthenes	39.7	50.0	79.4%	39.2	50.0	78.4%	1.3%

Semivolatile Surrogate Recovery

	LCS	LCSD
d5-Nitrobenzene	70.0%	66.0%
2-Fluorobiphenyl	70.0%	66.4%
d14-p-Terphenyl	80.0%	80.8%
d4-1,2-Dichlorobenzene	55.6%	53.2%
d5-Phenol	75.7%	71.5%
2-Fluorophenol	69.1%	65.6%
2,4,6-Tribromophenol	86.4%	84.3%
d4-2-Chlorophenol	69.9%	65.9%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-052112	72.8%	68.4%	80.8%	59.2%	73.3%	75.5%	72.3%	72.3%	0
LCS-052112	70.0%	70.0%	80.0%	55.6%	75.7%	69.1%	86.4%	69.9%	0
LCSD-052112	66.0%	66.4%	80.8%	53.2%	71.5%	65.6%	84.3%	65.9%	0
MW1-W-8.5	64.4%	69.6%	68.4%	50.4%	68.3%	66.9%	87.2%	65.6%	0
FIELD DUPLICATE	68.4%	70.0%	76.0%	54.0%	71.5%	73.1%	83.7%	69.3%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(50-100)	(34-101)
(FBP) = 2-Fluorobiphenyl	(51-100)	(38-100)
(TPH) = d14-p-Terphenyl	(54-117)	(27-122)
(DCB) = d4-1,2-Dichlorobenzene	(40-100)	(27-100)
(PHL) = d5-Phenol	(15-121)	(16-106)
(2FP) = 2-Fluorophenol	(33-100)	(23-100)
(TBP) = 2,4,6-Tribromophenol	(46-125)	(31-128)
(2CP) = d4-2-Chlorophenol	(46-102)	(33-100)

Prep Method: SW3520C
Log Number Range: 12-8973 to 12-8974

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: MW1-W-8.5
SAMPLE

Lab Sample ID: UU66A
LIMS ID: 12-8973
Matrix: Water
Data Release Authorized:
Reported: 05/24/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/15/12
Date Received: 05/16/12

Date Extracted: 05/21/12
Date Analyzed: 05/23/12 21:00
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.10**	**0.23**
91-57-6	**2-Methylnaphthalene**	**0.10**	**1.8**
90-12-0	**1-Methylnaphthalene**	**0.10**	**8.5**
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	**Acenaphthene**	**0.10**	**0.83**
86-73-7	**Fluorene**	**0.10**	**2.0**
85-01-8	**Phenanthrene**	**0.10**	**1.5**
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	67.7%
d14-Dibenzo(a,h)anthracene	47.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: FIELD DUPLICATE SAMPLE

Lab Sample ID: UU66B
LIMS ID: 12-8974
Matrix: Water
Data Release Authorized:
Reported: 05/24/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/15/12
Date Received: 05/16/12

Date Extracted: 05/21/12
Date Analyzed: 05/23/12 21:28
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.10**	**0.26**
91-57-6	**2-Methylnaphthalene**	**0.10**	**2.0**
90-12-0	**1-Methylnaphthalene**	**0.10**	**9.1**
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	**Acenaphthene**	**0.10**	**0.41**
86-73-7	**Fluorene**	**0.10**	**2.0**
85-01-8	**Phenanthrene**	**0.10**	**1.4**
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	69.3%
d14-Dibenzo(a,h)anthracene	59.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS

Sample ID: MB-052112
METHOD BLANK

Lab Sample ID: MB-052112
LIMS ID: 12-8973
Matrix: Water
Data Release Authorized:
Reported: 05/24/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/21/12
Date Analyzed: 05/23/12 18:38
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	64.7%
d14-Dibenzo(a,h)anthracene	78.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS

Sample ID: LCS-052112
LAB CONTROL SAMPLE

Lab Sample ID: LCS-052112
LIMS ID: 12-8973
Matrix: Water
Data Release Authorized:
Reported: 05/24/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 05/21/12

Date Analyzed LCS: 05/23/12 19:06
LCSD: 05/23/12 19:35
Instrument/Analyst LCS: NT4/JZ
LCSD: NT4/JZ

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Naphthalene	1.61	3.00	53.7%	1.61	3.00	53.7%	0.0%
2-Methylnaphthalene	1.45	3.00	48.3%	1.53	3.00	51.0%	5.4%
1-Methylnaphthalene	1.64	3.00	54.7%	1.71	3.00	57.0%	4.2%
Acenaphthylene	1.68	3.00	56.0%	1.78	3.00	59.3%	5.8%
Acenaphthene	1.69	3.00	56.3%	1.79	3.00	59.7%	5.7%
Fluorene	1.76	3.00	58.7%	1.84	3.00	61.3%	4.4%
Phenanthrene	2.00	3.00	66.7%	2.15	3.00	71.7%	7.2%
Anthracene	1.78	3.00	59.3%	2.05	3.00	68.3%	14.1%
Fluoranthene	2.09	3.00	69.7%	2.13	3.00	71.0%	1.9%
Pyrene	2.29	3.00	76.3%	2.40	3.00	80.0%	4.7%
Benzo(a)anthracene	2.09	3.00	69.7%	2.20	3.00	73.3%	5.1%
Chrysene	2.26	3.00	75.3%	2.49	3.00	83.0%	9.7%
Benzo(a)pyrene	1.89	3.00	63.0%	2.12	3.00	70.7%	11.5%
Indeno(1,2,3-cd)pyrene	2.22	3.00	74.0%	2.38	3.00	79.3%	7.0%
Dibenz(a,h)anthracene	1.76	3.00	58.7%	2.06	3.00	68.7%	15.7%
Benzo(g,h,i)perylene	2.14	3.00	71.3%	2.33	3.00	77.7%	8.5%
Dibenzofuran	1.67	3.00	55.7%	1.77	3.00	59.0%	5.8%
Total Benzofluoranthenes	4.73	6.00	78.8%	5.18	6.00	86.3%	9.1%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

SIM Semivolatile Surrogate Recovery

	LCS	LCSD
d10-2-Methylnaphthalene	61.0%	61.0%
d14-Dibenzo(a,h)anthracene	61.7%	70.0%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	MNP	DBA	TOT OUT
MB-052112	64.7%	78.7%	0
LCS-052112	61.0%	61.7%	0
LCSD-052112	61.0%	70.0%	0
MW1-W-8.5	67.7%	47.7%	0
FIELD DUPLICATE	69.3%	59.3%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(40-110)	(33-107)
(DBA) = d14-Dibenzo(a,h)anthracene	(33-140)	(10-142)

Prep Method: SW3520C
Log Number Range: 12-8973 to 12-8974

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Page 1 of 1
Matrix: Water

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Received: 05/16/12

Data Release Authorized: VT
Reported: 05/22/12

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range/Surrogate	RL	Result
MB-051812	Method Blank	05/18/12	05/21/12	1.00	Diesel Range	0.10	< 0.10 U
12-8973	HC ID: ---		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		92.6%
UU66A	MW1-W-8.5	05/18/12	05/21/12	1.00	**Diesel Range**	**0.10**	**1.3**
12-8973	HC ID: **DRO/RRO**		FID4A	1.0	**Motor Oil Range**	**0.20**	**0.24**
					o-Terphenyl		104%
UU66B	FIELD DUPLICATE	05/18/12	05/21/12	1.00	**Diesel Range**	**0.10**	**1.2**
12-8974	HC ID: **DRO/RRO**		FID4A	1.0	**Motor Oil Range**	**0.20**	**0.22**
					o-Terphenyl		96.0%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	OTER	TOT OUT
MB-051812	92.6%	0
LCS-051812	100%	0
LCSD-051812	98.6%	0
MW1-W-8.5	104%	0
FIELD DUPLICATE	96.0%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3510C
Log Number Range: 12-8973 to 12-8974

FORM-II TPHD

UU66:00073

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: LCS-051812
LCS/LCSD

Lab Sample ID: LCS-051812
LIMS ID: 12-8973
Matrix: Water
Data Release Authorized: VTB
Reported: 05/22/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 05/18/12

Date Analyzed LCS: 05/21/12 17:26
LCSD: 05/21/12 17:50
Instrument/Analyst LCS: FID4A/MH
LCSD: FID4A/MH

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 1.0 mL
LCSD: 1.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	2.61	3.00	87.0%	2.49	3.00	83.0%	4.7%

TPHD Surrogate Recovery

	LCS	LCSD
o-Terphenyl	100%	98.6%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: UU66
Matrix: Water
Project: SIMS - N Cascade Ford
Date Received: 05/16/12
0747.01.01

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
12-8973-051812MB1	Method Blank	500 mL	1.00 mL	05/18/12
12-8973-051812LCS1	Lab Control	500 mL	1.00 mL	05/18/12
12-8973-051812LCSD1	Lab Control Dup	500 mL	1.00 mL	05/18/12
12-8973-UU66A	MW1-W-8.5	500 mL	1.00 mL	05/18/12
12-8974-UU66B	FIELD DUPLICATE	500 mL	1.00 mL	05/18/12

Data File: /chem3/fid4a.i/20120521.b/0521a019.d

Date : 21-MAY-2012 17:02

Client ID: UU68MBW1

Sample Info: UU68MBW1

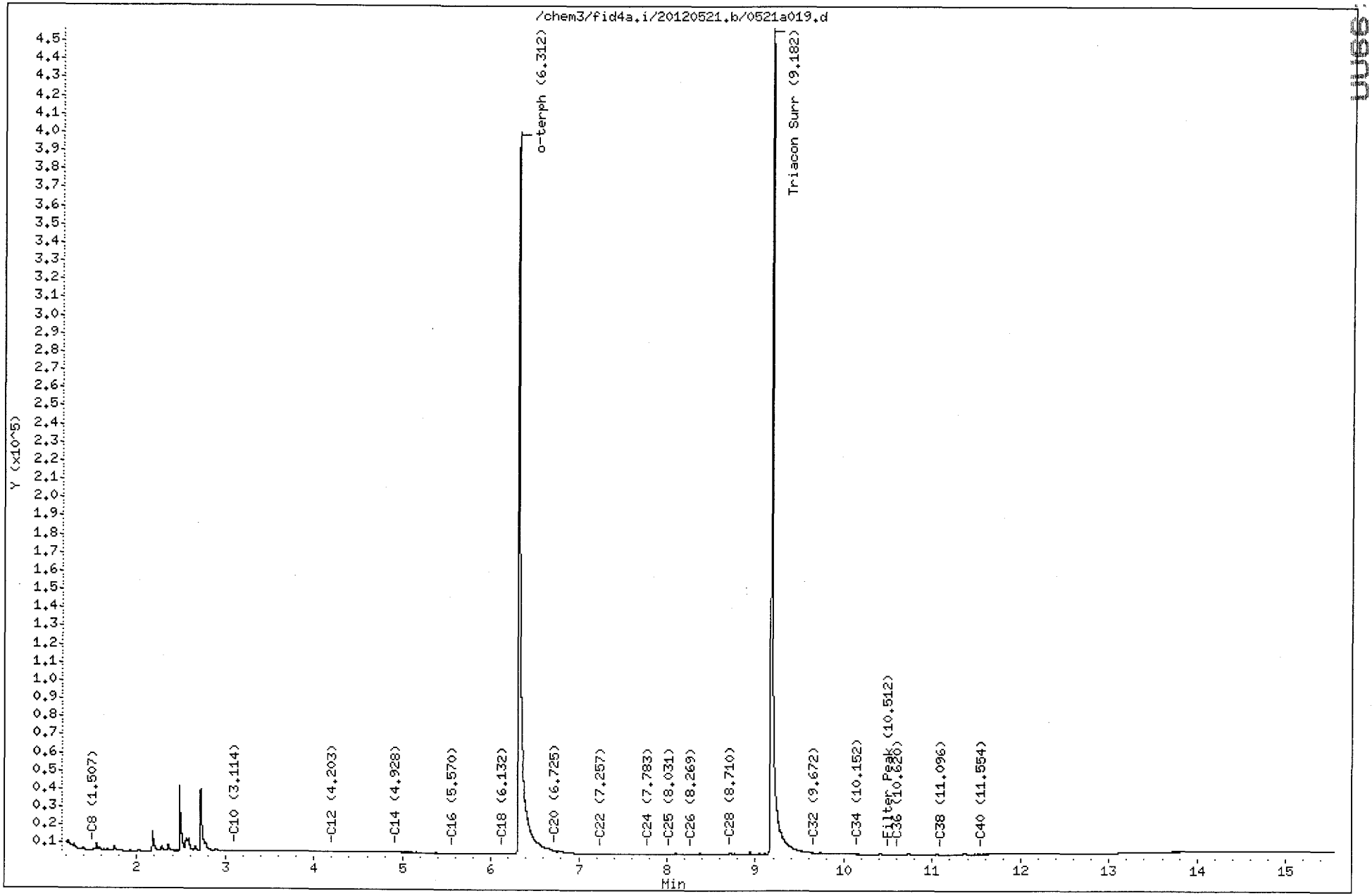
Column phase: RTX-1

Instrument: fid4a.i

Operator: MH

Column diameter: 0.25

UU66,00076



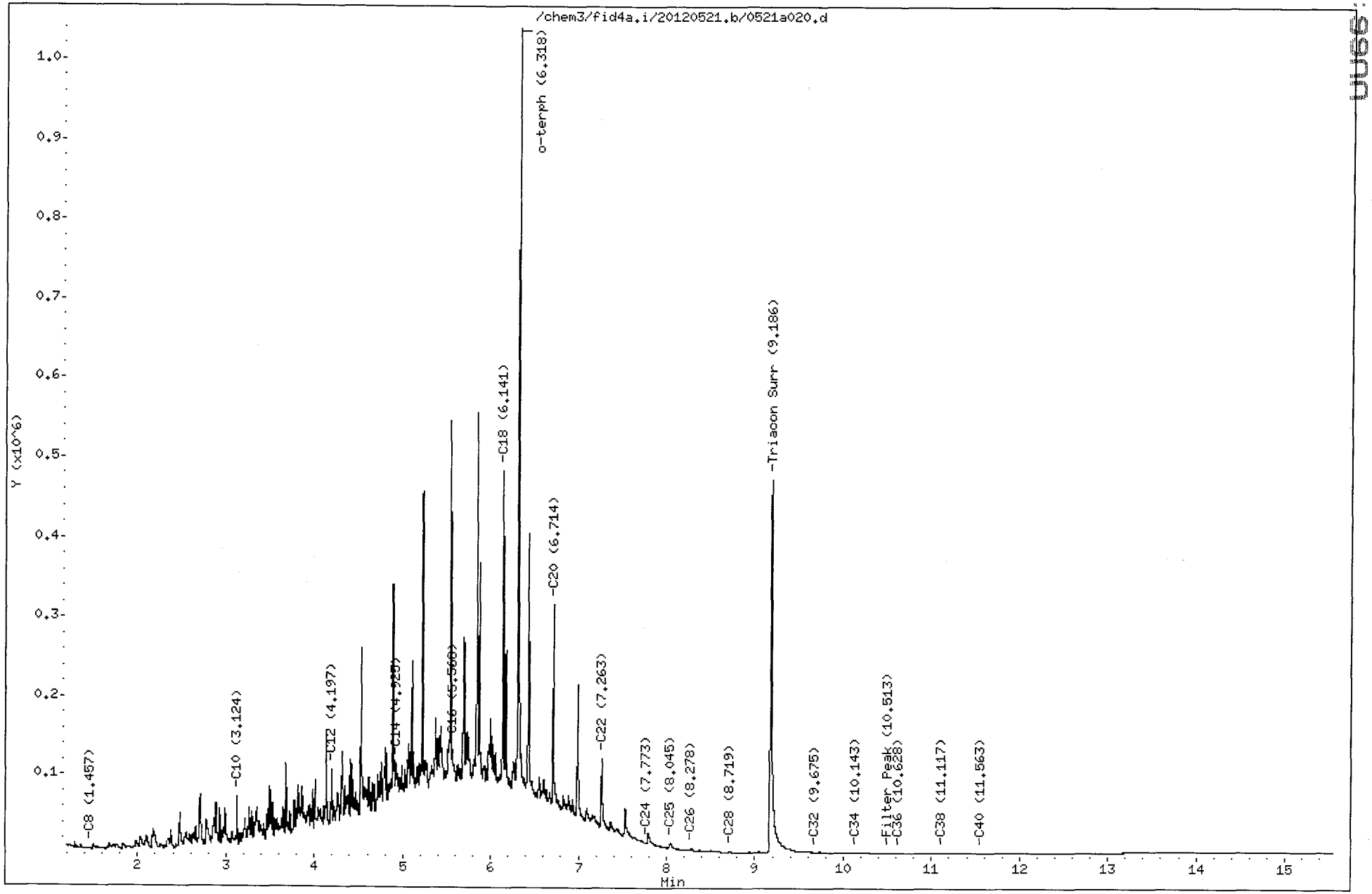
Data File: /chem3/fid4a.i/20120521.b/0521a020.d
Date : 21-MAY-2012 17:26
Client ID: UU68LCSW1
Sample Info: UU68LCSW1

Column phase: RTX-1

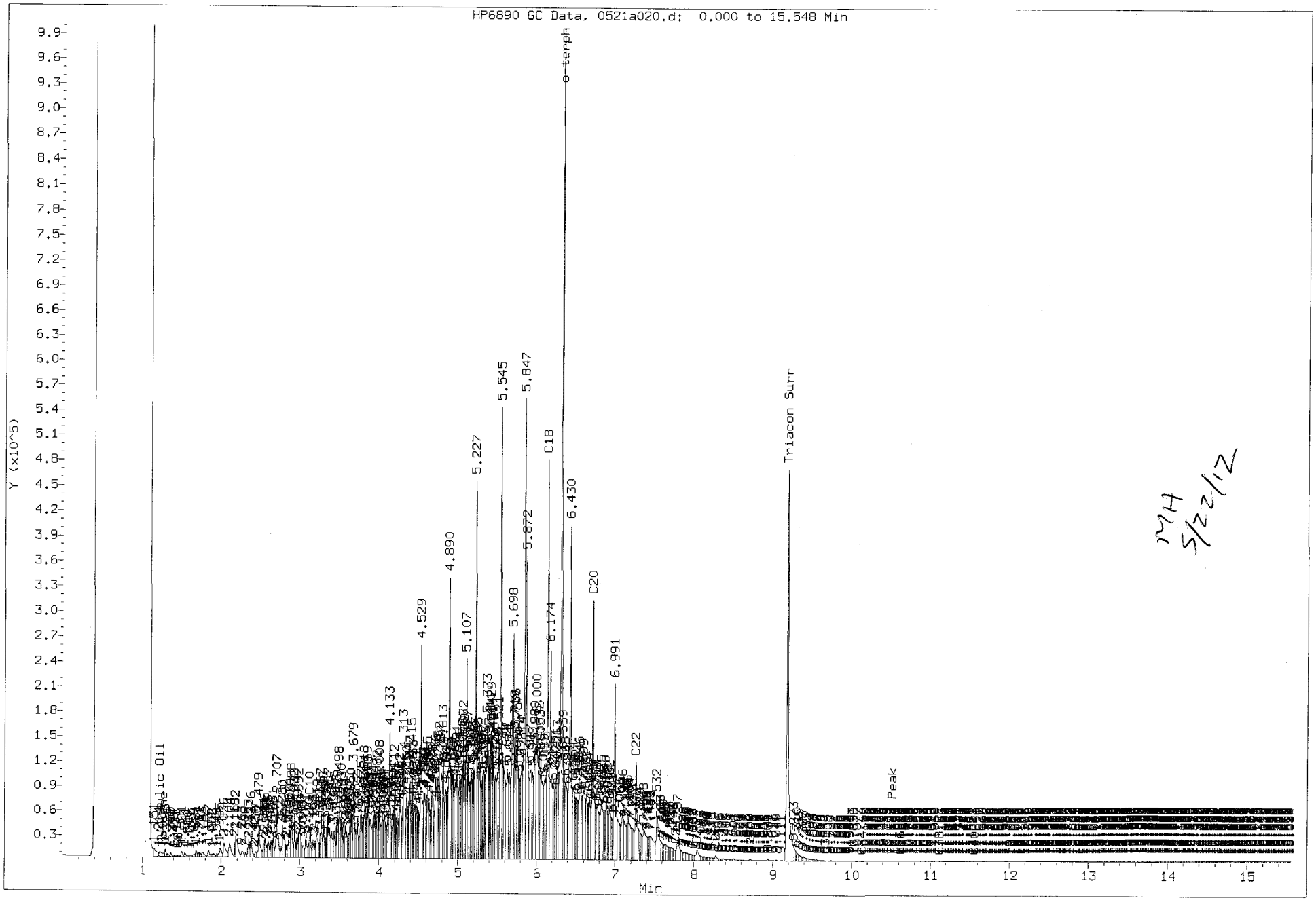
Instrument: fid4a.i

Operator: MH
Column diameter: 0.25

UU68.00077



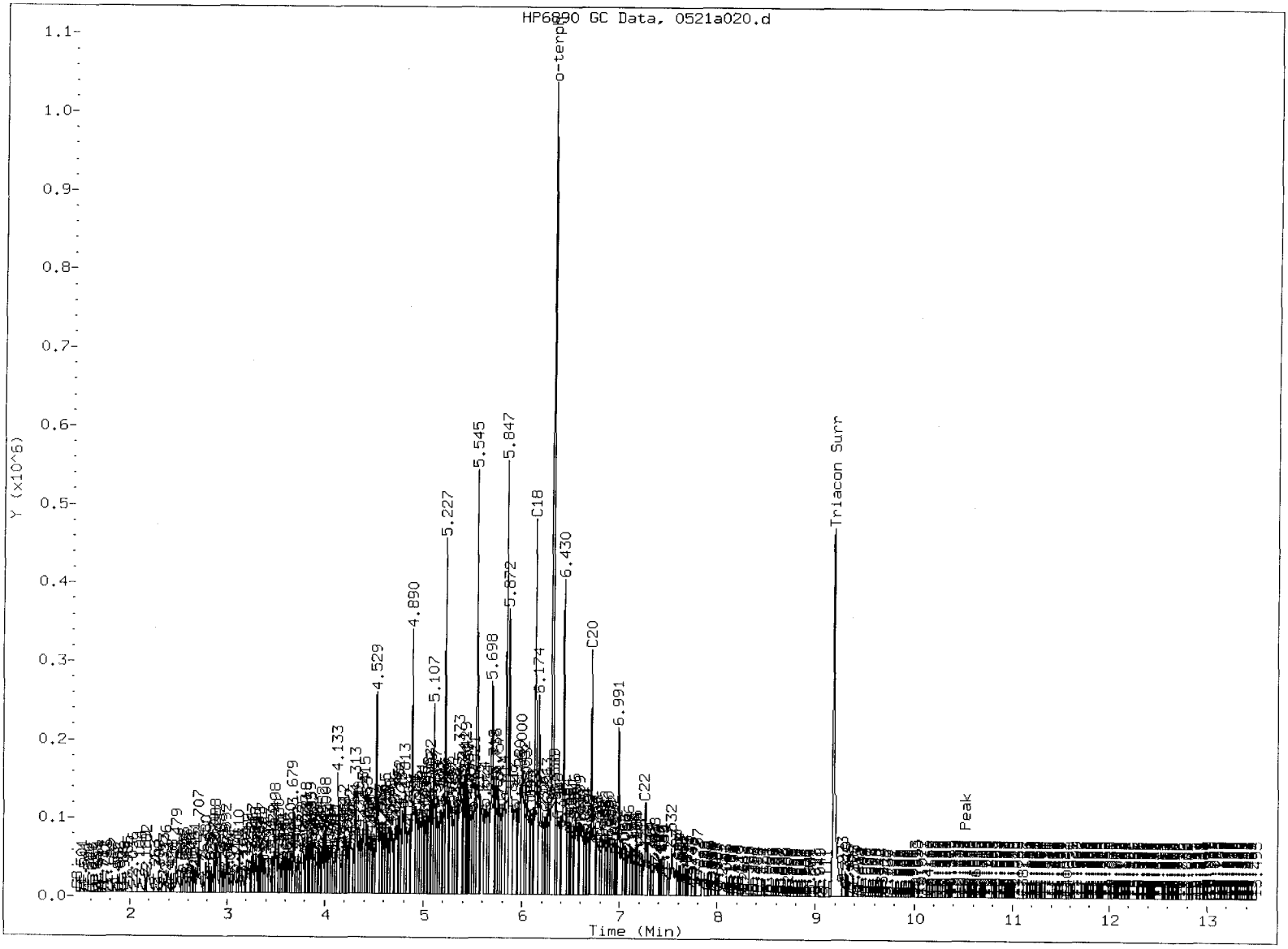
Data File: /chem3/fid4a.i/20120521.b/0521a020.d
Injection Date: 21-MAY-2012 17:26
Instrument: fid4a.i
Client Sample ID: UU68LCSW1



UU68 : 00078

MH 5/22/12

FID:4A-2C/RTX-1 UU68LCSW1 FID:4A SIGNAL



MANUAL INTEGRATION

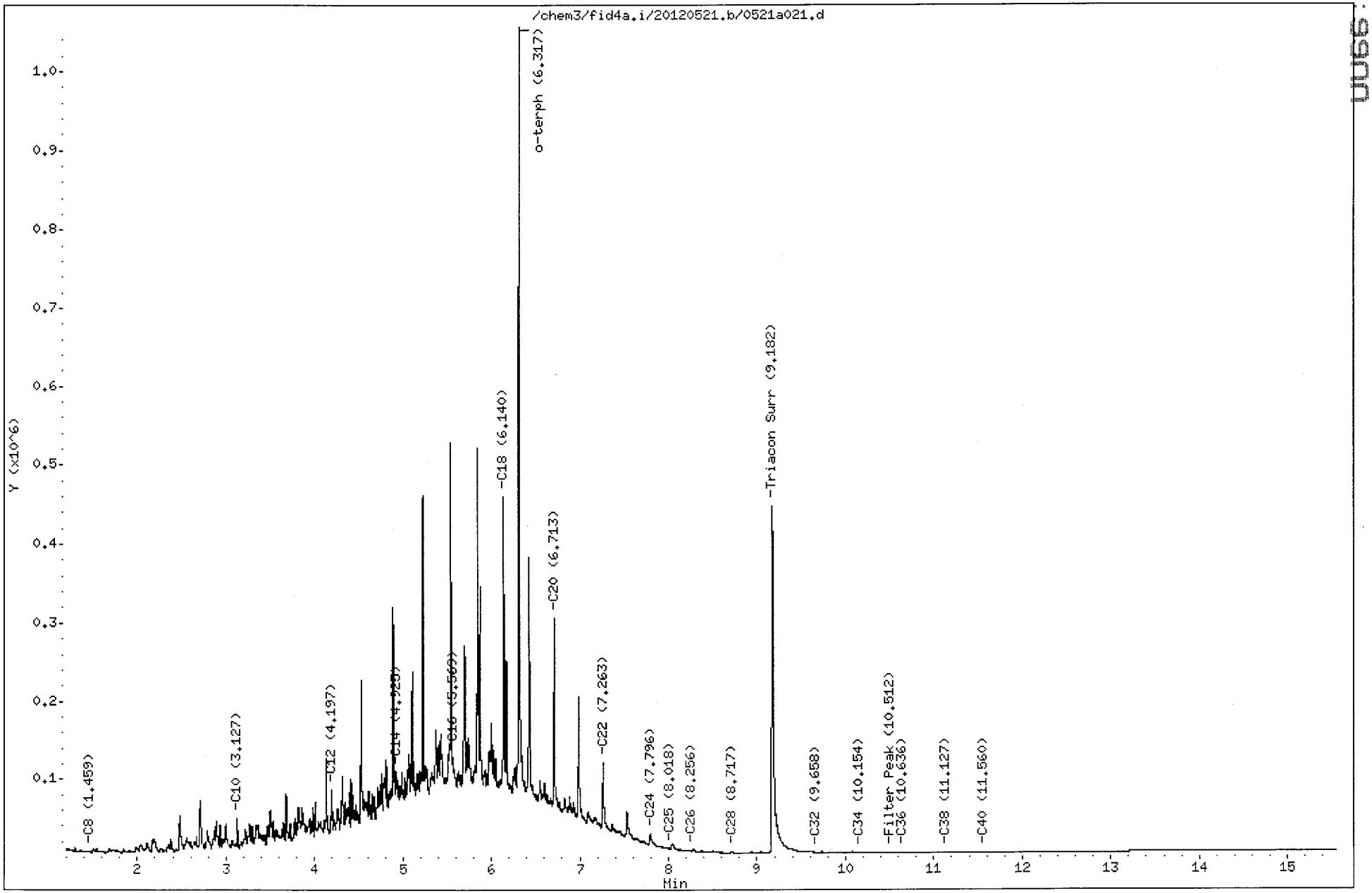
X 1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/22/12

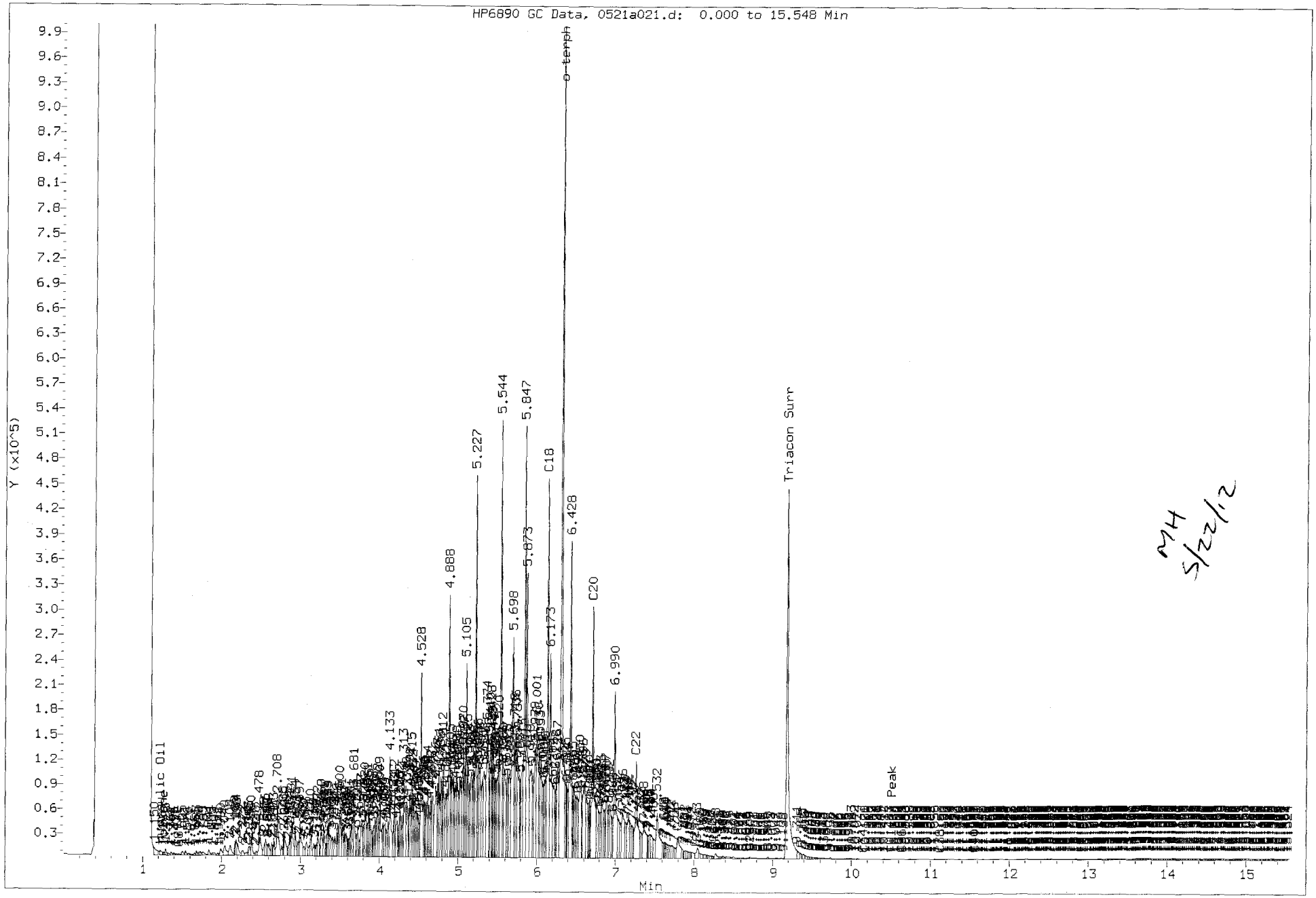
Data File: /chem3/fid4a.i/20120521.b/0521a021.d
Date : 21-MAY-2012 17:50
Client ID: UU68LCSDW1
Sample Info: UU68LCSDW1

Instrument: fid4a.i
Operator: MH
Column phase: RTX-1
Column diameter: 0.25



UU68 00030

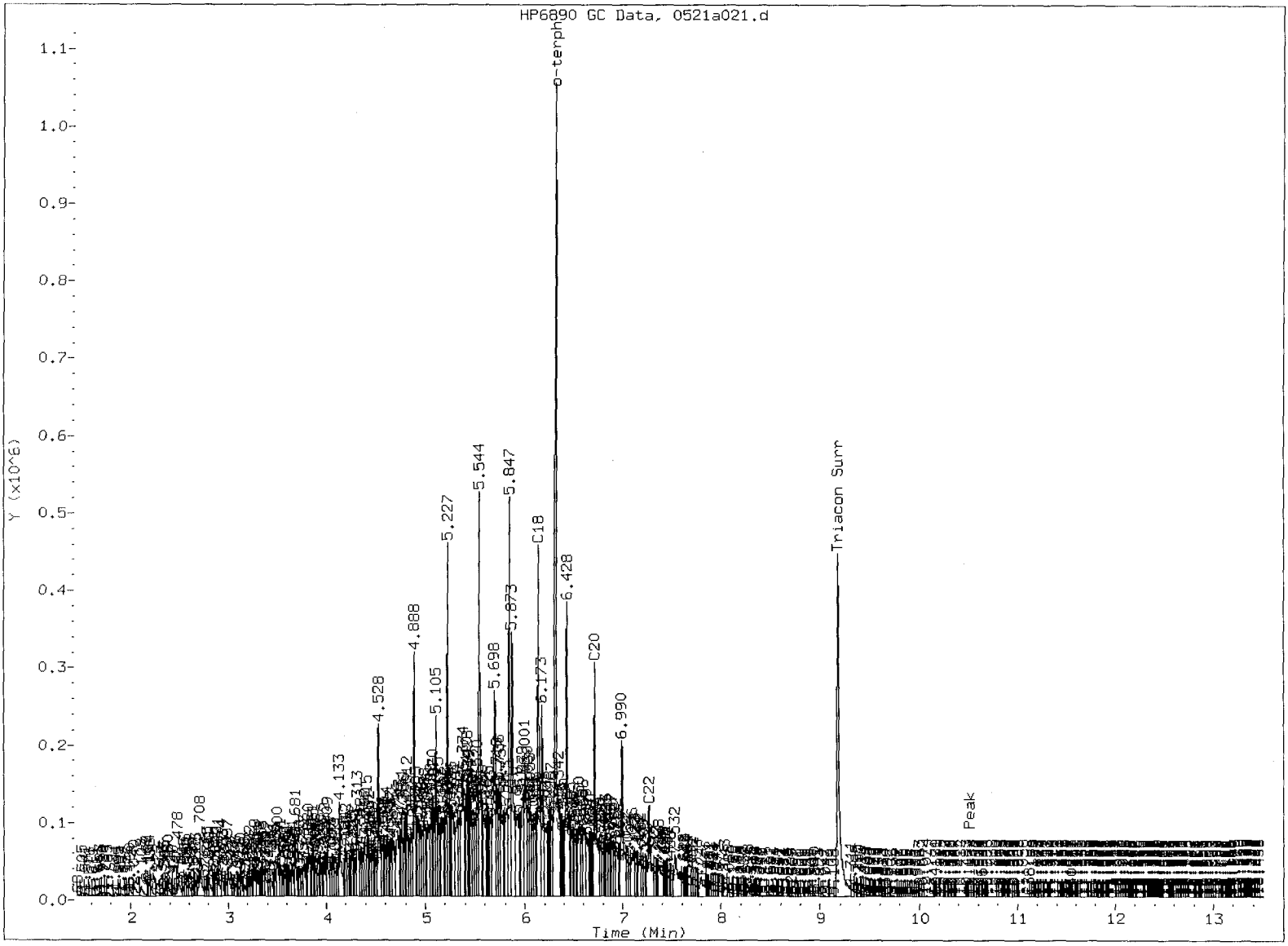
Data File: /chem3/fid4a.i/20120521.b/0521a021.d
Injection Date: 21-MAY-2012 17:50
Instrument: fid4a.i
Client Sample ID: UU68LCSDW1



UU68 : 00081

MH 5/22/12

FID:4A-2C/RTX-1 UU68LCSDW1 FID:4A SIGNAL



MANUAL INTEGRATION

X 1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/22/12

Data File: /chem3/fid4a.i/20120521.b/0521a023.d

Date : 21-MAY-2012 18:39

Client ID: MW1-W-8.5

Sample Info: UU66A

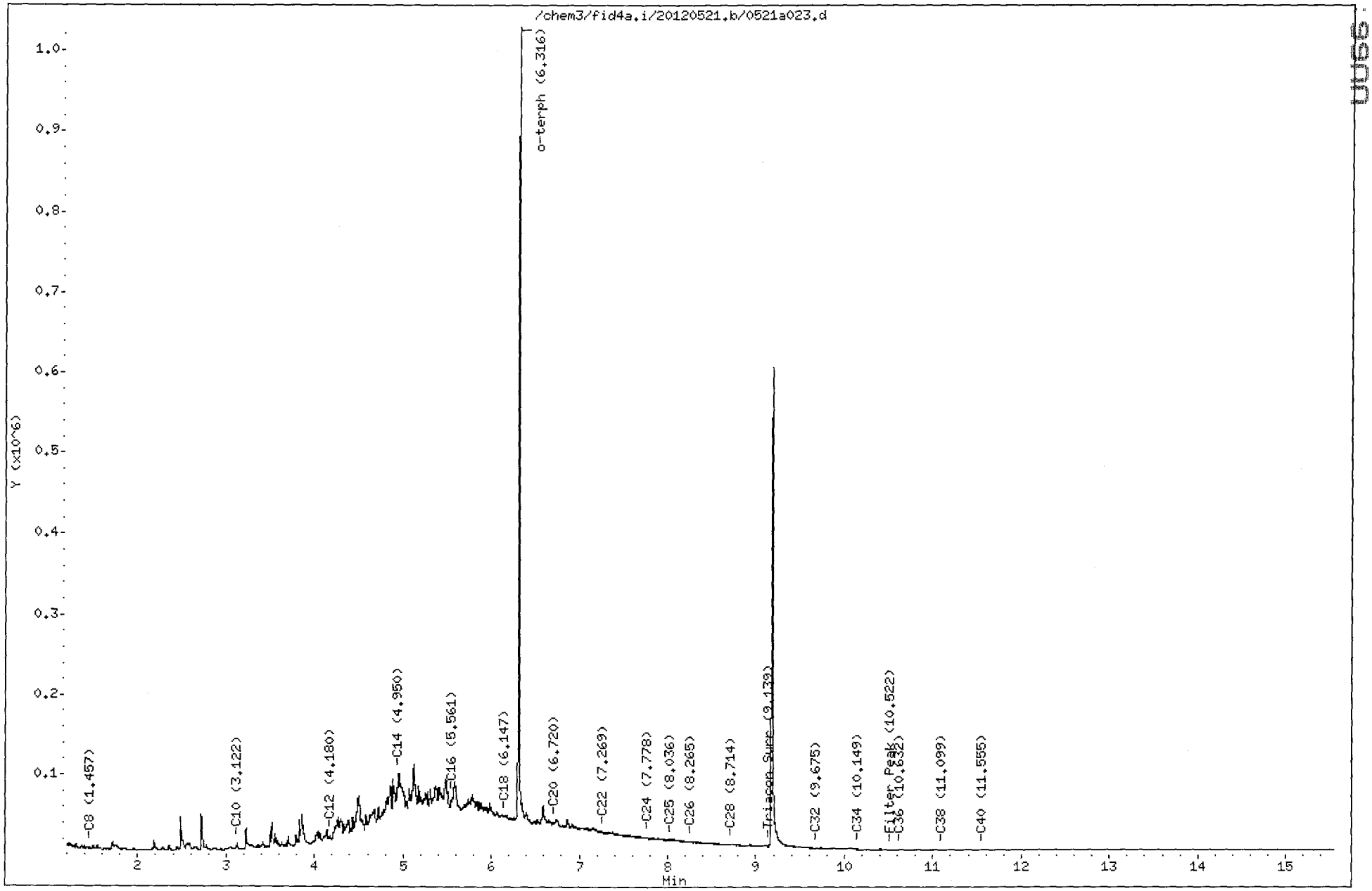
Column phase: RTX-1

Instrument: fid4a.i

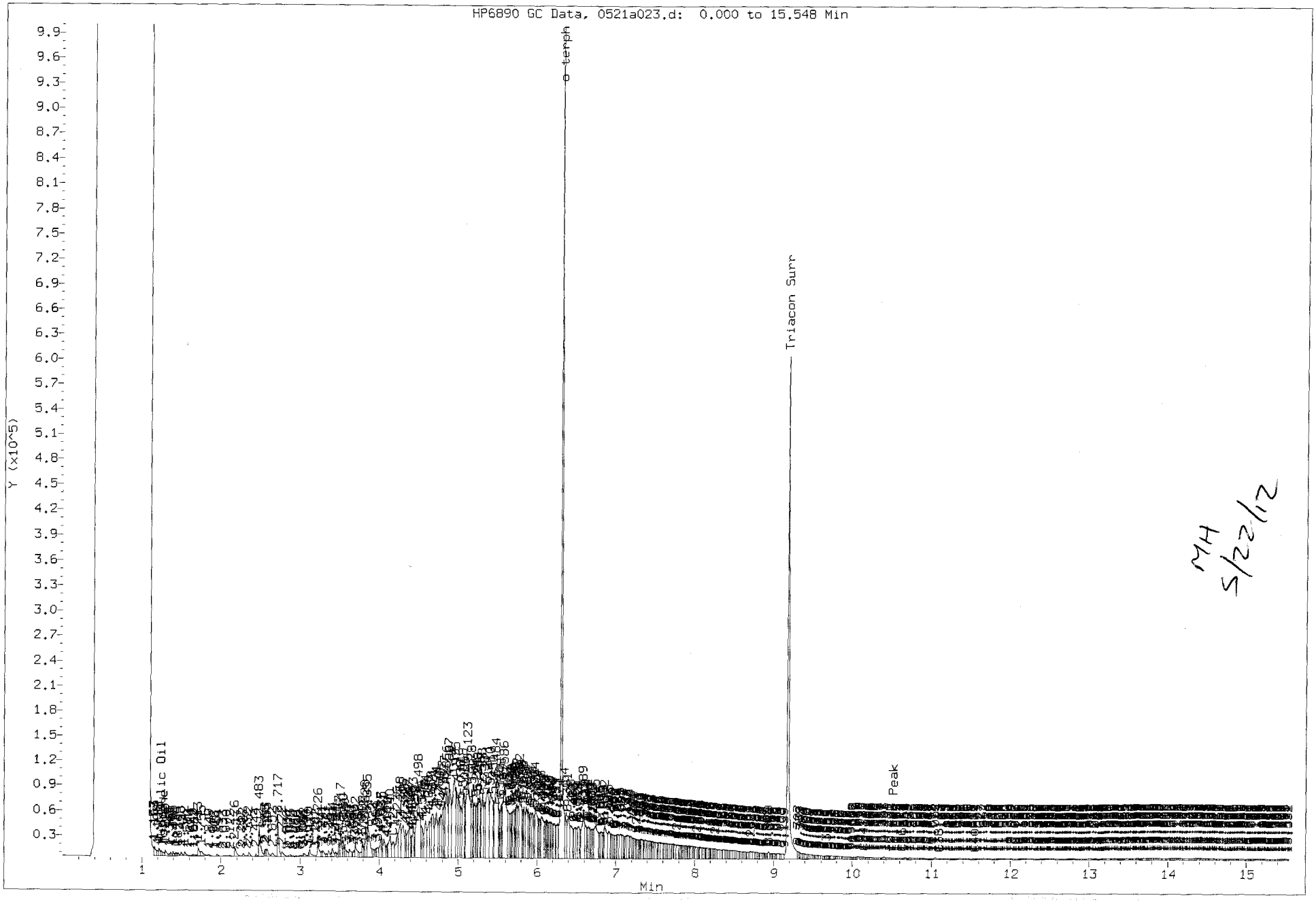
Operator: MH

Column diameter: 0.25

UU66 66083



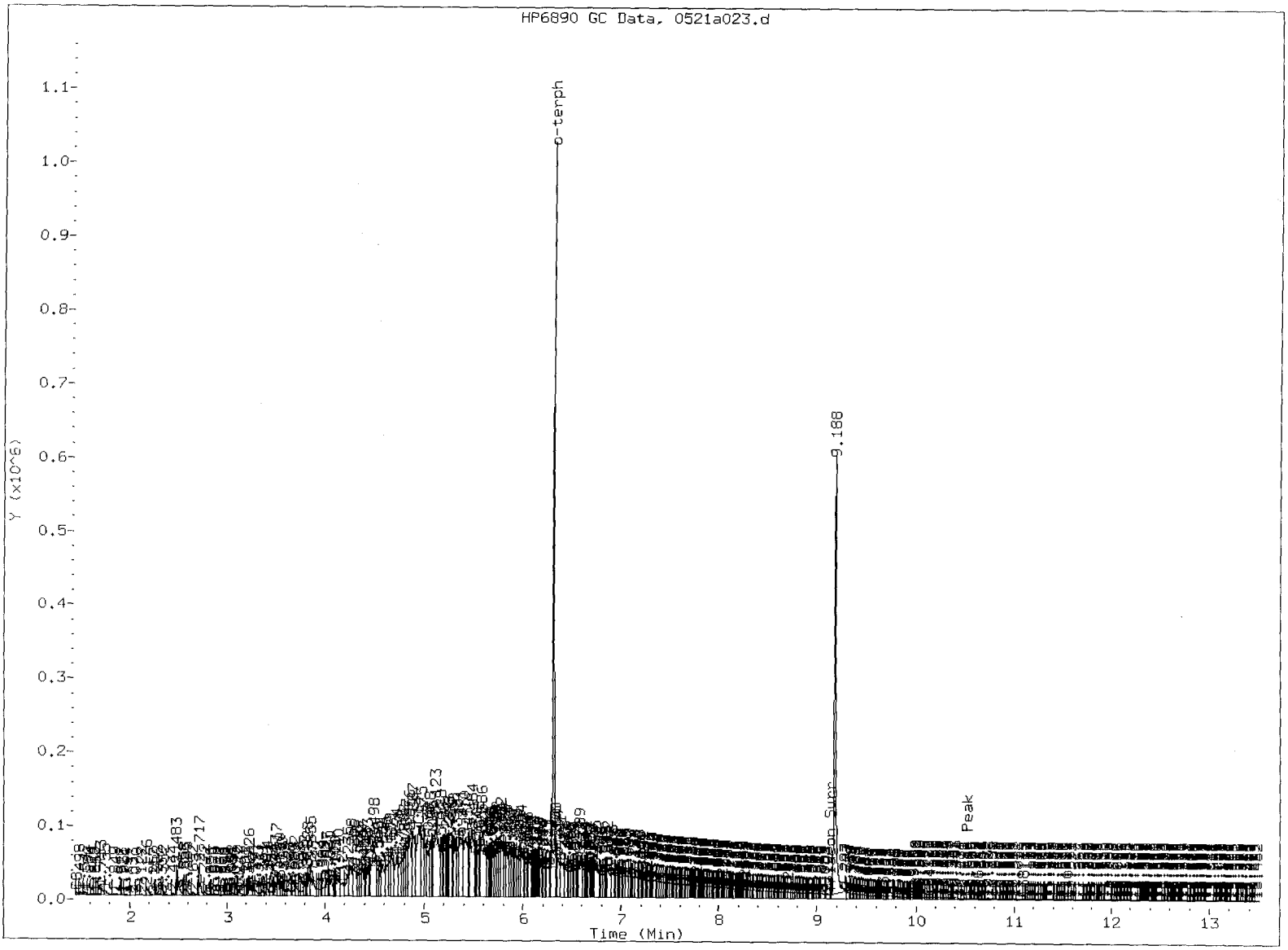
Data File: /chem3/fid4a.i/20120521.b/0521a023.d
Injection Date: 21-MAY-2012 18:39
Instrument: fid4a.i
Client Sample ID: MW1-W-8.5



1800695911

FID:4A-2C/RTX-1 UU66A

FID:4A SIGNAL



MANUAL INTEGRATION

X 1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/22/12

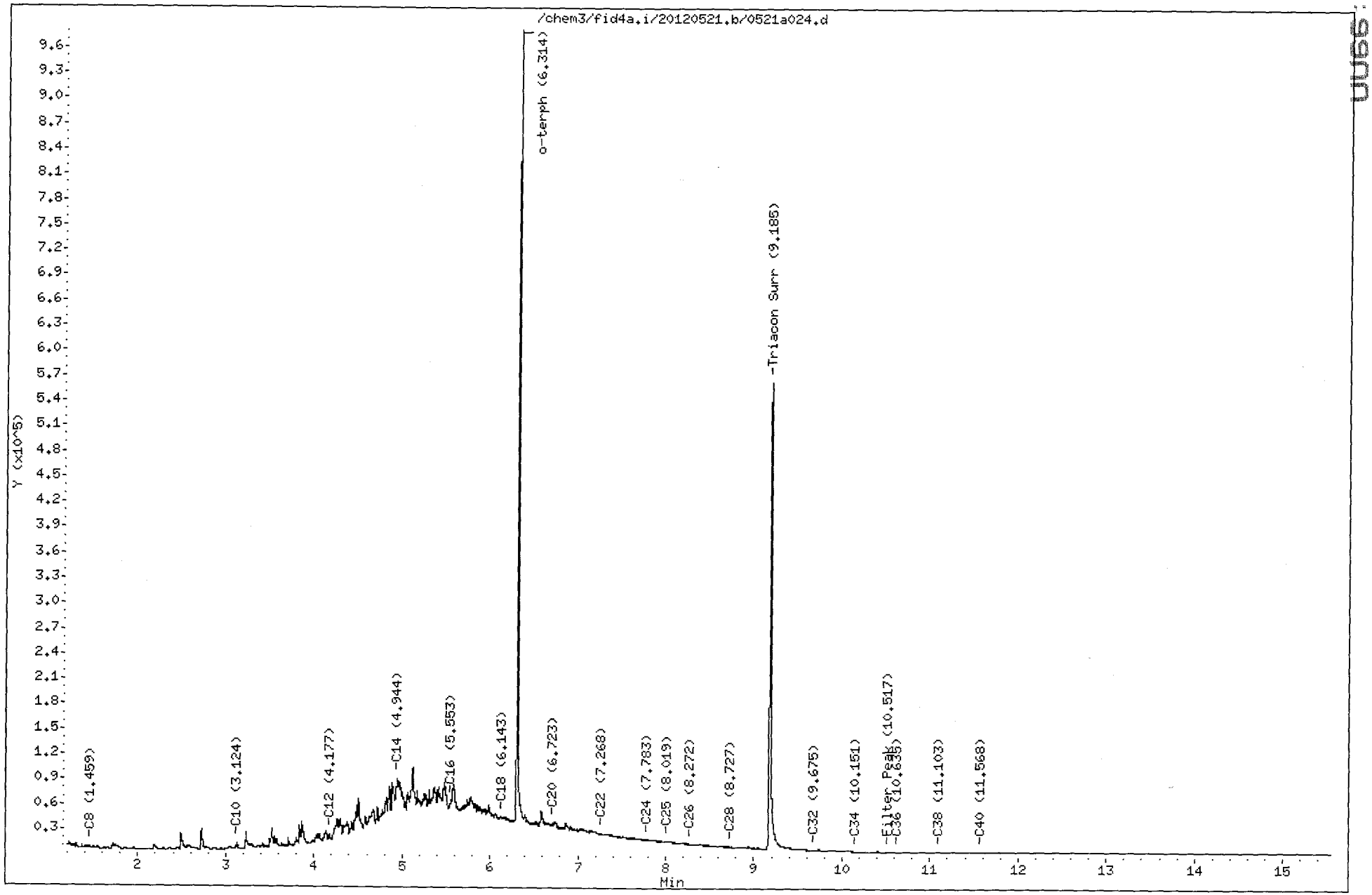
Data File: /chem3/fid4a.i/20120521.b/0521a024.d
Date : 21-MAY-2012 19:03
Client ID: FIELD DUPLICATE
Sample Info: UU66B

Column phase: RTX-1

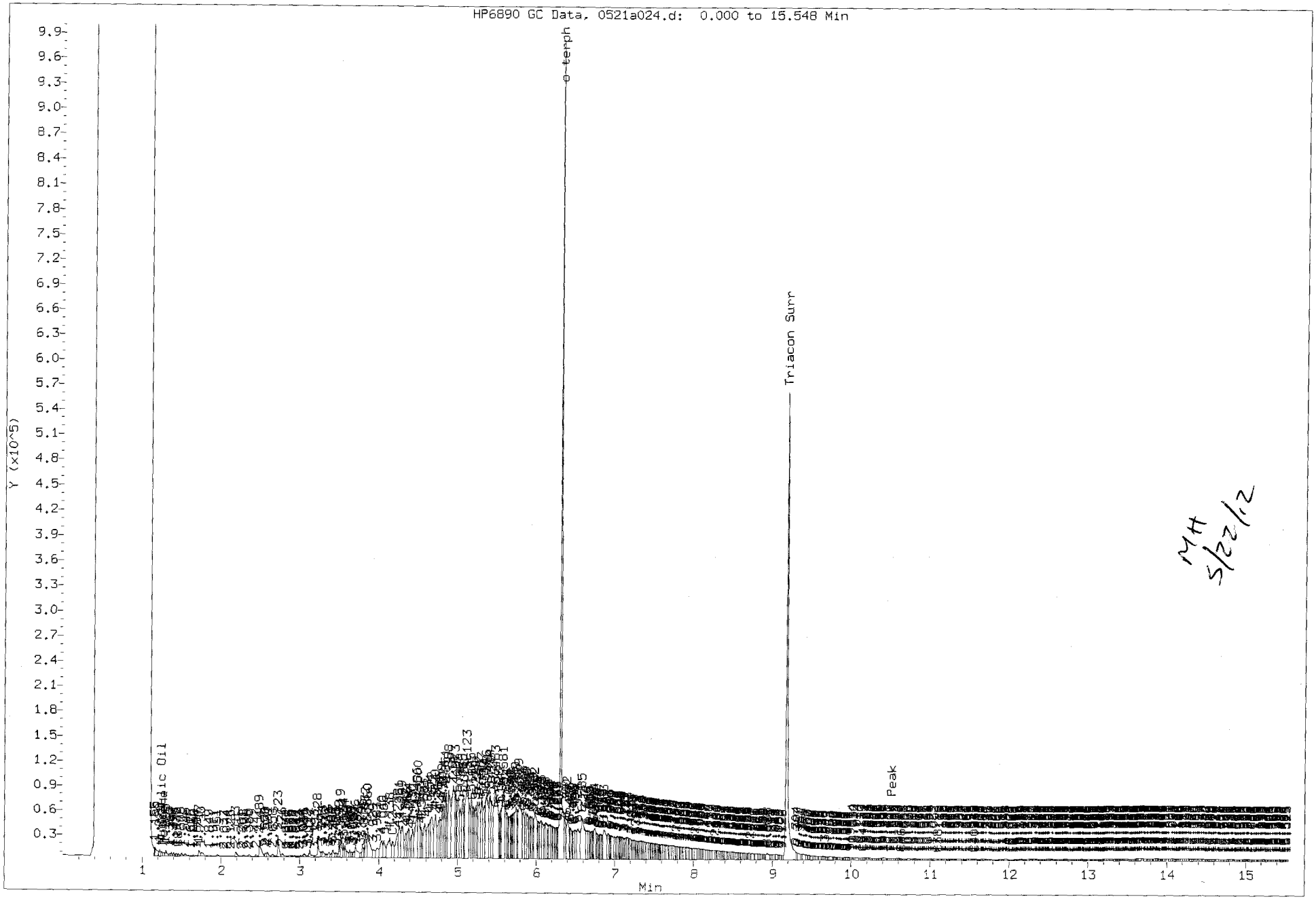
Instrument: fid4a.i

Operator: MH
Column diameter: 0.25

UU66, 99986



Data File: /chem3/fid4a.i/20120521.b/0521a024.d
Injection Date: 21-MAY-2012 19:03
Instrument: fid4a.i
Client Sample ID: FIELD DUPLICATE

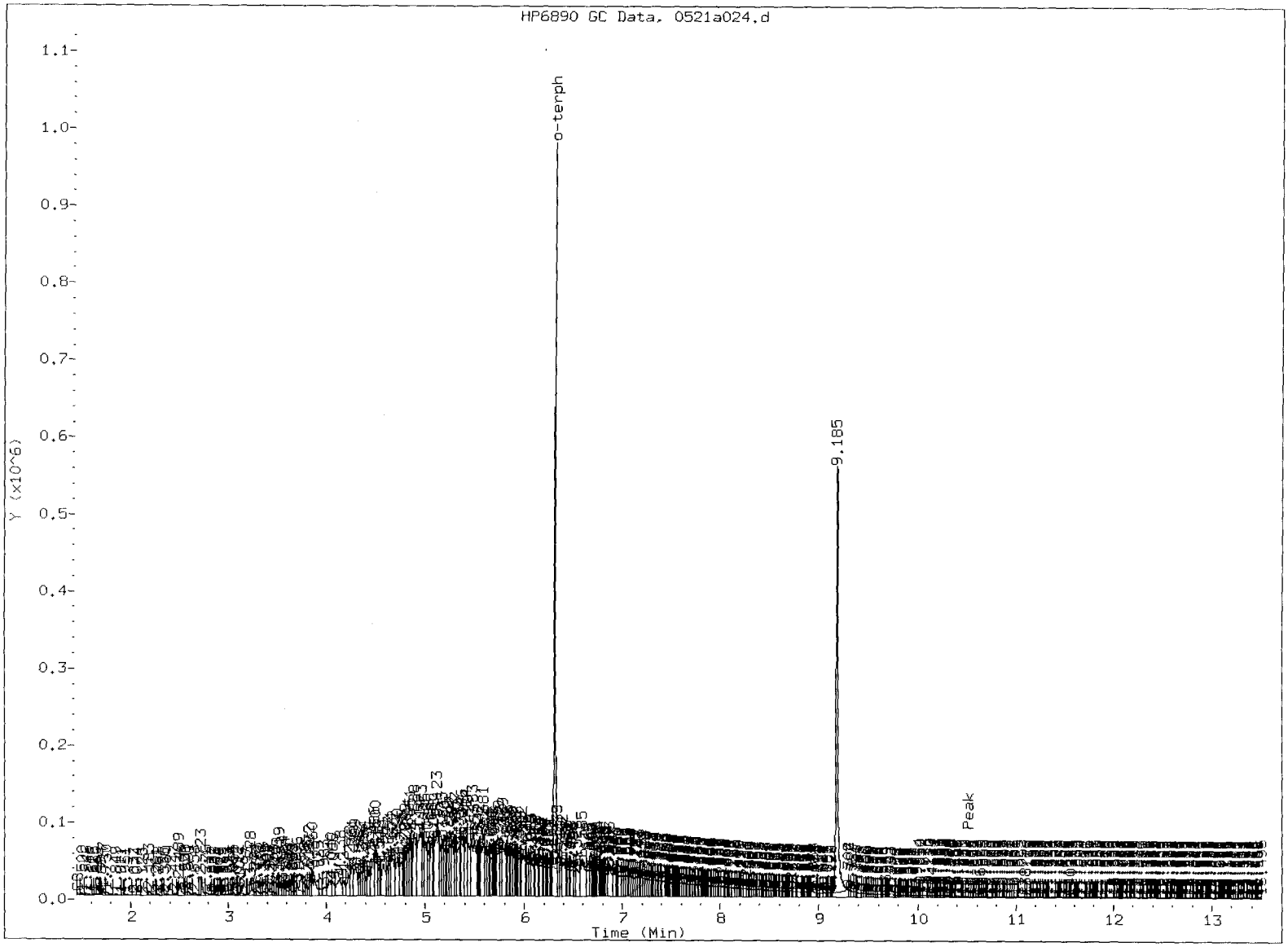


MH 5/22/12

USGS 1360937

FID:4A-2C/RTX-1 UU66B

FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/22/12

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: MW1-W-8.5
SAMPLE

Lab Sample ID: UU66A
LIMS ID: 12-8973
Matrix: Water
Data Release Authorized:
Reported: 06/01/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/15/12
Date Received: 05/16/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/21/12	200.8	05/24/12	**7440-38-2**	**Arsenic**	0.2	**0.6**	
200.8	05/21/12	200.8	05/24/12	**7440-39-3**	**Barium**	0.5	**103**	
200.8	05/21/12	200.8	05/24/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/21/12	200.8	05/24/12	**7440-47-3**	**Chromium**	0.5	**0.9**	
200.8	05/21/12	200.8	05/24/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/18/12	7470A	05/21/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/21/12	200.8	05/24/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/21/12	200.8	05/24/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: FIELD DUPLICATE SAMPLE

Lab Sample ID: UU66B
LIMS ID: 12-8974
Matrix: Water
Data Release Authorized:
Reported: 06/01/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: 05/15/12
Date Received: 05/16/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/21/12	200.8	05/24/12	**7440-38-2**	**Arsenic**	0.2	**0.6**	
200.8	05/21/12	200.8	05/24/12	**7440-39-3**	**Barium**	0.5	**103**	
200.8	05/21/12	200.8	05/24/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/21/12	200.8	05/31/12	**7440-47-3**	**Chromium**	1	**1**	
200.8	05/21/12	200.8	05/24/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/18/12	7470A	05/21/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/21/12	200.8	05/24/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/21/12	200.8	05/24/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

UU66 : 00090

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW3-W-9
SAMPLE

Lab Sample ID: UU66C
LIMS ID: 12-8975
Matrix: Water
Data Release Authorized:
Reported: 06/01/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/15/12
Date Received: 05/16/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/21/12	200.8	05/24/12	7439-92-1	Lead	0.1	0.1	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: UU66LCS
LIMS ID: 12-8973
Matrix: Water
Data Release Authorized:
Reported: 06/01/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	25.9	25.0	104%	
Barium	200.8	25.5	25.0	102%	
Cadmium	200.8	25.4	25.0	102%	
Chromium	200.8	25.7	25.0	103%	
Lead	200.8	26.5	25.0	106%	
Mercury	7470A	2.2	2.0	110%	
Selenium	200.8	76.8	80.0	96.0%	
Silver	200.8	25.7	25.0	103%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: UU66MB
LIMS ID: 12-8973
Matrix: Water
Data Release Authorized:
Reported: 06/01/12

QC Report No: UU66-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/21/12	200.8	05/24/12	7440-38-2	Arsenic	0.2	0.2	U
200.8	05/21/12	200.8	05/24/12	7440-39-3	Barium	0.5	0.5	U
200.8	05/21/12	200.8	05/24/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/21/12	200.8	05/24/12	7440-47-3	Chromium	0.5	0.5	U
200.8	05/21/12	200.8	05/24/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/18/12	7470A	05/21/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/21/12	200.8	05/24/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/21/12	200.8	05/24/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: UU68	Turn-around Requested: STANDARD	Page: 1 of 1	
ARI Client Company: MAUL FOSTER & ALONGI	Phone: 360-927-1307	Date: 5/16/12	Ice Present? Y
Client Contact: HEATHER HIRSCH		No. of Coolers: 1	Cooler Temps: 3.9
Client Project Name: SIMS – N. CASCADE FORD			
Client Project #: 0747.01.01	Samplers: H. HIRSCH		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: NWTPH-Gx	NWTPH-Dx	Metals* (EPA 8015)	VOCs (8260B)	SVOCs (8270C)	PAHs (8270SIM)			Notes/Comments
MW2-W-9	5/16/12	1330	WATER	12	X	X	X	X	X	X			*Metals are field filtered - report as dissolved.
TRIP BLANK	4/30/12		WATER	3									

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
edd's in customized Equis format	Printed Name: Heather Hirsch	Printed Name: Steve Potter	Printed Name:	Printed Name:
	Company: MFA	Company: ARI	Company:	Company:
	Date & Time: 5/17/12 0830	Date & Time: 5/17/12 10:50	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Page 1 of 1

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Mavi, Foster at Alongi Project Name: SIMS- N Cascade Ford

COC No(s): _____ (NA) Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: UU468 Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	(YES)	NO
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry): 3.9

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90411619

Cooler Accepted by: PS Date: 5-17-12 Time: 1050

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used?	(Bubble Wrap) (Wet Ice) Gel Packs Baggies Foam Block Paper Other:		
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		YES	(NO)
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	(YES)	NO
Were all VOC vials free of air bubbles?	NA	YES	(NO)
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	NA	4/30/12	

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: JM Date: 5/17/12 Time: 1307

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

Trip Blank has 6 containers, COC says 3.

TB - sm in 6 of 6

By: JM Date: 5/17/12

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm	Small → "sm"
			Peabubbles → "pb"
			Large → "lg"
			Headspace → "hs"

PRESERVATION VERIFICATION 05/17/12
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: **UU68**

Inquiry Number: NONE
Analysis Requested: 05/17/12
Contact: Hirsch, Heather
Client: Maul Foster & Alongi
Logged by: JM
Sample Set Used: Yes-481
Validatable Package: No
Deliverables:

PC: Mark
VTSR: 05/17/12

Project #: 0747.01.01
Project: SIMS - N Cascade Ford
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	AK102 <2	Fe2+ <2	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
12-8984 **UU68A**	MW2-W-9						DIS pass									Y						

UU68 9984

Checked By JM Date 5/17/2012

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: UU68
Client: Maul Foster & Alongi
Project Event: 0747.01.01
Project Name: SIMS - N Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	MW2-W-9	UU68A	12-8984	Water	05/16/12 13:30	05/17/12 10:50
2.	TRIP BLANK	UU68B	12-8985	Water	05/16/12	05/17/12 10:50

UU68 : 00097

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-052912A**
 METHOD BLANK

Lab Sample ID: MB-052912A
LIMS ID: 12-8984
Matrix: Water
Data Release Authorized: MW
Reported: 05/30/12

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/29/12 10:48

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

UU66 : 00098

Lab Sample ID: MB-052912A
LIMS ID: 12-8984
Matrix: Water
Date Analyzed: 05/29/12 10:48

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	97.5%
d8-Toluene	94.1%
Bromofluorobenzene	96.3%
d4-1,2-Dichlorobenzene	106%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW2-W-9**
Page 1 of 2 **SAMPLE**

Lab Sample ID: UU68A
LIMS ID: 12-8984
Matrix: Water
Data Release Authorized:
Reported: 05/30/12

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/16/12
Date Received: 05/17/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/29/12 18:55

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW2-W-9**
 SAMPLE

Lab Sample ID: UU68A
LIMS ID: 12-8984
Matrix: Water
Date Analyzed: 05/29/12 18:55

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	122%
d8-Toluene	102%
Bromofluorobenzene	93.7%
d4-1,2-Dichlorobenzene	105%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: TRIP BLANK**
 SAMPLE

Lab Sample ID: UU68B
LIMS ID: 12-8985
Matrix: Water
Data Release Authorized: MW
Reported: 05/30/12

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/16/12
Date Received: 05/17/12

Instrument/Analyst: NT2/PKC
Date Analyzed: 05/29/12 19:22

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	0.5	< 0.5	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.2	< 0.2	U
75-00-3	Chloroethane	0.2	< 0.2	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.2	< 0.2	U
75-35-4	1,1-Dichloroethene	0.2	< 0.2	U
75-34-3	1,1-Dichloroethane	0.2	< 0.2	U
156-60-5	trans-1,2-Dichloroethene	0.2	< 0.2	U
156-59-2	cis-1,2-Dichloroethene	0.2	< 0.2	U
67-66-3	Chloroform	0.2	< 0.2	U
107-06-2	1,2-Dichloroethane	0.2	< 0.2	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.2	< 0.2	U
56-23-5	Carbon Tetrachloride	0.2	< 0.2	U
108-05-4	Vinyl Acetate	0.2	< 0.2	U
75-27-4	Bromodichloromethane	0.2	< 0.2	U
78-87-5	1,2-Dichloropropane	0.2	< 0.2	U
10061-01-5	cis-1,3-Dichloropropene	0.2	< 0.2	U
79-01-6	Trichloroethene	0.2	< 0.2	U
124-48-1	Dibromochloromethane	0.2	< 0.2	U
79-00-5	1,1,2-Trichloroethane	0.2	< 0.2	U
71-43-2	Benzene	0.2	< 0.2	U
10061-02-6	trans-1,3-Dichloropropene	0.2	< 0.2	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.2	< 0.2	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.2	< 0.2	U
79-34-5	1,1,2,2-Tetrachloroethane	0.2	< 0.2	U
108-88-3	Toluene	0.2	< 0.2	U
108-90-7	Chlorobenzene	0.2	< 0.2	U
100-41-4	Ethylbenzene	0.2	< 0.2	U
100-42-5	Styrene	0.2	< 0.2	U
75-69-4	Trichlorofluoromethane	0.2	< 0.2	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.2	< 0.2	U
179601-23-1	m,p-Xylene	0.4	< 0.4	U
95-47-6	o-Xylene	0.2	< 0.2	U
95-50-1	1,2-Dichlorobenzene	0.2	< 0.2	U
541-73-1	1,3-Dichlorobenzene	0.2	< 0.2	U
106-46-7	1,4-Dichlorobenzene	0.2	< 0.2	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: TRIP BLANK SAMPLE**

Lab Sample ID: UU68B
LIMS ID: 12-8985
Matrix: Water
Date Analyzed: 05/29/12 19:22

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.2	< 0.2	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.2	< 0.2	U
74-95-3	Dibromomethane	0.2	< 0.2	U
630-20-6	1,1,1,2-Tetrachloroethane	0.2	< 0.2	U
96-12-8	1,2-Dibromo-3-chloropropane	0.5	< 0.5	U
96-18-4	1,2,3-Trichloropropane	0.5	< 0.5	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.2	< 0.2	U
95-63-6	1,2,4-Trimethylbenzene	0.2	< 0.2	U
87-68-3	Hexachlorobutadiene	0.5	< 0.5	U
106-93-4	Ethylene Dibromide	0.2	< 0.2	U
74-97-5	Bromochloromethane	0.2	< 0.2	U
594-20-7	2,2-Dichloropropane	0.2	< 0.2	U
142-28-9	1,3-Dichloropropane	0.2	< 0.2	U
98-82-8	Isopropylbenzene	0.2	< 0.2	U
103-65-1	n-Propylbenzene	0.2	< 0.2	U
108-86-1	Bromobenzene	0.2	< 0.2	U
95-49-8	2-Chlorotoluene	0.2	< 0.2	U
106-43-4	4-Chlorotoluene	0.2	< 0.2	U
98-06-6	tert-Butylbenzene	0.2	< 0.2	U
135-98-8	sec-Butylbenzene	0.2	< 0.2	U
99-87-6	4-Isopropyltoluene	0.2	< 0.2	U
104-51-8	n-Butylbenzene	0.2	< 0.2	U
120-82-1	1,2,4-Trichlorobenzene	0.5	< 0.5	U
91-20-3	Naphthalene	0.5	< 0.5	U
87-61-6	1,2,3-Trichlorobenzene	0.5	< 0.5	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	117%
d8-Toluene	92.8%
Bromofluorobenzene	88.3%
d4-1,2-Dichlorobenzene	93.3%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-052912A**
Page 1 of 2 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-052912A
LIMS ID: 12-8984
Matrix: Water
Data Release Authorized:
Reported: 05/30/12

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PKC
LCSD: NT2/PKC
Date Analyzed LCS: 05/29/12 09:54
LCSD: 05/29/12 10:22

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	10.2		10.0	102%	10.3		10.0	103%	1.0%
Bromomethane	10.0		10.0	100%	10.0		10.0	100%	0.0%
Vinyl Chloride	9.7		10.0	97.0%	10.7		10.0	107%	9.8%
Chloroethane	10.6		10.0	106%	10.4		10.0	104%	1.9%
Methylene Chloride	9.6		10.0	96.0%	9.8		10.0	98.0%	2.1%
Acetone	52.0		50.0	104%	54.0		50.0	108%	3.8%
Carbon Disulfide	10.0		10.0	100%	10.1		10.0	101%	1.0%
1,1-Dichloroethene	9.8		10.0	98.0%	10.0		10.0	100%	2.0%
1,1-Dichloroethane	9.9		10.0	99.0%	10.1		10.0	101%	2.0%
trans-1,2-Dichloroethene	9.9		10.0	99.0%	10.1		10.0	101%	2.0%
cis-1,2-Dichloroethene	10.0		10.0	100%	10.2		10.0	102%	2.0%
Chloroform	9.8		10.0	98.0%	9.9		10.0	99.0%	1.0%
1,2-Dichloroethane	10.2		10.0	102%	10.1		10.0	101%	1.0%
2-Butanone	52.6		50.0	105%	56.2		50.0	112%	6.6%
1,1,1-Trichloroethane	9.9		10.0	99.0%	10.2		10.0	102%	3.0%
Carbon Tetrachloride	10.5		10.0	105%	10.3		10.0	103%	1.9%
Vinyl Acetate	8.4	Q	10.0	84.0%	9.0	Q	10.0	90.0%	6.9%
Bromodichloromethane	10.6		10.0	106%	10.9		10.0	109%	2.8%
1,2-Dichloropropane	10.3		10.0	103%	10.4		10.0	104%	1.0%
cis-1,3-Dichloropropene	10.8		10.0	108%	11.5		10.0	115%	6.3%
Trichloroethene	10.3		10.0	103%	10.5		10.0	105%	1.9%
Dibromochloromethane	11.6		10.0	116%	10.6		10.0	106%	9.0%
1,1,2-Trichloroethane	10.0		10.0	100%	10.7		10.0	107%	6.8%
Benzene	10.2		10.0	102%	10.2		10.0	102%	0.0%
trans-1,3-Dichloropropene	11.5		10.0	115%	11.8		10.0	118%	2.6%
2-Chloroethylvinylether	7.8	Q	10.0	78.0%	8.8	Q	10.0	88.0%	12.0%
Bromoform	8.4		10.0	84.0%	8.9		10.0	89.0%	5.8%
4-Methyl-2-Pentanone (MIBK)	51.8		50.0	104%	53.1		50.0	106%	2.5%
2-Hexanone	52.3		50.0	105%	54.5		50.0	109%	4.1%
Tetrachloroethene	10.6		10.0	106%	10.3		10.0	103%	2.9%
1,1,2,2-Tetrachloroethane	10.0		10.0	100%	10.4		10.0	104%	3.9%
Toluene	9.4		10.0	94.0%	10.2		10.0	102%	8.2%
Chlorobenzene	10.0		10.0	100%	10.4		10.0	104%	3.9%
Ethylbenzene	10.3		10.0	103%	10.5		10.0	105%	1.9%
Styrene	10.8		10.0	108%	10.5		10.0	105%	2.8%
Trichlorofluoromethane	10.5		10.0	105%	10.4		10.0	104%	1.0%
1,1,2-Trichloro-1,2,2-trifluoroetha	9.9		10.0	99.0%	10.0		10.0	100%	1.0%
m,p-Xylene	21.2		20.0	106%	21.3		20.0	106%	0.5%
o-Xylene	10.3		10.0	103%	10.2		10.0	102%	1.0%
1,2-Dichlorobenzene	10.2		10.0	102%	10.0		10.0	100%	2.0%
1,3-Dichlorobenzene	10.0		10.0	100%	10.1		10.0	101%	1.0%
1,4-Dichlorobenzene	9.6		10.0	96.0%	10.1		10.0	101%	5.1%
Acrolein	51.8		50.0	104%	53.8		50.0	108%	3.8%
Methyl Iodide	10.0		10.0	100%	10.1		10.0	101%	1.0%
Bromoethane	10.0		10.0	100%	10.3		10.0	103%	3.0%
Acrylonitrile	10.5		10.0	105%	10.9		10.0	109%	3.7%
1,1-Dichloropropene	10.3		10.0	103%	10.3		10.0	103%	0.0%
Dibromomethane	10.5		10.0	105%	10.8		10.0	108%	2.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-052912A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-052912A QC Report No: UU68-Maul Foster & Alongi
LIMS ID: 12-8984 Project: SIMS - N Cascade Ford
Matrix: Water 0747.01.01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
1,1,1,2-Tetrachloroethane	10.9	10.0	109%	10.9	10.0	109%	0.0%
1,2-Dibromo-3-chloropropane	11.5	10.0	115%	11.9	10.0	119%	3.4%
1,2,3-Trichloropropane	10.2	10.0	102%	10.8	10.0	108%	5.7%
trans-1,4-Dichloro-2-butene	11.1	10.0	111%	11.8	10.0	118%	6.1%
1,3,5-Trimethylbenzene	10.7	10.0	107%	11.2	10.0	112%	4.6%
1,2,4-Trimethylbenzene	10.8	10.0	108%	11.0	10.0	110%	1.8%
Hexachlorobutadiene	10.0	10.0	100%	9.7	10.0	97.0%	3.0%
Ethylene Dibromide	9.5	10.0	95.0%	10.1	10.0	101%	6.1%
Bromochloromethane	10.0	10.0	100%	10.3	10.0	103%	3.0%
2,2-Dichloropropane	10.2	10.0	102%	10.1	10.0	101%	1.0%
1,3-Dichloropropane	9.9	10.0	99.0%	10.3	10.0	103%	4.0%
Isopropylbenzene	10.5	10.0	105%	11.0	10.0	110%	4.7%
n-Propylbenzene	10.3	10.0	103%	10.8	10.0	108%	4.7%
Bromobenzene	9.4	10.0	94.0%	10.0	10.0	100%	6.2%
2-Chlorotoluene	10.2	10.0	102%	10.4	10.0	104%	1.9%
4-Chlorotoluene	10.1	10.0	101%	10.7	10.0	107%	5.8%
tert-Butylbenzene	10.6	10.0	106%	11.3	10.0	113%	6.4%
sec-Butylbenzene	10.7	10.0	107%	11.2	10.0	112%	4.6%
4-Isopropyltoluene	10.7	10.0	107%	10.9	10.0	109%	1.9%
n-Butylbenzene	10.8	10.0	108%	10.8	10.0	108%	0.0%
1,2,4-Trichlorobenzene	11.1	10.0	111%	10.7	10.0	107%	3.7%
Naphthalene	10.8	10.0	108%	11.0	10.0	110%	1.8%
1,2,3-Trichlorobenzene	10.6	10.0	106%	10.7	10.0	107%	0.9%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	94.3%	95.2%
d8-Toluene	94.7%	97.1%
Bromofluorobenzene	98.4%	95.2%
d4-1,2-Dichlorobenzene	104%	100%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-052912A	Method Blank	10	97.5%	94.1%	96.3%	106%	0
LCS-052912A	Lab Control	10	94.3%	94.7%	98.4%	104%	0
LCSD-052912A	Lab Control Dup	10	95.2%	97.1%	95.2%	100%	0
UU68A	MW2-W-9	10	122%*	102%	93.7%	105%	1
UU68B	TRIP BLANK	10	117%	92.8%	88.3%	93.3%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-120)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 12-8984 to 12-8985

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Matrix: Water

Data Release Authorized: MW
Reported: 05/22/12

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/16/12
Date Received: 05/17/12

ARI ID	Client ID	Analysis Date	DL	Range	Result
MB-051812	Method Blank	05/18/12	1.0	Gasoline	< 0.25 U
12-8984		PID1		HC ID	---
				Trifluorotoluene	99.6%
				Bromobenzene	97.7%
UU68A	MW2-W-9	05/18/12	1.0	Gasoline	< 0.25 U
12-8984		PID1		HC ID	---
				Trifluorotoluene	102%
				Bromobenzene	100%
UU68B	TRIP BLANK	05/18/12	1.0	Gasoline	< 0.25 U
12-8985		PID1		HC ID	---
				Trifluorotoluene	96.4%
				Bromobenzene	94.7%

Gasoline values reported in mg/L (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-051812
LAB CONTROL SAMPLE

Lab Sample ID: LCS-051812
LIMS ID: 12-8984
Matrix: Water
Data Release Authorized: MW
Reported: 05/22/12

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 05/18/12 12:13
LCSD: 05/18/12 11:15
Instrument/Analyst LCS: PID1/JLW
LCSD: PID1/JLW

Purge Volume: 5.0 mL

Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	0.92	1.00	92.0%	0.95	1.00	95.0%	3.2%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	103%	96.4%
Bromobenzene	98.7%	92.1%

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: UU68
Matrix: Water

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01

Client ID	TFT	BBZ	TOT OUT
MB-051812	99.6%	97.7%	0
LCS-051812	103%	98.7%	0
LCSD-051812	96.4%	92.1%	0
MW2-W-9	102%	100%	0
TRIP BLANK	96.4%	94.7%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

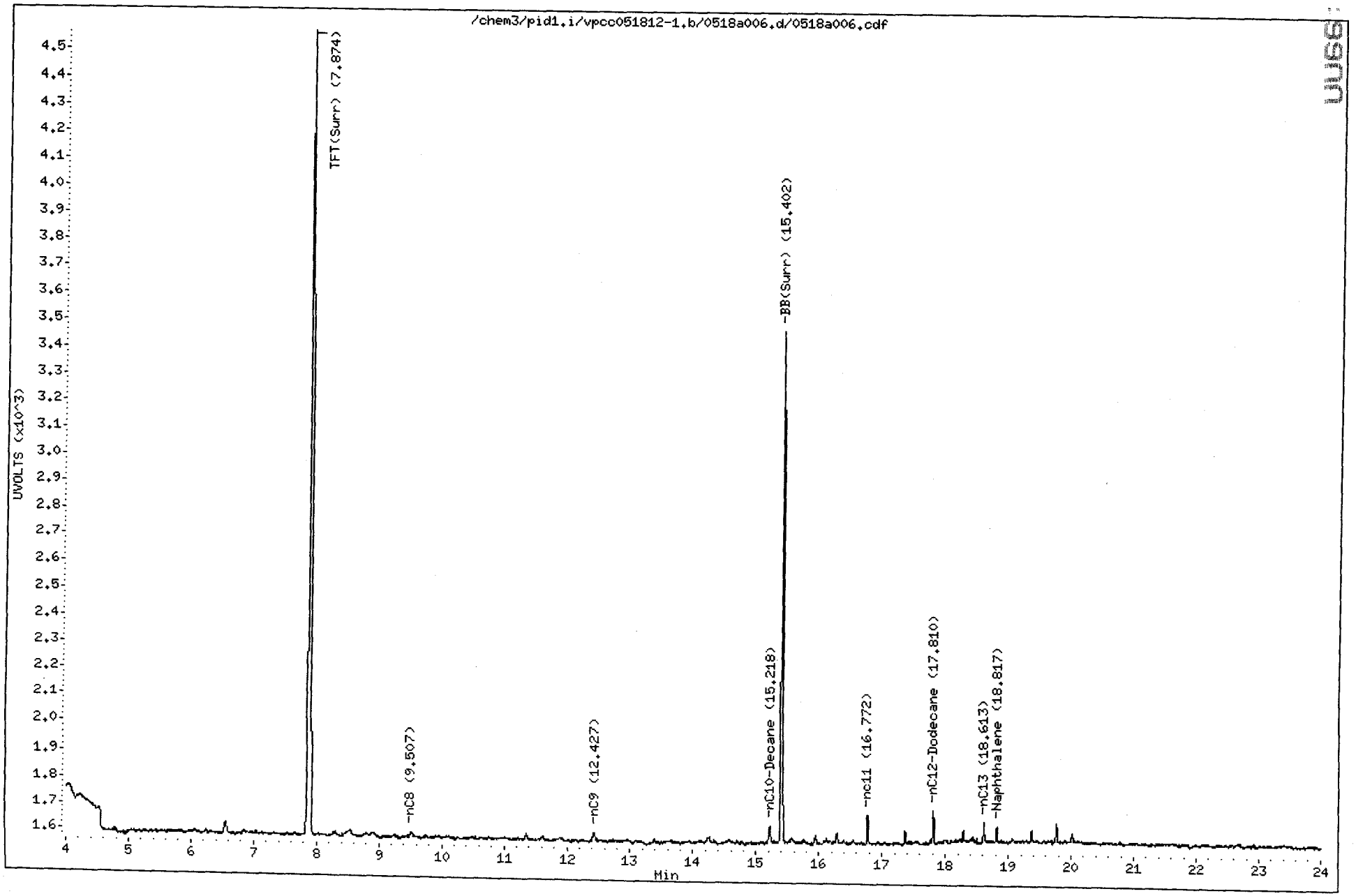
Log Number Range: 12-8984 to 12-8985

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Date : 18-MAY-2012 11:44
Client ID:
Sample Info: MB0518

Instrument: pid1.i

Operator: JW
Column diameter: 0.18

Column phase: RTX 502-2 FID



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Date : 18-MAY-2012 11:44

Client ID:

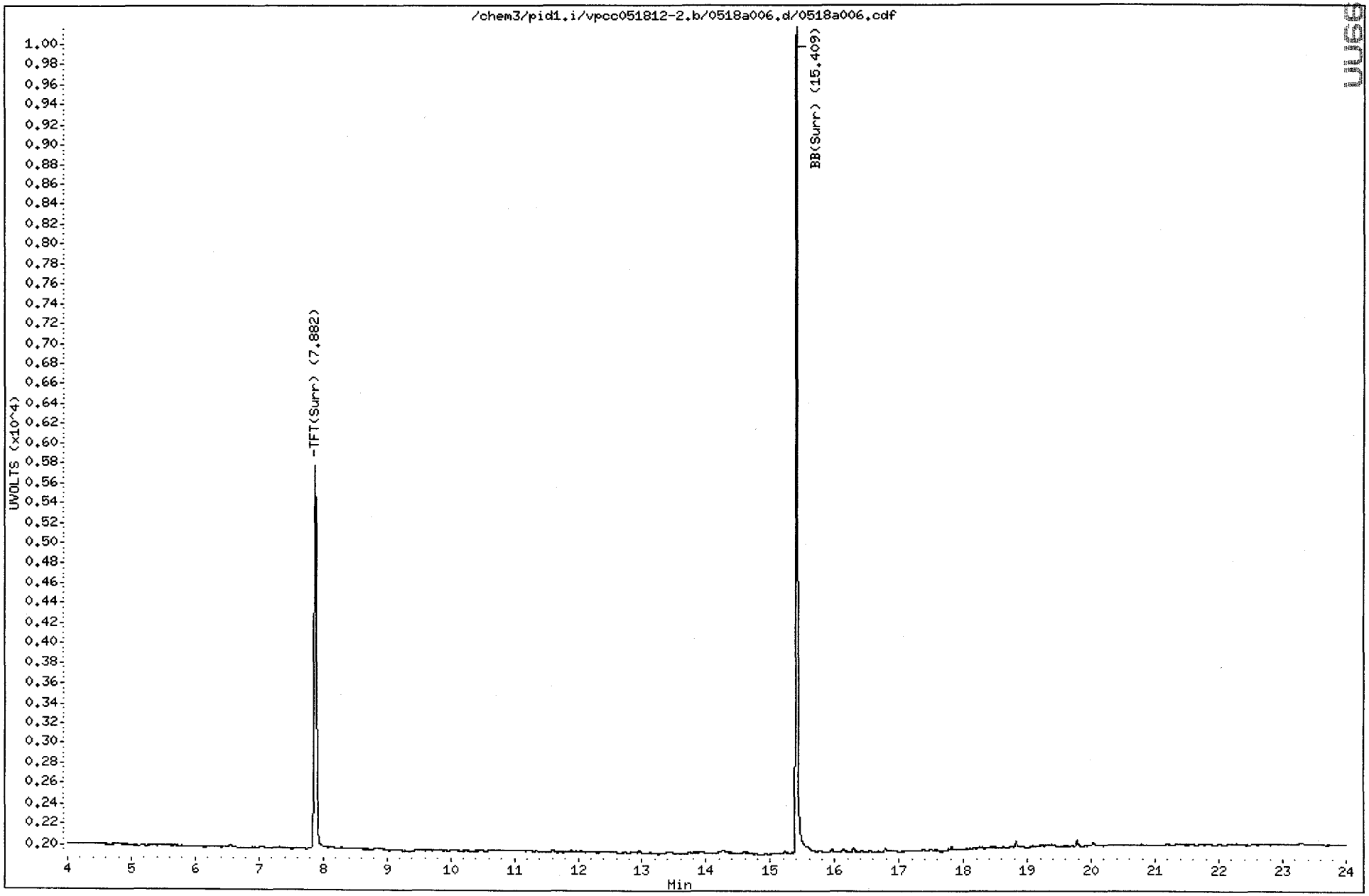
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Instrument: pid1.i

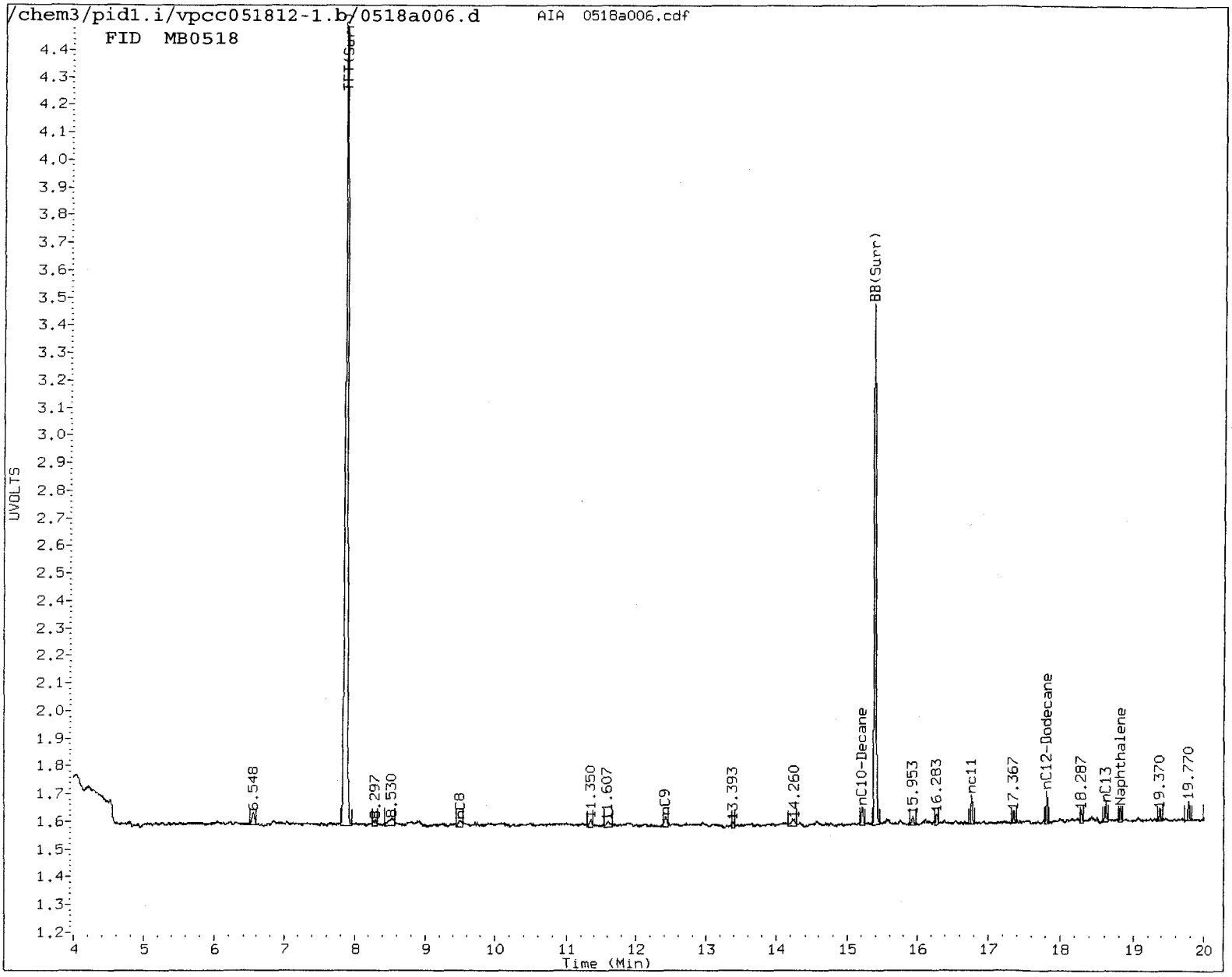
Operator: JW

Column phase: RTX 502-2 PID

Column diameter: 0.18



UNSIGNED



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

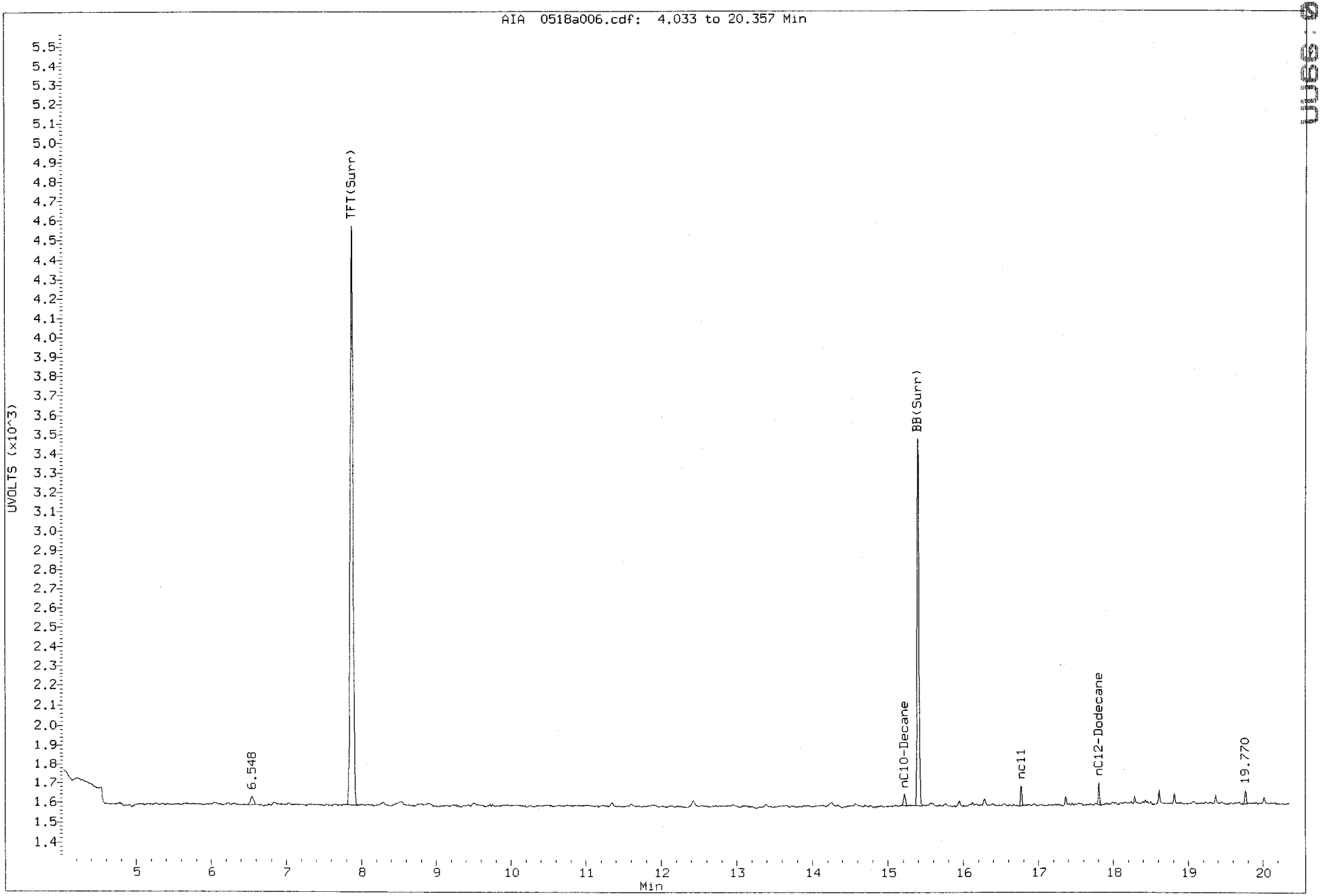
5. Other _____

Analyst: JC Date: 5/22/12

Data File: /chem3/pid1.i/vpcc051812-1.b/0518a006.d/0518a006.cdf
Injection Date: 18-MAY-2012 11:44
Instrument: pid1.i
Client Sample ID:

Before JW 5/22/12

UU666 - 99613



Data File: /chem3/pid1.i/vpcc051812-1.b/0518a007.d

Page 1

Date : 18-MAY-2012 12:13

Client ID:

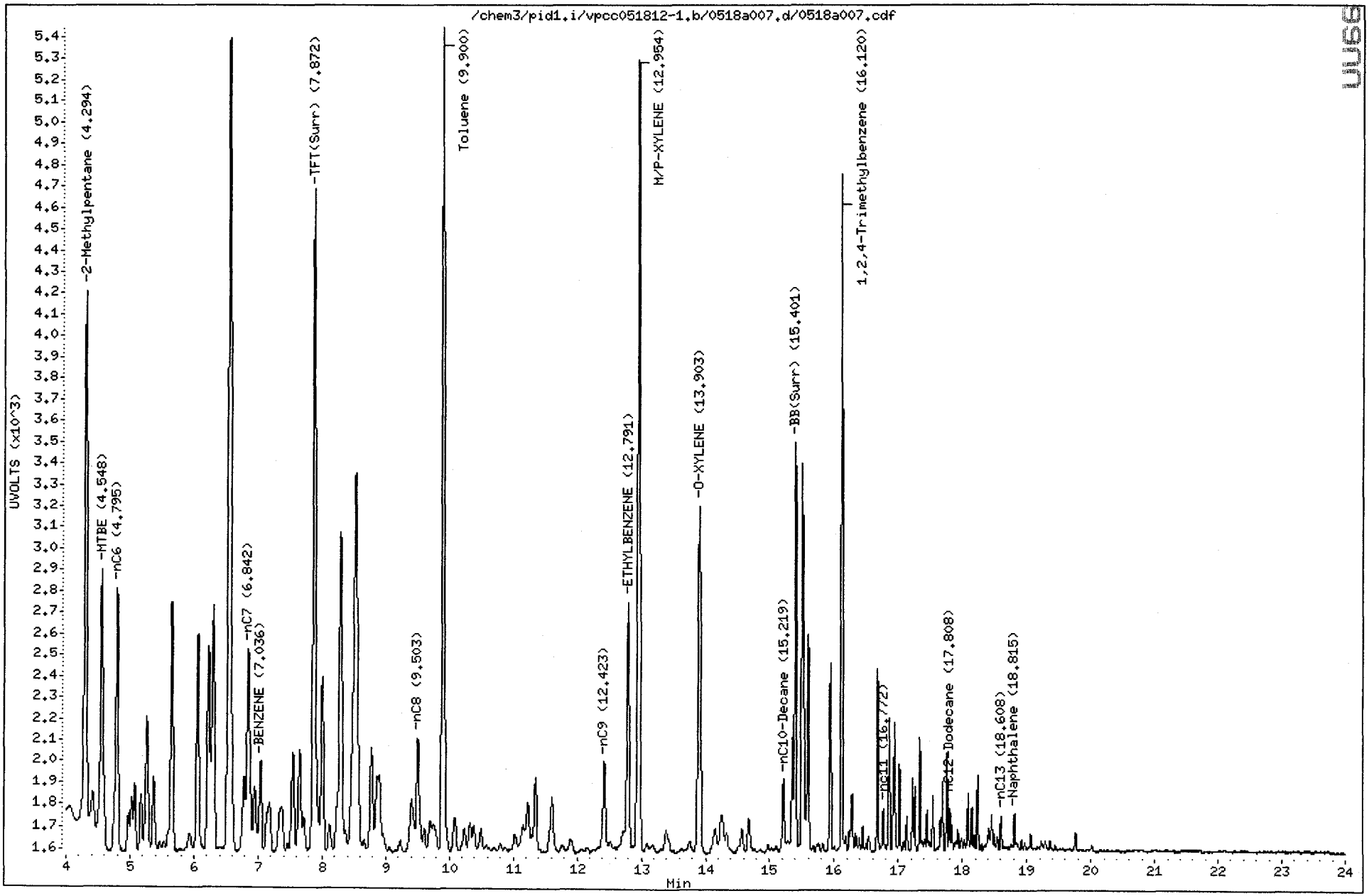
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Sample Info: LCS0518

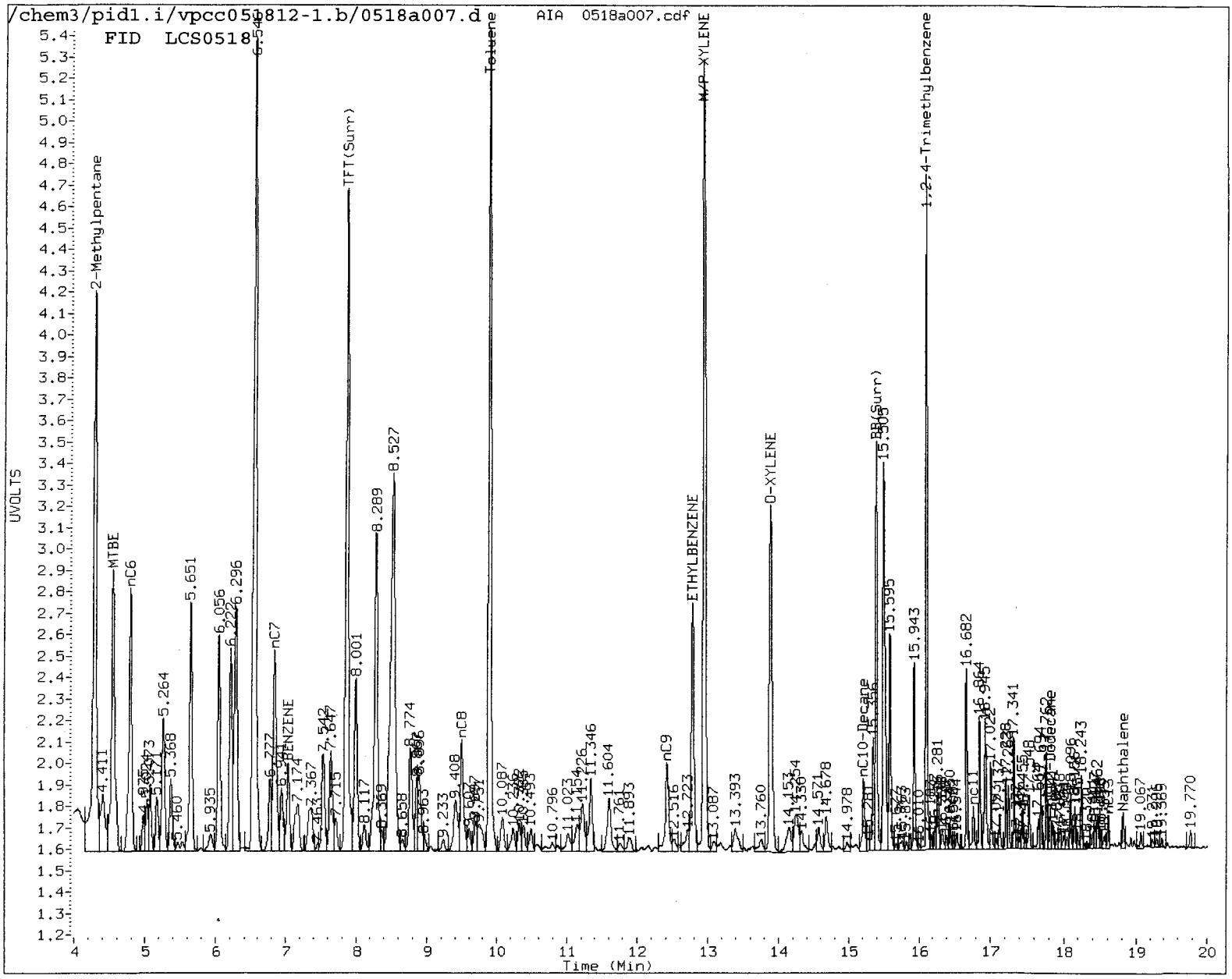
Operator: JW

Column phase: RTX 502-2 FID

Column diameter: 0.18



LUCS : 001 11

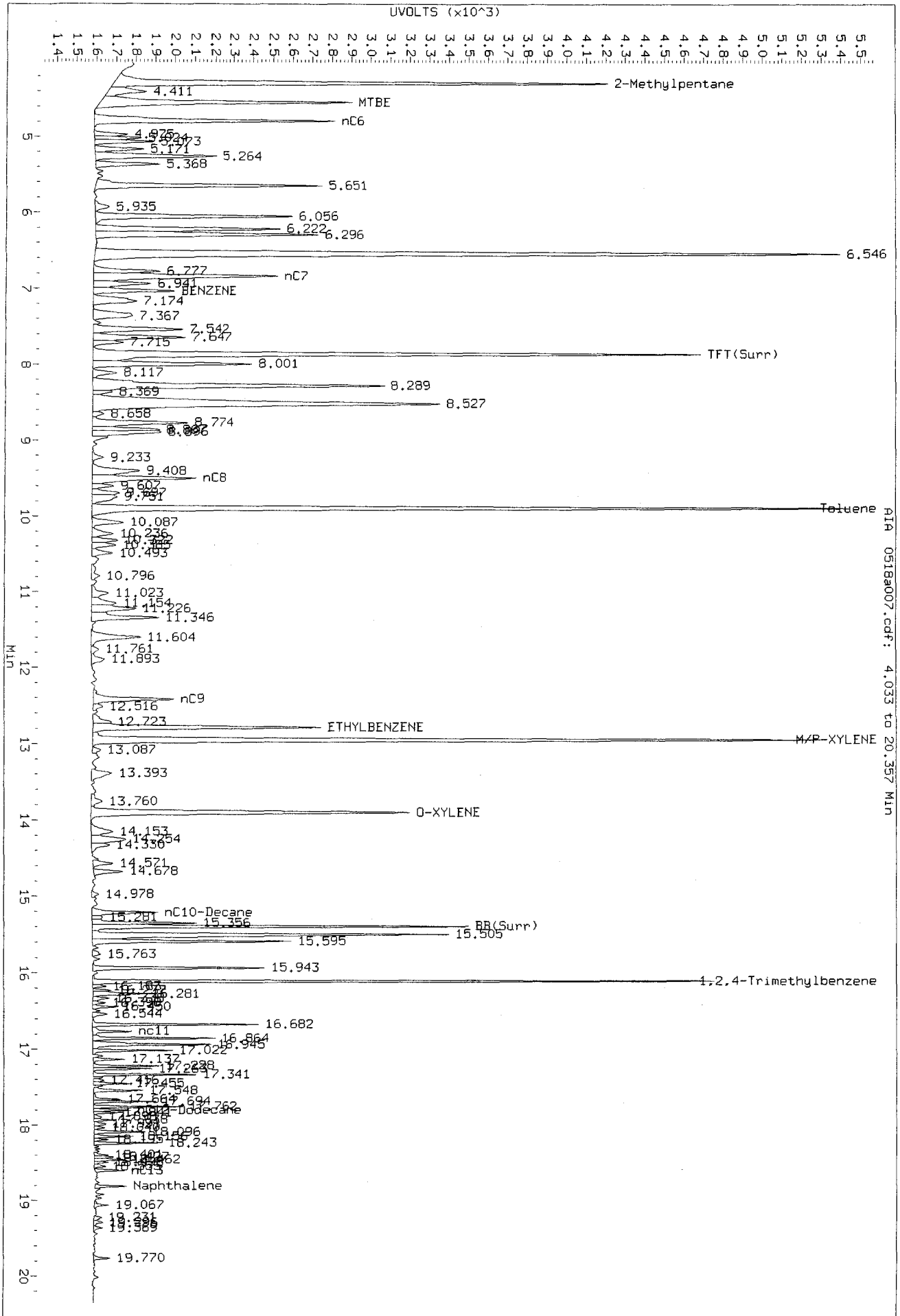


MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

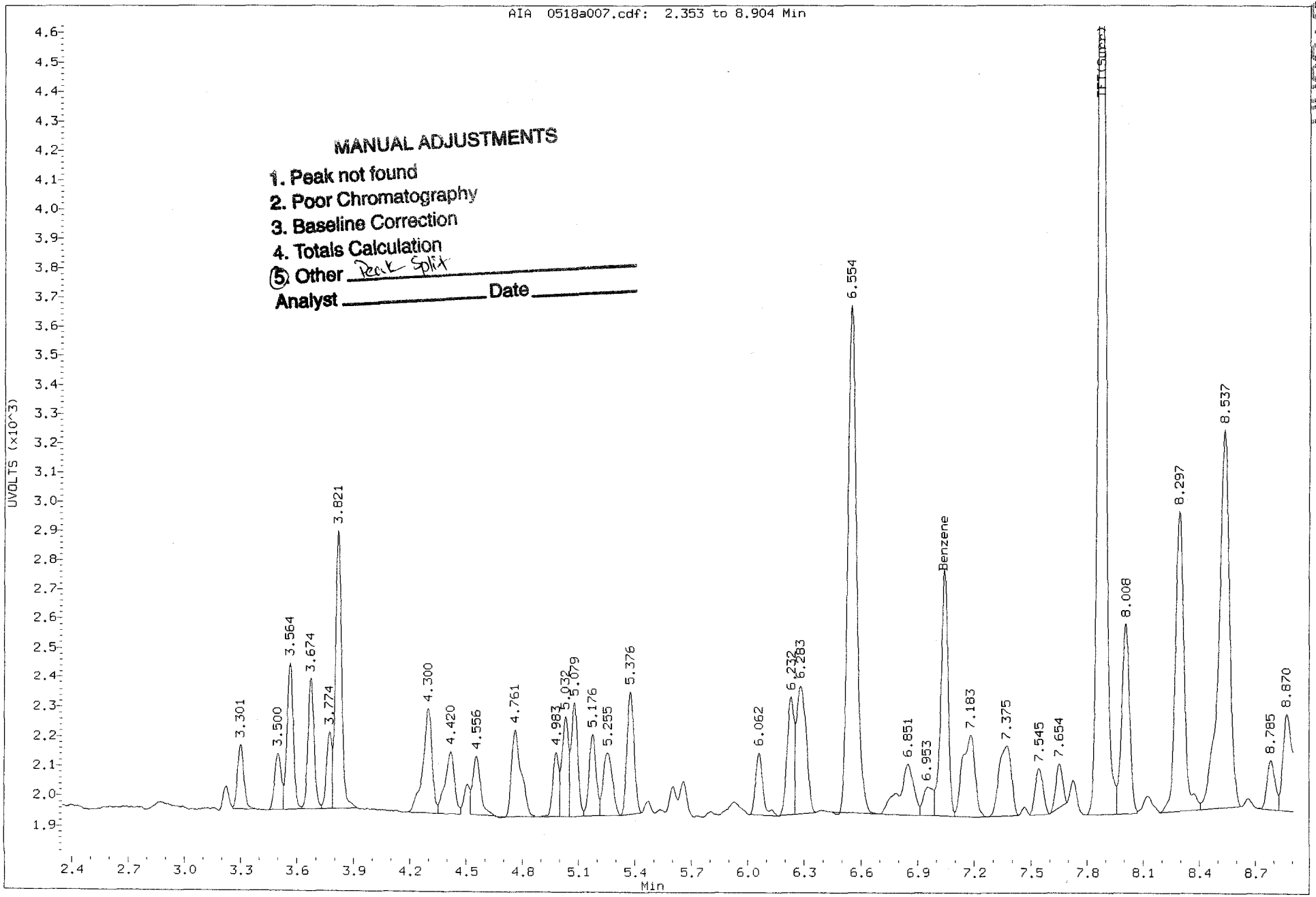
Analyst: JW Date: 5/22/12



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Injection Date: 18-MAY-2012 12:13
Instrument: pid1.i
Client Sample ID:

5/21/12

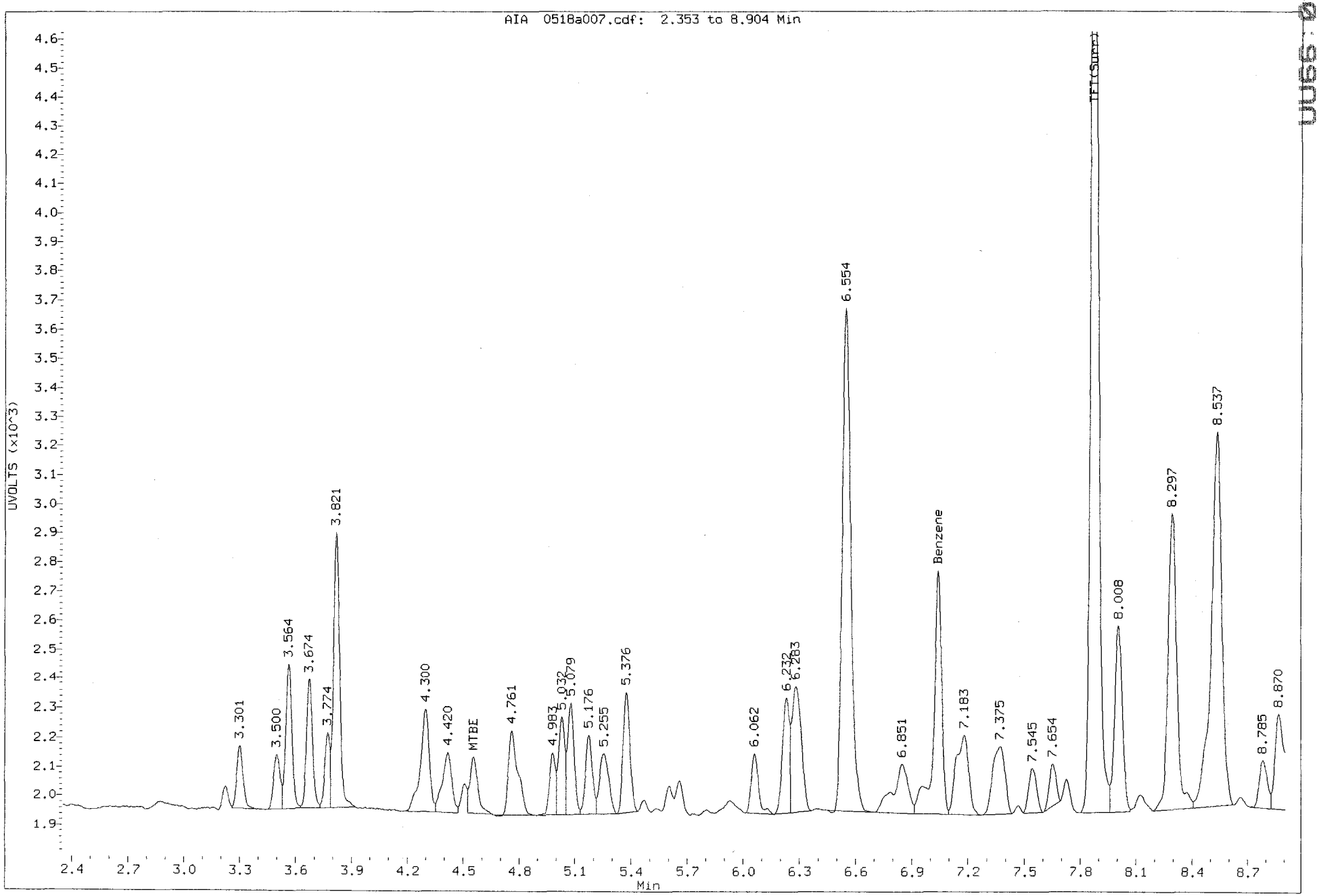
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Injection Date: 18-MAY-2012 12:13
Instrument: pid1.i
Client Sample ID:



USGS 5041 17

Data File: /chem3/pid1.i/vpcc051812-2.b/0518a007.d/0518a007.cdf
Injection Date: 18-MAY-2012 12:13
Instrument: pid1.i
Client Sample ID:

Before JW 5/22/12



UU66:0018

Data File: /chem3/pid1.i/vpcc051812-1.b/0518a005.d

Date : 18-MAY-2012 11:15

Client ID:

Sample Info: LCSD0518

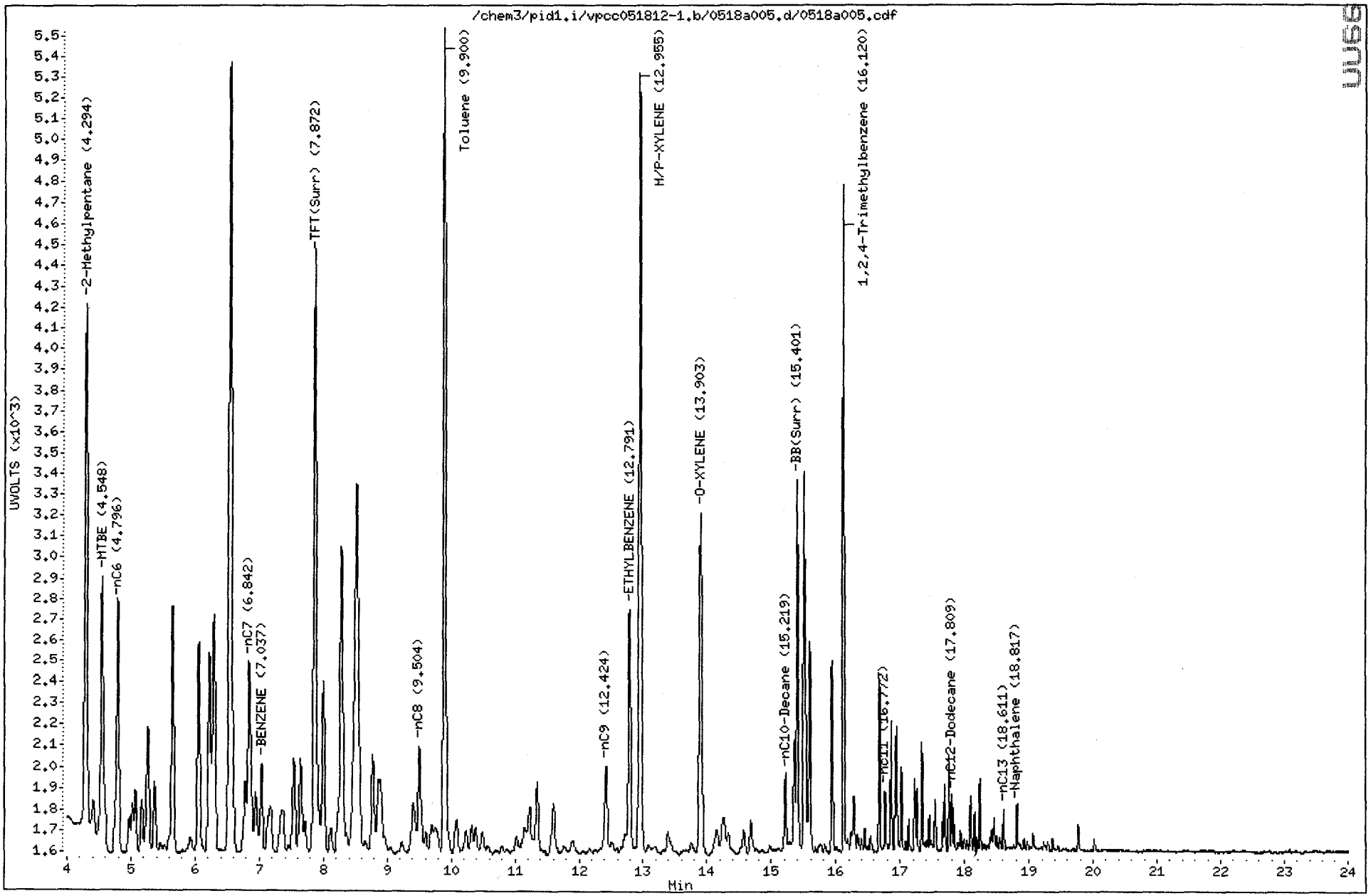
Instrument: pid1.i

Operator: JW

Column phase: RTX 502-2 FID

Column diameter: 0.18

UJ69:001A9



Data File: /chem3/pid1.i/vpcc051812-2.b/0518a005.d

Date : 18-MAY-2012 11:15

Client ID:

Sample Info: LCSD0518

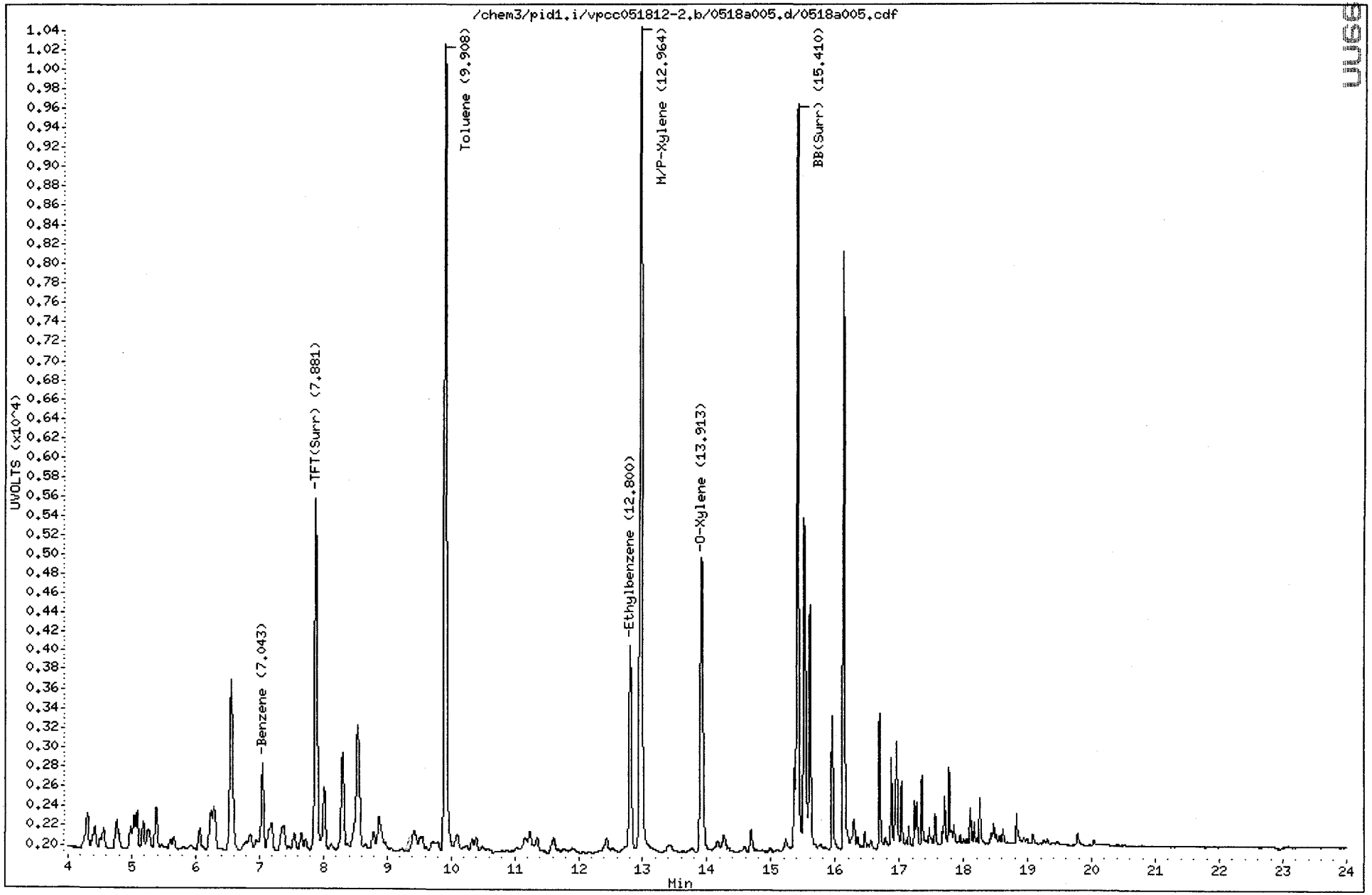
Instrument: pid1.i

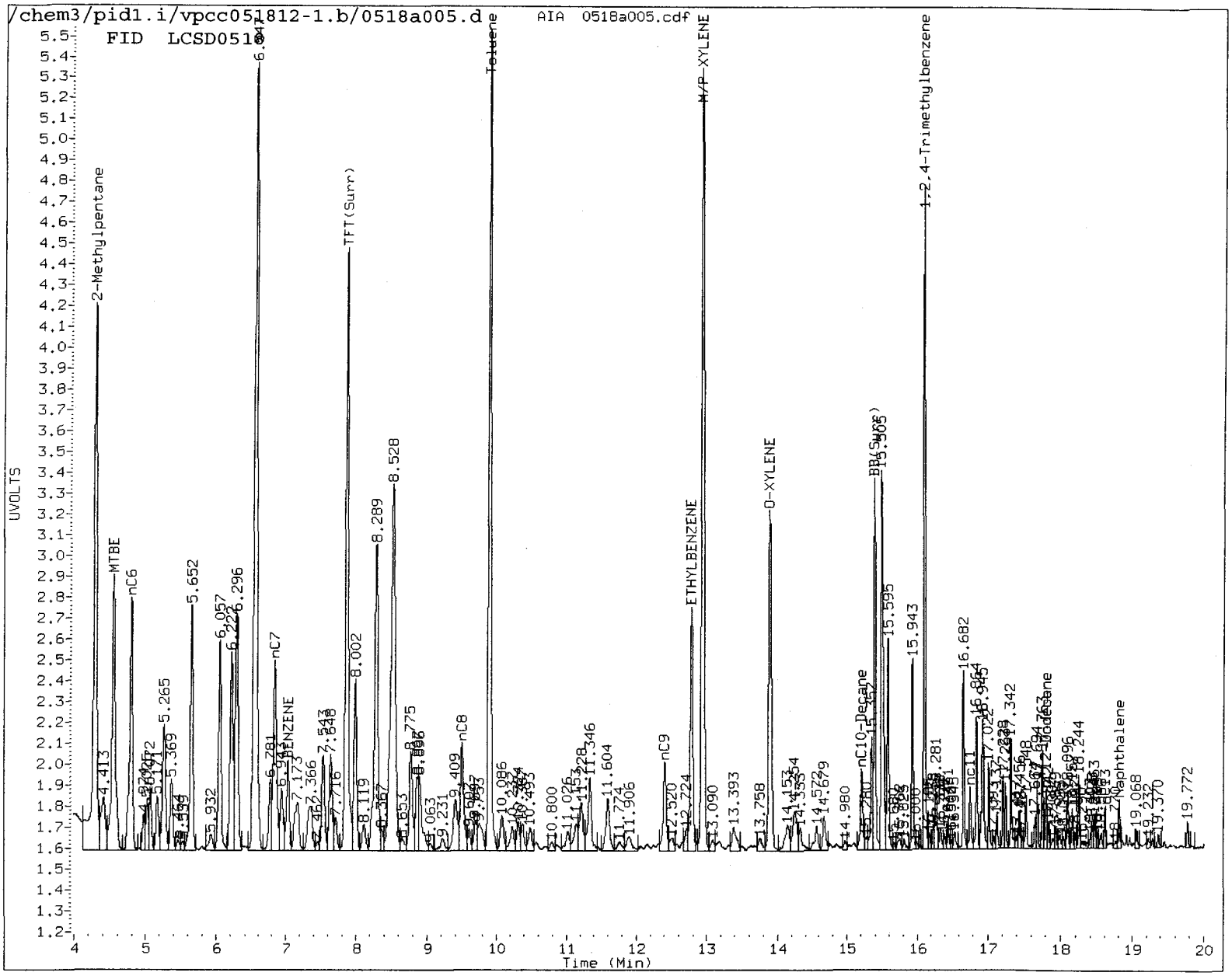
Operator: JW

Column phase: RTX 502-2 PID

Column diameter: 0.18

USGS 00120



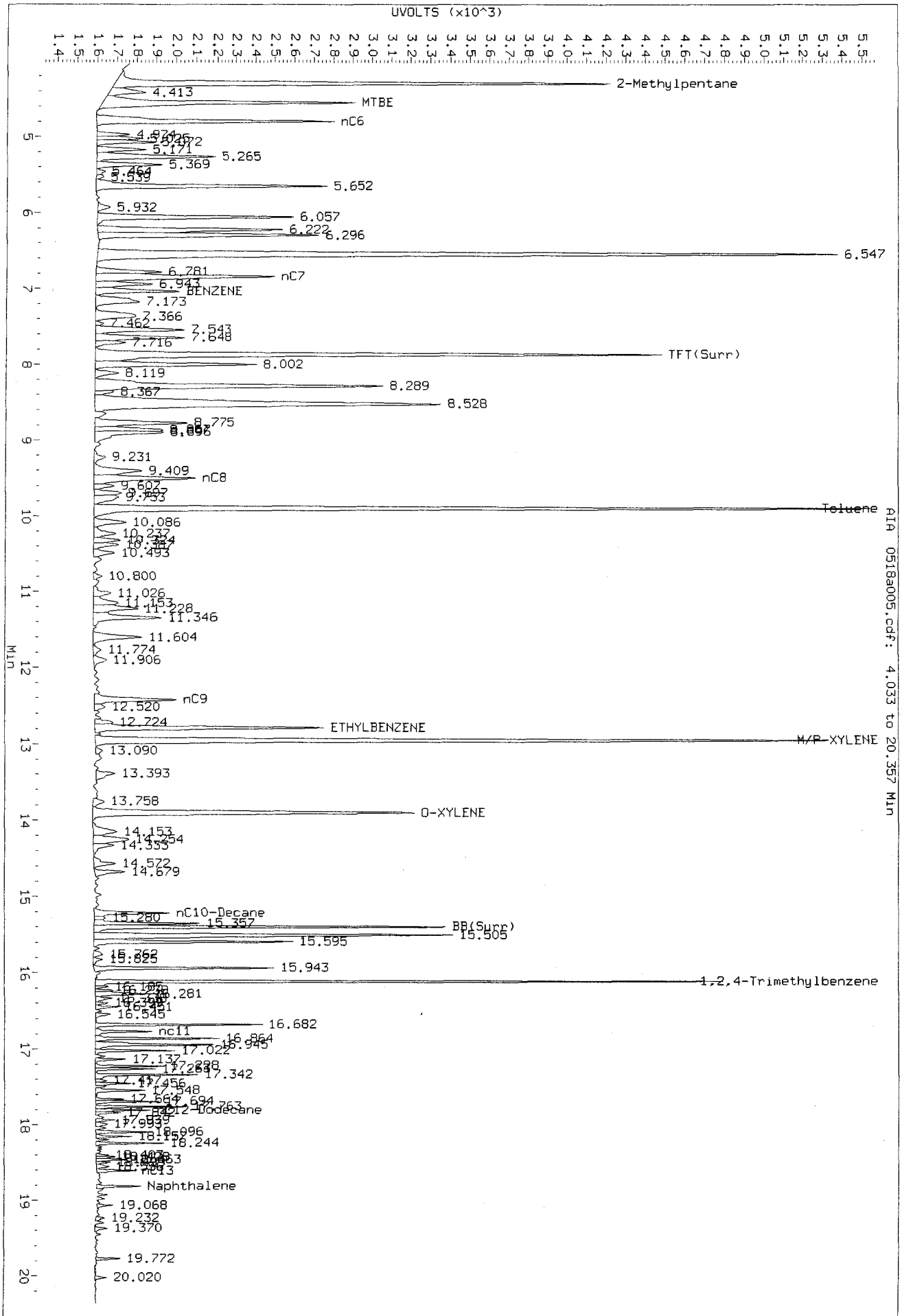


MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

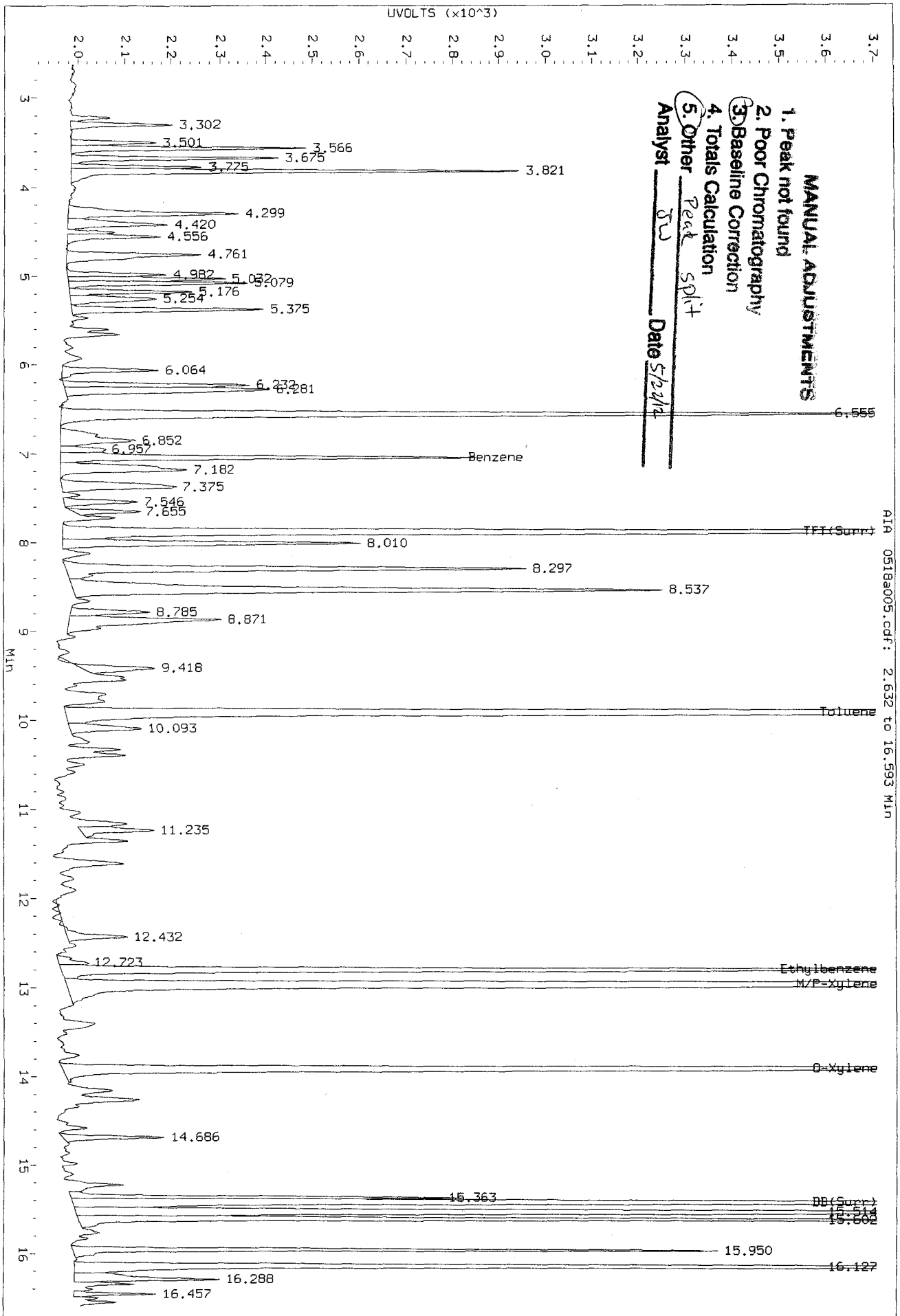
Analyst: SW Date: 5/22/12



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Instrument: pid1.i
Client Sample ID:

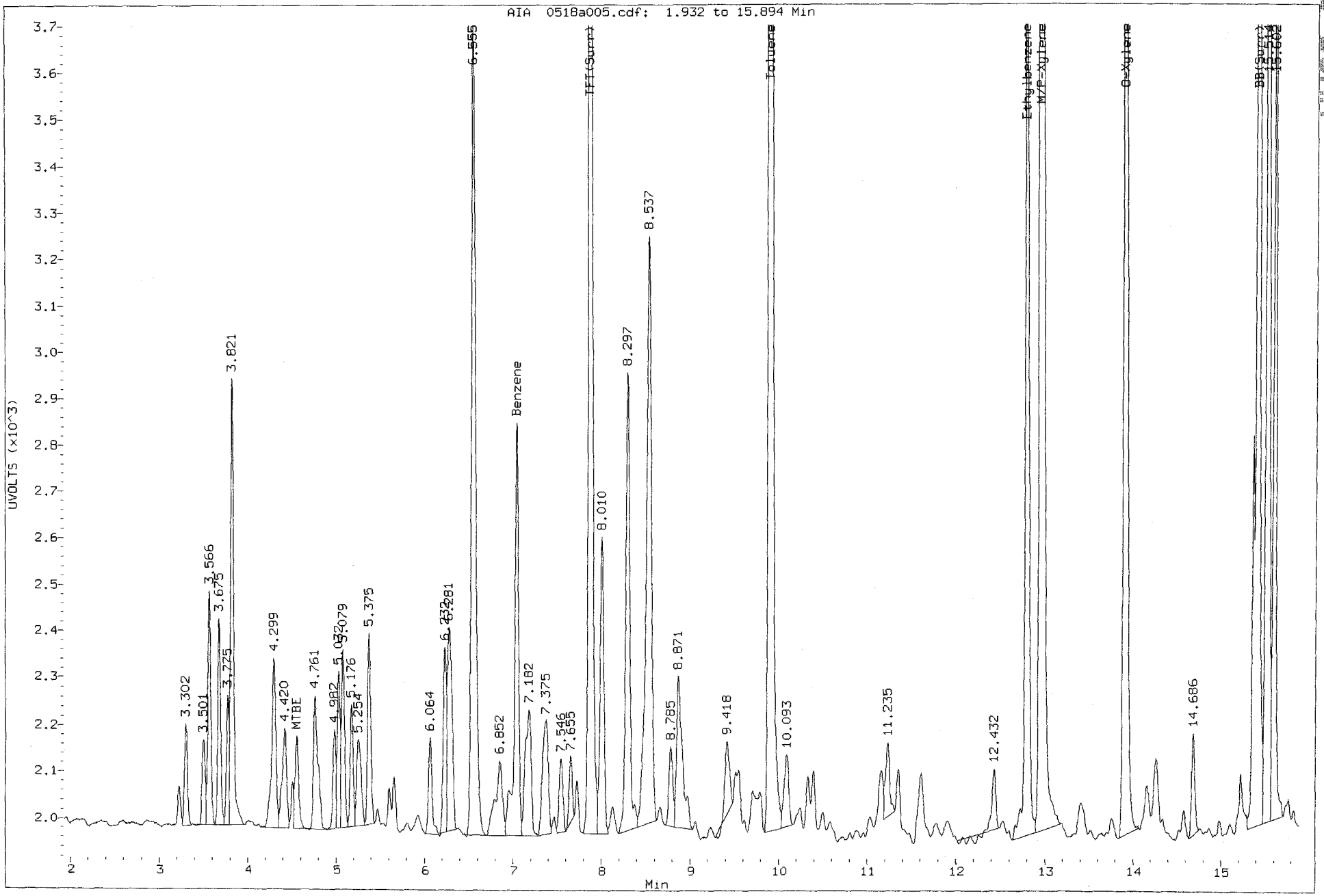
Beker JW 5/22/12

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Instrument: pid1.i
Client Sample ID:



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Instrument: pid1.i
Client Sample ID:

Before SJ 5/22/12



UU1556.00121

Data File: /chem3/pid1.i/vpcc051812-1.b/0518a020.d

Page 1

Date : 18-MAY-2012 18:56

Client ID: MW2-W-9

Instrument: pid1.i

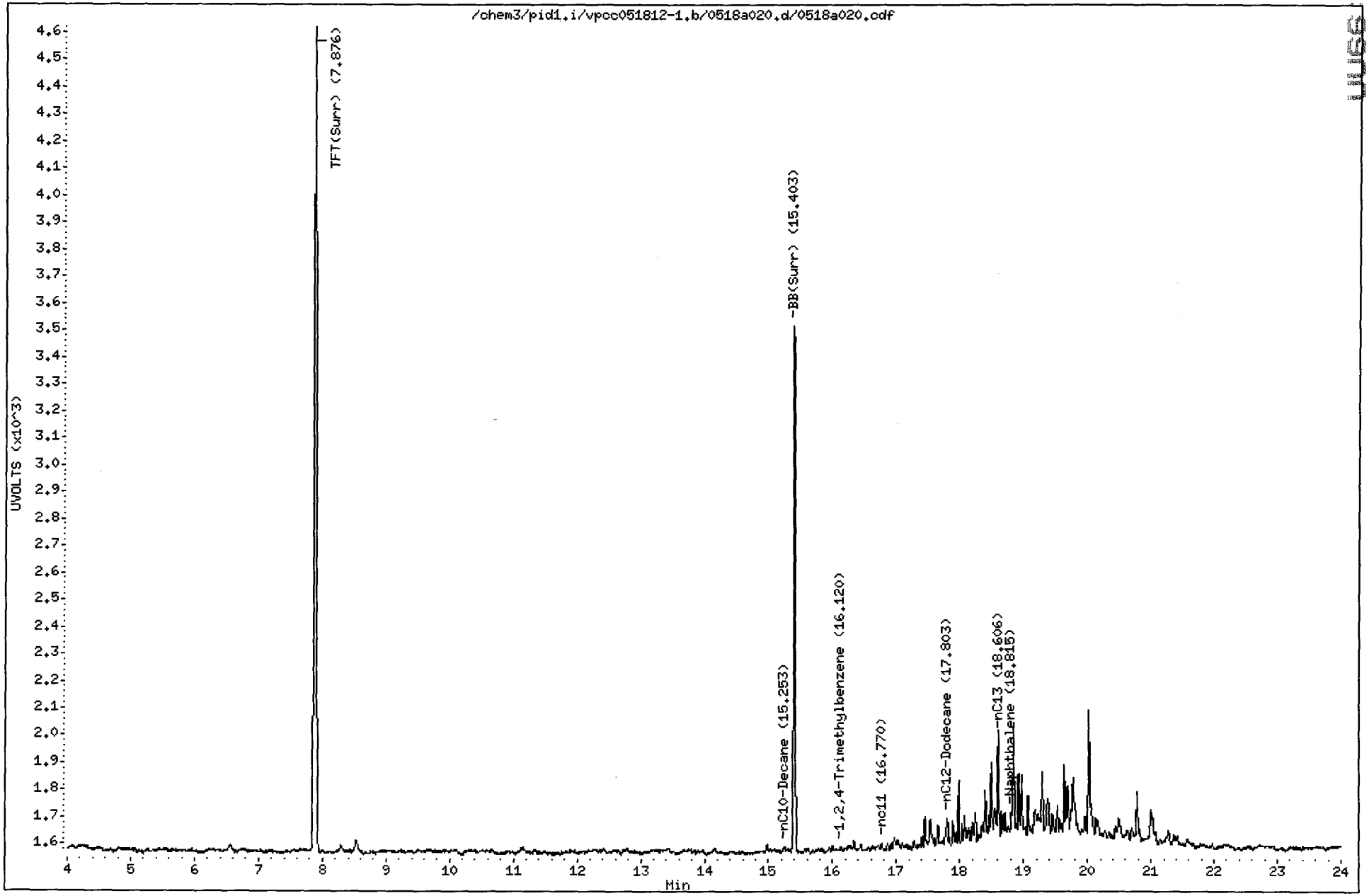
Sample Info: UU68A

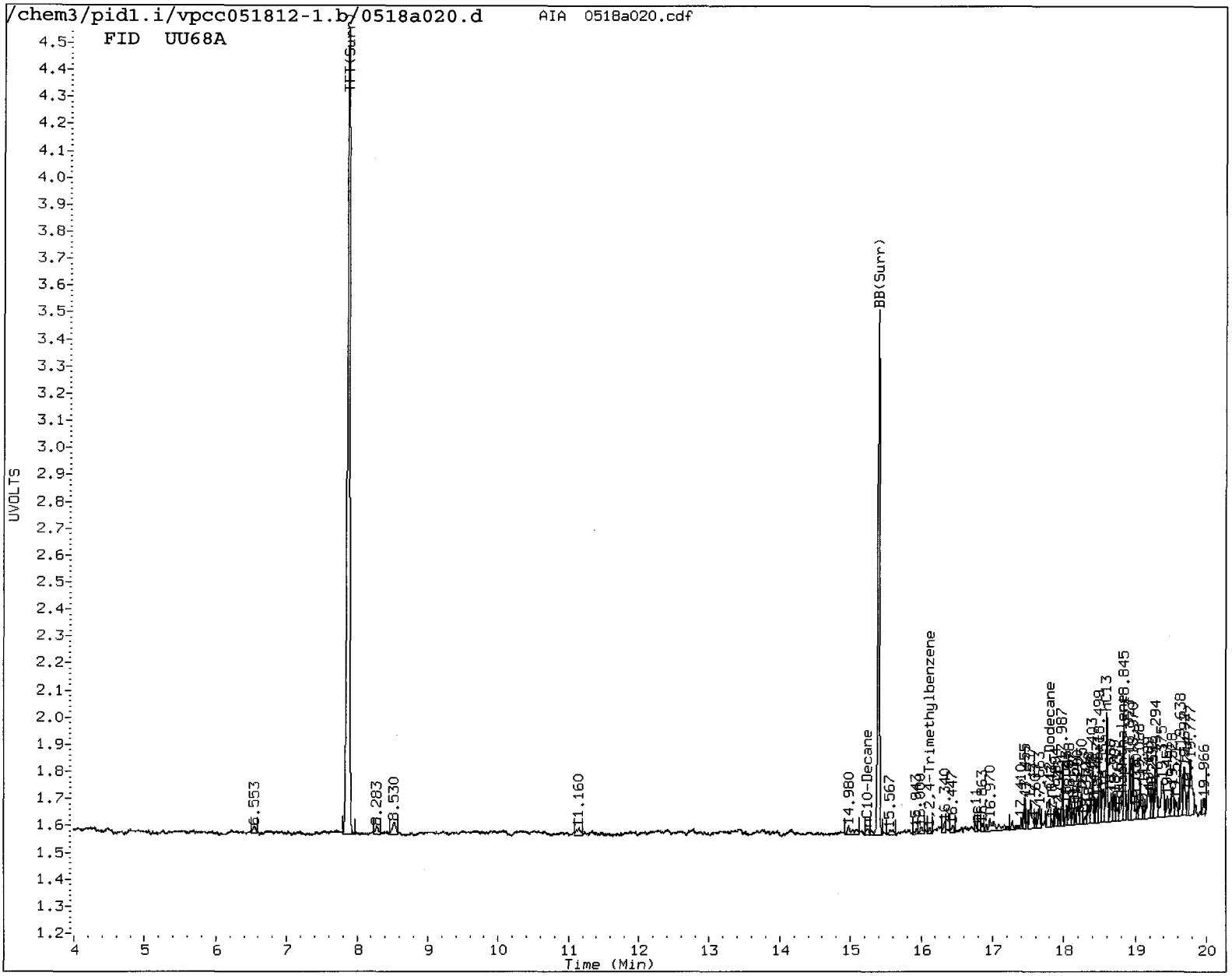
Operator: JW

Column phase: RTX 502-2 FID

Column diameter: 0.18

UU68 99125





MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

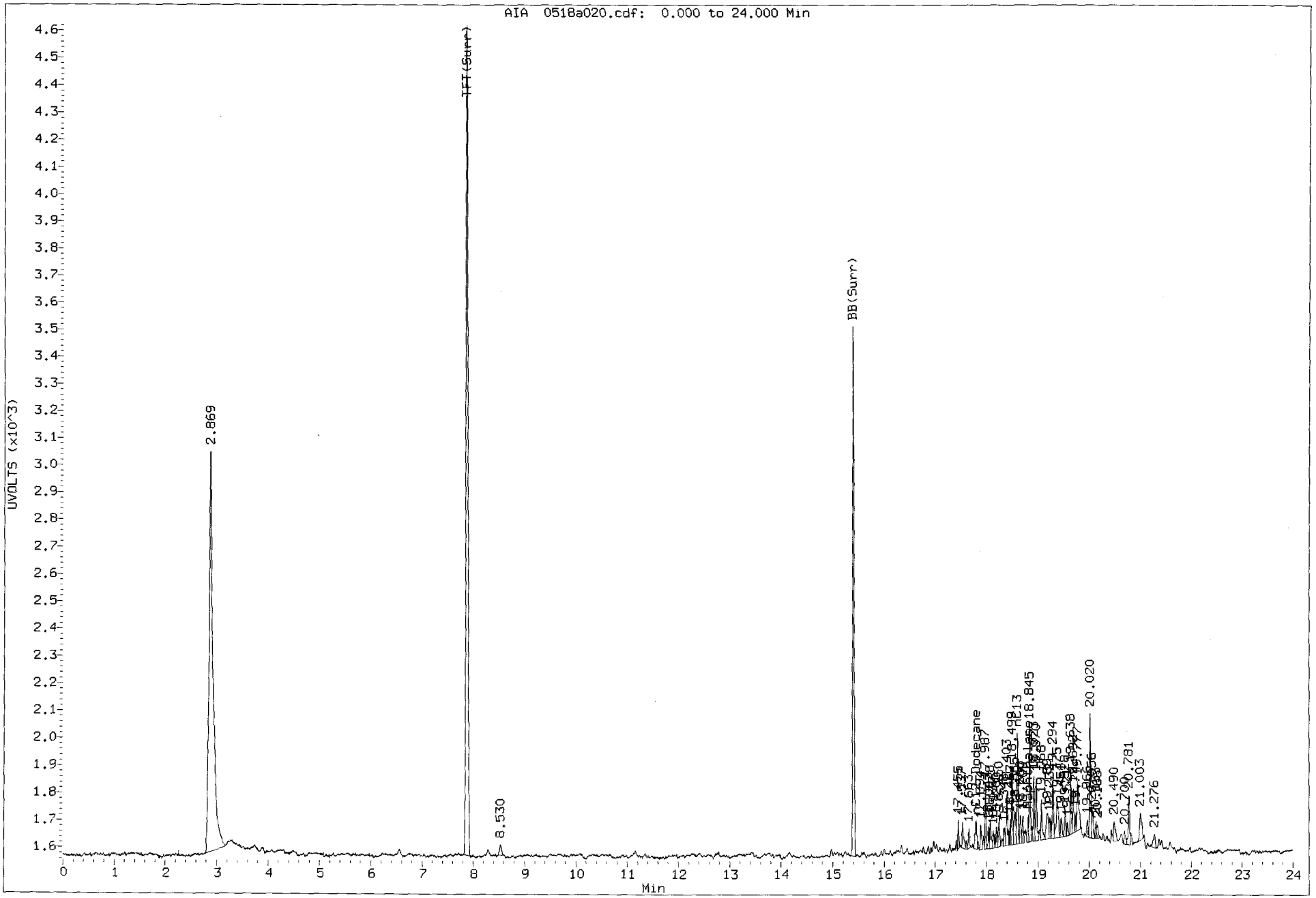
5. Other _____

Analyst: JW Date: 5/22/12

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Injection Date: 18-MAY-2012 18:56
Instrument: pid1.i
Client Sample ID: MW2-W-9

Before JW 5/22/12

JU66:00127



Data File: /chem3/pid1.i/vpcc051812-1.b/0518a017.d

Page 1

Date : 18-MAY-2012 17:29

Client ID: TRIP BLANK

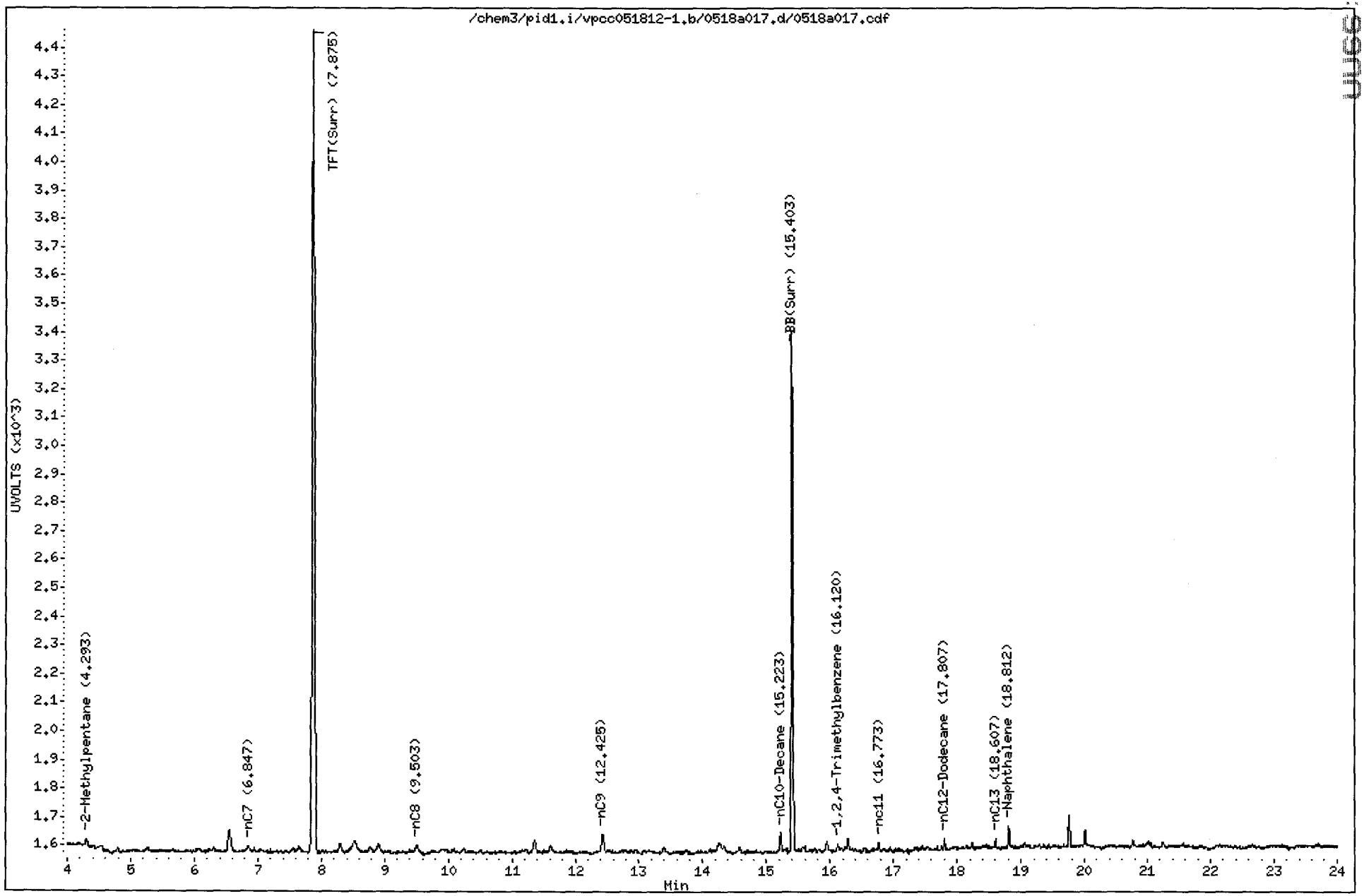
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Sample Info: UU68B

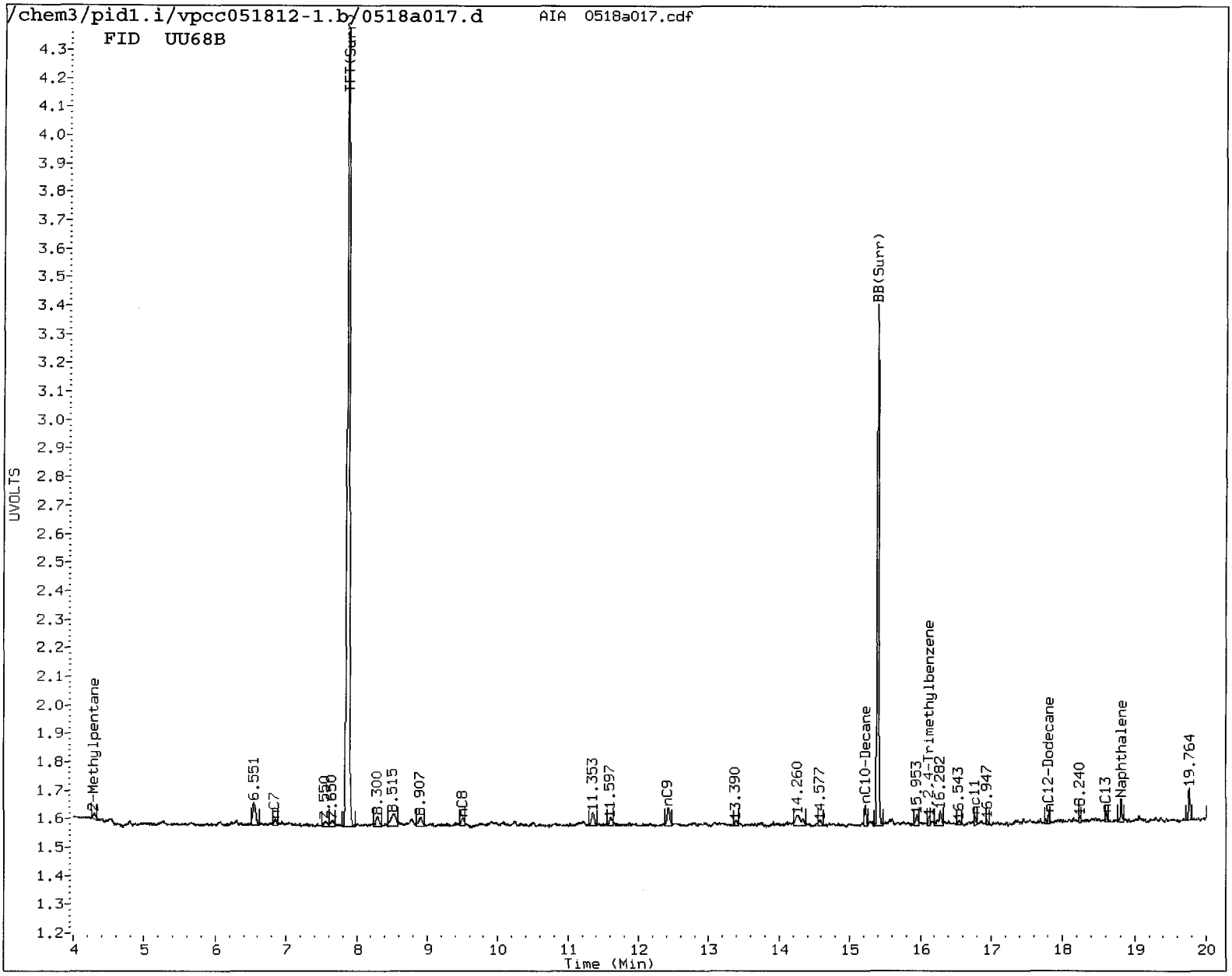
Operator: JW

Column phase: RTX 502-2 FID

Column diameter: 0.18



UU68, 051228

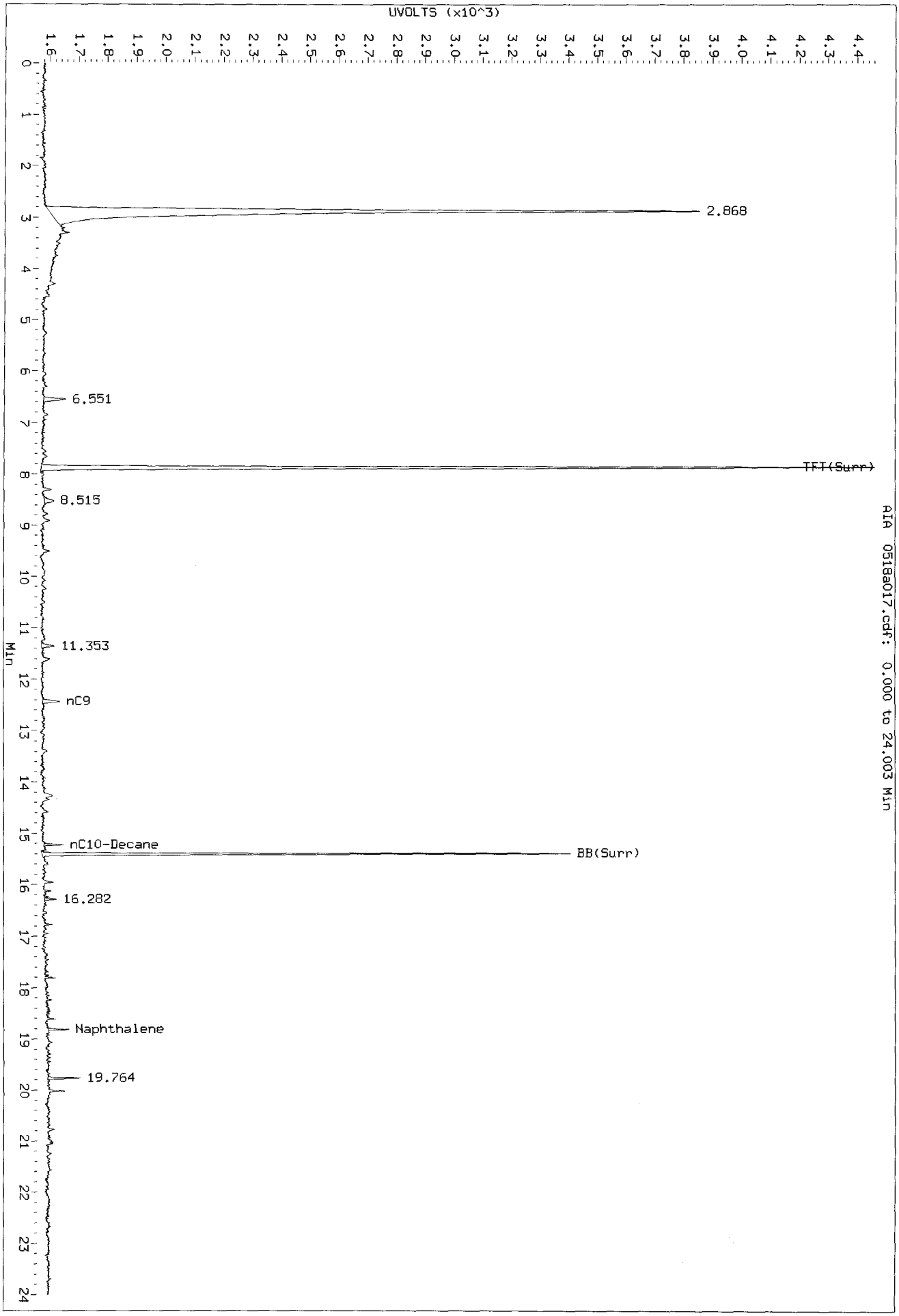


MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: JW Date: 5/22/12



Before
JW
5/22/12

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: MW2-W-9**
Extraction Method: SW3520C

SAMPLE

Lab Sample ID: UU68A
LIMS ID: 12-8984
Matrix: Water
Data Release Authorized:
Reported: 05/25/12

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/16/12
Date Received: 05/17/12

Date Extracted: 05/21/12
Date Analyzed: 05/24/12 14:47
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	1.0	< 1.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: MW2-W-9**
 SAMPLE

Lab Sample ID: UU68A
LIMS ID: 12-8984
Matrix: Water
Date Analyzed: 05/24/12 14:47

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	1.0	< 1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	62.8%	2-Fluorobiphenyl	60.8%
d14-p-Terphenyl	47.6%	d4-1,2-Dichlorobenzene	49.2%
d5-Phenol	61.6%	2-Fluorophenol	59.7%
2,4,6-Tribromophenol	83.7%	d4-2-Chlorophenol	61.6%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: MB-052112**
Extraction Method: SW3520C

METHOD BLANK

Lab Sample ID: MB-052112
LIMS ID: 12-8984
Matrix: Water
Data Release Authorized:
Reported: 05/25/12

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/21/12
Date Analyzed: 05/24/12 11:26
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
108-95-2	Phenol	1.0	< 1.0 U
111-44-4	Bis-(2-Chloroethyl) Ether	1.0	< 1.0 U
95-57-8	2-Chlorophenol	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	5.0	< 5.0 U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0 U
95-48-7	2-Methylphenol	1.0	< 1.0 U
108-60-1	2,2'-Oxybis(1-Chloropropane)	1.0	< 1.0 U
106-44-5	4-Methylphenol	1.0	< 1.0 U
621-64-7	N-Nitroso-Di-N-Propylamine	1.0	< 1.0 U
67-72-1	Hexachloroethane	1.0	< 1.0 U
98-95-3	Nitrobenzene	1.0	< 1.0 U
78-59-1	Isophorone	1.0	< 1.0 U
88-75-5	2-Nitrophenol	5.0	< 5.0 U
105-67-9	2,4-Dimethylphenol	1.0	< 1.0 U
65-85-0	Benzoic Acid	10	< 10 U
111-91-1	bis(2-Chloroethoxy) Methane	1.0	< 1.0 U
120-83-2	2,4-Dichlorophenol	5.0	< 5.0 U
120-82-1	1,2,4-Trichlorobenzene	1.0	< 1.0 U
91-20-3	Naphthalene	1.0	< 1.0 U
106-47-8	4-Chloroaniline	5.0	< 5.0 U
87-68-3	Hexachlorobutadiene	1.0	< 1.0 U
59-50-7	4-Chloro-3-methylphenol	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	1.0	< 1.0 U
77-47-4	Hexachlorocyclopentadiene	5.0	< 5.0 U
88-06-2	2,4,6-Trichlorophenol	5.0	< 5.0 U
95-95-4	2,4,5-Trichlorophenol	5.0	< 5.0 U
91-58-7	2-Chloronaphthalene	1.0	< 1.0 U
88-74-4	2-Nitroaniline	5.0	< 5.0 U
131-11-3	Dimethylphthalate	1.0	< 1.0 U
208-96-8	Acenaphthylene	1.0	< 1.0 U
99-09-2	3-Nitroaniline	5.0	< 5.0 U
83-32-9	Acenaphthene	1.0	< 1.0 U
51-28-5	2,4-Dinitrophenol	10	< 10 U
100-02-7	4-Nitrophenol	5.0	< 5.0 U
132-64-9	Dibenzofuran	1.0	< 1.0 U
606-20-2	2,6-Dinitrotoluene	5.0	< 5.0 U
121-14-2	2,4-Dinitrotoluene	5.0	< 5.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: MB-052112
METHOD BLANK

Lab Sample ID: MB-052112
LIMS ID: 12-8984
Matrix: Water
Date Analyzed: 05/24/12 11:26

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

CAS Number	Analyte	RL	Result
84-66-2	Diethylphthalate	1.0	< 1.0 U
7005-72-3	4-Chlorophenyl-phenylether	1.0	< 1.0 U
86-73-7	Fluorene	1.0	< 1.0 U
100-01-6	4-Nitroaniline	5.0	< 5.0 U
534-52-1	4,6-Dinitro-2-Methylphenol	10	< 10 U
86-30-6	N-Nitrosodiphenylamine	1.0	< 1.0 U
101-55-3	4-Bromophenyl-phenylether	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	1.0	< 1.0 U
87-86-5	Pentachlorophenol	5.0	< 5.0 U
85-01-8	Phenanthrene	1.0	< 1.0 U
86-74-8	Carbazole	1.0	< 1.0 U
120-12-7	Anthracene	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	1.0	< 1.0 U
206-44-0	Fluoranthene	1.0	< 1.0 U
129-00-0	Pyrene	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	1.0	< 1.0 U
91-94-1	3,3'-Dichlorobenzidine	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.0	< 1.0 U
218-01-9	Chrysene	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	1.0	< 1.0 U

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	72.8%	2-Fluorobiphenyl	68.4%
d14-p-Terphenyl	80.8%	d4-1,2-Dichlorobenzene	59.2%
d5-Phenol	73.3%	2-Fluorophenol	75.5%
2,4,6-Tribromophenol	72.3%	d4-2-Chlorophenol	72.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Page 1 of 2

Sample ID: LCS-052112
LCS/LCSD

Lab Sample ID: LCS-052112
LIMS ID: 12-8984
Matrix: Water
Data Release Authorized:
Reported: 05/25/12

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/16/12
Date Received: 05/17/12

Date Extracted LCS/LCSD: 05/21/12

Date Analyzed LCS: 05/24/12 11:59
LCSD: 05/24/12 12:33
Instrument/Analyst LCS: NT6/JZ
LCSD: NT6/JZ
GPC Cleanup: NO

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Phenol	16.6	25.0	66.4%	16.1	25.0	64.4%	3.1%
Bis-(2-Chloroethyl) Ether	17.9	25.0	71.6%	17.4	25.0	69.6%	2.8%
2-Chlorophenol	15.6	25.0	62.4%	15.0	25.0	60.0%	3.9%
1,3-Dichlorobenzene	10.8	25.0	43.2%	10.8	25.0	43.2%	0.0%
1,4-Dichlorobenzene	11.4	25.0	45.6%	11.3	25.0	45.2%	0.9%
Benzyl Alcohol	15.8	25.0	63.2%	16.1	25.0	64.4%	1.9%
1,2-Dichlorobenzene	11.9	25.0	47.6%	12.0	25.0	48.0%	0.8%
2-Methylphenol	15.4	25.0	61.6%	14.8	25.0	59.2%	4.0%
2,2'-Oxybis(1-Chloropropane)	17.1	25.0	68.4%	16.7	25.0	66.8%	2.4%
4-Methylphenol	32.1	50.0	64.2%	31.2	50.0	62.4%	2.8%
N-Nitroso-Di-N-Propylamine	18.1	25.0	72.4%	17.9	25.0	71.6%	1.1%
Hexachloroethane	9.7	25.0	38.8%	9.5	25.0	38.0%	2.4%
Nitrobenzene	16.8	25.0	67.2%	16.4	25.0	65.6%	2.4%
Isophorone	19.7	25.0	78.8%	20.1	25.0	80.4%	2.0%
2-Nitrophenol	15.9	25.0	63.6%	15.4	25.0	61.6%	3.2%
2,4-Dimethylphenol	42.7	75.0	56.9%	37.0	75.0	49.3%	14.3%
Benzoic Acid	102	138	73.9%	103	138	74.6%	1.0%
bis(2-Chloroethoxy) Methane	17.7	25.0	70.8%	17.7	25.0	70.8%	0.0%
2,4-Dichlorophenol	50.0	75.0	66.7%	47.9	75.0	63.9%	4.3%
1,2,4-Trichlorobenzene	12.3	25.0	49.2%	12.4	25.0	49.6%	0.8%
Naphthalene	15.2	25.0	60.8%	14.9	25.0	59.6%	2.0%
4-Chloroaniline	46.9	75.0	62.5%	45.9	75.0	61.2%	2.2%
Hexachlorobutadiene	9.7	25.0	38.8%	9.5	25.0	38.0%	2.0%
4-Chloro-3-methylphenol	56.2	75.0	74.9%	55.4	75.0	73.9%	1.4%
2-Methylnaphthalene	13.9	25.0	55.6%	14.0	25.0	56.0%	0.7%
Hexachlorocyclopentadiene	28.5	75.0	38.0%	27.8	75.0	37.1%	2.5%
2,4,6-Trichlorophenol	56.8	75.0	75.7%	53.9	75.0	71.9%	5.2%
2,4,5-Trichlorophenol	60.5	75.0	80.7%	59.3	75.0	79.1%	2.0%
2-Chloronaphthalene	17.0	25.0	68.0%	16.8	25.0	67.2%	1.2%
2-Nitroaniline	56.6	75.0	75.5%	57.2	75.0	76.3%	1.1%
Dimethylphthalate	21.8	25.0	87.2%	22.1	25.0	88.4%	1.4%
Acenaphthylene	18.3	25.0	73.2%	18.0	25.0	72.0%	1.7%
3-Nitroaniline	60.0	75.0	80.0%	60.4	75.0	80.5%	0.7%
Acenaphthene	17.2	25.0	68.8%	17.0	25.0	68.0%	1.2%
2,4-Dinitrophenol	108	138	78.3%	108	138	78.3%	0.0%
4-Nitrophenol	62.8	75.0	83.7%	63.1	75.0	84.1%	0.5%
Dibenzofuran	17.6	25.0	70.4%	17.2	25.0	68.8%	2.3%
2,6-Dinitrotoluene	64.0	75.0	85.3%	64.5	75.0	86.0%	0.8%
2,4-Dinitrotoluene	66.3	75.0	88.4%	66.8	75.0	89.1%	0.8%
Diethylphthalate	22.0	25.0	88.0%	22.3	25.0	89.2%	1.4%
4-Chlorophenyl-phenylether	19.3	25.0	77.2%	19.1	25.0	76.4%	1.0%
Fluorene	18.6	25.0	74.4%	18.3	25.0	73.2%	1.6%
4-Nitroaniline	61.1	75.0	81.5%	60.5	75.0	80.7%	1.0%
4,6-Dinitro-2-Methylphenol	118	138	85.5%	121	138	87.7%	2.5%
N-Nitrosodiphenylamine	18.6	25.0	74.4%	19.0	25.0	76.0%	2.1%

FORM III

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-052112
LCS/LCSD

Lab Sample ID: LCS-052112
LIMS ID: 12-8984
Matrix: Water
Date Analyzed LCS: 05/24/12 11:59
LCSD: 05/24/12 12:33

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
4-Bromophenyl-phenylether	19.5	25.0	78.0%	19.8	25.0	79.2%	1.5%
Hexachlorobenzene	19.9	25.0	79.6%	20.2	25.0	80.8%	1.5%
Pentachlorophenol	60.6	75.0	80.8%	62.5	75.0	83.3%	3.1%
Phenanthrene	19.8	25.0	79.2%	19.9	25.0	79.6%	0.5%
Carbazole	22.4	25.0	89.6%	22.1	25.0	88.4%	1.3%
Anthracene	19.2	25.0	76.8%	19.4	25.0	77.6%	1.0%
Di-n-Butylphthalate	23.2	25.0	92.8%	23.3	25.0	93.2%	0.4%
Fluoranthene	21.6	25.0	86.4%	21.3	25.0	85.2%	1.4%
Pyrene	19.3	25.0	77.2%	19.9	25.0	79.6%	3.1%
Butylbenzylphthalate	21.0	25.0	84.0%	21.6	25.0	86.4%	2.8%
3,3'-Dichlorobenzidine	51.2	75.0	68.3%	49.9	75.0	66.5%	2.6%
Benzo(a)anthracene	18.4	25.0	73.6%	18.6	25.0	74.4%	1.1%
bis(2-Ethylhexyl)phthalate	21.3	25.0	85.2%	21.6	25.0	86.4%	1.4%
Chrysene	19.9	25.0	79.6%	20.0	25.0	80.0%	0.5%
Di-n-Octyl phthalate	21.6	25.0	86.4%	21.5	25.0	86.0%	0.5%
Benzo(a)pyrene	18.2	25.0	72.8%	18.1	25.0	72.4%	0.6%
Indeno(1,2,3-cd)pyrene	18.2	25.0	72.8%	18.9	25.0	75.6%	3.8%
Dibenz(a,h)anthracene	17.9	25.0	71.6%	19.2	25.0	76.8%	7.0%
Benzo(g,h,i)perylene	19.0	25.0	76.0%	19.4	25.0	77.6%	2.1%
1-Methylnaphthalene	19.2	25.0	76.8%	19.2	25.0	76.8%	0.0%
Total Benzofluoranthenes	39.7	50.0	79.4%	39.2	50.0	78.4%	1.3%

Semivolatile Surrogate Recovery

	LCS	LCSD
d5-Nitrobenzene	70.0%	66.0%
2-Fluorobiphenyl	70.0%	66.4%
d14-p-Terphenyl	80.0%	80.8%
d4-1,2-Dichlorobenzene	55.6%	53.2%
d5-Phenol	75.7%	71.5%
2-Fluorophenol	69.1%	65.6%
2,4,6-Tribromophenol	86.4%	84.3%
d4-2-Chlorophenol	69.9%	65.9%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-052112	72.8%	68.4%	80.8%	59.2%	73.3%	75.5%	72.3%	72.3%	0
LCS-052112	70.0%	70.0%	80.0%	55.6%	75.7%	69.1%	86.4%	69.9%	0
LCSD-052112	66.0%	66.4%	80.8%	53.2%	71.5%	65.6%	84.3%	65.9%	0
MW2-W-9	62.8%	60.8%	47.6%	49.2%	61.6%	59.7%	83.7%	61.6%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(50-100)	(34-101)
(FBP) = 2-Fluorobiphenyl	(51-100)	(38-100)
(TPH) = d14-p-Terphenyl	(54-117)	(27-122)
(DCB) = d4-1,2-Dichlorobenzene	(40-100)	(27-100)
(PHL) = d5-Phenol	(15-121)	(16-106)
(2FP) = 2-Fluorophenol	(33-100)	(23-100)
(TBP) = 2,4,6-Tribromophenol	(46-125)	(31-128)
(2CP) = d4-2-Chlorophenol	(46-102)	(33-100)

Prep Method: SW3520C
Log Number Range: 12-8984 to 12-8984

UU66:00137

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: MW2-W-9
SAMPLE

Lab Sample ID: UU68A
LIMS ID: 12-8984
Matrix: Water
Data Release Authorized:
Reported: 05/24/12

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: 05/16/12
Date Received: 05/17/12

Date Extracted: 05/21/12
Date Analyzed: 05/23/12 20:32
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	**Acenaphthene**	**0.10**	**0.38**
86-73-7	**Fluorene**	**0.10**	**0.68**
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	72.3%
d14-Dibenzo(a,h)anthracene	54.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS

Sample ID: MB-052112
METHOD BLANK

Lab Sample ID: MB-052112
LIMS ID: 12-8984
Matrix: Water
Data Release Authorized:
Reported: 05/24/12

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 05/21/12
Date Analyzed: 05/23/12 18:38
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	64.7%
d14-Dibenzo(a,h)anthracene	78.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: LCS-052112
LAB CONTROL SAMPLE

Lab Sample ID: LCS-052112
LIMS ID: 12-8984
Matrix: Water
Data Release Authorized:
Reported: 05/24/12

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 05/21/12

Date Analyzed LCS: 05/23/12 19:06
LCSD: 05/23/12 19:35
Instrument/Analyst LCS: NT4/JZ
LCSD: NT4/JZ

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Naphthalene	1.61	3.00	53.7%	1.61	3.00	53.7%	0.0%
2-Methylnaphthalene	1.45	3.00	48.3%	1.53	3.00	51.0%	5.4%
1-Methylnaphthalene	1.64	3.00	54.7%	1.71	3.00	57.0%	4.2%
Acenaphthylene	1.68	3.00	56.0%	1.78	3.00	59.3%	5.8%
Acenaphthene	1.69	3.00	56.3%	1.79	3.00	59.7%	5.7%
Fluorene	1.76	3.00	58.7%	1.84	3.00	61.3%	4.4%
Phenanthrene	2.00	3.00	66.7%	2.15	3.00	71.7%	7.2%
Anthracene	1.78	3.00	59.3%	2.05	3.00	68.3%	14.1%
Fluoranthene	2.09	3.00	69.7%	2.13	3.00	71.0%	1.9%
Pyrene	2.29	3.00	76.3%	2.40	3.00	80.0%	4.7%
Benzo(a)anthracene	2.09	3.00	69.7%	2.20	3.00	73.3%	5.1%
Chrysene	2.26	3.00	75.3%	2.49	3.00	83.0%	9.7%
Benzo(a)pyrene	1.89	3.00	63.0%	2.12	3.00	70.7%	11.5%
Indeno(1,2,3-cd)pyrene	2.22	3.00	74.0%	2.38	3.00	79.3%	7.0%
Dibenz(a,h)anthracene	1.76	3.00	58.7%	2.06	3.00	68.7%	15.7%
Benzo(g,h,i)perylene	2.14	3.00	71.3%	2.33	3.00	77.7%	8.5%
Dibenzofuran	1.67	3.00	55.7%	1.77	3.00	59.0%	5.8%
Total Benzofluoranthenes	4.73	6.00	78.8%	5.18	6.00	86.3%	9.1%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

SIM Semivolatile Surrogate Recovery

	LCS	LCSD
d10-2-Methylnaphthalene	61.0%	61.0%
d14-Dibenzo(a,h)anthracene	61.7%	70.0%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	MNP	DBA	TOT OUT
MB-052112	64.7%	78.7%	0
LCS-052112	61.0%	61.7%	0
LCSD-052112	61.0%	70.0%	0
MW2-W-9	72.3%	54.7%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(40-110)	(33-107)
(DBA) = d14-Dibenzo(a,h)anthracene	(33-140)	(10-142)

Prep Method: SW3520C
Log Number Range: 12-8984 to 12-8984

UU66:00141

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Page 1 of 1
Matrix: Water

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Received: 05/17/12

Data Release Authorized: VB
Reported: 05/22/12

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range/Surrogate	RL	Result
MB-051812	Method Blank	05/18/12	05/21/12	1.00	Diesel Range	0.10	< 0.10 U
12-8984	HC ID: ---		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		92.6%
UU68A	MW2-W-9	05/18/12	05/21/12	1.00	**Diesel Range**	**0.10**	**1.9**
12-8984	HC ID: **DRO/RRO**		FID4A	1.0	**Motor Oil Range**	**0.20**	**0.24**
					o-Terphenyl		108%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

UU66:00142

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01

Client ID	OTER	TOT OUT
MB-051812	92.6%	0
LCS-051812	100%	0
LCSD-051812	98.6%	0
MW2-W-9	108%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3510C
Log Number Range: 12-8984 to 12-8984

FORM-II TPHD

UU66:00143

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: LCS-051812
LCS/LCSD

Lab Sample ID: LCS-051812
LIMS ID: 12-8984
Matrix: Water
Data Release Authorized: VD
Reported: 05/22/12

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 05/18/12

Date Analyzed LCS: 05/21/12 17:26
LCSD: 05/21/12 17:50
Instrument/Analyst LCS: FID4A/MH
LCSD: FID4A/MH

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 1.0 mL
LCSD: 1.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	2.61	3.00	87.0%	2.49	3.00	83.0%	4.7%

TPHD Surrogate Recovery

	LCS	LCSD
o-Terphenyl	100%	98.6%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: UU68
Matrix: Water
Project: SIMS - N Cascade Ford
Date Received: 05/17/12
0747.01.01

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
12-8984-051812MB1	Method Blank	500 mL	1.00 mL	05/18/12
12-8984-051812LCS1	Lab Control	500 mL	1.00 mL	05/18/12
12-8984-051812LCSD1	Lab Control Dup	500 mL	1.00 mL	05/18/12
12-8984-UU68A	MW2-W-9	500 mL	1.00 mL	05/18/12

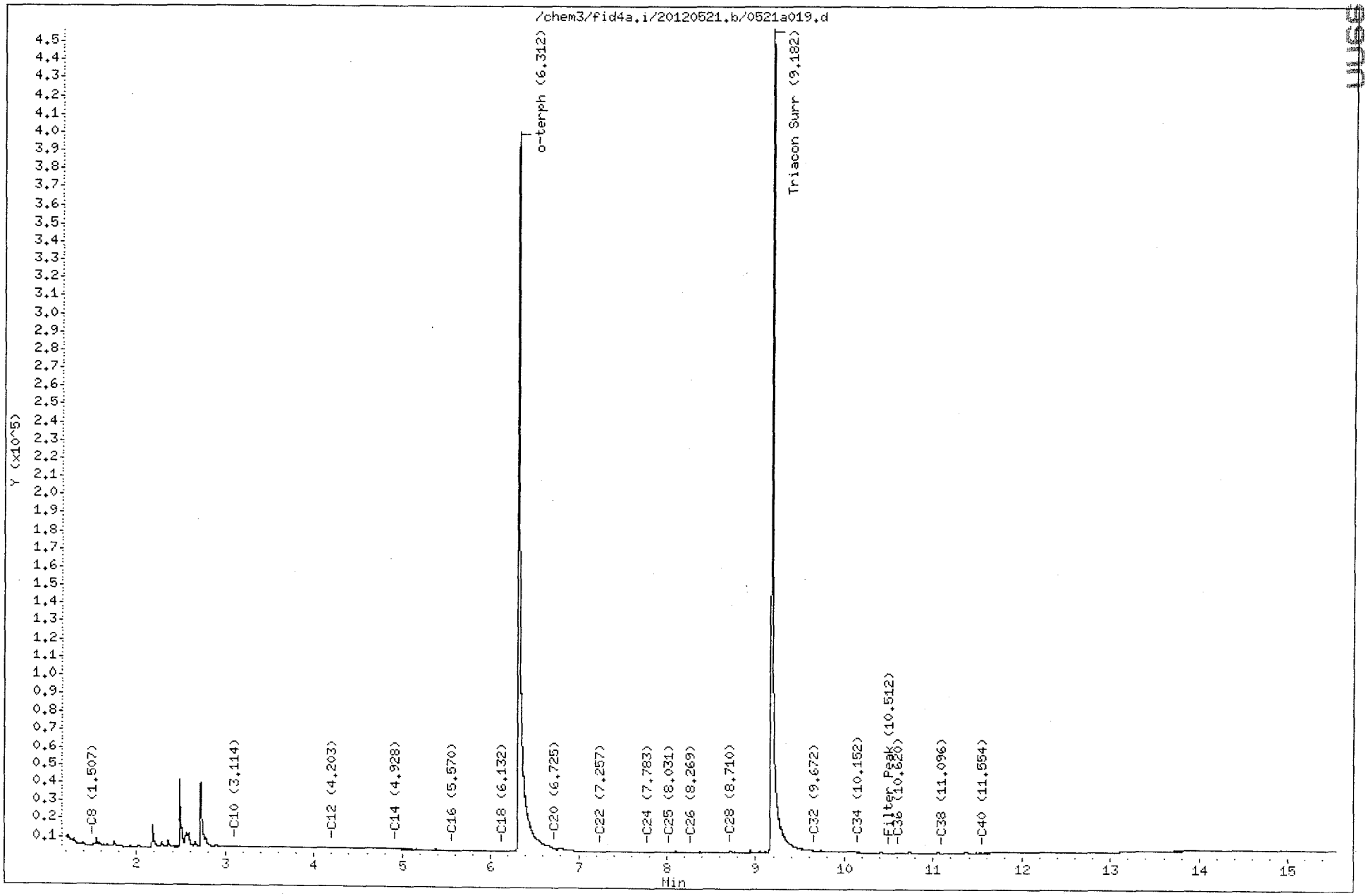
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Data File: /chem3/fid4a.i/20120521.b/0521a019.d
Date : 21-MAY-2012 17:02
Client ID: UU68MBW1
Sample Info: UU68MBW1

Instrument: fid4a.i

Operator: MH
Column phase: RTX-1
Column diameter: 0.25

UU68-001.LC



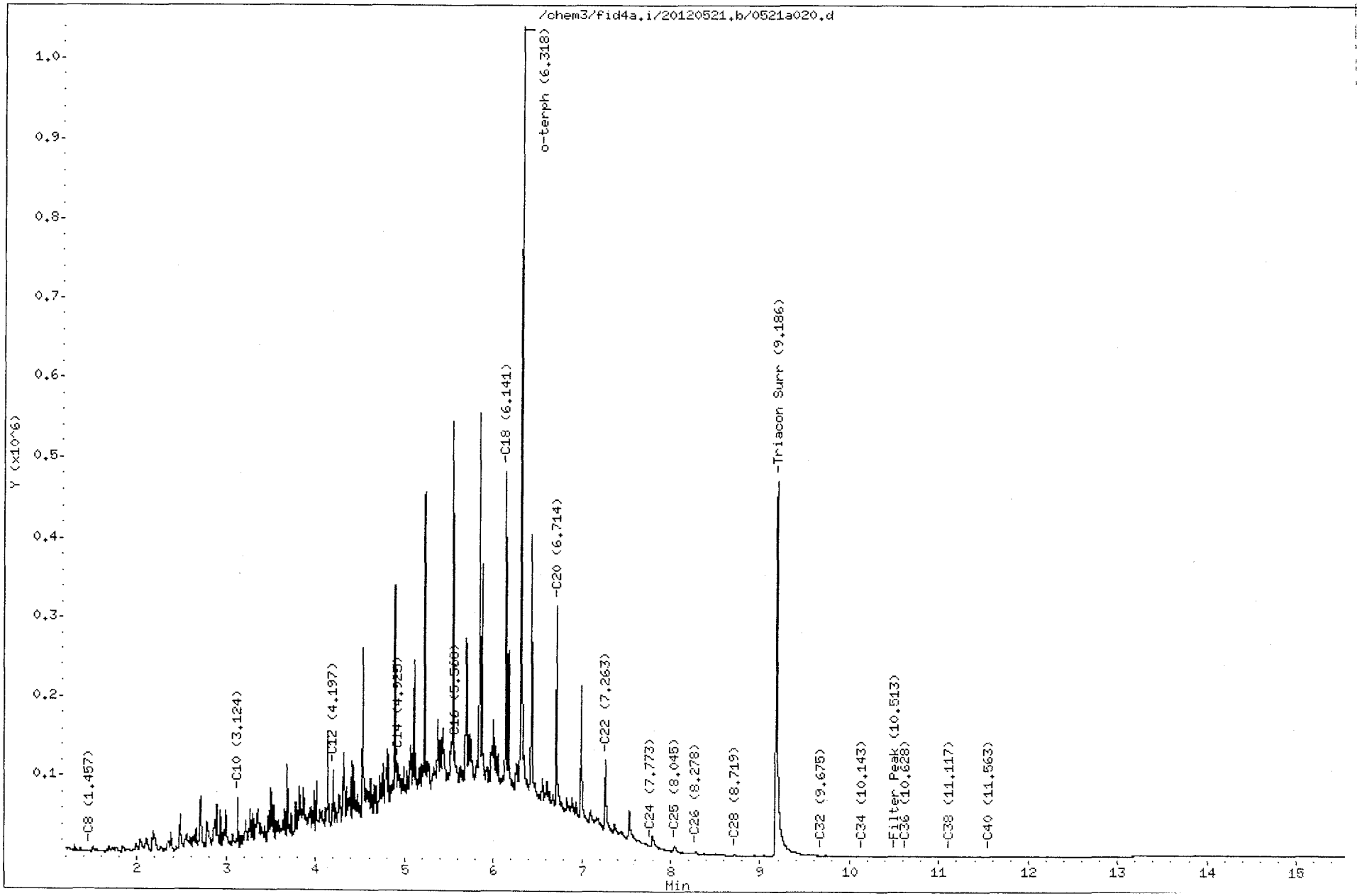
Data File: /chem3/fid4a.i/20120521.b/0521a020.d
Date : 21-MAY-2012 17:26
Client ID: UU68LCSW1
Sample Info: UU68LCSW1

Column phase: RTX-1

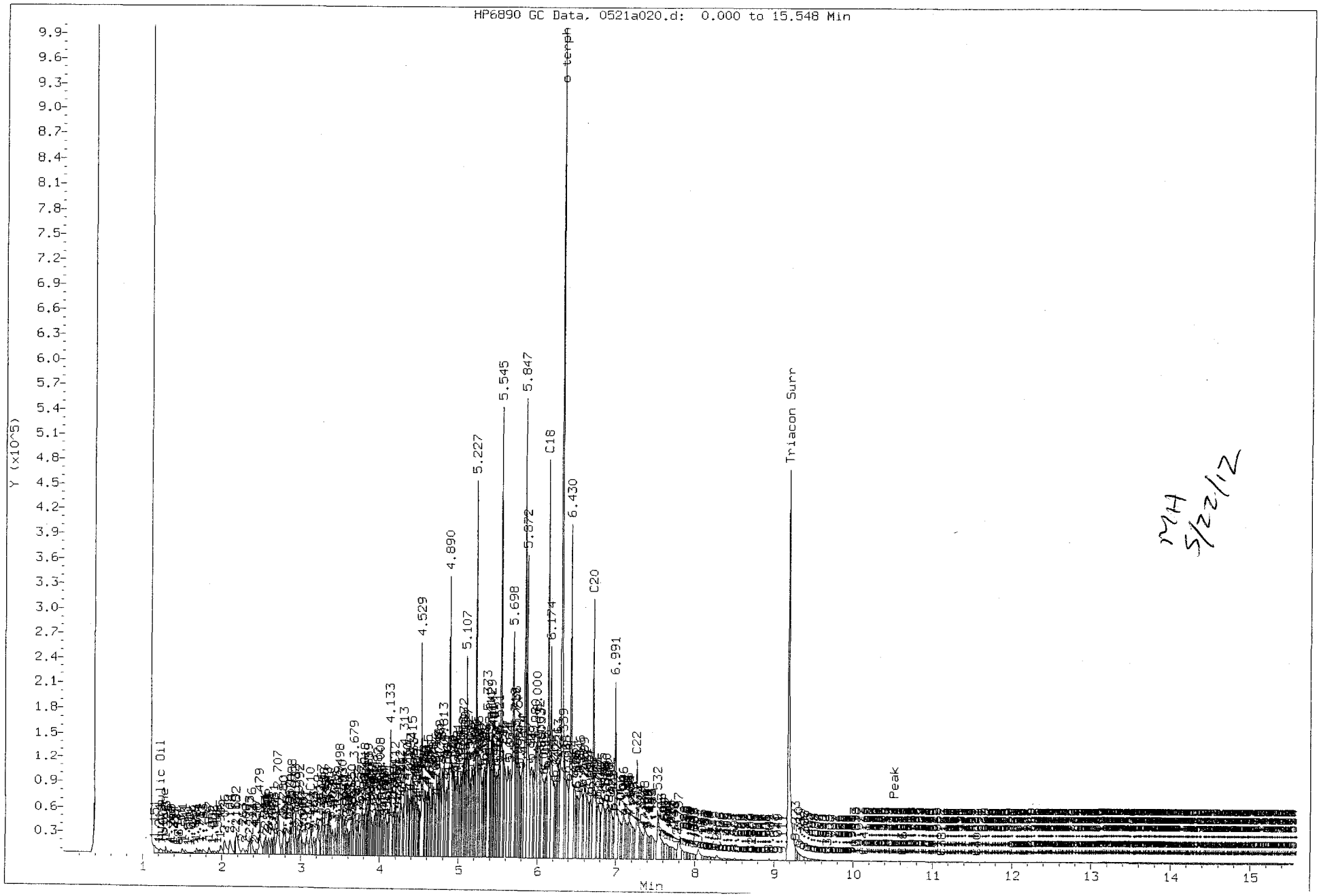
Instrument: fid4a.i

Operator: MH
Column diameter: 0.25

UU68 : 001117



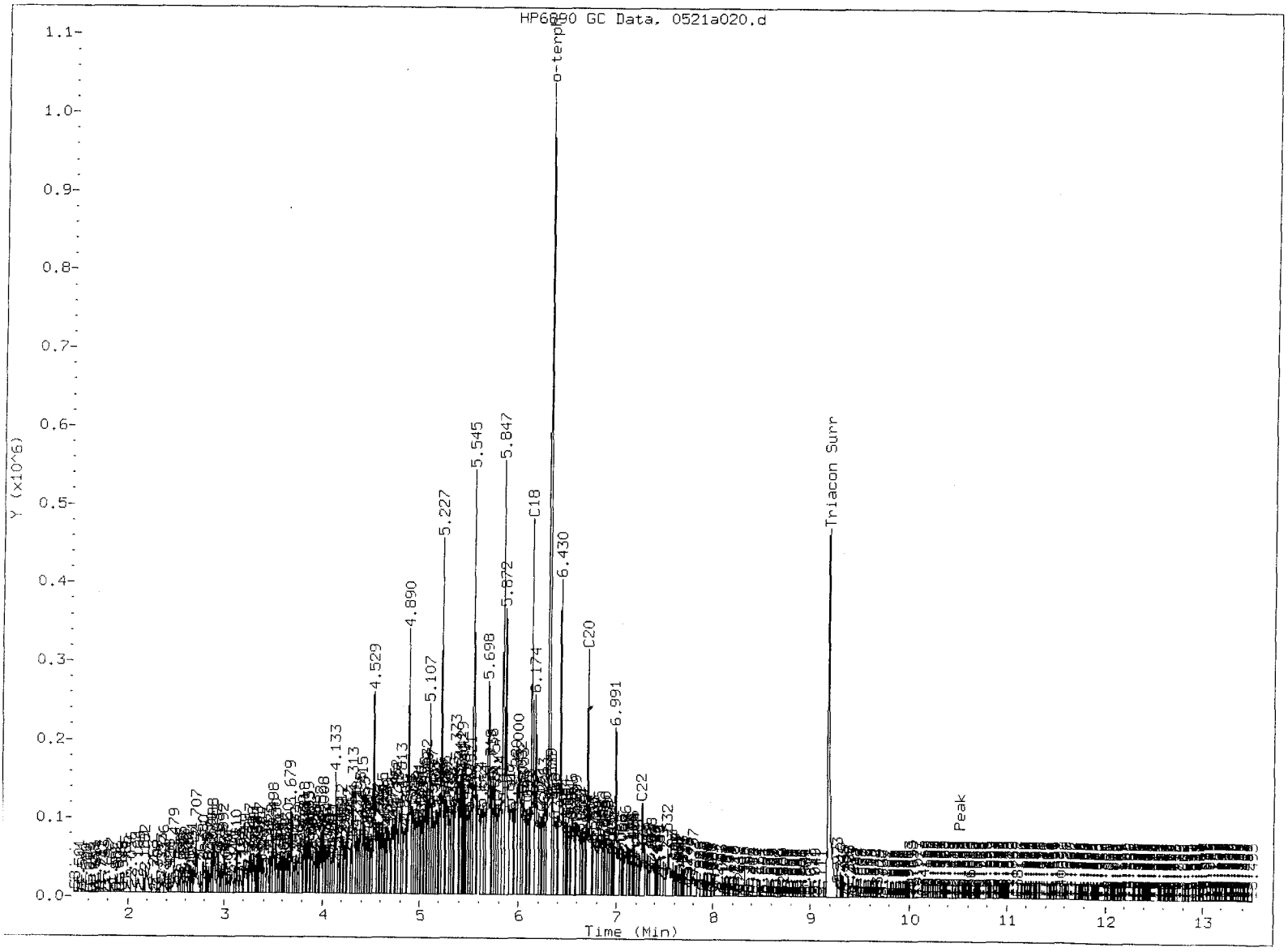
Data File: /chem3/fid4a.i/20120521.b/0521a020.d
Injection Date: 21-MAY-2012 17:26
Instrument: fid4a.i
Client Sample ID: UU68LCSW1



MH 5/22/12

UU68LCSW1 : 0521a020.d

FID:4A-2C/RTX-1 UU68LCSW1 FID:4A SIGNAL



MANUAL INTEGRATION

X 1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/22/12

Data File: /chem3/fid4a.i/20120521.b/0521a021.d

Date : 21-MAY-2012 17:50

Client ID: UU68LCSDW1

Sample Info: UU68LCSDW1

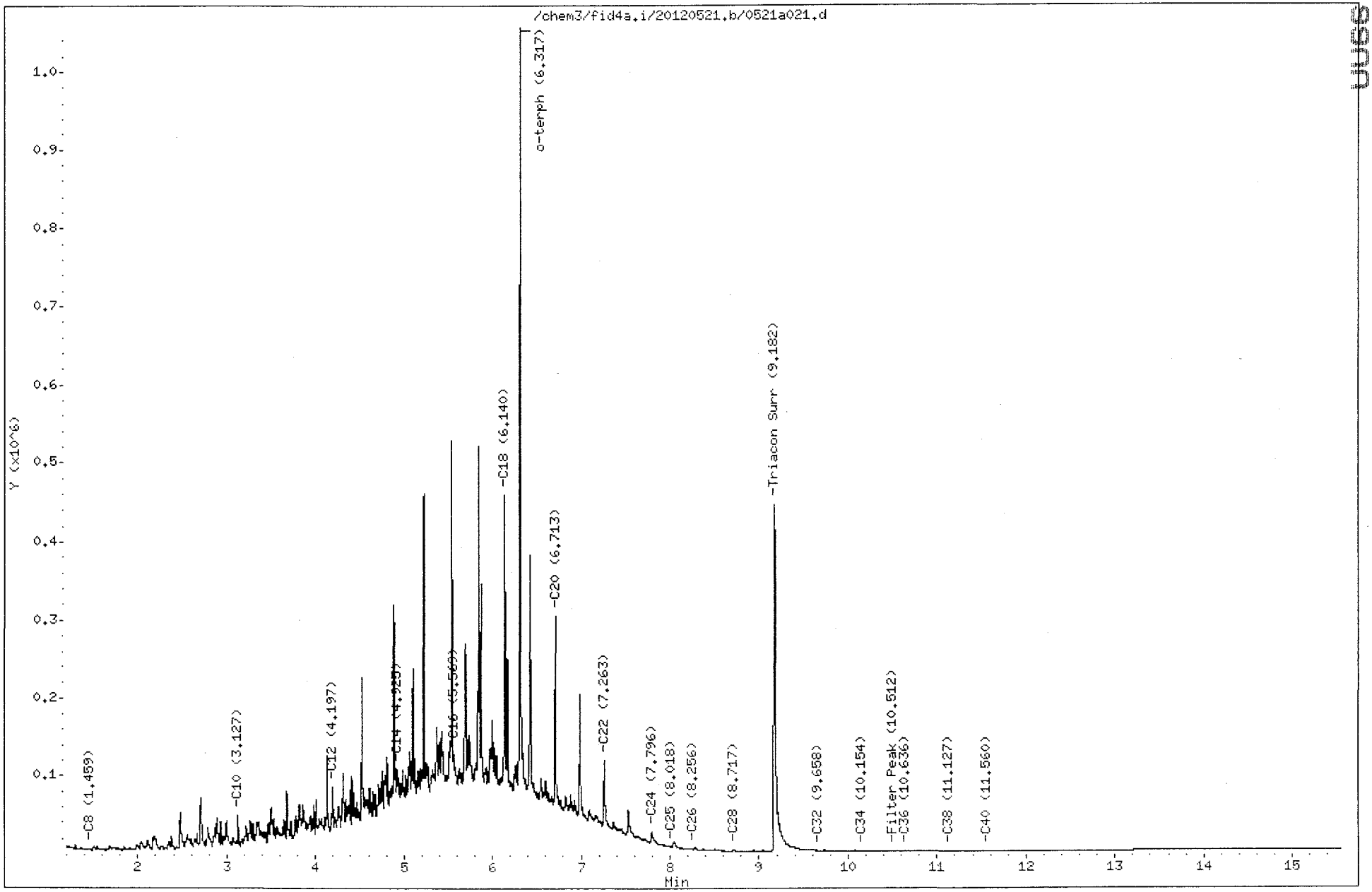
Instrument: fid4a.i

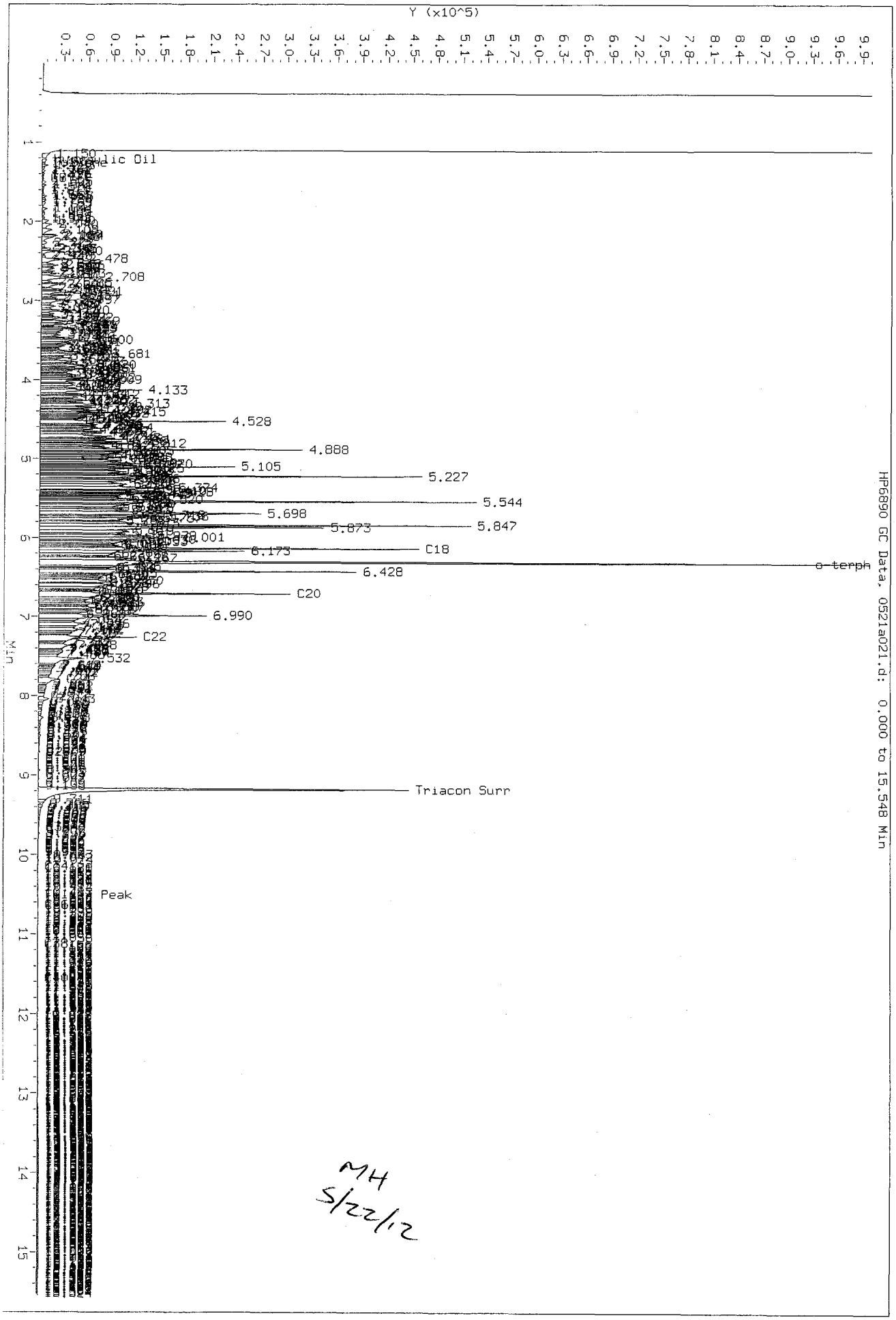
Operator: MH

Column phase: RTX-1

Column diameter: 0.25

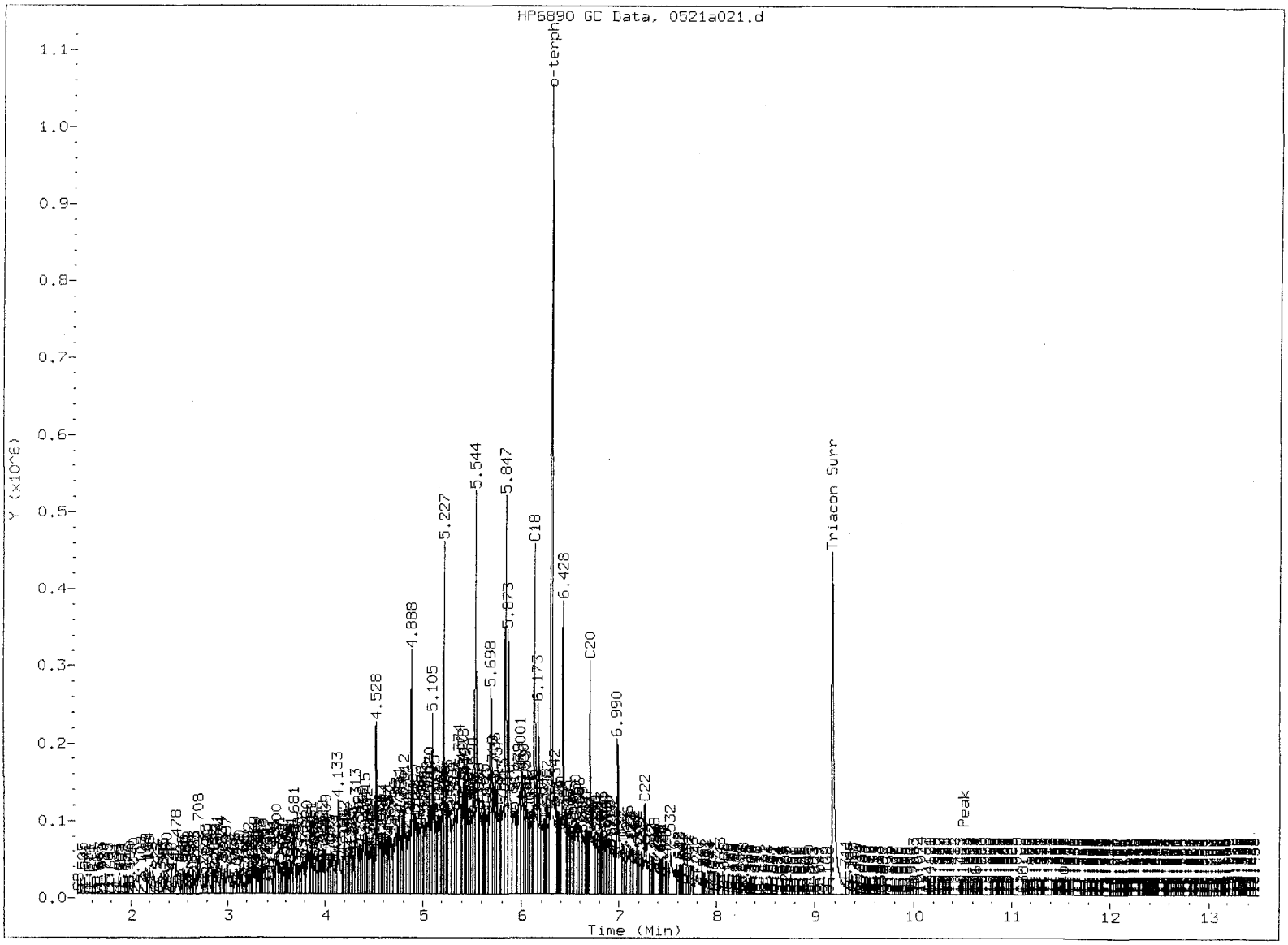
UU68 : 001459




Data File: /chem3/fid4a.i/20120521.b/0521a021.d
Injection Date: 21-MAY-2012 17:50
Instrument: fid4a.i
Client Sample ID: UU68LCSDW1
Y (x10^5)
Hydraulic Oil
4.133
4.528
4.888
5.105
5.227
5.544
5.698
5.847
5.873
6.173
C18
6.428
o-terph
C20
6.990
C22
Triacon Surr
Peak
Min
HP6890 GC Data, 0521a021.d: 0.000 to 15.548 Min

MH
5/22/12

FID:4A-2C/RTX-1 UU68LCSDW1 FID:4A SIGNAL



MANUAL INTEGRATION

X 1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/22/12

Data File: /chem3/fid4a.i/20120521.b/0521a022.d

Date : 21-MAY-2012 18:14

Client ID: MW2-W-9

Sample Info: UU68A

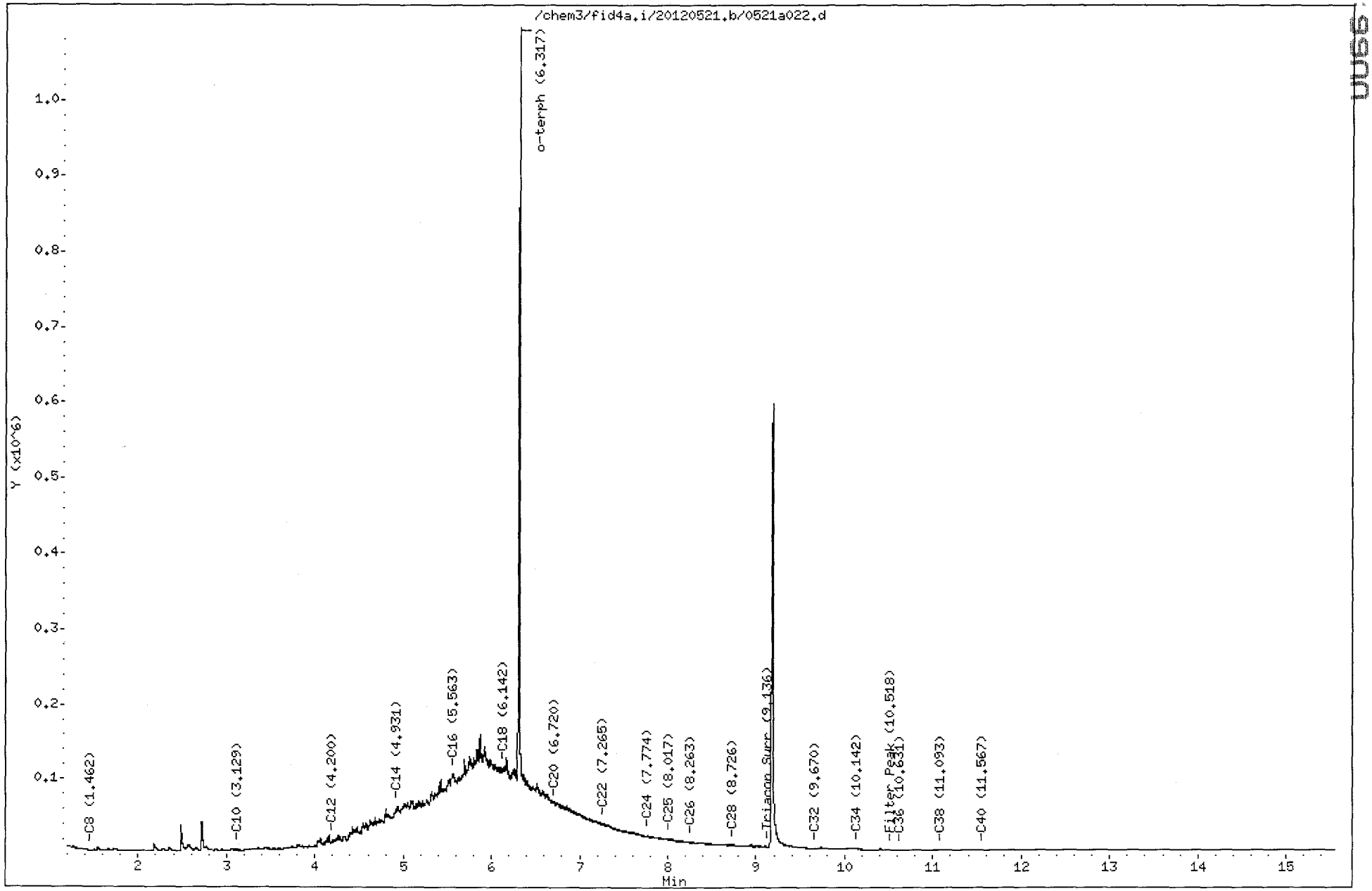
Column phase: RTX-1

Instrument: fid4a.i

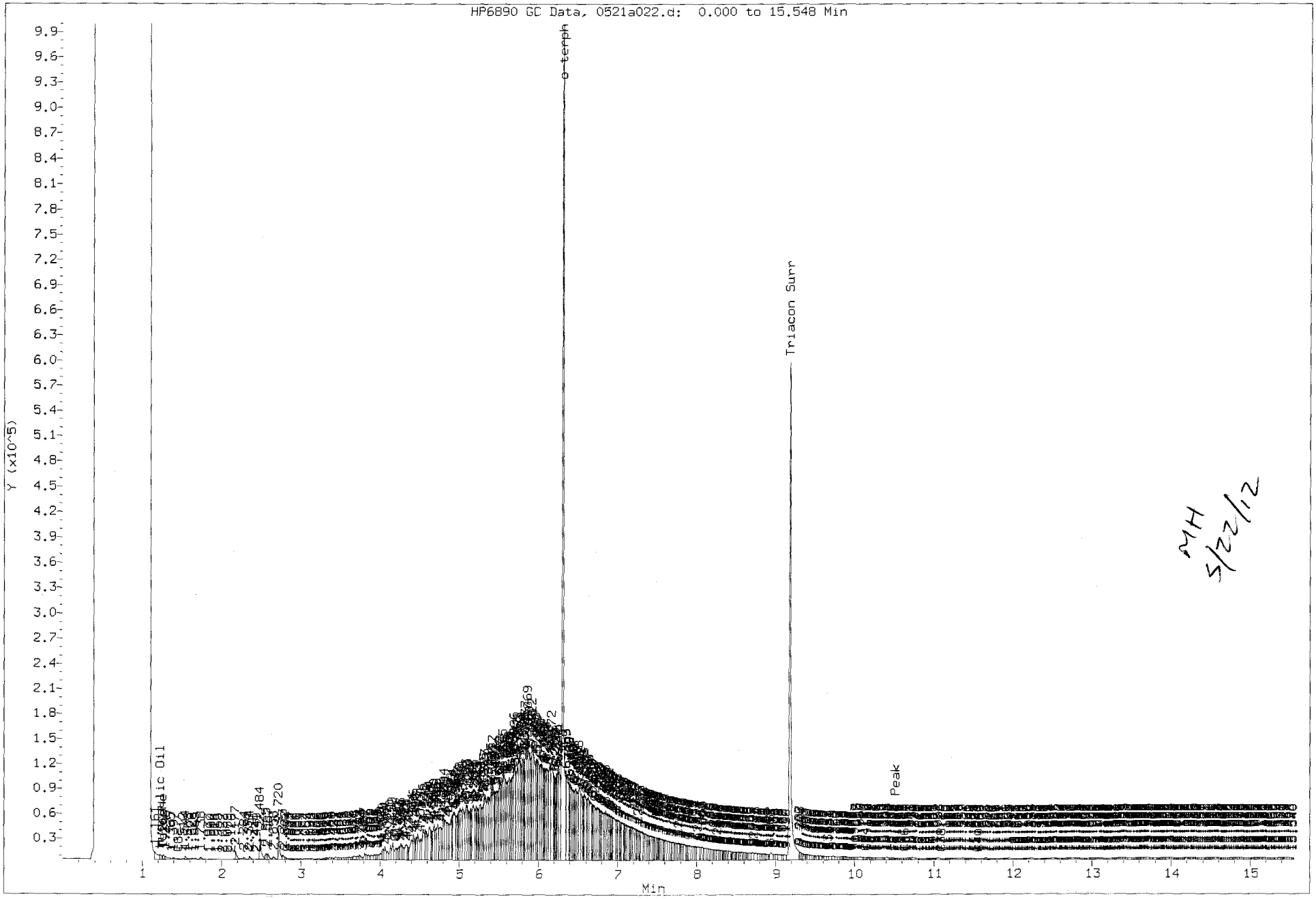
Operator: MH

Column diameter: 0.25

UU68 00153



Data File: /chem3/fid4a.i/20120521.b/0521a022.d
Injection Date: 21-MAY-2012 18:14
Instrument: fid4a.i
Client Sample ID: MW2-W-9

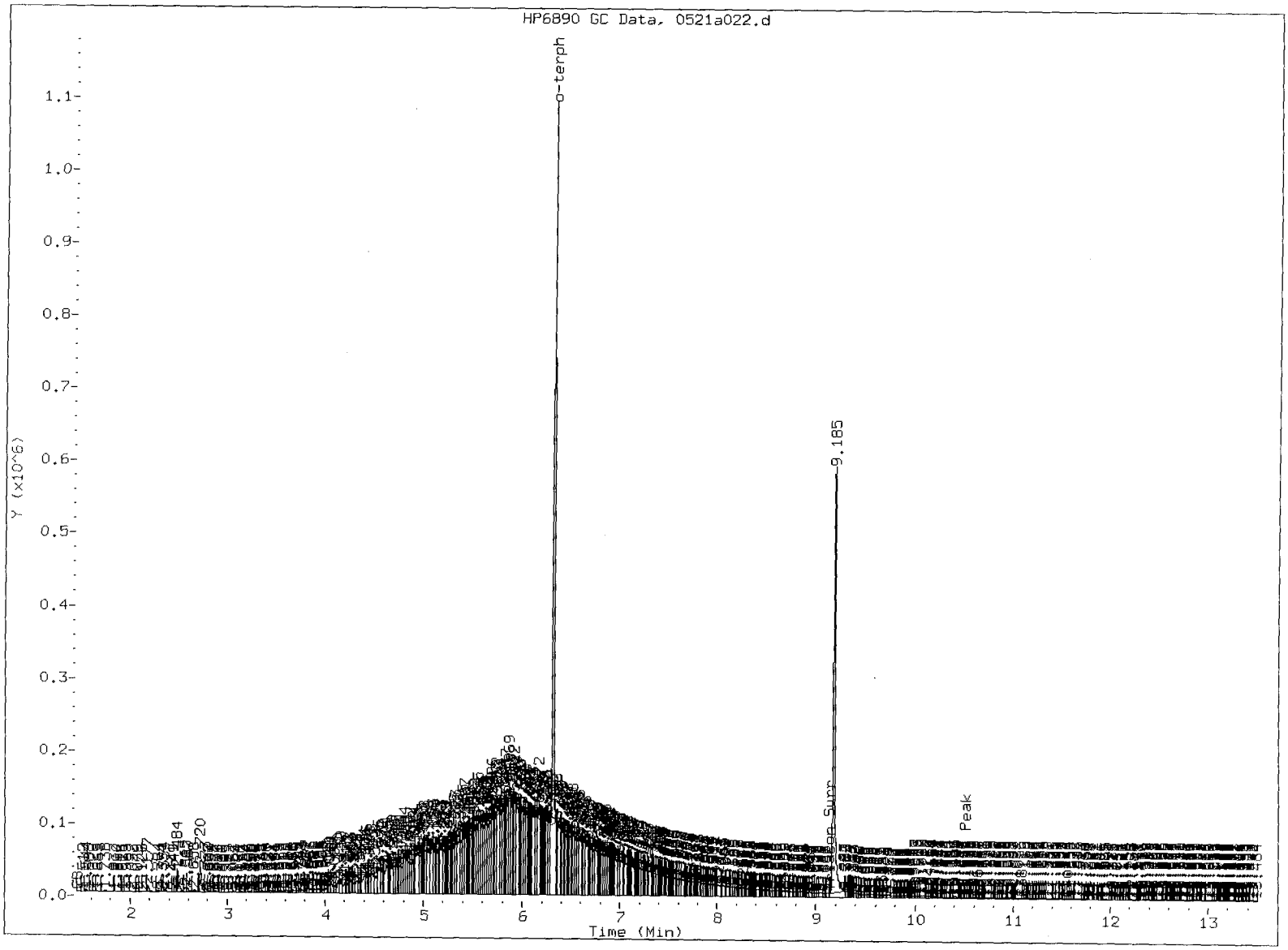


MH 5/22/12

15169 : 09/15

FID:4A-2C/RTX-1 UU68A

FID:4A SIGNAL



MANUAL INTEGRATION

- [x] Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: MH Date: 5/22/12

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: MW2-W-9
SAMPLE

Lab Sample ID: UU68A
LIMS ID: 12-8984
Matrix: Water
Data Release Authorized:
Reported: 06/01/12

QC Report No: UU68-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.01
Date Sampled: 05/16/12
Date Received: 05/17/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	µg/L	Q
200.8	05/21/12	200.8	05/24/12	**7440-38-2**	**Arsenic**	0.2	**2.9**	
200.8	05/21/12	200.8	05/24/12	**7440-39-3**	**Barium**	0.5	**31.0**	
200.8	05/21/12	200.8	05/24/12	7440-43-9	Cadmium	0.1	0.1	U
200.8	05/21/12	200.8	05/31/12	7440-47-3	Chromium	1	1	U
200.8	05/21/12	200.8	05/24/12	7439-92-1	Lead	0.1	0.1	U
7470A	05/18/12	7470A	05/21/12	7439-97-6	Mercury	0.1	0.1	U
200.8	05/21/12	200.8	05/24/12	7782-49-2	Selenium	0.5	0.5	U
200.8	05/21/12	200.8	05/24/12	7440-22-4	Silver	0.2	0.2	U

U-Analyte undetected at given RL
RL-Reporting Limit

Analytical Resources, Incorporated
Analytical Chemists and Consultants

19 October 2012

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: Sims-N Cascade Ford, 0747.01.02
ARI Job No.: VM60

Dear Heather:

Please find enclosed the original chain of custody record and the final results for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted four water samples and one trip blank on October 10, 2012. The samples were analyzed for VOAs, NWTPH-G, PAHs and NWTPH-Dx as requested on 10/15/12. The analysis for dissolved lead was canceled as instructed.

These analyses proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file VM60

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client Maul Foster + Alongi
Project Name SIMS - N Cascade Ford
COC No(s) _____ (NA)
Delivered by Fed-Ex UPS Courier Hand Delivered Other _____
Assigned ARI Job No VM160
Tracking No _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc)	(YES)	NO
Temperature of Cooler(s) (°C) (recommended 2 0-6 0 °C for chemistry)	1.6	
If cooler temperature is out of compliance fill out form 00070F	Temp Gun ID#	90877952

Cooler Accepted by JM (for DM) Date 10/10/12 Time 830

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used?	Bubble Wrap (Wet Ice) Gel Packs Baggies (Foam Block) Paper Other		
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	NA	YES	(NO)
Were all VOC vials free of air bubbles?	NA	(YES)	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI.	NA	10/5/12	

Was Sample Split by ARI : (NA) YES Date/Time _____ Equipment _____ Split by: _____

Samples Logged by JM Date 10/10/12 Time 1045

*** Notify Project Manager of discrepancies or concerns ***

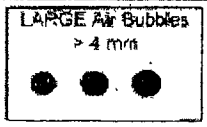
Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date







Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

Subject: RE: Sims bottle request
From: "Heather Hirsch" <hhirsch@maulfoster.com>
Date: 10/15/2012 10:14 AM
To: "Mark Harris" <markh@arilabs.com>

Correct. Thank you.

HEATHER HIRSCH LHG | MAUL FOSTER & ALONGI, INC.
d. 360 594 6257| c. 360 927 1309 | p. 360 594 6262 | f. 360 594 6270

-----Original Message-----
From: Mark Harris [mailto:markh@arilabs.com]
Sent: Monday, October 15, 2012 10:09 AM
To: Heather Hirsch
Subject: Re: Sims bottle request

Just to confirm, we're adding SIM-PAHs and VOCs to MW03 and FD, VOCs to the trip blank and no dissolved lead.

On 10/15/2012 10:09 AM, Heather Hirsch wrote:
Thanks Mark. Please move forward w/ the PAHs and VOCs analyses.

HEATHER HIRSCH LHG | MAUL FOSTER & ALONGI, INC.
d. 360 594 6257| c. 360 927 1309 | p. 360 594 6262 | f. 360 594 6270

-----Original Message-----
From: Mark Harris [mailto:markh@arilabs.com]
Sent: Monday, October 15, 2012 9:12 AM
To: Heather Hirsch
Subject: Re: Sims bottle request

TPH-Dx finals.

On 10/12/2012 9:51 AM, Heather Hirsch wrote:
Yes, I'll be in to review and can get back to you ASAP. If TPH-Dx is detected in either sample, I'll want to run both samples for PAHs and VOCs, and the trip blank for VOCs.

Thanks!

HEATHER HIRSCH LHG | MAUL FOSTER & ALONGI, INC.
d. 360 594 6257| c. 360 927 1309 | p. 360 594 6262 | f. 360 594 6270

-----Original Message-----
From: Mark Harris [mailto:markh@arilabs.com]
Sent: Friday, October 12, 2012 9:21 AM
To: Heather Hirsch
Subject: Re: Sims bottle request

So, our extractions lab has been deluged with samples and rush jobs. I don't think I'll have the TPH-Dx results today but I should definitely have them by Monday. If you're in the office or available to review the data fairly quickly, we'll make sure we get any PAH extractions

done on Monday.

On 10/11/2012 11:03 AM, Heather Hirsch wrote:
Great. thanks, Mark.

HEATHER HIRSCH LHG | MAUL FOSTER & ALONGI, INC.
d. 360 594 6257| c. 360 927 1309 | p. 360 594 6262 | f. 360 594 6270

-----Original Message-----
From: Mark Harris [mailto:markh@arilabs.com]
Sent: Thursday, October 11, 2012 11:00 AM
To: Heather Hirsch
Subject: Re: Sims bottle request

The TPH-D's will finish extracting today and hopefully get put on an instrument this evening. I'll track those results down tomorrow and we'll continue to hold the extraction of the PAHs.

On 10/11/2012 10:33 AM, Heather Hirsch wrote:
Based on the TPH-G results, we will not need to analyze for lead. I'd still like to hold the PAHs and VOCs pending the Dx results for those two samples (MW03-GW-121009 and FD-GW-121009). Thanks!

HEATHER HIRSCH LHG | MAUL FOSTER & ALONGI, INC.
d. 360 594 6257| c. 360 927 1309 | p. 360 594 6262 | f. 360 594 6270

-----Original Message-----
From: Mark Harris [mailto:markh@arilabs.com]
Sent: Thursday, October 11, 2012 10:17 AM
To: Heather Hirsch
Subject: Re: Sims bottle request

TPH-G final are attached.

We're holding the PAHs in case we need to batch...

On 10/10/2012 9:26 AM, Heather Hirsch wrote:
Excellent! Thanks, Mark.

HEATHER HIRSCH LHG | MAUL FOSTER & ALONGI, INC.
d. 360 594 6257| c. 360 927 1309 | p. 360 594 6262 | f. 360 594 6270

-----Original Message-----
From: Mark Harris [mailto:markh@arilabs.com]
Sent: Wednesday, October 10, 2012 9:17 AM
To: Heather Hirsch
Subject: Re: Sims bottle request

We should be able to get you the TPH-G within a day or two. The VOA

holding time for preserved samples is 14 days. The shortest we'd be

dealing with is 7 days (PAHs). We'll make sure you have data in plenty of time to make further decisions.

On 10/10/2012 8:48 AM, Heather Hirsch wrote:
one more thing...I'm holding the PAHs, VOAs, and lead analyses pending Gx results. Would it be possible to review prelims to decide whether to run the hold analyses? I'm worried about coming up on the hold time for the VOAs...

Alternatively, could we run a 24 or 48-turn on Gx for one sample, whichever would be needed to allow enough time to review data and still meet the holding time for the VOAs on a standard TAT?

The linchpin sample is MW03-GW-121009.

HEATHER HIRSCH LHG | MAUL FOSTER & ALONGI, INC.
d. 360 594 6257| c. 360 927 1309 | p. 360 594 6262 | f. 360 594 6270

-----Original Message-----
From: Mark Harris [mailto:markh@arilabs.com]
Sent: Wednesday, October 10, 2012 8:17 AM
To: Heather Hirsch
Subject: Re: Sims bottle request

No problem. It didn't occur to me either. And I've had 3-4 cups already.
On 10/10/2012 8:17 AM, Heather Hirsch wrote:
Never mind. I haven't had my coffee yet. I'll just revise the COC

before it gets picked up. Duh.

HEATHER HIRSCH LHG | MAUL FOSTER & ALONGI, INC.
d. 360 594 6257| c. 360 927 1309 | p. 360 594 6262 | f. 360 594 6270

-----Original Message-----
From: Heather Hirsch
Sent: Wednesday, October 10, 2012 8:16 AM
To: 'Mark Harris'
Subject: RE: Sims bottle request

With respect to the date mix-up, would it be possible to change all the sample id's from XXXX-GW-121010 to XXXX-GW-121009? Sorry, I know this is a pain. I'm hoping we can make this change so they don't get mixed up in our database.

HEATHER HIRSCH LHG | MAUL FOSTER & ALONGI, INC.
d. 360 594 6257| c. 360 927 1309 | p. 360 594 6262 | f. 360 594 6270

-----Original Message-----
From: Mark Harris [mailto:markh@arilabs.com]
Sent: Wednesday, October 10, 2012 7:34 AM
To: Heather Hirsch
Subject: Re: Sims bottle request

Heather:

No problem. Don Moran should be there shortly after 8:30 this morning.

Mark H.

On 10/9/2012 8:21 AM, Heather Hirsch wrote:
Hi Mark,

I just wanted to confirm courier pickup for tomorrow, Wednesday, October 10 from our Bellingham office. There will be 2 coolers. The office will be open by 8:30am.

Thanks!

HEATHER HIRSCH LHG | MAUL FOSTER & ALONGI, INC.
d. 360 594 6257| c. 360 927 1309 | p. 360 594 6262 | f. 360 594 6270

-----Original Message-----
From: Mark Harris [mailto:markh@arilabs.com]
Sent: Wednesday, October 03, 2012 2:46 PM
To: Heather Hirsch
Subject: Re: Sims bottle request

Heather:

These will be delivered to your office by 10/08. We'll tentatively arrange a courier for next Wednesday but we can confirm next week.

mark H.

On 10/3/2012 2:34 PM, Heather Hirsch wrote:
Hi Mark,

I'm going to be doing some additional work on the Sims- N. Cascade Ford project (new project no. 0747.01.02). I'd like some containers delivered to me in Bellingham and to coordinate courier pickup of the samples.

Can you get containers to me by next Monday, Oct. 8? Tentatively, I'd need courier pickup on Wed., Oct. 10; one day only.

I'll need a cooler, some loose labels, COCs, and 1 trip blank.

These will be water samples only. Please send containers for the following # samples/analyses (number of samples includes one extra for potential breakage):

* 5 NWTPH-Dx
* 3 NWTPH-Gx
* 4 PAHs (8270-SIM)
* 3 VOCs (8260)
* 3 Lead (6010)

Same reporting limits as last time.

I'm going to be doing some additional sampling in early November as well, which will include soil and groundwater. Just a heads up that I'll be contacting you for that in the next week or two.

Please, let me know if you have any questions. Thanks!

HEATHER HIRSCH LHG | MAUL FOSTER & ALONGI, INC.

d. 360 594 6257| c. 360 927 1309 | p. 360 594 6262 | f. 360 594 6270

|www.maulfoster.com <http://www.maulfoster.com/>

1329 North State Street, Suite 301, Bellingham, WA 98225

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Mark Harris
Project Manager
Analytical Resources, Inc.
206/695-6210

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Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: VM60
Client: Maul Foster & Alongi
Project Event: 0747.01.02
Project Name: SIMS - N Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	MW01-GW-121009	VM60A	12-19583	Water	10/09/12 14:15	10/10/12 08:30
2.	MW02-GW-121009	VM60B	12-19584	Water	10/09/12 10:55	10/10/12 08:30
3.	MW03-GW-121009	VM60C	12-19585	Water	10/09/12 12:05	10/10/12 08:30
4.	FD-GW-121009	VM60D	12-19586	Water	10/09/12 12:15	10/10/12 08:30
5.	TRIP BLANK	VM60E	12-19587	Water	10/09/12	10/10/12 08:30

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U — Indicates that the target analyte was not detected at the reported concentration

* — Duplicate RPD is not within established control limits

B — Reported value is less than the CRDL but ≥ the Reporting Limit

N — Matrix Spike recovery not within established control limits

NA — Not Applicable, analyte not spiked

H — The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible

L — Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U — Indicates that the target analyte was not detected at the reported concentration

* — Flagged value is not within established control limits

B — Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.

J — Estimated concentration when the value is less than ARI's established reporting limits

D — The spiked compound was not detected due to sample extract dilution

E — Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Q — Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

VM60 : 00011

S	Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte
NA	The flagged analyte was not analyzed for
NR	Spiked compound recovery is not reported due to chromatographic interference
NS	The flagged analyte was not spiked into the sample
M	Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses
M2	The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"
Y	The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.
EMPC	Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**
C	The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column
P	The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference
X	Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**
Z	Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

VM60 · 00012

Geotechnical Data

A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F Samples were frozen prior to particle size determination

SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots was below the level required for accurate weighting

VMEG 00013

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: FD-GW-121009**
Page 1 of 2 **SAMPLE**

Lab Sample ID: VM60D
LIMS ID: 12-19586
Matrix: Water
Data Release Authorized:
Reported: 10/19/12

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.02
Date Sampled: 10/09/12
Date Received: 10/10/12

Instrument/Analyst: NT2/PAB
Date Analyzed: 10/16/12 12:05

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	**Benzene**	**0.20**	**0.20**	
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	**Chlorobenzene**	**0.20**	**0.10**	**J**
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: VM60D
LIMS ID: 12-19586
Matrix: Water
Date Analyzed: 10/16/12 12:05

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.02

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	Ethylene Dibromide	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	**Isopropylbenzene**	**0.20**	**0.28**	
103-65-1	**n-Propylbenzene**	**0.20**	**0.21**	
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	**2-Chlorotoluene**	**0.20**	**0.14**	**J**
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	**4-Isopropyltoluene**	**0.20**	**0.13**	**J**
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	98.8%
Bromofluorobenzene	101%
d4-1,2-Dichlorobenzene	104%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW03-GW-121009**
Page 1 of 2 **SAMPLE**

Lab Sample ID: VM60C
LIMS ID: 12-19585
Matrix: Water
Data Release Authorized:
Reported: 10/19/12

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.02
Date Sampled: 10/09/12
Date Received: 10/10/12

Instrument/Analyst: NT2/PAB
Date Analyzed: 10/16/12 11:39

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	**Benzene**	**0.20**	**0.19**	**J**
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	**Chlorobenzene**	**0.20**	**0.10**	**J**
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW03-GW-121009**
 SAMPLE

Lab Sample ID: VM60C
LIMS ID: 12-19585
Matrix: Water
Date Analyzed: 10/16/12 11:39

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.02

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	**1,2,4-Trimethylbenzene**	**0.20**	**0.11**	**J**
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	Ethylene Dibromide	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	**Isopropylbenzene**	**0.20**	**0.31**	
103-65-1	**n-Propylbenzene**	**0.20**	**0.24**	
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	**2-Chlorotoluene**	**0.20**	**0.13**	**J**
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	**4-Isopropyltoluene**	**0.20**	**0.13**	**J**
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	101%
Bromofluorobenzene	98.9%
d4-1,2-Dichlorobenzene	104%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: TRIP BLANK SAMPLE**

Lab Sample ID: VM60E
LIMS ID: 12-19587
Matrix: Water
Data Release Authorized:
Reported: 10/19/12

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.02
Date Sampled: 10/09/12
Date Received: 10/10/12

Instrument/Analyst: NT2/PAB
Date Analyzed: 10/16/12 12:32

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: TRIP BLANK SAMPLE**

Lab Sample ID: VM60E
LIMS ID: 12-19587
Matrix: Water
Date Analyzed: 10/16/12 12:32

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.02

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	Ethylene Dibromide	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	99.7%
Bromofluorobenzene	99.5%
d4-1,2-Dichlorobenzene	102%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-101612A**
 METHOD BLANK

Lab Sample ID: MB-101612A
LIMS ID: 12-19585
Matrix: Water
Data Release Authorized:
Reported: 10/19/12

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford 0747.01.02
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PAB
Date Analyzed: 10/16/12 08:49

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-101612A**
 METHOD BLANK

Lab Sample ID: MB-101612A QC Report No: VM60-Maul Foster & Alongi
LIMS ID: 12-19585 Project: SIMS - N Cascade Ford
Matrix: Water 0747.01.02
Date Analyzed: 10/16/12 08:49

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Methyl Iodide	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	**Hexachlorobutadiene**	**0.50**	**0.23**	**J**
106-93-4	Ethylene Dibromide	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	109%
d8-Toluene	102%
Bromofluorobenzene	99.4%
d4-1,2-Dichlorobenzene	103%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-101612A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-101612A
LIMS ID: 12-19585
Matrix: Water
Data Release Authorized:
Reported: 10/19/12

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PAB
LCSD: NT2/PAB
Date Analyzed LCS: 10/16/12 07:29
LCSD: 10/16/12 07:55

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	11.0	10.0	110%	11.4	10.0	114%	3.6%
Bromomethane	11.5	10.0	115%	10.9	10.0	109%	5.4%
Vinyl Chloride	11.2	10.0	112%	11.4	10.0	114%	1.8%
Chloroethane	11.1	10.0	111%	11.1	10.0	111%	0.0%
Methylene Chloride	9.99	10.0	99.9%	10.3	10.0	103%	3.1%
Acetone	48.5	50.0	97.0%	52.0	50.0	104%	7.0%
Carbon Disulfide	11.3	10.0	113%	11.5	10.0	115%	1.8%
1,1-Dichloroethene	10.5	10.0	105%	11.1	10.0	111%	5.6%
1,1-Dichloroethane	10.8	10.0	108%	11.2	10.0	112%	3.6%
trans-1,2-Dichloroethene	10.6	10.0	106%	11.0	10.0	110%	3.7%
cis-1,2-Dichloroethene	10.4	10.0	104%	10.9	10.0	109%	4.7%
Chloroform	10.5	10.0	105%	10.9	10.0	109%	3.7%
1,2-Dichloroethane	9.96	10.0	99.6%	10.4	10.0	104%	4.3%
2-Butanone	48.9	50.0	97.8%	53.5	50.0	107%	9.0%
1,1,1-Trichloroethane	11.2	10.0	112%	11.3	10.0	113%	0.9%
Carbon Tetrachloride	11.2	10.0	112%	11.3	10.0	113%	0.9%
Vinyl Acetate	9.62	10.0	96.2%	10.6	10.0	106%	9.7%
Bromodichloromethane	9.92	10.0	99.2%	10.5	10.0	105%	5.7%
1,2-Dichloropropane	10.1	10.0	101%	10.6	10.0	106%	4.8%
cis-1,3-Dichloropropene	9.79	10.0	97.9%	10.7	10.0	107%	8.9%
Trichloroethene	9.96	10.0	99.6%	10.5	10.0	105%	5.3%
Dibromochloromethane	9.56	10.0	95.6%	10.2	10.0	102%	6.5%
1,1,2-Trichloroethane	9.93	10.0	99.3%	10.7	10.0	107%	7.5%
Benzene	10.2	10.0	102%	10.7	10.0	107%	4.8%
trans-1,3-Dichloropropene	10.1	10.0	101%	11.0	10.0	110%	8.5%
2-Chloroethylvinylether	8.35	10.0	83.5%	9.37	10.0	93.7%	11.5%
Bromoform	8.46	10.0	84.6%	9.00	10.0	90.0%	6.2%
4-Methyl-2-Pentanone (MIBK)	53.6	50.0	107%	56.8	50.0	114%	5.8%
2-Hexanone	49.3	50.0	98.6%	53.8	50.0	108%	8.7%
Tetrachloroethene	9.30	10.0	93.0%	9.93	10.0	99.3%	6.6%
1,1,2,2-Tetrachloroethane	8.97	10.0	89.7%	9.54	10.0	95.4%	6.2%
Toluene	9.87	10.0	98.7%	10.6	10.0	106%	7.1%
Chlorobenzene	9.35	10.0	93.5%	9.86	10.0	98.6%	5.3%
Ethylbenzene	9.76	10.0	97.6%	10.1	10.0	101%	3.4%
Styrene	10.0	10.0	100%	10.6	10.0	106%	5.8%
Trichlorofluoromethane	11.7	10.0	117%	11.8	10.0	118%	0.9%
1,1,2-Trichloro-1,2,2-trifluoroetha	11.3	10.0	113%	11.5	10.0	115%	1.8%
m,p-Xylene	19.7	20.0	98.5%	20.7	20.0	104%	5.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-101612A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-101612A QC Report No: VM60-Maul Foster & Alongi
LIMS ID: 12-19585 Project: SIMS - N Cascade Ford
Matrix: Water 0747.01.02

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	9.76	10.0	97.6%	10.4	10.0	104%	6.3%
1,2-Dichlorobenzene	8.86	10.0	88.6%	9.53	10.0	95.3%	7.3%
1,3-Dichlorobenzene	8.86	10.0	88.6%	9.59	10.0	95.9%	7.9%
1,4-Dichlorobenzene	8.85	10.0	88.5%	9.51	10.0	95.1%	7.2%
Acrolein	73.8 Q	50.0	148%	78.4 Q	50.0	157%	6.0%
Methyl Iodide	11.1	10.0	111%	11.4	10.0	114%	2.7%
Bromoethane	11.2	10.0	112%	11.4	10.0	114%	1.8%
Acrylonitrile	11.0	10.0	110%	11.4	10.0	114%	3.6%
1,1-Dichloropropene	10.2	10.0	102%	10.6	10.0	106%	3.8%
Dibromomethane	9.98	10.0	99.8%	10.6	10.0	106%	6.0%
1,1,1,2-Tetrachloroethane	10.3	10.0	103%	10.6	10.0	106%	2.9%
1,2-Dibromo-3-chloropropane	9.12	10.0	91.2%	9.39	10.0	93.9%	2.9%
1,2,3-Trichloropropane	9.65	10.0	96.5%	10.1	10.0	101%	4.6%
trans-1,4-Dichloro-2-butene	10.6	10.0	106%	11.3	10.0	113%	6.4%
1,3,5-Trimethylbenzene	9.22	10.0	92.2%	10.1	10.0	101%	9.1%
1,2,4-Trimethylbenzene	9.12	10.0	91.2%	9.95	10.0	99.5%	8.7%
Hexachlorobutadiene	8.33 B	10.0	83.3%	8.88 B	10.0	88.8%	6.4%
Ethylene Dibromide	9.59	10.0	95.9%	10.5	10.0	105%	9.1%
Bromochloromethane	10.5	10.0	105%	11.0	10.0	110%	4.7%
2,2-Dichloropropane	13.2 Q	10.0	132%	12.6 Q	10.0	126%	4.7%
1,3-Dichloropropane	9.08	10.0	90.8%	9.80	10.0	98.0%	7.6%
Isopropylbenzene	9.16	10.0	91.6%	9.87	10.0	98.7%	7.5%
n-Propylbenzene	9.19	10.0	91.9%	9.92	10.0	99.2%	7.6%
Bromobenzene	8.91	10.0	89.1%	9.34	10.0	93.4%	4.7%
2-Chlorotoluene	8.96	10.0	89.6%	9.71	10.0	97.1%	8.0%
4-Chlorotoluene	8.97	10.0	89.7%	9.58	10.0	95.8%	6.6%
tert-Butylbenzene	8.95	10.0	89.5%	9.91	10.0	99.1%	10.2%
sec-Butylbenzene	8.94	10.0	89.4%	9.96	10.0	99.6%	10.8%
4-Isopropyltoluene	8.99	10.0	89.9%	10.0	10.0	100%	10.6%
n-Butylbenzene	8.70	10.0	87.0%	9.56	10.0	95.6%	9.4%
1,2,4-Trichlorobenzene	8.66	10.0	86.6%	9.38	10.0	93.8%	8.0%
Naphthalene	8.22	10.0	82.2%	8.98	10.0	89.8%	8.8%
1,2,3-Trichlorobenzene	8.38	10.0	83.8%	9.21	10.0	92.1%	9.4%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	102%	103%
d8-Toluene	104%	104%
Bromofluorobenzene	102%	100%
d4-1,2-Dichlorobenzene	101%	101%

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i Injection Date: 16-OCT-2012 07:02
Lab File ID: cc10161.d Init. Cal. Date(s): 01-OCT-2012 01-OCT-2012
Analysis Type: WATER Init. Cal. Times: 12:03 15:10
Lab Sample ID: CC1016 Quant Type: ISTD
Method: /chem3/nt2.i/20121016.b/82600913L.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 Dichlorodifluoromethane	0.45120	0.47858	0.47858	0.010	6.06768	20.00000	Averaged	
2 Chloromethane	0.60821	0.65205	0.65205	0.100	7.20799	20.00000	Averaged	
3 Vinyl Chloride	0.63176	0.68348	0.68348	0.100	8.18631	20.00000	Averaged	
4 Bromomethane	0.31194	0.34255	0.34255	0.100	9.81122	20.00000	Averaged	
5 Chloroethane	0.38854	0.42194	0.42194	0.010	8.59615	20.00000	Averaged	
6 Trichlorofluoromethane	0.64089	0.73388	0.73388	0.010	14.50928	20.00000	Averaged	
7 1,1-Dichloroethene	0.54231	0.57323	0.57323	0.100	5.70193	20.00000	Averaged	
8 Carbon Disulfide	1.75039	1.93875	1.93875	0.010	10.76117	20.00000	Averaged	
9 112Trichloro122Trifluoroeth	0.49918	0.55097	0.55097	0.010	10.37395	20.00000	Averaged	
10 Iodomethane	0.83340	0.90962	0.90962	0.010	9.14565	20.00000	Averaged	
11 Bromoethane	0.39760	0.43395	0.43395	0.100	9.14271	20.00000	Averaged	
12 Acrolein	0.03338	0.04599	0.04599	0.000	37.78293	20.00000	Averaged	<-
13 Methylene Chloride	0.62200	0.60915	0.60915	0.010	-2.06534	20.00000	Averaged	
14 Acetone	0.10719	0.09742	0.09742	0.001	-9.11724	20.00000	Averaged	
15 Trans-1,2-Dichloroethene	0.58166	0.60633	0.60633	0.010	4.24180	20.00000	Averaged	
17 Methyl tert butyl ether	1.42639	1.48163	1.48163	0.100	3.87253	20.00000	Averaged	
18 1,1-Dichloroethane	1.00921	1.07408	1.07408	0.200	6.42816	20.00000	Averaged	
19 Acrylonitrile	0.13021	0.14092	0.14092	0.001	8.22259	20.00000	Averaged	
20 Vinyl Acetate	0.56671	0.53820	0.53820	0.010	-5.02997	20.00000	Averaged	
22 Cis-1,2-Dichloroethene	0.59360	0.61897	0.61897	0.010	4.27498	20.00000	Averaged	
23 2,2-Dichloropropane	0.48869	0.59901	0.59901	0.010	22.57525	20.00000	Averaged	<-
24 Bromochloromethane	0.25717	0.26737	0.26737	0.050	3.96472	20.00000	Averaged	
25 Chloroform	0.94702	0.99291	0.99291	0.200	4.84541	20.00000	Averaged	
26 Carbon Tetrachloride	0.43229	0.48181	0.48181	0.100	11.45547	20.00000	Averaged	
$ 27 Dibromofluoromethane	0.46887	0.50398	0.50398	0.100	7.48733	20.00000	Averaged	
28 1,1,1-Trichloroethane	0.78272	0.84950	0.84950	0.100	8.53183	20.00000	Averaged	
29 2-Butanone	0.15539	0.15072	0.15072	0.001	-3.00966	20.00000	Averaged	
30 1,1-Dichloropropene	0.50998	0.52290	0.52290	0.010	2.53351	20.00000	Averaged	
31 Benzene	1.44549	1.46329	1.46329	0.500	1.23151	20.00000	Averaged	
$ 33 d4-1,2-Dichloroethane	0.50316	0.50062	0.50062	0.010	-0.50516	20.00000	Averaged	
34 1,2-Dichloroethane	0.40568	0.40309	0.40309	0.100	-0.63888	20.00000	Averaged	
36 Trichloroethene	0.37199	0.37028	0.37028	0.100	-0.45992	20.00000	Averaged	
38 Dibromomethane	0.15810	0.15839	0.15839	0.010	0.18306	20.00000	Averaged	
39 1,2-Dichloropropane	0.32001	0.32827	0.32827	0.100	2.58047	20.00000	Averaged	
40 Bromodichloromethane	0.40847	0.40668	0.40668	0.100	-0.43942	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i Injection Date: 16-OCT-2012 07:02
Lab File ID: cc10161.d Init. Cal. Date(s): 01-OCT-2012 01-OCT-2012
Analysis Type: WATER Init. Cal. Times: 12:03 15:10
Lab Sample ID: CC1016 Quant Type: ISTD
Method: /chem3/nt2.i/20121016.b/82600913L.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
41 2-Chloroethyl Vinyl Ether	0.12889	0.10486	0.10486	0.000	-18.64150	20.00000	Averaged
42 Cis 1,3-dichloropropene	0.44787	0.43715	0.43715	0.200	-2.39481	20.00000	Averaged
$ 43 d8-Toluene	1.12893	1.16960	1.16960	0.010	3.60291	20.00000	Averaged
44 Toluene	0.80987	0.80380	0.80380	0.400	-0.74969	20.00000	Averaged
45 4-Methyl-2-Pentanone	0.08655	0.09071	0.09071	0.000	4.80513	20.00000	Averaged
46 Tetrachloroethene	0.41022	0.39741	0.39741	0.200	-3.12232	20.00000	Averaged
47 Trans 1,3-Dichloropropene	0.36248	0.37079	0.37079	0.010	2.29191	20.00000	Averaged
48 1,1,2-Trichloroethane	0.20813	0.20319	0.20319	0.100	-2.37470	20.00000	Averaged
49 Chlorodibromomethane	0.28222	0.27298	0.27298	0.100	-3.27623	20.00000	Averaged
50 1,3-Dichloropropane	0.43654	0.39837	0.39837	0.100	-8.74266	20.00000	Averaged
51 1,2-Dibromoethane	0.20804	0.20134	0.20134	0.010	-3.22224	20.00000	Averaged
52 2-Hexanone	0.15232	0.15143	0.15143	0.010	-0.58659	20.00000	Averaged
54 Chlorobenzene	0.97485	0.91234	0.91234	0.500	-6.41195	20.00000	Averaged
55 Ethyl Benzene	0.55911	0.54195	0.54195	0.100	-3.06814	20.00000	Averaged
56 1,1,1,2-Tetrachloroethane	0.35343	0.35552	0.35552	0.010	0.59354	20.00000	Averaged
57 m,p-xylene	0.67702	0.67084	0.67084	0.300	-0.91413	20.00000	Averaged
58 o-Xylene	0.68709	0.67186	0.67186	0.300	-2.21588	20.00000	Averaged
59 Styrene	1.02674	1.03115	1.03115	0.300	0.42900	20.00000	Averaged
60 Bromoform	8.40465	10.00000	0.27004	0.010	-15.95349	20.00000	Linear
61 Isopropyl Benzene	3.09979	2.84209	2.84209	0.010	-8.31338	20.00000	Averaged
$ 62 4-Bromofluorobenzene	0.51281	0.51225	0.51225	0.200	-0.10765	20.00000	Averaged
63 Bromobenzene	0.75289	0.66352	0.66352	0.010	-11.86975	20.00000	Averaged
64 N-Propyl Benzene	3.32613	3.06444	3.06444	0.010	-7.86760	20.00000	Averaged
65 1,1,2,2-Tetrachloroethane	0.54712	0.49341	0.49341	0.100	-9.81651	20.00000	Averaged
66 2-Chloro Toluene	2.37689	2.15767	2.15767	0.010	-9.22273	20.00000	Averaged
67 1,3,5-Trimethyl Benzene	2.45670	2.28958	2.28958	0.010	-6.80293	20.00000	Averaged
68 1,2,3-Trichloropropane	0.16654	0.15782	0.15782	0.010	-5.23495	20.00000	Averaged
69 Trans-1,4-Dichloro 2-Butene	0.15020	0.16426	0.16426	0.001	9.36122	20.00000	Averaged
70 4-Chloro Toluene	2.19230	1.98933	1.98933	0.010	-9.25846	20.00000	Averaged
71 T-Butyl Benzene	2.08631	1.88809	1.88809	0.010	-9.50075	20.00000	Averaged
72 1,2,4-Trimethylbenzene	2.46776	2.26778	2.26778	0.010	-8.10362	20.00000	Averaged
73 S-Butyl Benzene	3.05754	2.73643	2.73643	0.010	-10.50214	20.00000	Averaged
74 4-Isopropyl Toluene	2.43619	2.20673	2.20673	0.010	-9.41864	20.00000	Averaged
75 1,3-Dichlorobenzene	1.41917	1.28158	1.28158	0.600	-9.69514	20.00000	Averaged
77 1,4-Dichlorobenzene	1.45993	1.30940	1.30940	0.500	-10.31072	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i
Lab File ID: cc10161.d
Analysis Type: WATER
Lab Sample ID: CC1016
Method: /chem3/nt2.i/20121016.b/82600913L.m

Injection Date: 16-OCT-2012 07:02
Init. Cal. Date(s): 01-OCT-2012 01-OCT-2012
Init. Cal. Times: 12:03 15:10
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
78 N-Butyl Benzene	2.21916	1.92116	1.92116	0.010	-13.42840	20.00000	Averaged
$ 79 d4-1,2-Dichlorobenzene	0.83941	0.84182	0.84182	0.010	0.28696	20.00000	Averaged
80 1,2-Dichlorobenzene	1.27864	1.14150	1.14150	0.400	-10.72531	20.00000	Averaged
81 1,2-Dibromo 3-Chloropropane	0.06948	0.06197	0.06197	0.010	-10.80231	20.00000	Averaged
83 Hexachloro 1,3-Butadiene	0.32538	0.27839	0.27839	0.010	-14.44195	20.00000	Averaged
84 1,2,4-Trichlorobenzene	0.60476	0.52233	0.52233	0.010	-13.63006	20.00000	Averaged
85 Naphthalene	1.03584	0.84855	0.84855	0.010	-18.08065	20.00000	Averaged
86 1,2,3-Trichlorobenzene	0.42554	0.35994	0.35994	0.010	-15.41383	20.00000	Averaged

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.02

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-101612A	Method Blank	10	109%	102%	99.4%	103%	0
LCS-101612A	Lab Control	10	102%	104%	102%	101%	0
LCSD-101612A	Lab Control Dup	10	103%	104%	100%	101%	0
VM60C	MW03-GW-121009	10	108%	101%	98.9%	104%	0
VM60D	FD-GW-121009	10	106%	98.8%	101%	104%	0
VM60E	TRIP BLANK	10	108%	99.7%	99.5%	102%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 12-19585 to 12-19587

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Matrix: Water

Data Release Authorized: MW
Reported: 10/11/12

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.02
Date Sampled: 10/09/12
Date Received: 10/10/12

ARI ID	Client ID	Analysis Date	DL	Range	Result
MB-101012	Method Blank	10/10/12	1.0	Gasoline	< 0.25 U
12-19585		PID1		HC ID	---
				Trifluorotoluene	95.7%
				Bromobenzene	91.2%
VM60C	MW03-GW-121009	10/10/12	1.0	Gasoline	< 0.25 U
12-19585		PID1		HC ID	---
				Trifluorotoluene	93.9%
				Bromobenzene	89.5%
VM60D	FD-GW-121009	10/10/12	1.0	Gasoline	< 0.25 U
12-19586		PID1		HC ID	---
				Trifluorotoluene	95.0%
				Bromobenzene	91.2%
VM60E	TRIP BLANK	10/10/12	1.0	Gasoline	< 0.25 U
12-19587		PID1		HC ID	---
				Trifluorotoluene	96.0%
				Bromobenzene	90.3%

Gasoline values reported in mg/L (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-101012
LAB CONTROL SAMPLE

Lab Sample ID: LCS-101012
LIMS ID: 12-19585
Matrix: Water
Data Release Authorized:
Reported: 10/11/12

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 10/10/12 12:42
LCSD: 10/10/12 13:11
Instrument/Analyst LCS: PID1/PKC
LCSD: PID1/PKC

Purge Volume: 5.0 mL

Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	0.94	1.00	94.0%	1.01	1.00	101%	7.2%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	98.5%	99.7%
Bromobenzene	89.7%	93.6%

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: VM60
Matrix: Water

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.02

Client ID	TFT	BBZ	TOT OUT
MB-101012	95.7%	91.2%	0
LCS-101012	98.5%	89.7%	0
LCSD-101012	99.7%	93.6%	0
MW03-GW-121009	93.9%	89.5%	0
FD-GW-121009	95.0%	91.2%	0
TRIP BLANK	96.0%	90.3%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 12-19585 to 12-19587

VOLATILES SUMMARY 10/10/12
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: **VM60**

Inquiry Number: NONE
Analysis Requested: 10/10/12
Contact: Hirsch, Heather
Client: Maul Foster & Alongi
Logged by: JM
Sample Set Used: Yes-481
Validatable Package: No
J-flags required: YES NO
Deliverables Require Spectra (Circle one): YES NO

Special Instructions All Samples:

PC: Mark
VTSR: 10/10/12 08:30
Data Due: 10/15/12

Project #: 0747.01.02
Project: SIMS - N Cascade Ford
Sample Site:
SDG No:

___See enclosed instructions
_✓_No enclosed instructions

3 Sample(s) * Sample(s) Preserved **Samples(s) Preserved, No Sampling Time

Gas/BETX Analytes (1 Total)
Gasoline Range Hydrocarbons
Gas/BETX Surrogates
FID-Trifluorotoluene FID-Bromobenzene

ARI ID	Client ID	Matrix	Sampling Date	Holding Time Up	NW TPH-G	Rtype
12-19585-VM60C	MW03-GW-121009	Water	10/09/12	10/23/12*	X(1)	1
12-19586-VM60D	FD-GW-121009	Water	10/09/12	10/23/12*	X(1)	1
12-19587-VM60E	TRIP BLANK	Water	10/09/12	10/22/12**	X(1)	1

VOA Special Instructions: None

Sample	Condition	Sample Comment-All Analyses
12-19585-VM60C		No VOAs
12-19586-VM60D		No VOAs
12-19587-VM60E		No VOAs

PM OK _s_ Date 10/10/12

Data File: /chem3/pid1.i/vpcc1010-1.b/1010a004.d

Date : 10-OCT-2012 12:42

Client ID:

Sample Info: LCS1010

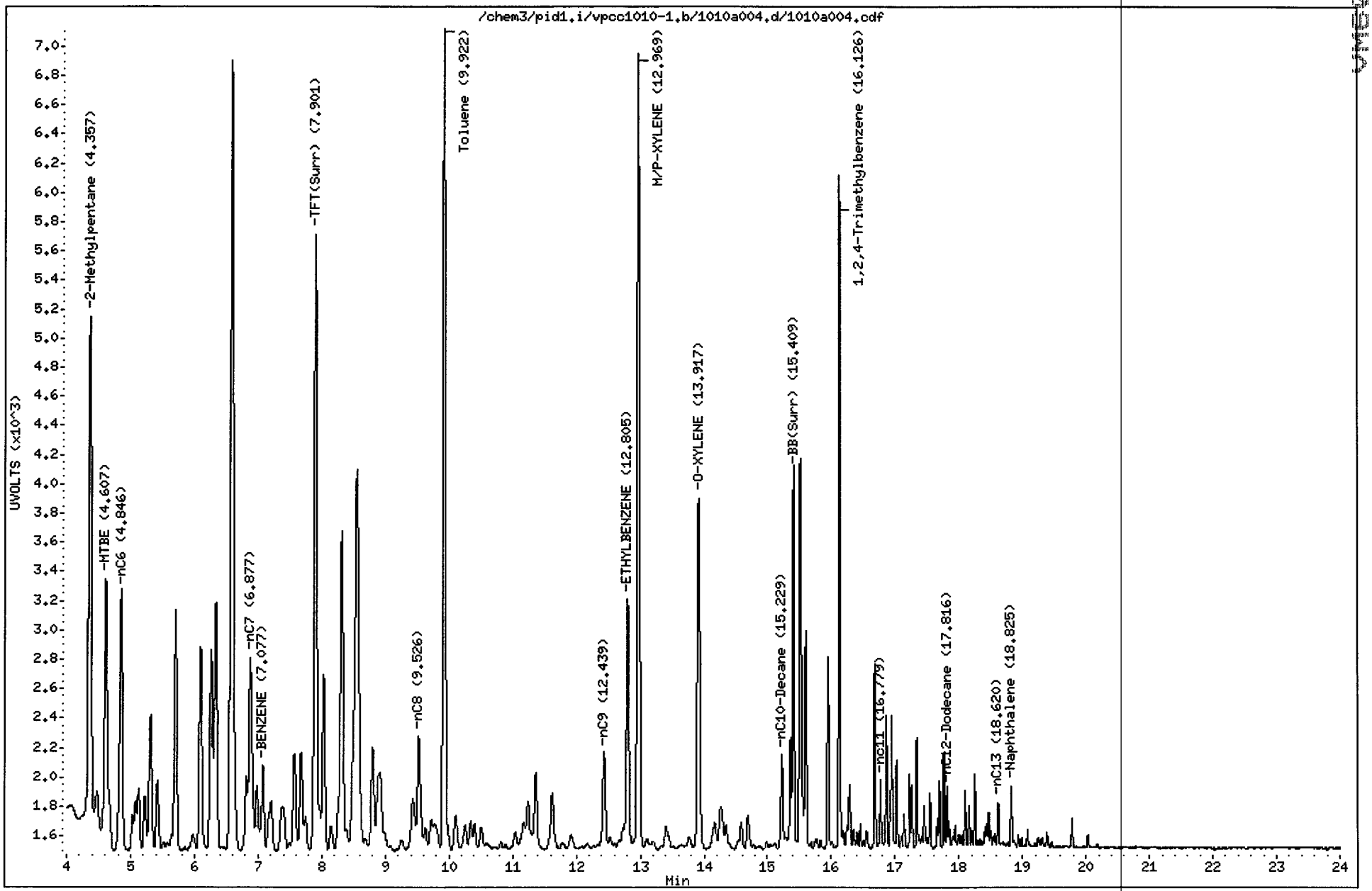
Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: PC/JW

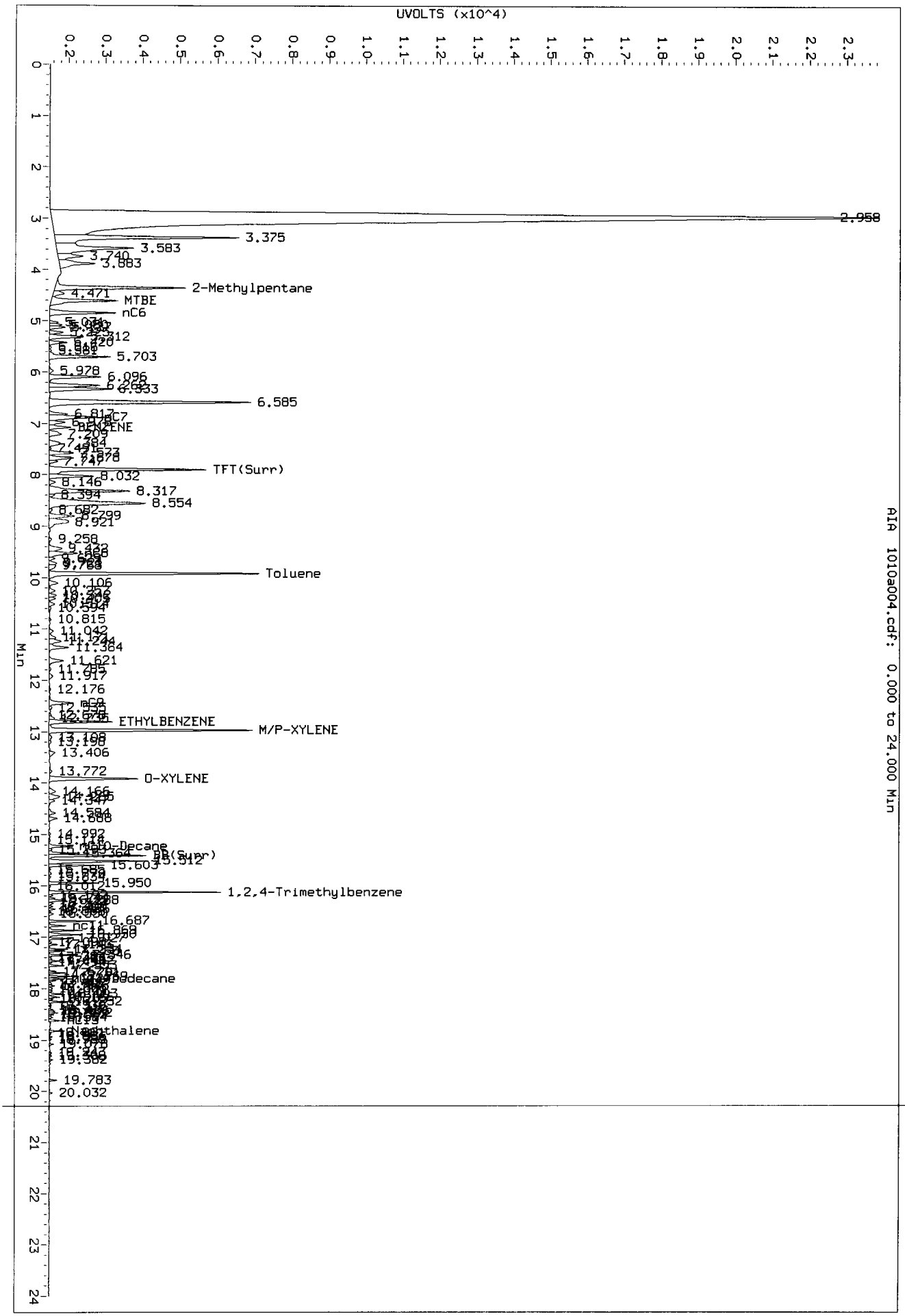
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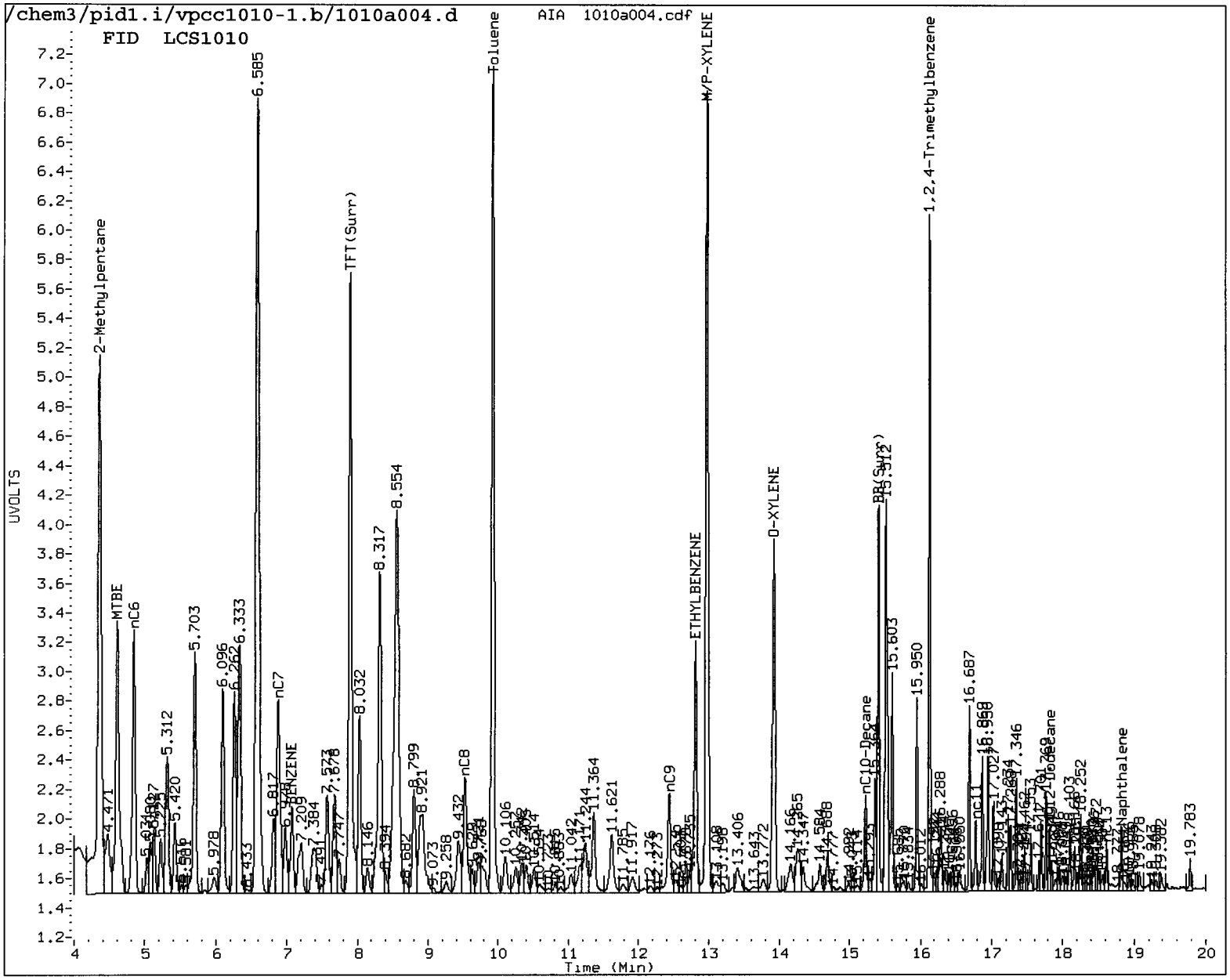
VMSD 00032



PC
10/11/12

Data File: /chem3/pid1.i/vpcc1010-1.b/1010a004.d/1010a004.cdf
Injection Date: 10-OCT-2012 12:42
Instrument: pid1.i
Client Sample ID:





MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: PC Date: 10/11/12

Data File: /chem3/pid1.i/vpcc1010-1.b/1010a005.d

Date : 10-OCT-2012 13:11

Client ID:

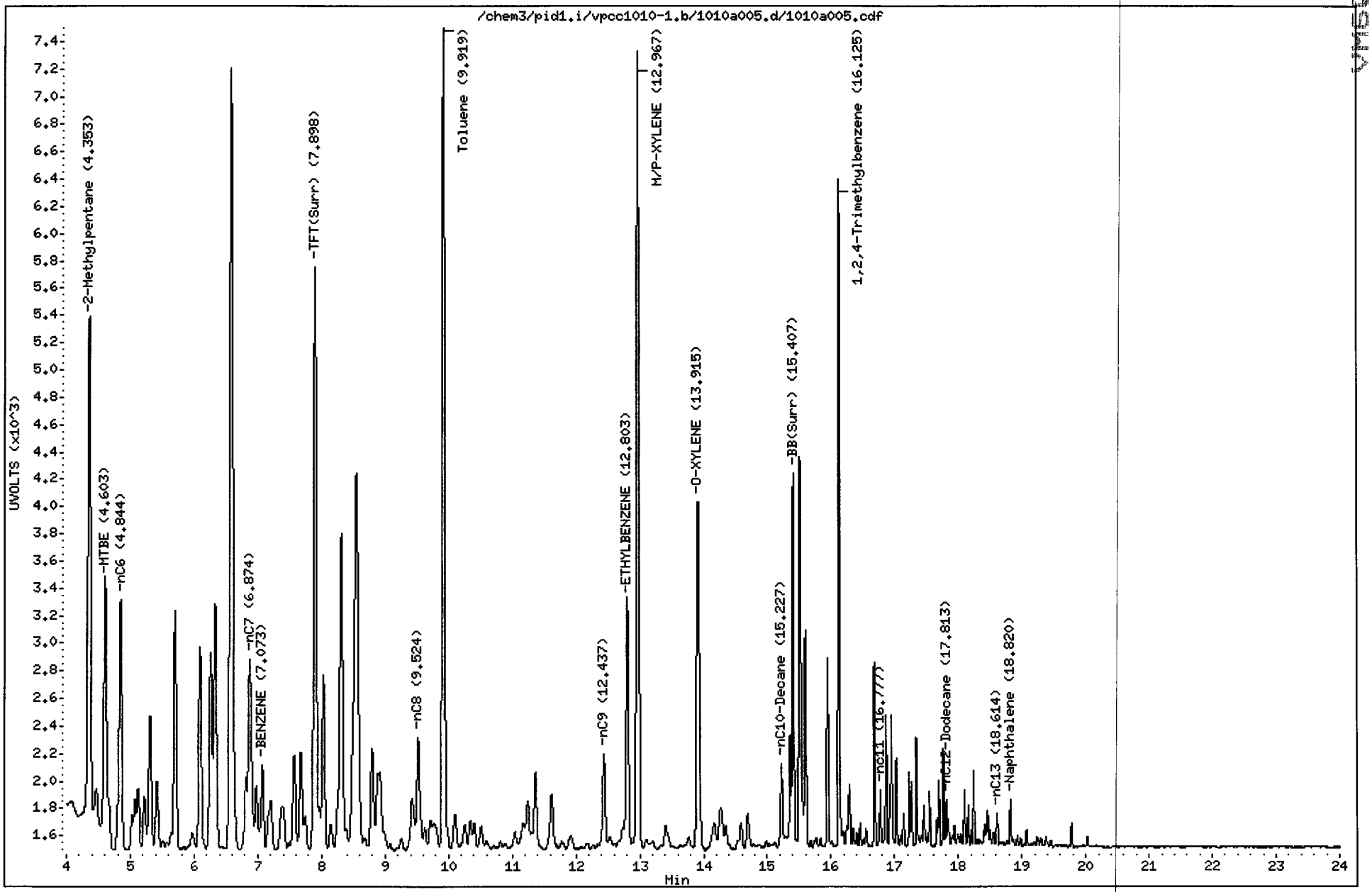
Sample Info: LCSD1010

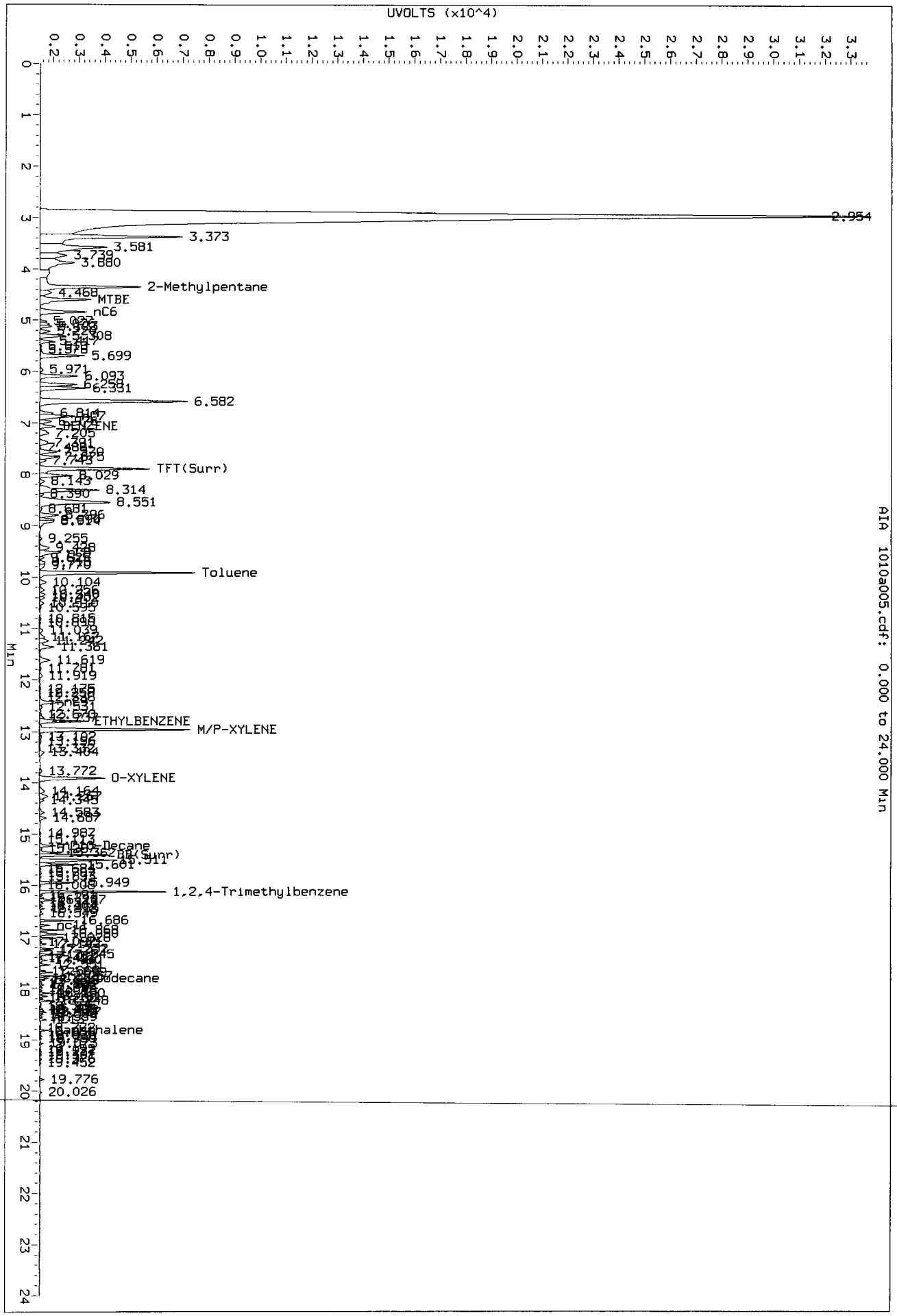
Column phase: RTX 502-2 FID

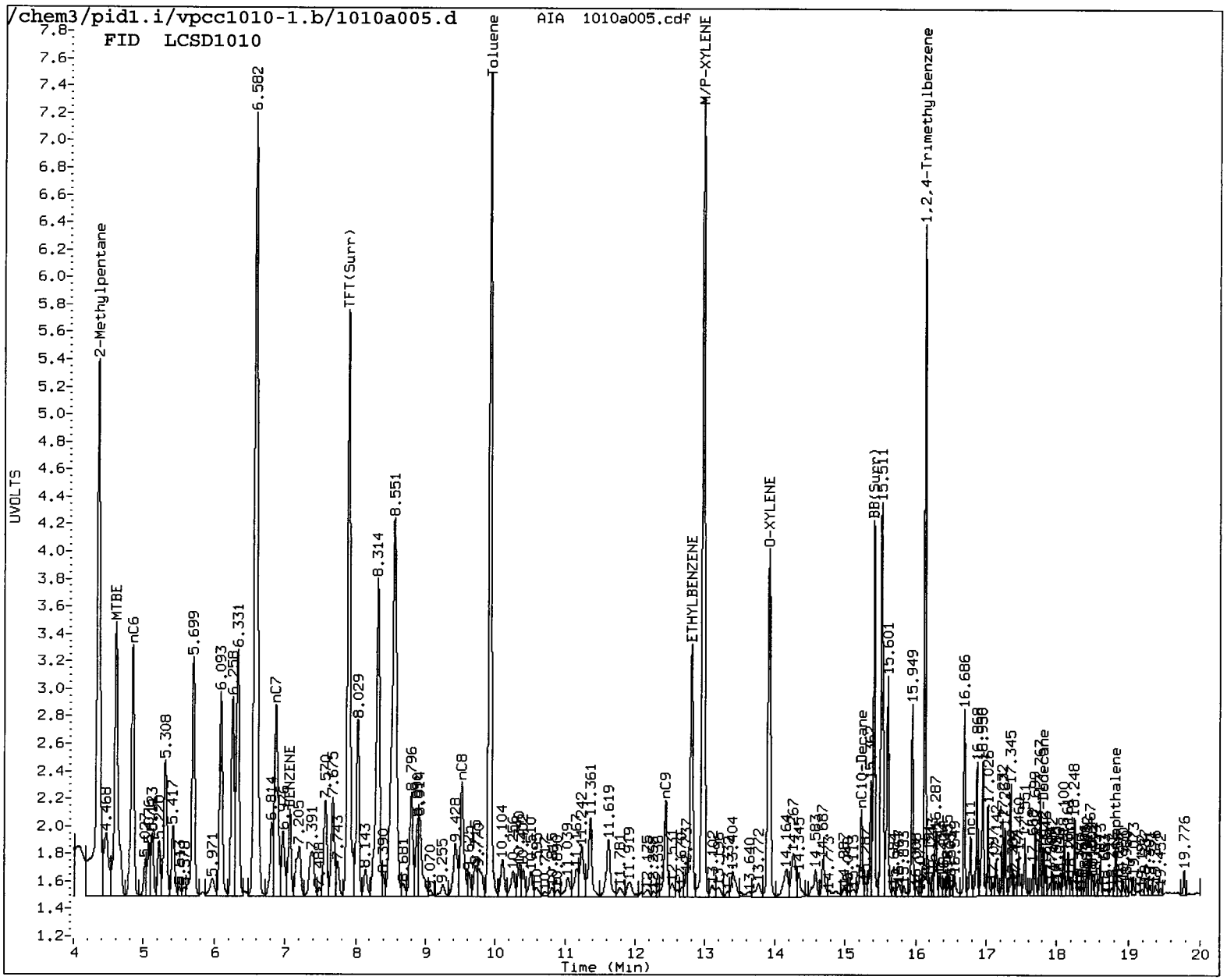
Instrument: pid1.i

Operator: PC/JW

Column diameter: 0.18




UVOLTS (x10^4)
Min
Data File: /chem3/pid1.i/vpcc1010-1.b/1010a005.d/1010a005.cdf
Injection Date: 10-OCT-2012 13:11
Instrument: pid1.i
Client Sample ID:
AIA 1010a005.cdf: 0.000 to 24.000 Min
2.954
3.373
3.581
3.739
3.880
2-Methylpentane
4.468
MTBE
nC6
5.699
5.971
6.093
6.331
6.582
BENZENE
TFT(Surr)
8.029
8.143
8.314
8.390
8.551
Toluene
9.255
10.104
10.595
11.039
11.361
11.619
11.919
ETHYLBENZENE
M/P-XYLENE
13.404
13.772
O-XYLENE
14.164
14.343
14.583
14.687
14.982
Decane
15.511
15.661
1,2,4-Trimethylbenzene
15.949
16.008
16.686
nC11
19.776
20.026



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: PC Date: 10/11/10

Data File: /chem3/pid1.i/vpcc1010-1.b/1010a006.d

Date : 10-OCT-2012 13:40

Client ID:

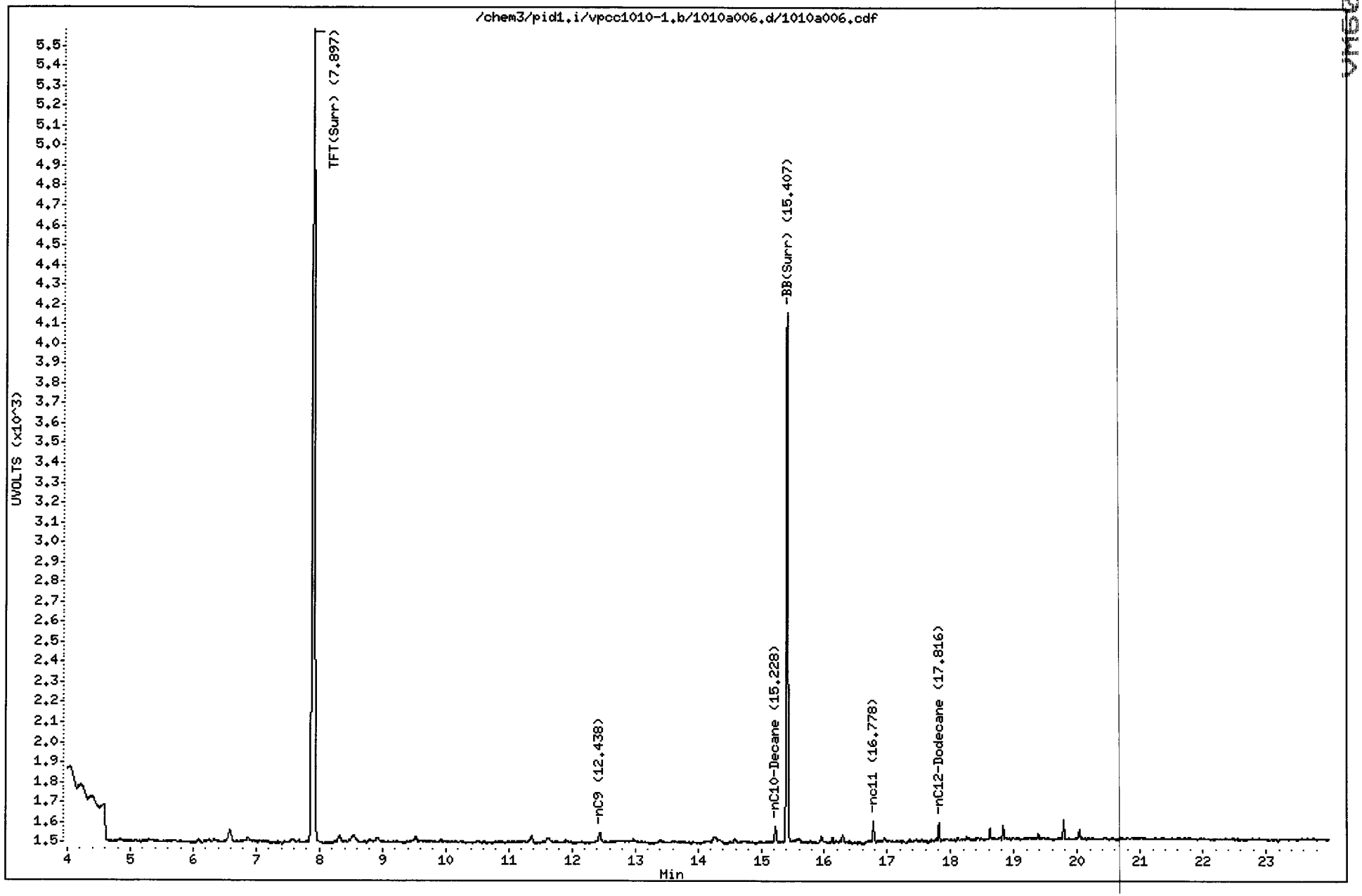
Instrument: pid1.i

Sample Info: MB1010

Operator: PC/JW

Column phase: RTX 502-2 FID

Column diameter: 0.18



Data File: /chem3/pid1.i/vpcc1010-1.b/1010a013.d

Date : 10-OCT-2012 17:30

Client ID: MW03-GW-121009

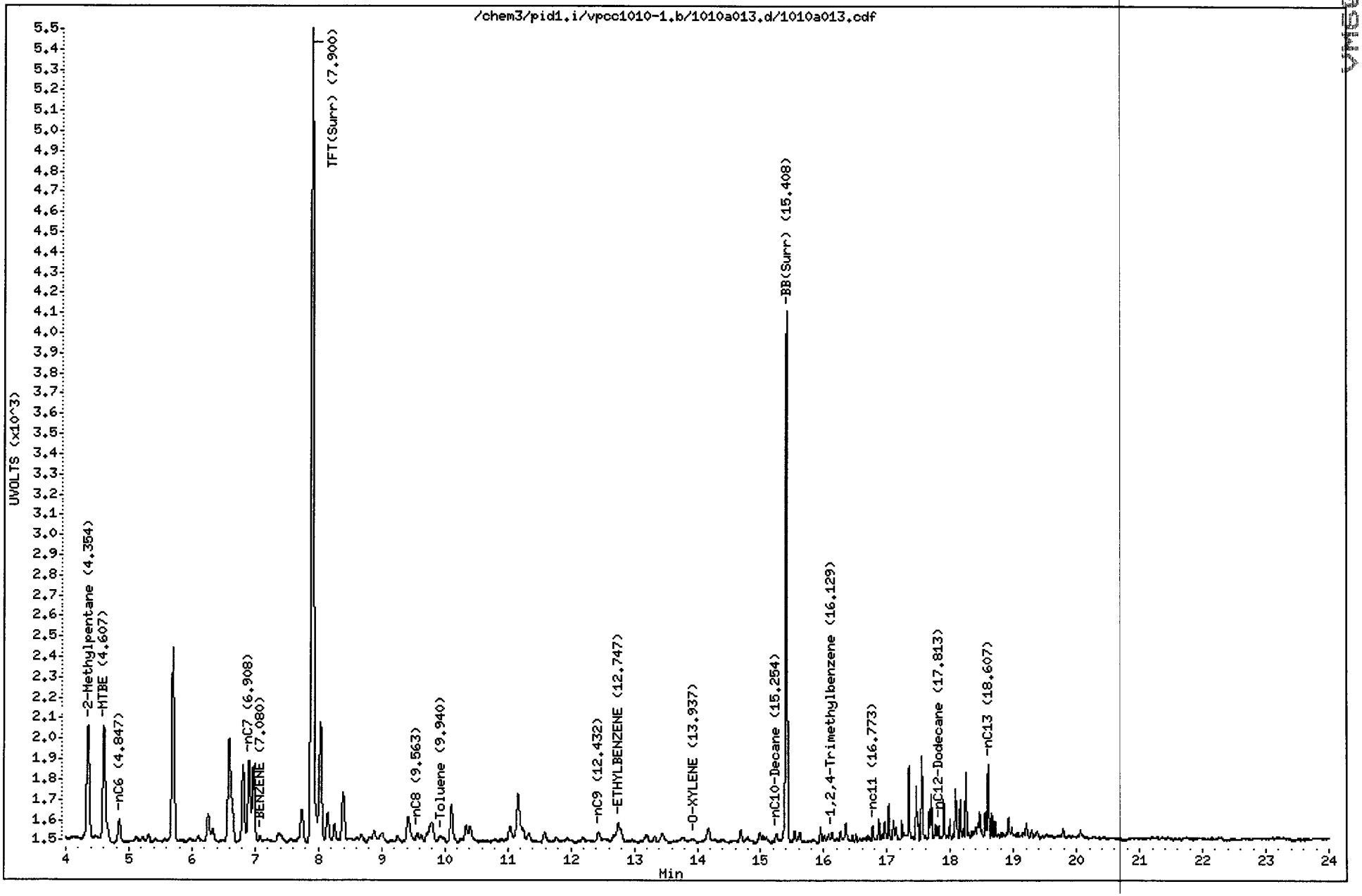
Sample Info: VM60C

Instrument: pid1.i

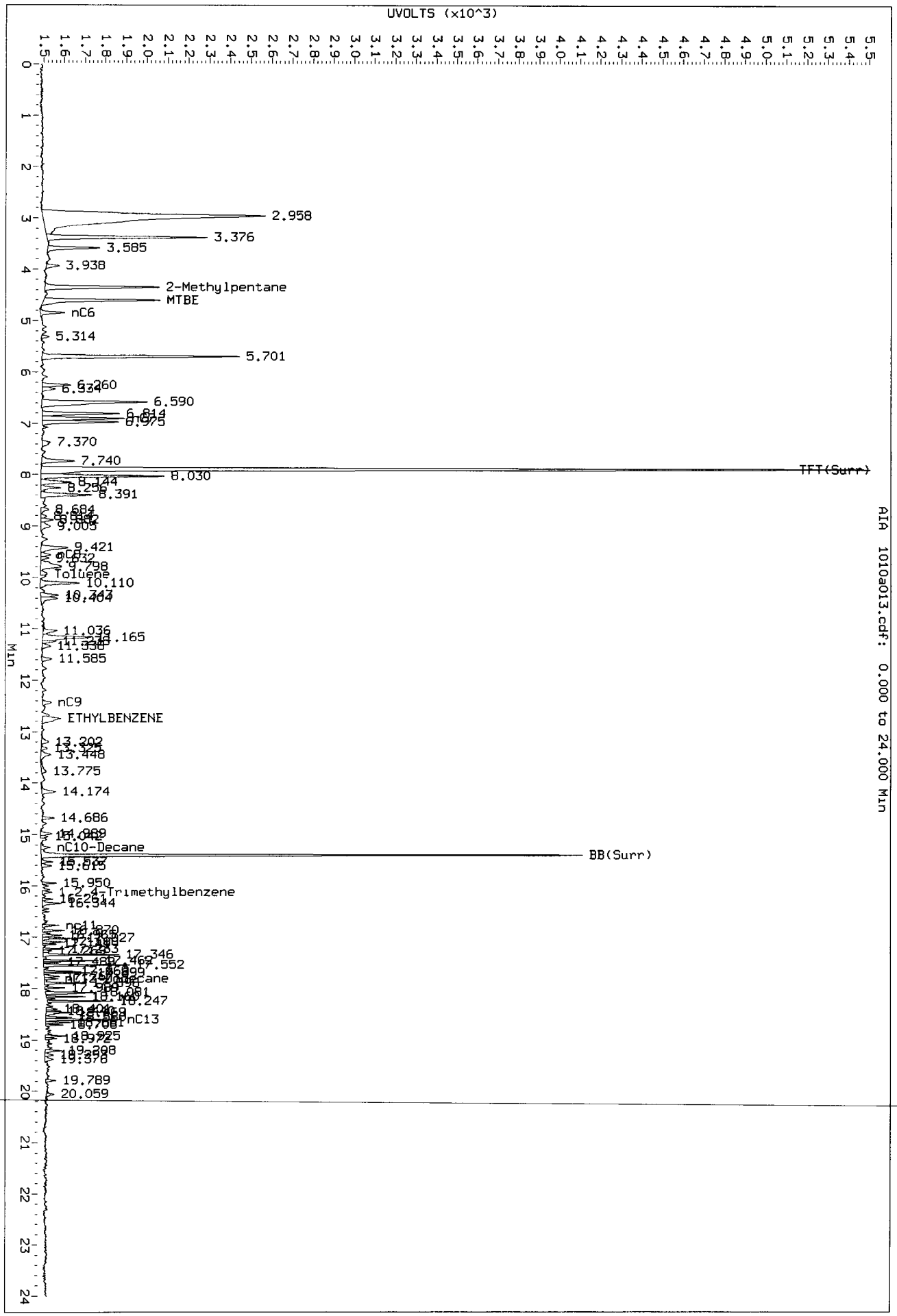
Operator: PC/JW

Column phase: RTX 502-2 FID

Column diameter: 0.18

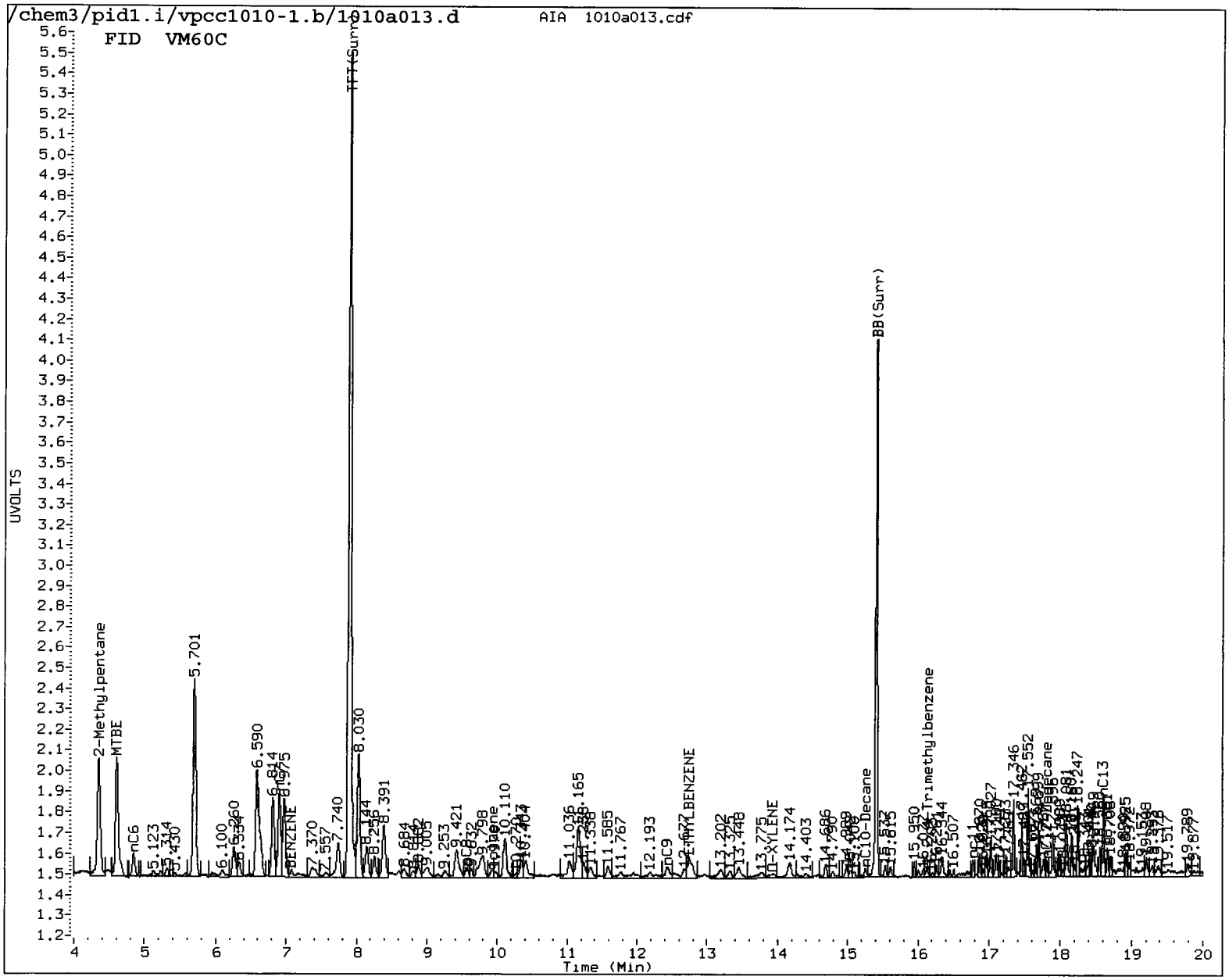


VM60 : 10/10/12



Data File: /chem3/pid1.i/vpcc1010-1.b/1010a013.d/1010a013.cdf
Injection Date: 10-OCT-2012 17:30
Instrument: pid1.i
Client Sample ID: MW03-GW-121009

AIA 1010a013.cdf: 0.000 to 24.000 Min



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: PC Date: 10/11/02

Data File: /chem3/pid1.i/vpcc1010-1.b/1010a014.d

Date : 10-OCT-2012 17:59

Client ID: FD-GW-121009

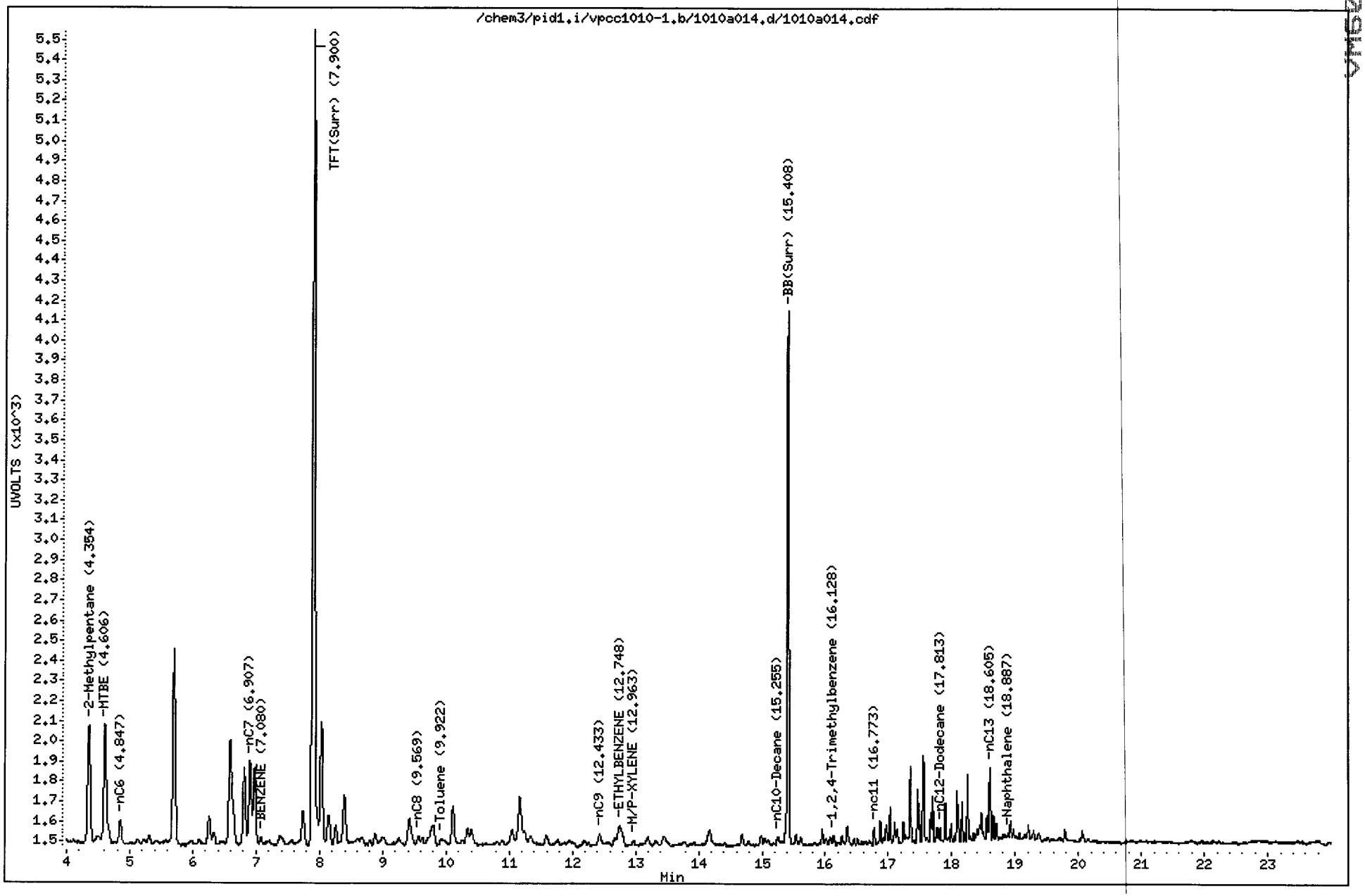
Sample Info: VM60D

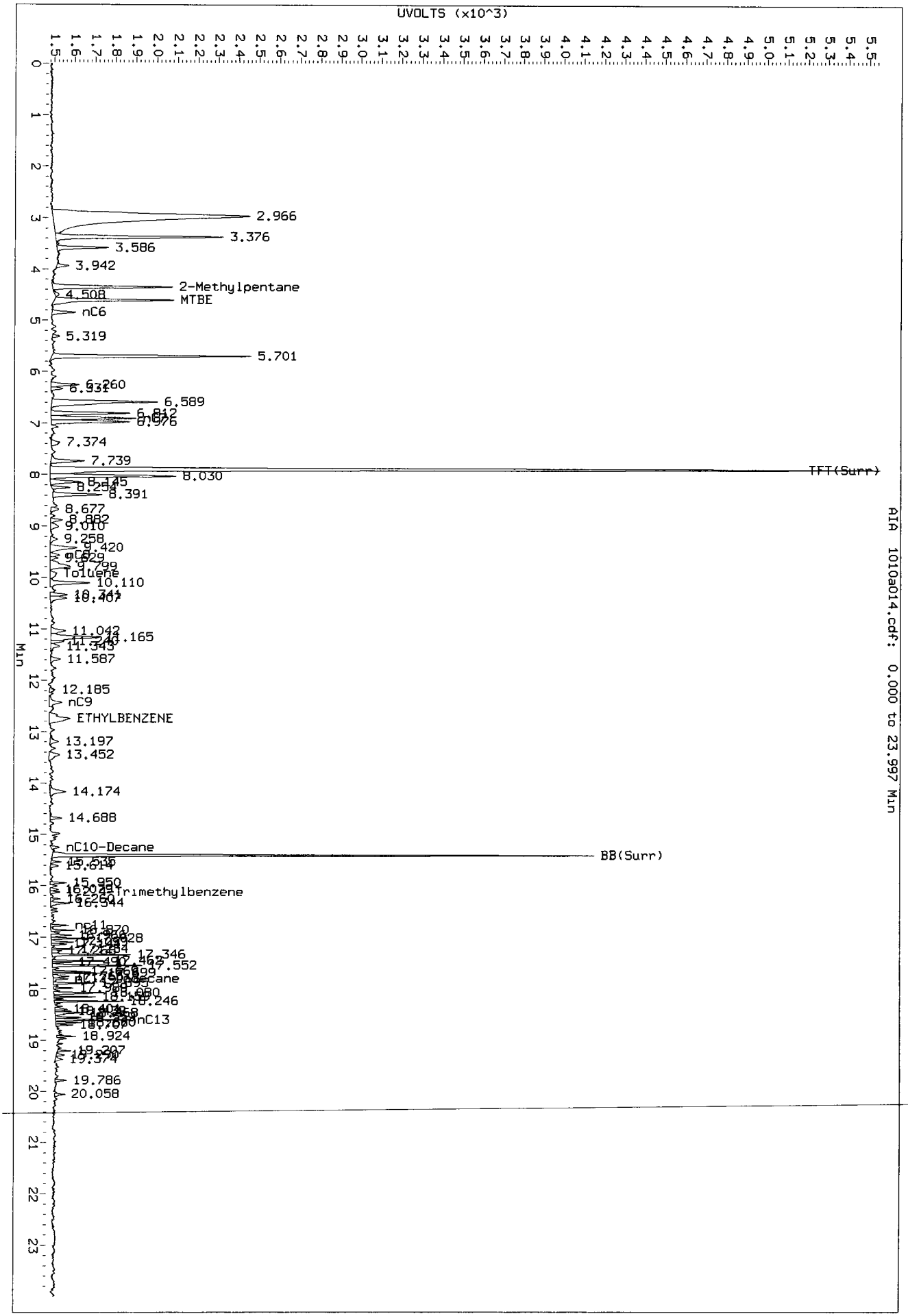
Instrument: pid1.i

Operator: PC/JW

Column phase: RTX 502-2 FID

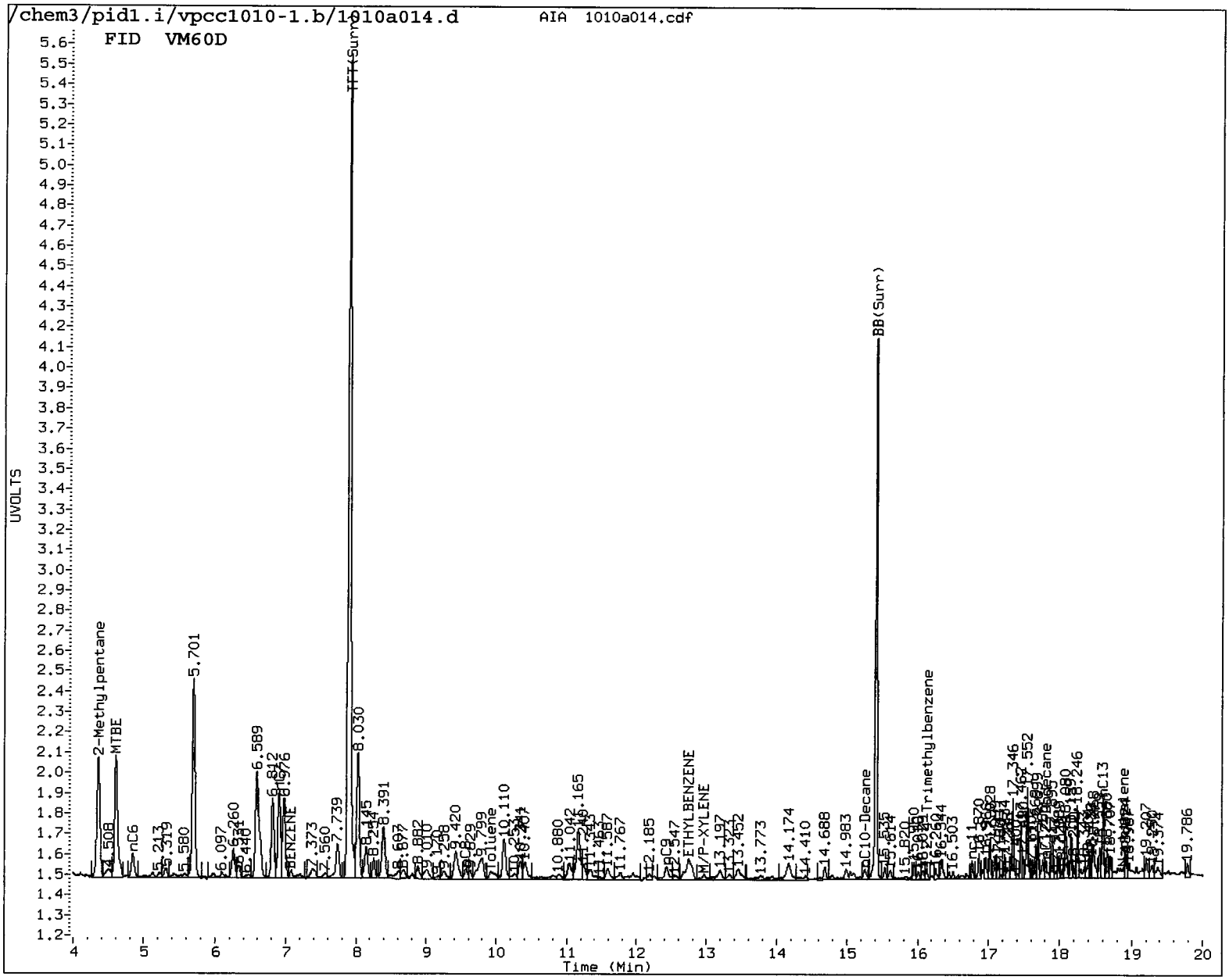
Column diameter: 0.18





Data File: /chem3/pid1.i/vpcc1010-1.b/1010a014.d/1010a014.cdf
Injection Date: 10-OCT-2012 17:59
Instrument: pid1.i
Client Sample ID: FD-GW-121009

AIA 1010a014.cdf: 0.000 to 23.997 Min



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: PC Date: 10/11/12

Data File: /chem3/pid1.i/vpcc1010-1.b/1010a007.d

Date : 10-OCT-2012 14:35

Client ID: TRIP BLANK

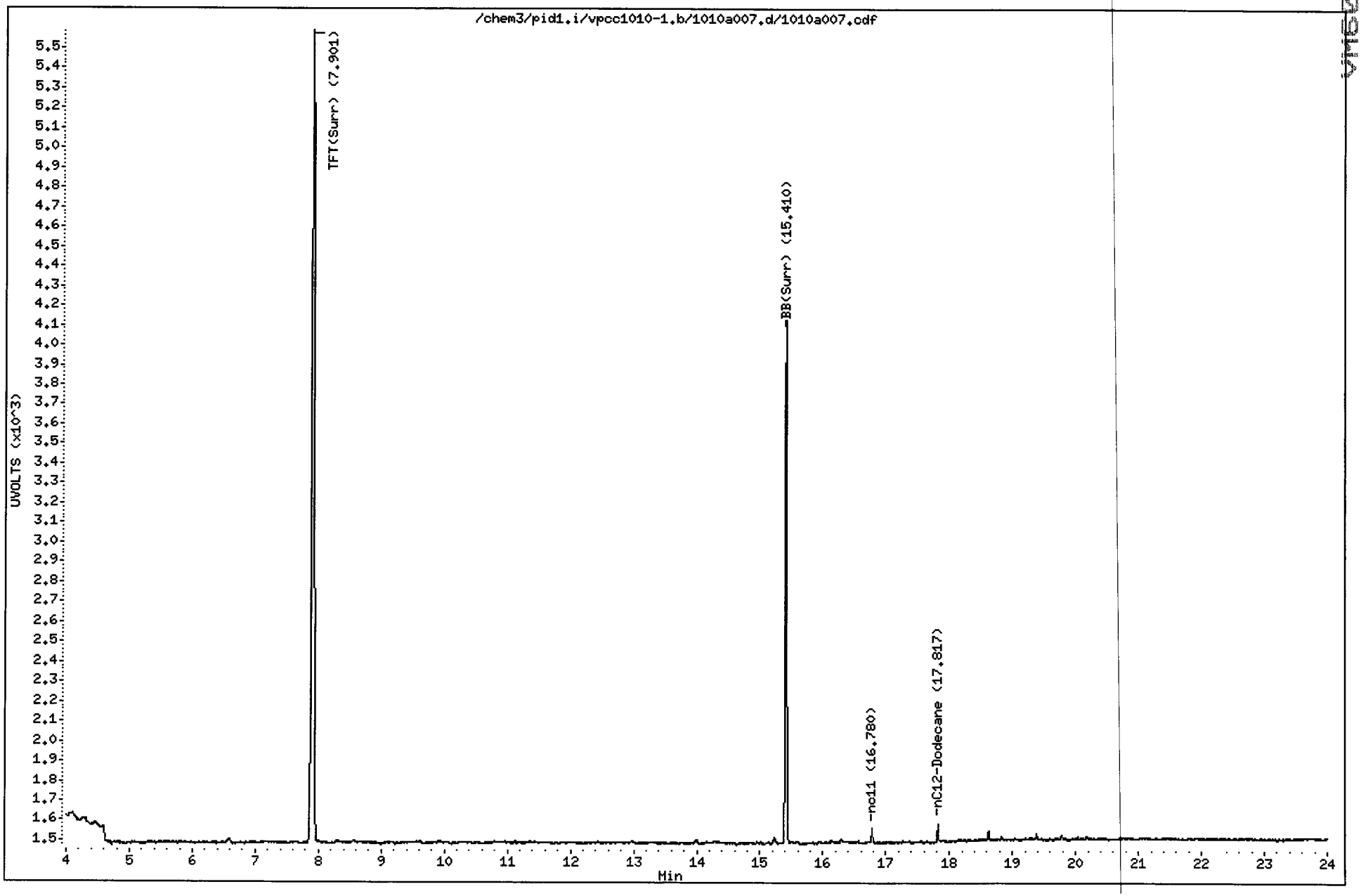
Sample Info: VM60E

Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: PC/JW

Column diameter: 0.18



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Extraction Method: SW3520C
Page 1 of 1

Sample ID: MW01-GW-121009
SAMPLE

Lab Sample ID: VM60A
LIMS ID: 12-19583
Matrix: Water
Data Release Authorized:
Reported: 10/17/12

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.02
Date Sampled: 10/09/12
Date Received: 10/10/12

Date Extracted: 10/15/12
Date Analyzed: 10/16/12 14:26
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.10**	**0.13**
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	**1-Methylnaphthalene**	**0.10**	**11 E**
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	**Acenaphthene**	**0.10**	**0.93**
86-73-7	**Fluorene**	**0.10**	**2.7**
85-01-8	**Phenanthrene**	**0.10**	**1.8**
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	60.3%
d14-Dibenzo(a,h)anthracene	29.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Extraction Method: SW3520C

Sample ID: MW01-GW-121009
DILUTION

Lab Sample ID: VM60A
LIMS ID: 12-19583
Matrix: Water
Data Release Authorized:
Reported: 10/17/12

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.02
Date Sampled: 10/09/12
Date Received: 10/10/12

Date Extracted: 10/15/12
Date Analyzed: 10/16/12 15:51
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 3.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.30**	**0.16 J**
91-57-6	2-Methylnaphthalene	0.30	< 0.30 U
90-12-0	**1-Methylnaphthalene**	**0.30**	**11**
208-96-8	Acenaphthylene	0.30	< 0.30 U
83-32-9	**Acenaphthene**	**0.30**	**0.94**
86-73-7	**Fluorene**	**0.30**	**2.6**
85-01-8	**Phenanthrene**	**0.30**	**1.8**
120-12-7	Anthracene	0.30	< 0.30 U
206-44-0	Fluoranthene	0.30	< 0.30 U
129-00-0	Pyrene	0.30	< 0.30 U
56-55-3	Benzo(a)anthracene	0.30	< 0.30 U
218-01-9	Chrysene	0.30	< 0.30 U
50-32-8	Benzo(a)pyrene	0.30	< 0.30 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.30	< 0.30 U
53-70-3	Dibenz(a,h)anthracene	0.30	< 0.30 U
191-24-2	Benzo(g,h,i)perylene	0.30	< 0.30 U
132-64-9	Dibenzofuran	0.30	< 0.30 U
TOTBFA	Total Benzofluoranthenes	0.60	< 0.60 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	59.0%
d14-Dibenzo(a,h)anthracene	26.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Extraction Method: SW3520C
Page 1 of 1

Sample ID: MW03-GW-121009
SAMPLE

Lab Sample ID: VM60C
LIMS ID: 12-19585
Matrix: Water
Data Release Authorized:
Reported: 10/17/12

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.02
Date Sampled: 10/09/12
Date Received: 10/10/12

Date Extracted: 10/15/12
Date Analyzed: 10/16/12 14:55
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.10**	**0.06 J**
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	**1-Methylnaphthalene**	**0.10**	**0.15**
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	57.7%
d14-Dibenzo(a,h)anthracene	66.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Extraction Method: SW3520C
Page 1 of 1

Sample ID: FD-GW-121009
SAMPLE

Lab Sample ID: VM60D
LIMS ID: 12-19586
Matrix: Water
Data Release Authorized:
Reported: 10/17/12

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.02
Date Sampled: 10/09/12
Date Received: 10/10/12

Date Extracted: 10/15/12
Date Analyzed: 10/16/12 15:23
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**0.10**	**0.06 J**
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	**1-Methylnaphthalene**	**0.10**	**0.09 J**
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	53.0%
d14-Dibenzo(a,h)anthracene	69.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Extraction Method: SW3520C

Sample ID: MB-101512
METHOD BLANK

Lab Sample ID: MB-101512
LIMS ID: 12-19583
Matrix: Water
Data Release Authorized:
Reported: 10/17/12

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 10/15/12
Date Analyzed: 10/16/12 13:01
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	59.7%
d14-Dibenzo(a,h)anthracene	60.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS

Sample ID: LCS-101512
LAB CONTROL SAMPLE

Lab Sample ID: LCS-101512
LIMS ID: 12-19583
Matrix: Water
Data Release Authorized:
Reported: 10/17/12

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 10/15/12

Date Analyzed LCS: 10/16/12 13:30
LCSD: 10/16/12 13:58
Instrument/Analyst LCS: NT4/JZ
LCSD: NT4/JZ

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Naphthalene	1.39	3.00	46.3%	1.81	3.00	60.3%	26.2%
2-Methylnaphthalene	1.36	3.00	45.3%	1.68	3.00	56.0%	21.1%
1-Methylnaphthalene	1.55	3.00	51.7%	1.95	3.00	65.0%	22.9%
Acenaphthylene	1.57	3.00	52.3%	2.00	3.00	66.7%	24.1%
Acenaphthene	1.53	3.00	51.0%	1.88	3.00	62.7%	20.5%
Fluorene	1.64	3.00	54.7%	1.94	3.00	64.7%	16.8%
Phenanthrene	1.93	3.00	64.3%	2.14	3.00	71.3%	10.3%
Anthracene	1.70	3.00	56.7%	2.16	3.00	72.0%	23.8%
Fluoranthene	1.97	3.00	65.7%	2.12	3.00	70.7%	7.3%
Pyrene	1.98	3.00	66.0%	2.30	3.00	76.7%	15.0%
Benzo(a)anthracene	1.77	3.00	59.0%	1.97	3.00	65.7%	10.7%
Chrysene	2.01	3.00	67.0%	2.10	3.00	70.0%	4.4%
Benzo(a)pyrene	1.65	3.00	55.0%	1.83	3.00	61.0%	10.3%
Indeno(1,2,3-cd)pyrene	1.85	3.00	61.7%	1.88	3.00	62.7%	1.6%
Dibenz(a,h)anthracene	1.64	3.00	54.7%	1.66	3.00	55.3%	1.2%
Benzo(g,h,i)perylene	1.79	3.00	59.7%	1.80	3.00	60.0%	0.6%
Dibenzofuran	1.44	3.00	48.0%	1.76	3.00	58.7%	20.0%
Total Benzofluoranthenes	5.91	9.00	65.7%	6.93	9.00	77.0%	15.9%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

SIM Semivolatile Surrogate Recovery

	LCS	LCSD
d10-2-Methylnaphthalene	47.7%	58.7%
d14-Dibenzo(a,h)anthracene	52.7%	55.0%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.02

Client ID	MNP	DBA	TOT OUT
MB-101512	59.7%	60.7%	0
LCS-101512	47.7%	52.7%	0
LCSD-101512	58.7%	55.0%	0
MW01-GW-121009	60.3%	29.0%	0
MW01-GW-121009 DL	59.0%	26.0%	0
MW03-GW-121009	57.7%	66.0%	0
FD-GW-121009	53.0%	69.3%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(40-110)	(33-107)
(DBA) = d14-Dibenzo(a,h)anthracene	(33-140)	(10-142)

Prep Method: SW3520C
Log Number Range: 12-19583 to 12-19586

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Extraction Method: SW3510C
Page 1 of 1

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.02

Matrix: Water

Date Received: 10/10/12

Data Release Authorized:
Reported: 10/15/12

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range/Surrogate	RL	Result
MB-101112	Method Blank	10/11/12	10/12/12	1.00	Diesel Range	0.10	< 0.10 U
12-19583	HC ID: ---		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		88.4%
VM60A	MW01-GW-121009	10/11/12	10/12/12	1.00	**Diesel Range**	**0.10**	**1.8**
12-19583	HC ID: **DRO/RRO**		FID4A	1.0	**Motor Oil Range**	**0.20**	**0.49**
					o-Terphenyl		94.8%
VM60B	MW02-GW-121009	10/11/12	10/12/12	1.00	**Diesel Range**	**0.10**	**0.69**
12-19584	HC ID: **DRO**		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		81.1%
VM60C	MW03-GW-121009	10/11/12	10/12/12	1.00	**Diesel Range**	**0.10**	**0.36**
12-19585	HC ID: **DRO/RRO**		FID4A	1.0	**Motor Oil Range**	**0.20**	**0.26**
					o-Terphenyl		92.7%
VM60D	FD-GW-121009	10/11/12	10/12/12	1.00	**Diesel Range**	**0.10**	**0.31**
12-19586	HC ID: **DRO/RRO**		FID4A	1.0	**Motor Oil Range**	**0.20**	**0.20**
					o-Terphenyl		80.5%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.02

Client ID	OTER	TOT OUT
MB-101112	88.4%	0
LCS-101112	77.0%	0
MW01-GW-121009	94.8%	0
MW02-GW-121009	81.1%	0
MW03-GW-121009	92.7%	0
FD-GW-121009	80.5%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3510C
Log Number Range: 12-19583 to 12-19586

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: LCS-101112
LAB CONTROL

Lab Sample ID: LCS-101112
LIMS ID: 12-19583
Matrix: Water
Data Release Authorized:
Reported: 10/15/12

QC Report No: VM60-Maul Foster & Alongi
Project: SIMS - N Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 10/11/12
Date Analyzed: 10/12/12 20:45
Instrument/Analyst: FID4A/JGR

Sample Amount: 500 mL
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
Diesel	2.37	3.00	79.0%

TPHD Surrogate Recovery

o-Terphenyl	77.0%

Results reported in mg/L

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: VM60
Matrix: Water — Project: SIMS - N Cascade Ford
Date Received: 10/10/12 — 0747.01.02

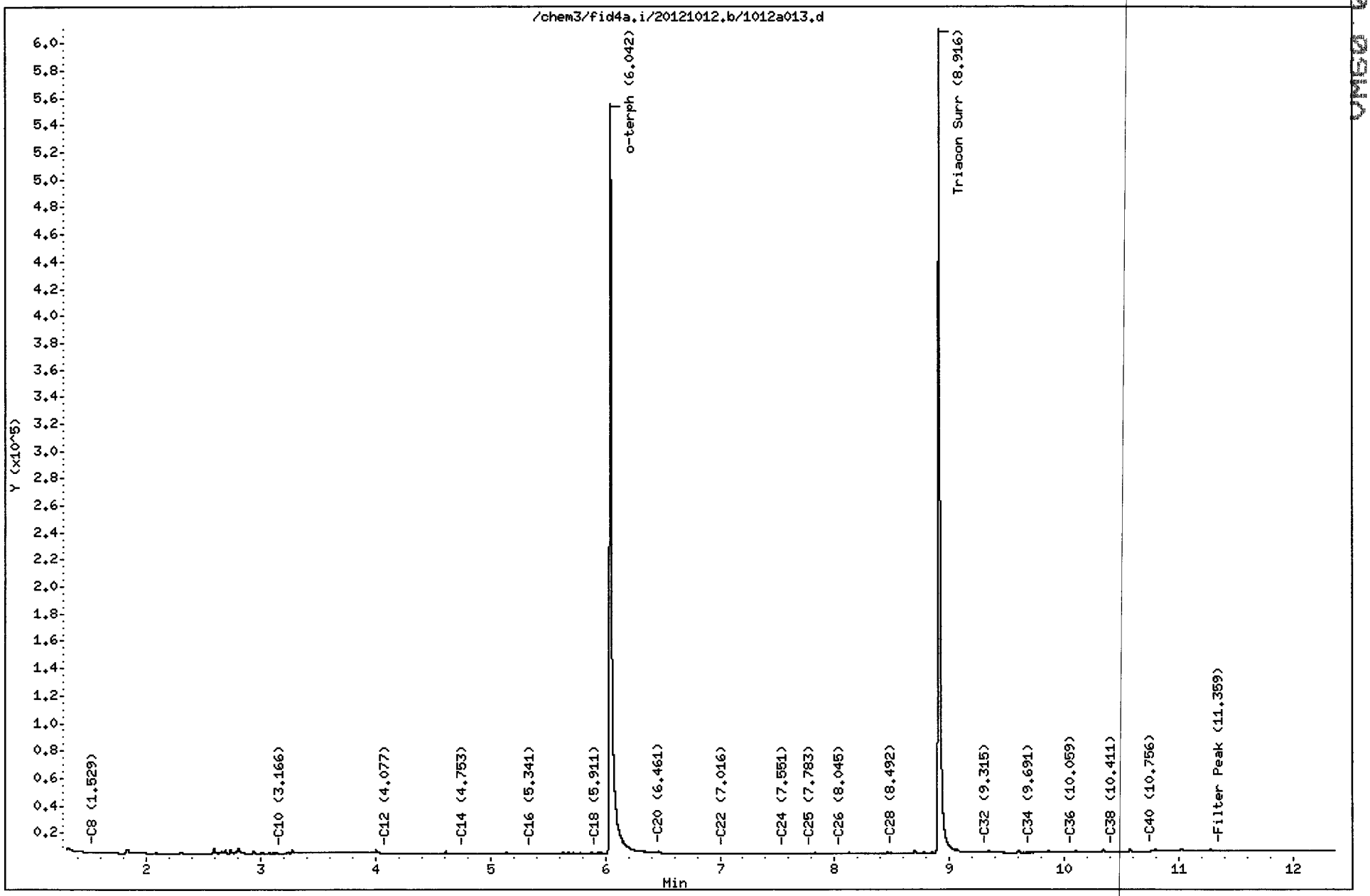
ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
12-19583-101112MB1	Method Blank	500 mL	1.00 mL	10/11/12
12-19583-101112LCS1	Lab Control	500 mL	1.00 mL	10/11/12
12-19583-VM60A	MW01-GW-121009	500 mL	1.00 mL	10/11/12
12-19584-VM60B	MW02-GW-121009	500 mL	1.00 mL	10/11/12
12-19585-VM60C	MW03-GW-121009	500 mL	1.00 mL	10/11/12
12-19586-VM60D	FD-GW-121009	500 mL	1.00 mL	10/11/12

Data File: /chem3/fid4a.i/20121012.b/1012a013.d
Date : 12-OCT-2012 20:23
Client ID:
Sample Info: VM60MBW1

Instrument: fid4a.i

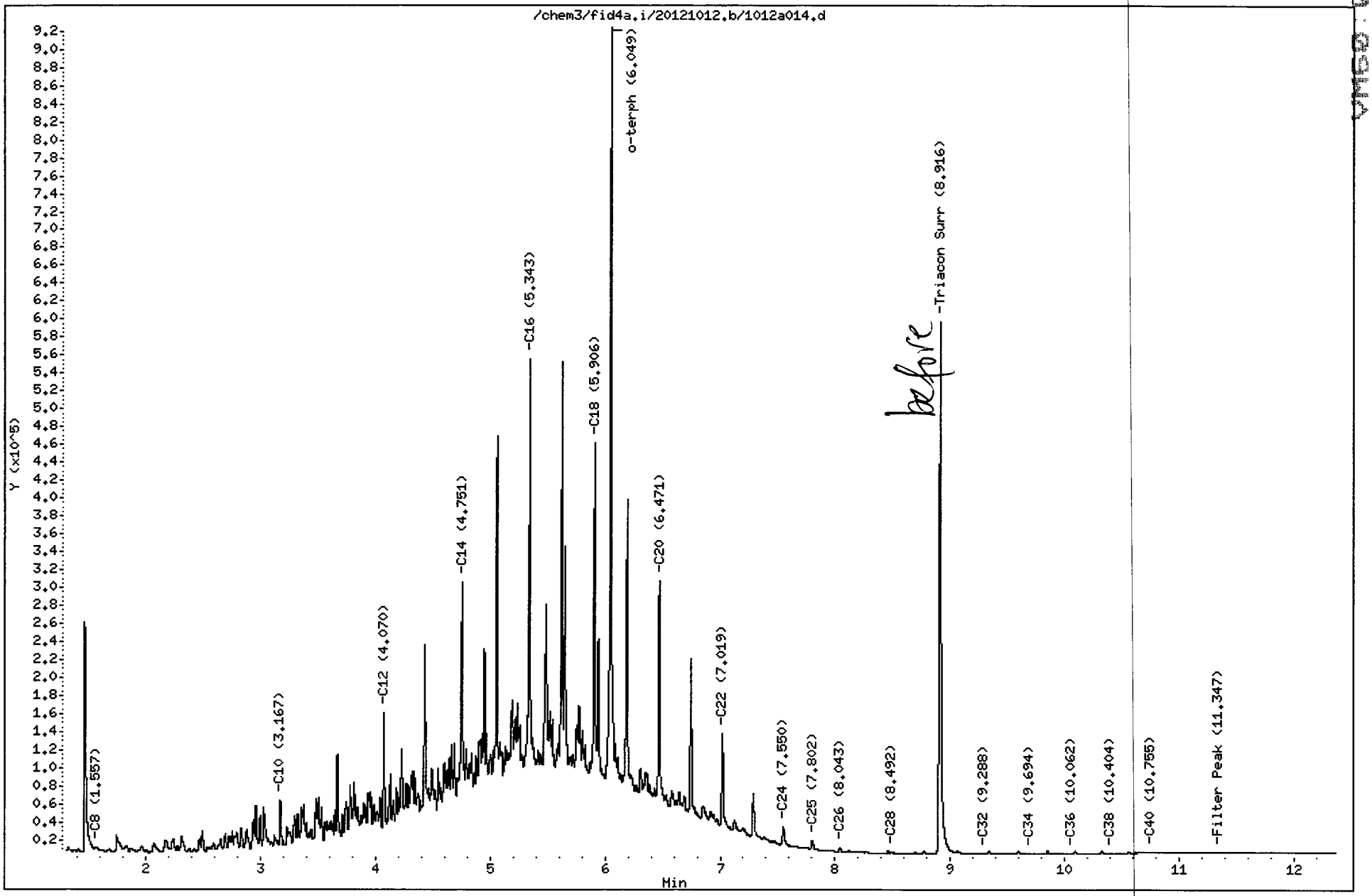
Operator: JR/VTS
Column diameter: 0.25

Column phase: RTX-1

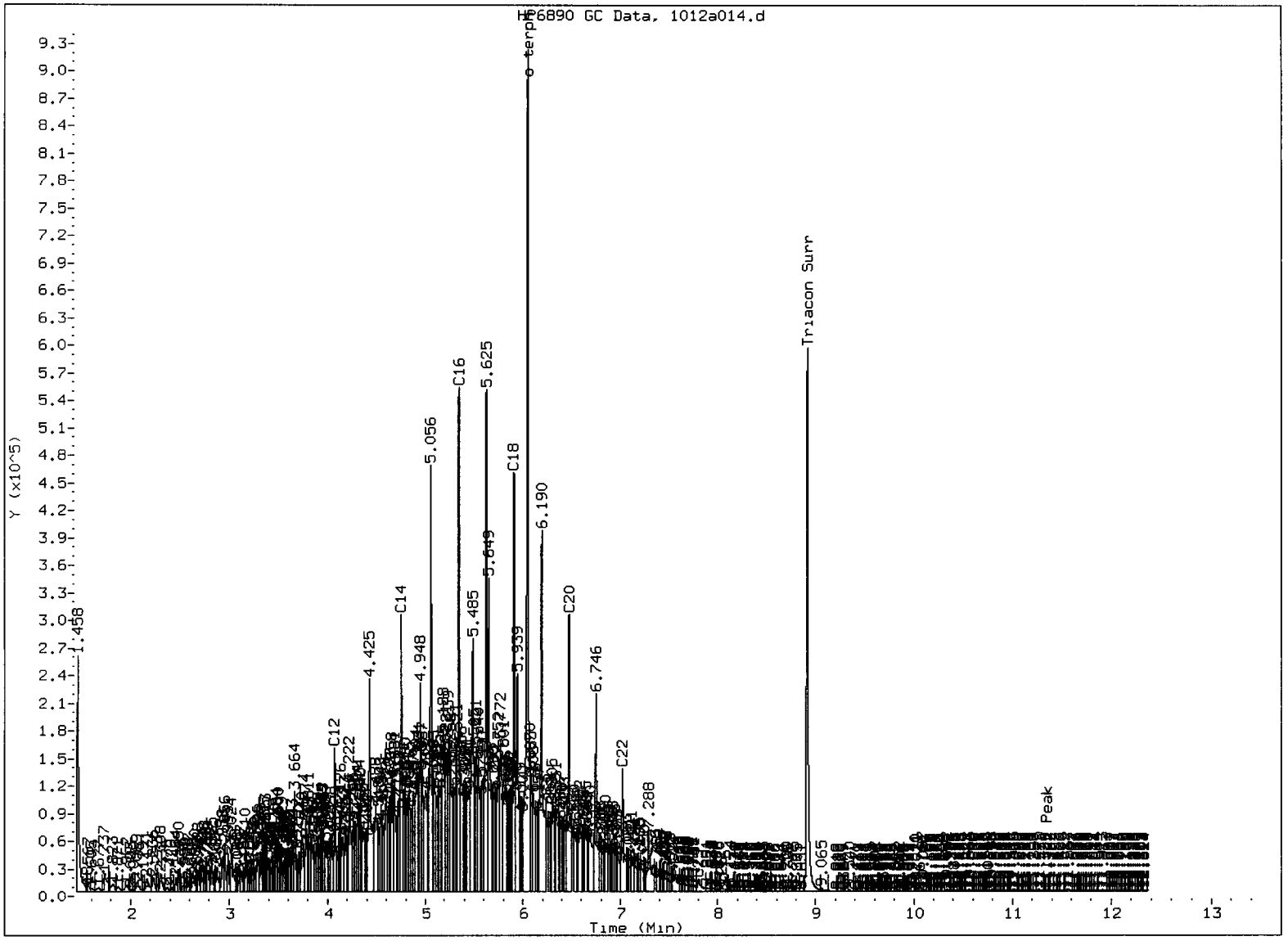


Data File: /chem3/fid4a.i/20121012.b/1012a014.d
Date : 12-OCT-2012 20:45
Client ID:
Sample Info: VM60LCSW1

Instrument: fid4a.i
Operator: JR/VTS
Column phase: RTX-1
Column diameter: 0.25



FID:4A-2C/RTX-1 VM60LCSW1 FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: _____ Date: 10/13/11

Data File: /chem3/fid4a.i/20121012.b/1012a015.d

Date : 12-OCT-2012 21:06

Client ID:

Sample Info: VM60A

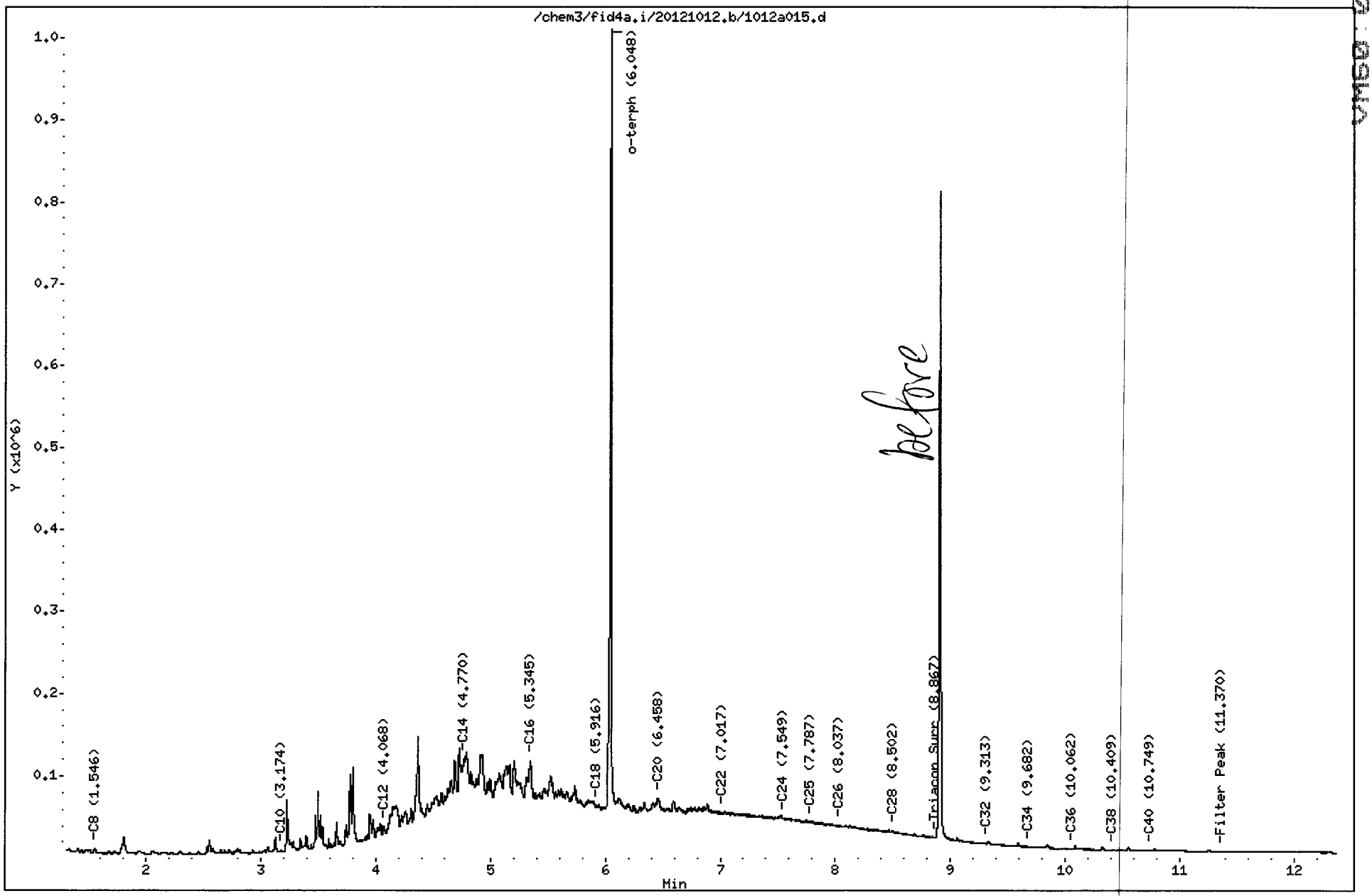
Instrument: fid4a.i

Operator: JR/VTS

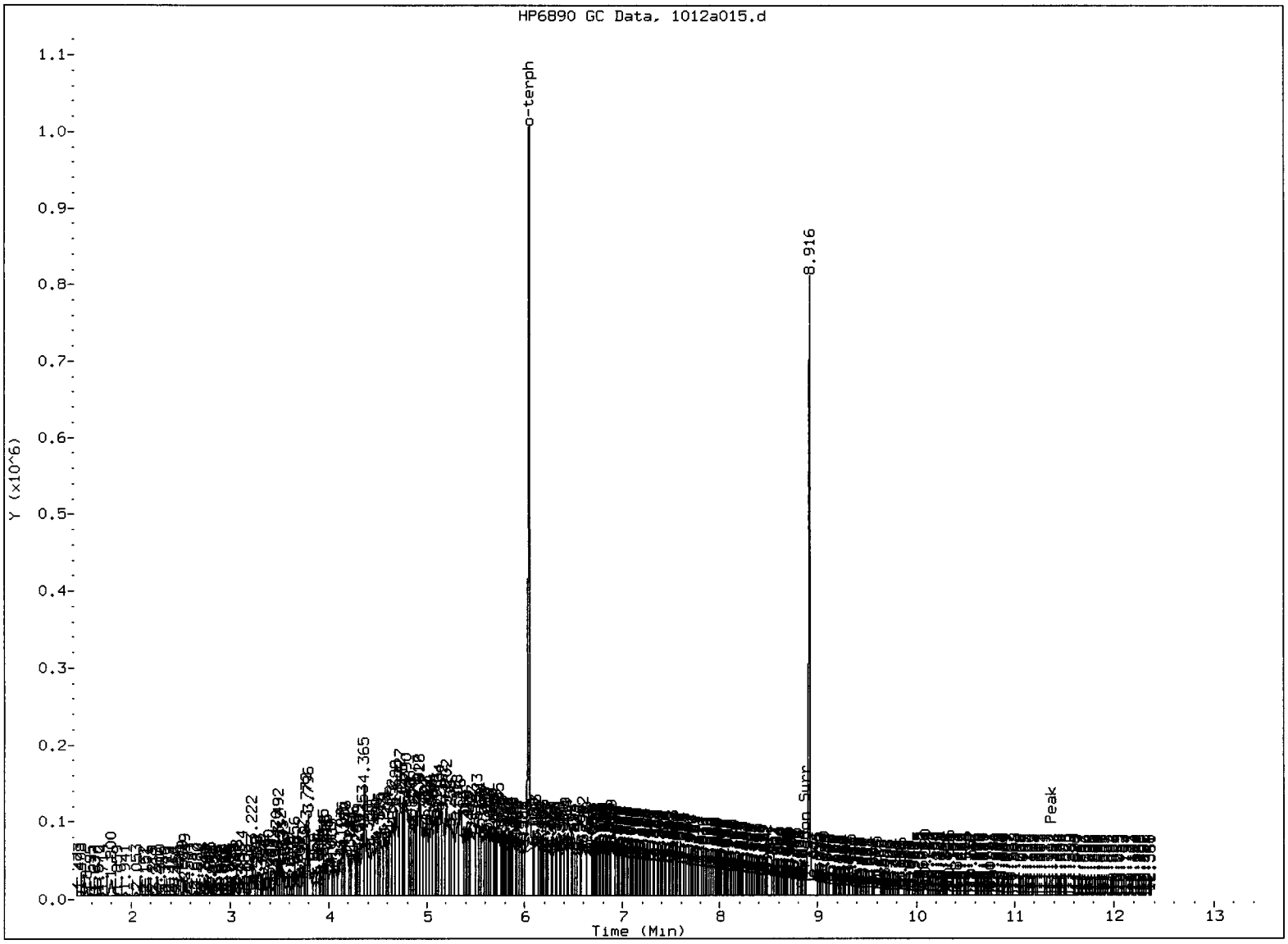
Column phase: RTX-1

Column diameter: 0.25

VM60 00060



FID:4A-2C/RTX-1 VM60A FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

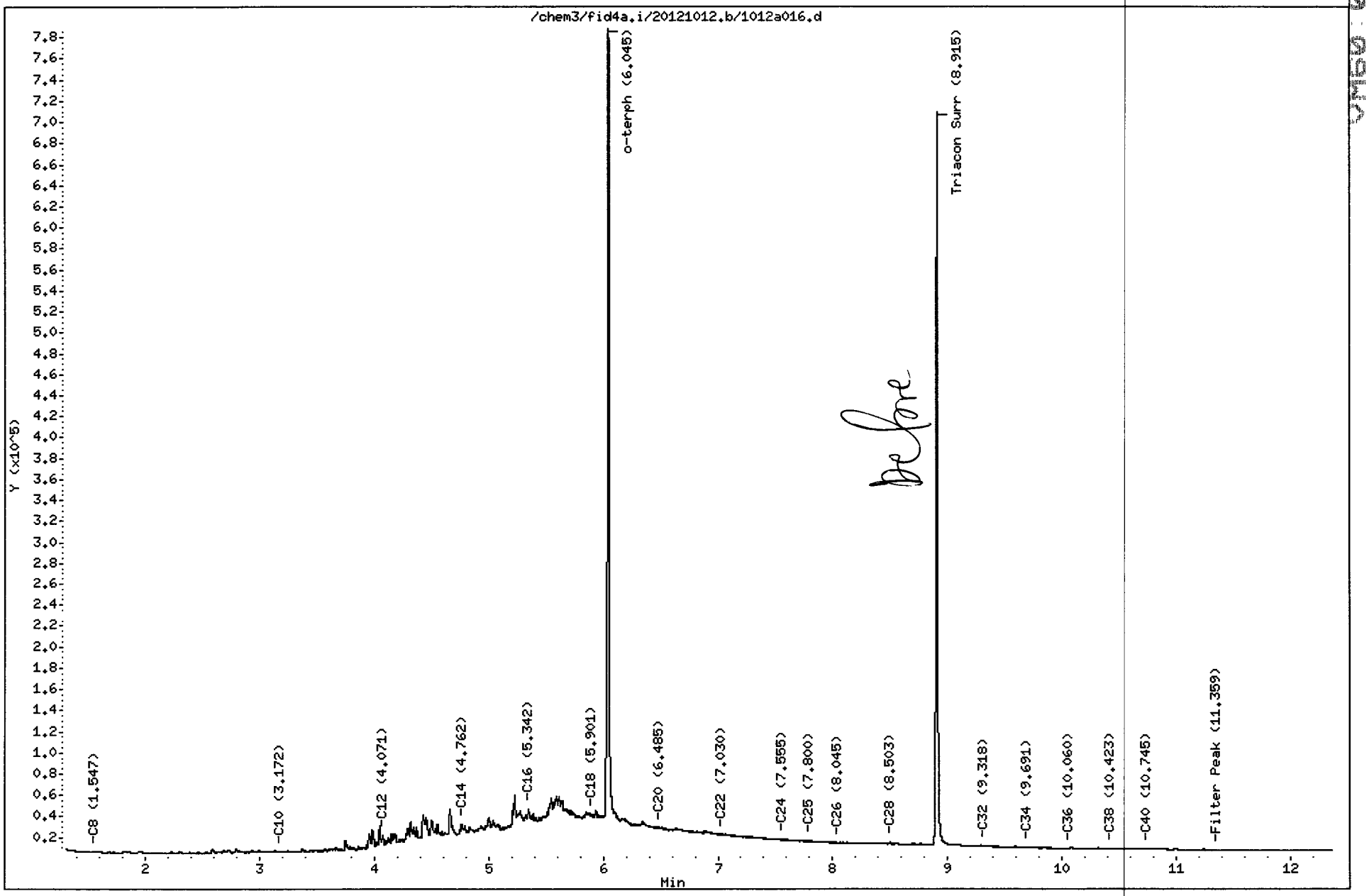
Analyst: _____ Date: 10/17/12

Data File: /chem3/fid4a.i/20121012.b/1012a016.d
Date : 12-OCT-2012 21:28
Client ID:
Sample Info: VM60B

Instrument: fid4a.i

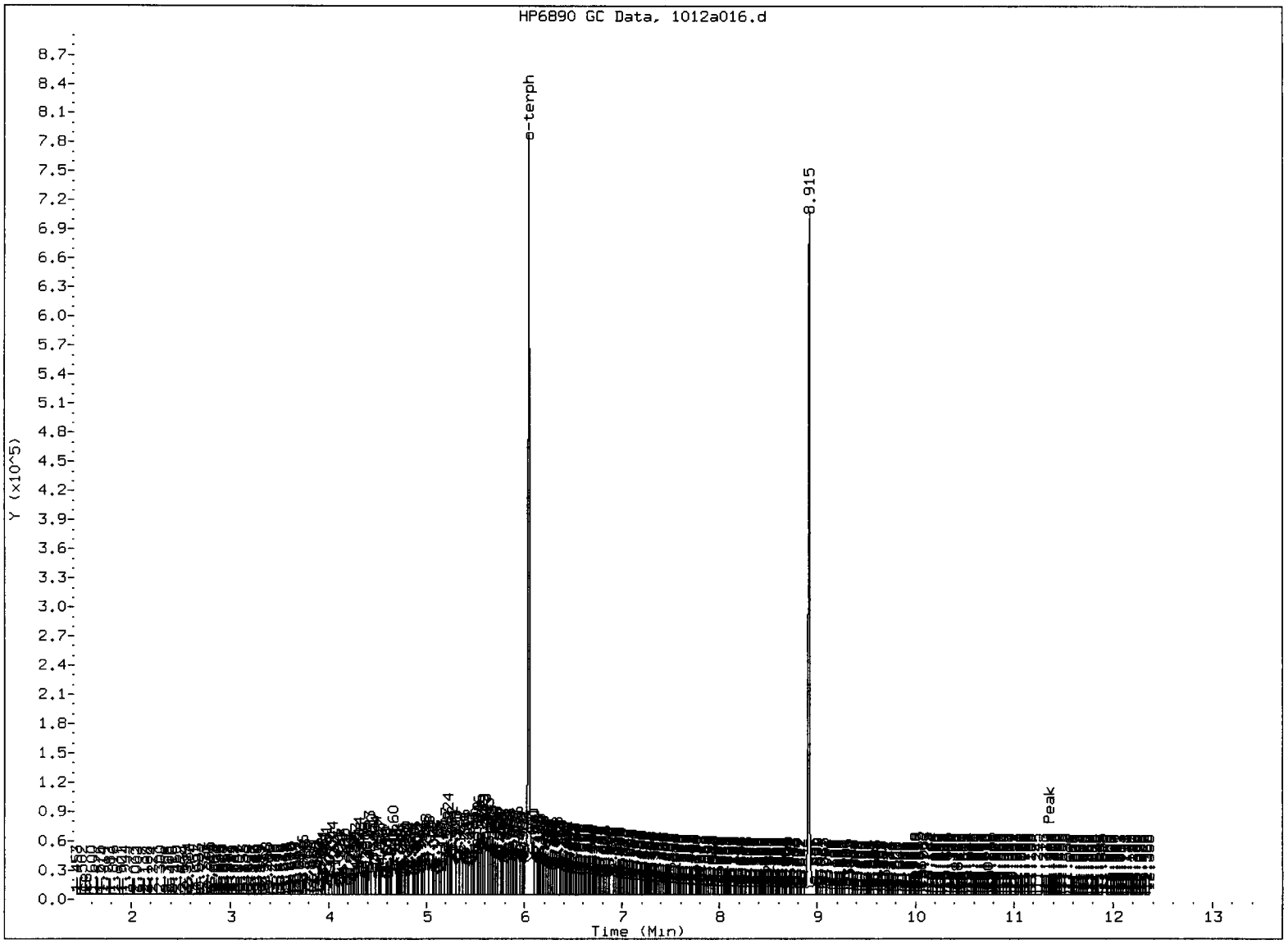
Operator: JR/VTS
Column diameter: 0.25

Column phase: RTX-1



VM60 00052

FID:4A-2C/RTX-1 VM60B FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: _____ Date: 12/13/12

Data File: /chem3/fid4a.i/20121012.b/1012a017.d

Date : 12-OCT-2012 21:49

Client ID:

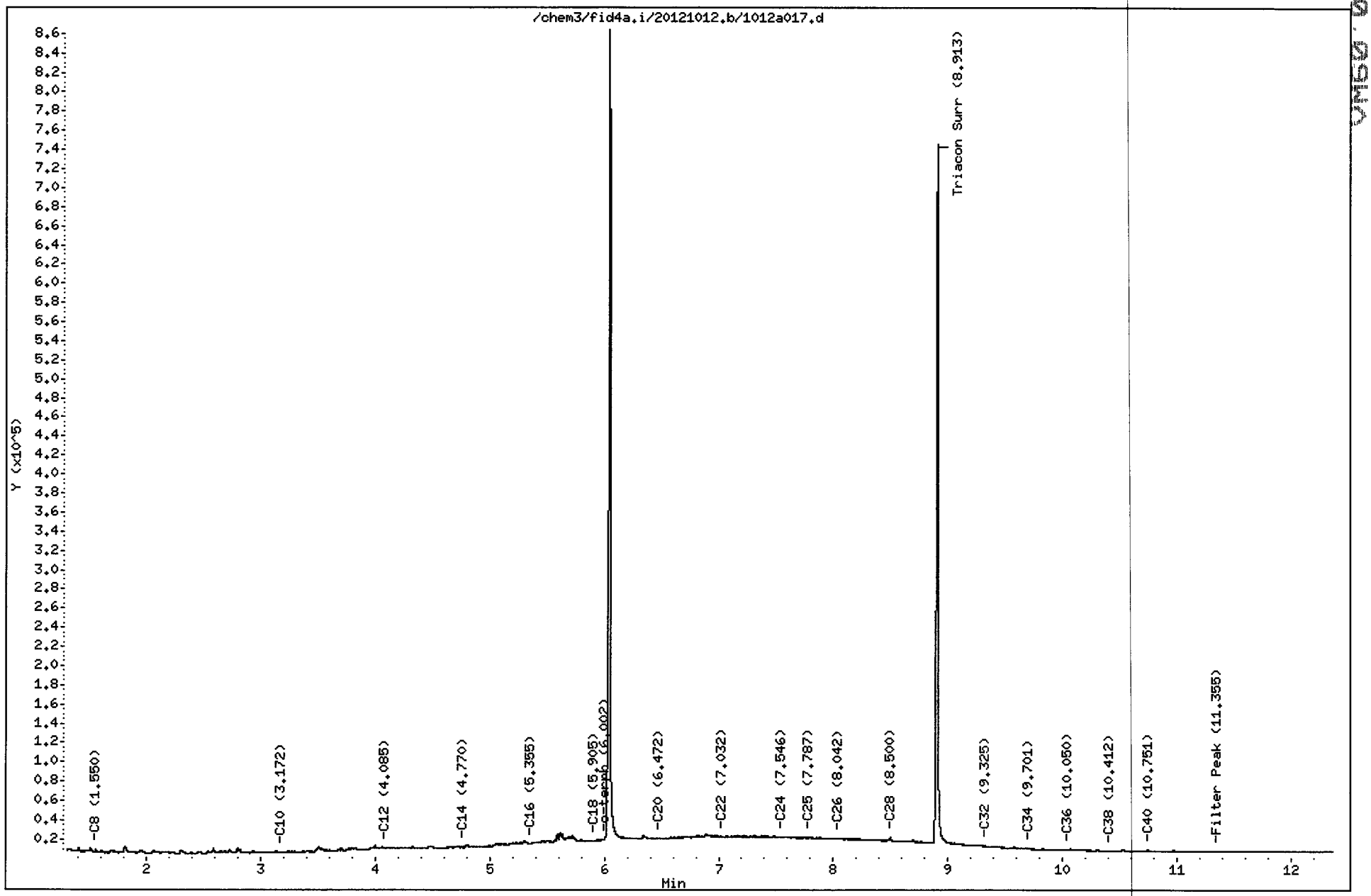
Sample Info: VM60C

Column phase: RTX-1

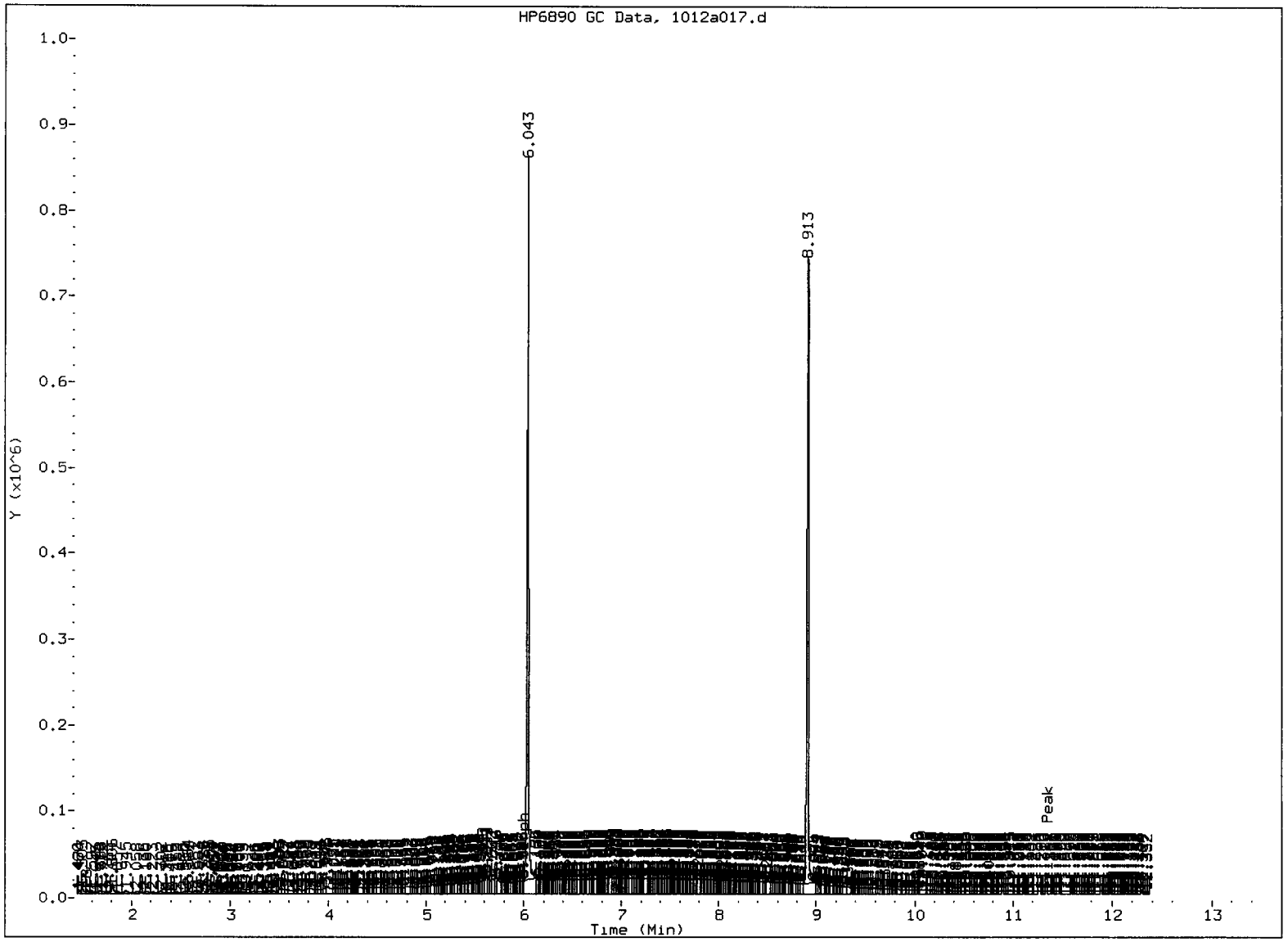
Instrument: fid4a.i

Operator: JR/VTS

Column diameter: 0.25



FID:4A-2C/RTX-1 VM60C FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

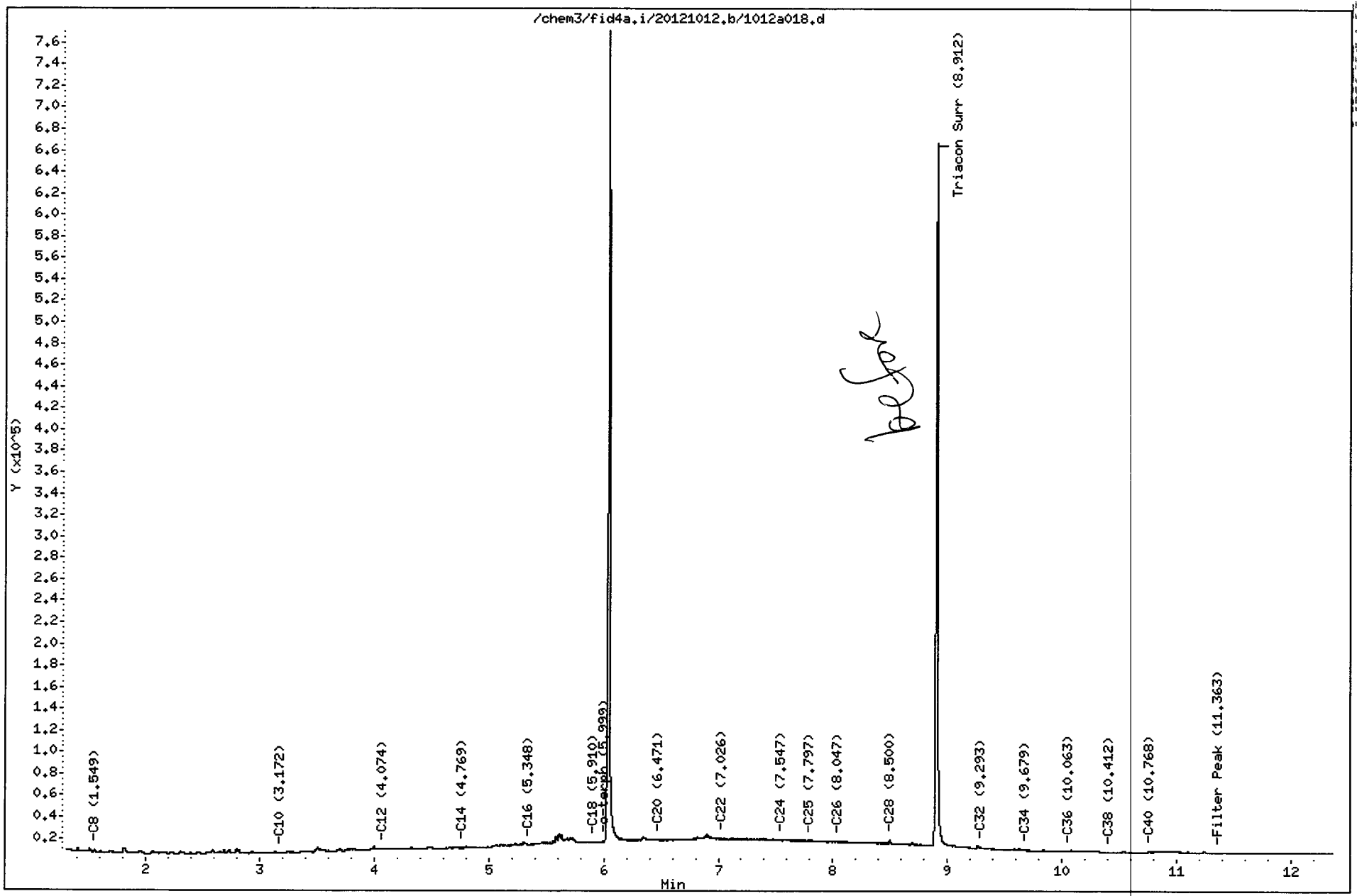
Analyst: _____ Date: 10/13/12

Data File: /chem3/fid4a.i/20121012.b/1012a018.d
Date : 12-OCT-2012 22:10
Client ID:
Sample Info: VM60D

Instrument: fid4a.i

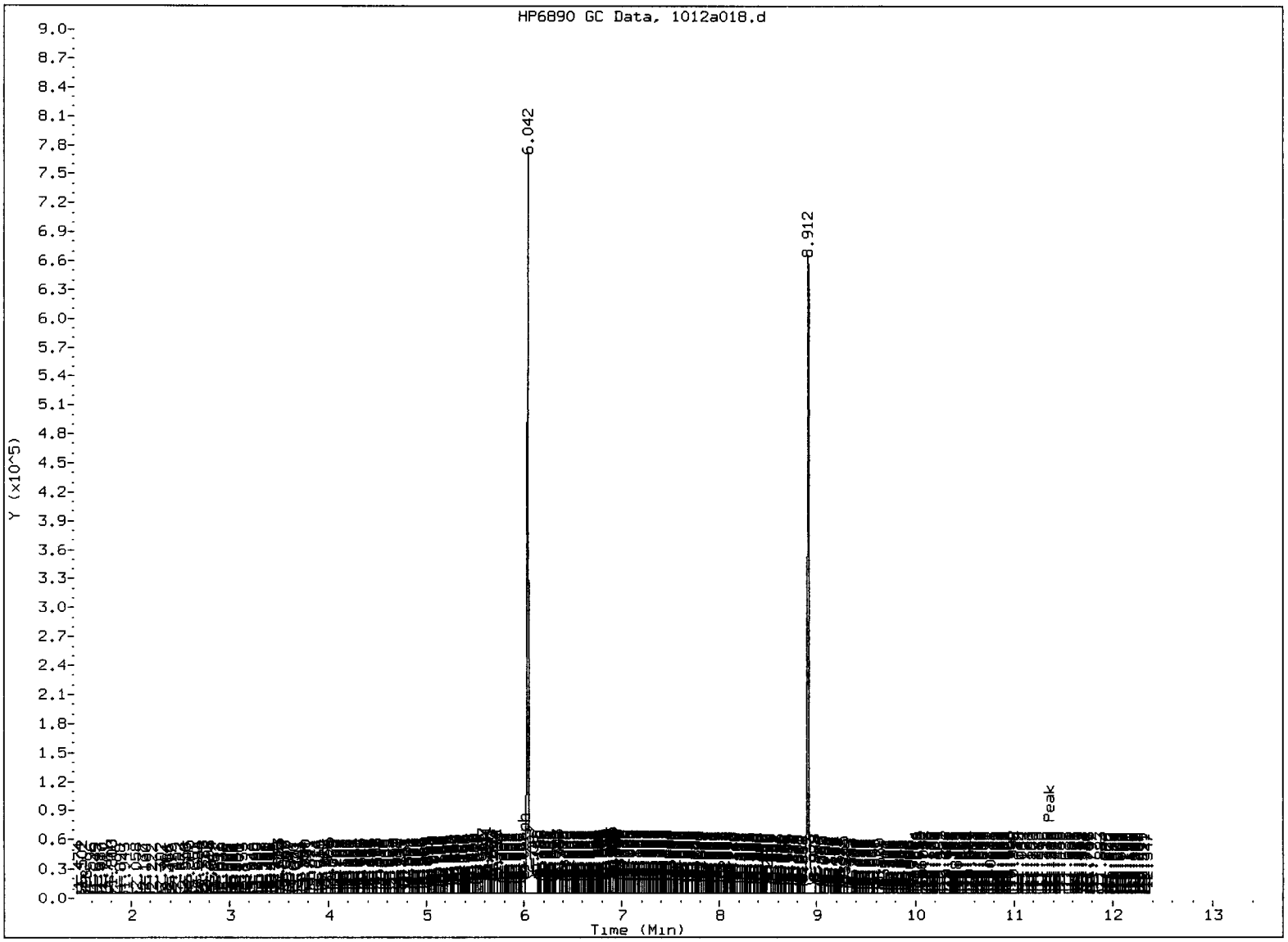
Operator: JR/VTS
Column diameter: 0.25

Column phase: RTX-1



VM60D:0055

FID:4A-2C/RTX-1 VM60D FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: _____ Date: 10/13/11

Analytical Resources, Incorporated
Analytical Chemists and Consultants

14 December 2012

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: Sims-N Cascade Ford, 0747.01.02
ARI Job No.: VU67

Dear Heather:

Please find enclosed the original chain of custody records and the final results for the samples from the project referenced above. These samples were received on December 4, 2012. The samples were analyzed for VOAs, NWTPH-G, SIM-PAHs, PCBs, NWTPH-Dx and TOC as requested.

The percent differences (%Ds) for methylene chloride, acetone, vinyl acetate, trichlorofluoromethane and acrolein were high for the CCALs that bracketed the VOA analyses of these samples. All positive results for these compounds have been flagged with a "Q" qualifier to denote the high %Ds.

It was noted prior to extraction that the amber bottles for samples GP11-W-17.5, GP12-W-7.5 and GP16-W-17.5 contained a fine, but noticeable layer of sediment. As instructed, the sediment layer was not included in the extraction for NWTPH-Dx or SIM-PAHs. No solvent bottle rinse was performed for any of these extractions.

The remaining analyses proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file VU67

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: vu67	Turn-around Requested: Standard	Page: 1 of 1	
ARI Client Company: Maul Foster & Alongi	Phone: 360-927-1309	Date: 12/02/12	Ice Present? Y
Client Contact: Heather Hirsch		No. of Coolers: 2	Cooler Temps: 3,4,5,0
Client Project Name: Sims - N. Cascade Ford			
Client Project #: 0747.01.02	Samplers: Hirsch / Gallagher		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: TOC by 9060A	VOCs by 8260B	NWTPH-Gx	NWTPH-Dx	PAHs by 8270 SIM	PCBs by 8082	Lead by 6010		Notes/Comments
GP11-S-1.25	12/2/12	1300	Soil	8		X	X	X	X	X			
GP11-S-7.5		1310		1	X								
GP12-S-12.0		0910		1	X								
GP13-S-1.6		1520		8		X	X	X	X	X			
GP11-W-17.5		1445	Water	9		X	X	X	X				
GP12-W-7.5		1230		9		X	X	X	X				
GP12-W-25.5		1110		9	←	Hold				→			
GP16-W-17.5		1620		10		Hold	X	X	Hold		Hold		
~~TRIP BLANK~~													

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
No trip blanks were provided.	Printed Name: Heather Hirsch	Printed Name: Jennifer Milbap	Printed Name:	Printed Name:
	Company: Maul Foster & Alongi	Company: ARI	Company:	Company:
	Date & Time: 12/3/12 0830	Date & Time: 12/3/12 1320	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Maul, Foster + Alongi Project Name: SIMS - N Cascade Ford

COC No(s): _____ NA Delivered by: Fed-Ex UPS Courier ARI Hand Delivered Other: _____

Assigned ARI Job No: VUG7 Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry): 3.4 5.0 ___ ___ ___ ___

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90877952

Cooler Accepted by: JM Date: 12/3/12 Time: 1320

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	(NA)	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

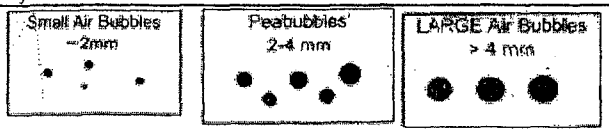
Samples Logged by: TS Date: 12-3-12 Time: 1605

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: VU67
Client: Maul Foster & Alongi
Project Event: 0747.01.02
Project Name: Sims- N.Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	GP11-W-17.5	VU67A	12-23838	Water	12/02/12 14:45	12/03/12 13:20
2.	GP12-W-7.5	VU67B	12-23839	Water	12/02/12 12:30	12/03/12 13:20
3.	GP12-W-25.5	VU67C	12-23840	Water	12/02/12 11:10	12/03/12 13:20
4.	GP16-W-17.5	VU67D	12-23841	Water	12/02/12 16:20	12/03/12 13:20
5.	GP-11-S-1.25	VU67E	12-23842	Soil	12/02/12 13:00	12/03/12 13:20
6.	GP-13-S-1.6	VU67F	12-23843	Soil	12/02/12 15:20	12/03/12 13:20
7.	GP11-S-7.5	VU67G	12-23844	Soil	12/02/12 13:10	12/03/12 13:20
8.	GP12-S-12.0	VU67H	12-23845	Soil	12/02/12 09:10	12/03/12 13:20

VU67 : 00004

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Duplicate RPD is not within established control limits
B	Reported value is less than the CRDL but ≥ the Reporting Limit
N	Matrix Spike recovery not within established control limits
NA	Not Applicable, analyte not spiked
H	The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
L	Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Flagged value is not within established control limits
B	Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
J	Estimated concentration when the value is less than ARI's established reporting limits
D	The spiked compound was not detected due to sample extract dilution
E	Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

VU67 : 00005

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

VU67 : 00006

Geotechnical Data

A	The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
F	Samples were frozen prior to particle size determination
SM	Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
SS	Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
W	Weight of sample in some pipette aliquots was below the level required for accurate weighting

VU57 : 00007

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP-11-S-1.25**
 SAMPLE

Lab Sample ID: VU67E
LIMS ID: 12-23842
Matrix: Soil
Data Release Authorized:
Reported: 12/05/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Instrument/Analyst: NT9/PAB
Date Analyzed: 12/04/12 12:03

Sample Amount: 76.9 mg-dry-wt
Purge Volume: 5.0 mL
Moisture: 7.0%

CAS Number	Analyte	RL	Result	Q
74-87-3	**Chloromethane**	**65**	**110**	
74-83-9	**Bromomethane**	**65**	**87**	**B**
75-01-4	Vinyl Chloride	65	< 65	U
75-00-3	Chloroethane	65	< 65	U
75-09-2	Methylene Chloride	130	< 130	U
67-64-1	**Acetone**	**320**	**530**	**QB**
75-15-0	Carbon Disulfide	65	< 65	U
75-35-4	1,1-Dichloroethene	65	< 65	U
75-34-3	1,1-Dichloroethane	65	< 65	U
156-60-5	trans-1,2-Dichloroethene	65	< 65	U
156-59-2	cis-1,2-Dichloroethene	65	< 65	U
67-66-3	Chloroform	65	< 65	U
107-06-2	1,2-Dichloroethane	65	< 65	U
78-93-3	2-Butanone	320	< 320	U
71-55-6	1,1,1-Trichloroethane	65	< 65	U
56-23-5	Carbon Tetrachloride	65	< 65	U
108-05-4	Vinyl Acetate	320	< 320	U
75-27-4	Bromodichloromethane	65	< 65	U
78-87-5	1,2-Dichloropropane	65	< 65	U
10061-01-5	cis-1,3-Dichloropropene	65	< 65	U
79-01-6	Trichloroethene	65	< 65	U
124-48-1	Dibromochloromethane	65	< 65	U
79-00-5	1,1,2-Trichloroethane	65	< 65	U
71-43-2	Benzene	65	< 65	U
10061-02-6	trans-1,3-Dichloropropene	65	< 65	U
110-75-8	2-Chloroethylvinylether	320	< 320	U
75-25-2	Bromoform	65	< 65	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	320	< 320	U
591-78-6	2-Hexanone	320	< 320	U
127-18-4	Tetrachloroethene	65	< 65	U
79-34-5	1,1,2,2-Tetrachloroethane	65	< 65	U
108-88-3	**Toluene**	**65**	**160**	
108-90-7	**Chlorobenzene**	**65**	**230**	
100-41-4	**Ethylbenzene**	**65**	**57**	**J**
100-42-5	Styrene	65	< 65	U
75-69-4	Trichlorofluoromethane	65	< 65	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	130	< 130	U
179601-23-1	**m,p-Xylene**	**65**	**210**	
95-47-6	**o-Xylene**	**65**	**73**	
95-50-1	**1,2-Dichlorobenzene**	**65**	**96**	
541-73-1	1,3-Dichlorobenzene	65	< 65	U
106-46-7	**1,4-Dichlorobenzene**	**65**	**280**	
107-02-8	Acrolein	3,200	< 3,200	U
74-88-4	Iodomethane	65	< 65	U
74-96-4	Bromoethane	130	< 130	U
107-13-1	Acrylonitrile	320	< 320	U
563-58-6	1,1-Dichloropropene	65	< 65	U
74-95-3	Dibromomethane	65	< 65	U
630-20-6	1,1,1,2-Tetrachloroethane	65	< 65	U
96-12-8	1,2-Dibromo-3-chloropropane	320	< 320	U
96-18-4	1,2,3-Trichloropropane	130	< 130	U
110-57-6	trans-1,4-Dichloro-2-butene	320	< 320	U
108-67-8	**1,3,5-Trimethylbenzene**	**65**	**120**	

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP-11-S-1.25**
 SAMPLE

Lab Sample ID: VU67E
LIMS ID: 12-23842
Matrix: Soil
Date Analyzed: 12/04/12 12:03

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

CAS Number	Analyte	RL	Result	Q
95-63-6	**1,2,4-Trimethylbenzene**	**65**	**390**	
87-68-3	Hexachlorobutadiene	320	< 320	U
106-93-4	1,2-Dibromoethane	65	< 65	U
74-97-5	Bromochloromethane	65	< 65	U
594-20-7	2,2-Dichloropropane	65	< 65	U
142-28-9	1,3-Dichloropropane	65	< 65	U
98-82-8	Isopropylbenzene	65	< 65	U
103-65-1	n-Propylbenzene	65	< 65	U
108-86-1	Bromobenzene	65	< 65	U
95-49-8	2-Chlorotoluene	65	< 65	U
106-43-4	4-Chlorotoluene	65	< 65	U
98-06-6	tert-Butylbenzene	65	< 65	U
135-98-8	sec-Butylbenzene	65	< 65	U
99-87-6	**4-Isopropyltoluene**	**65**	**49**	**J**
104-51-8	**n-Butylbenzene**	**65**	**42**	**J**
120-82-1	1,2,4-Trichlorobenzene	320	< 320	U
91-20-3	Naphthalene	320	< 320	U
87-61-6	1,2,3-Trichlorobenzene	320	< 320	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	107%
d8-Toluene	103%
Bromofluorobenzene	98.3%
d4-1,2-Dichlorobenzene	102%

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP-13-S-1.6**
Page 1 of 2 **SAMPLE**

Lab Sample ID: VU67F
LIMS ID: 12-23843
Matrix: Soil
Data Release Authorized:
Reported: 12/05/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Instrument/Analyst: NT9/PAB
Date Analyzed: 12/04/12 10:28

Sample Amount: 3.58 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 23.8%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.4	< 1.4	U
74-83-9	Bromomethane	1.4	< 1.4	U
75-01-4	Vinyl Chloride	1.4	< 1.4	U
75-00-3	Chloroethane	1.4	< 1.4	U
75-09-2	**Methylene Chloride**	**2.8**	**4.3**	
67-64-1	**Acetone**	**7.0**	**40**	**QB**
75-15-0	Carbon Disulfide	1.4	< 1.4	U
75-35-4	1,1-Dichloroethene	1.4	< 1.4	U
75-34-3	1,1-Dichloroethane	1.4	< 1.4	U
156-60-5	trans-1,2-Dichloroethene	1.4	< 1.4	U
156-59-2	cis-1,2-Dichloroethene	1.4	< 1.4	U
67-66-3	Chloroform	1.4	< 1.4	U
107-06-2	1,2-Dichloroethane	1.4	< 1.4	U
78-93-3	2-Butanone	7.0	< 7.0	U
71-55-6	1,1,1-Trichloroethane	1.4	< 1.4	U
56-23-5	Carbon Tetrachloride	1.4	< 1.4	U
108-05-4	Vinyl Acetate	7.0	< 7.0	U
75-27-4	Bromodichloromethane	1.4	< 1.4	U
78-87-5	1,2-Dichloropropane	1.4	< 1.4	U
10061-01-5	cis-1,3-Dichloropropene	1.4	< 1.4	U
79-01-6	Trichloroethene	1.4	< 1.4	U
124-48-1	Dibromochloromethane	1.4	< 1.4	U
79-00-5	1,1,2-Trichloroethane	1.4	< 1.4	U
71-43-2	Benzene	1.4	< 1.4	U
10061-02-6	trans-1,3-Dichloropropene	1.4	< 1.4	U
110-75-8	2-Chloroethylvinylether	7.0	< 7.0	U
75-25-2	Bromoform	1.4	< 1.4	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	7.0	< 7.0	U
591-78-6	2-Hexanone	7.0	< 7.0	U
127-18-4	Tetrachloroethene	1.4	< 1.4	U
79-34-5	1,1,2,2-Tetrachloroethane	1.4	< 1.4	U
108-88-3	Toluene	1.4	< 1.4	U
108-90-7	Chlorobenzene	1.4	< 1.4	U
100-41-4	Ethylbenzene	1.4	< 1.4	U
100-42-5	Styrene	1.4	< 1.4	U
75-69-4	Trichlorofluoromethane	1.4	< 1.4	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.8	< 2.8	U
179601-23-1	m,p-Xylene	1.4	< 1.4	U
95-47-6	o-Xylene	1.4	< 1.4	U
95-50-1	1,2-Dichlorobenzene	1.4	< 1.4	U
541-73-1	1,3-Dichlorobenzene	1.4	< 1.4	U
106-46-7	1,4-Dichlorobenzene	1.4	< 1.4	U
107-02-8	Acrolein	70	< 70	U
74-88-4	Iodomethane	1.4	< 1.4	U
74-96-4	Bromoethane	2.8	< 2.8	U
107-13-1	Acrylonitrile	7.0	< 7.0	U
563-58-6	1,1-Dichloropropene	1.4	< 1.4	U
74-95-3	Dibromomethane	1.4	< 1.4	U
630-20-6	1,1,1,2-Tetrachloroethane	1.4	< 1.4	U
96-12-8	1,2-Dibromo-3-chloropropane	7.0	< 7.0	U
96-18-4	1,2,3-Trichloropropane	2.8	< 2.8	U
110-57-6	trans-1,4-Dichloro-2-butene	7.0	< 7.0	U
108-67-8	1,3,5-Trimethylbenzene	1.4	< 1.4	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP-13-S-1.6**
 SAMPLE

Lab Sample ID: VU67F
LIMS ID: 12-23843
Matrix: Soil
Date Analyzed: 12/04/12 10:28

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford 0747.01.02

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	1.4	< 1.4	U
87-68-3	Hexachlorobutadiene	7.0	< 7.0	U
106-93-4	1,2-Dibromoethane	1.4	< 1.4	U
74-97-5	Bromochloromethane	1.4	< 1.4	U
594-20-7	2,2-Dichloropropane	1.4	< 1.4	U
142-28-9	1,3-Dichloropropane	1.4	< 1.4	U
98-82-8	Isopropylbenzene	1.4	< 1.4	U
103-65-1	n-Propylbenzene	1.4	< 1.4	U
108-86-1	Bromobenzene	1.4	< 1.4	U
95-49-8	2-Chlorotoluene	1.4	< 1.4	U
106-43-4	4-Chlorotoluene	1.4	< 1.4	U
98-06-6	tert-Butylbenzene	1.4	< 1.4	U
135-98-8	sec-Butylbenzene	1.4	< 1.4	U
99-87-6	4-Isopropyltoluene	1.4	< 1.4	U
104-51-8	n-Butylbenzene	1.4	< 1.4	U
120-82-1	1,2,4-Trichlorobenzene	7.0	< 7.0	U
91-20-3	Naphthalene	7.0	< 7.0	U
87-61-6	1,2,3-Trichlorobenzene	7.0	< 7.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	115%
d8-Toluene	101%
Bromofluorobenzene	98.3%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-120412A**
 METHOD BLANK

Lab Sample ID: MB-120412A
LIMS ID: 12-23843
Matrix: Soil
Data Release Authorized:
Reported: 12/05/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford 0747.01.02
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT9/PAB
Date Analyzed: 12/04/12 09:01

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.0	< 1.0	U
74-83-9	**Bromomethane**	**1.0**	**0.5**	**J**
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	Methylene Chloride	2.0	< 2.0	U
67-64-1	**Acetone**	**5.0**	**3.4**	**J**
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	5.0	< 5.0	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	< 2.0	U
179601-23-1	m,p-Xylene	1.0	< 1.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
107-02-8	Acrolein	50	< 50	U
74-88-4	**Iodomethane**	**1.0**	**0.7**	**J**
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	5.0	< 5.0	U
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0	U
96-18-4	1,2,3-Trichloropropane	2.0	< 2.0	U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U

Lab Sample ID: MB-120412A
LIMS ID: 12-23843
Matrix: Soil
Date Analyzed: 12/04/12 09:01

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	5.0	< 5.0	U
106-93-4	1,2-Dibromoethane	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	**1,2,4-Trichlorobenzene**	**5.0**	**0.6**	**J**
91-20-3	**Naphthalene**	**5.0**	**0.7**	**J**
87-61-6	**1,2,3-Trichlorobenzene**	**5.0**	**0.7**	**J**

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	101%
Bromofluorobenzene	94.8%
d4-1,2-Dichlorobenzene	103%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-120412A**
 METHOD BLANK

Lab Sample ID: MB-120412A
LIMS ID: 12-23842
Matrix: Soil
Data Release Authorized:
Reported: 12/05/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford 0747.01.02
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT9/PAB
Date Analyzed: 12/04/12 09:01

Sample Amount: 100 mg-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	50	< 50	U
74-83-9	**Bromomethane**	**50**	**26**	**J**
75-01-4	Vinyl Chloride	50	< 50	U
75-00-3	Chloroethane	50	< 50	U
75-09-2	Methylene Chloride	100	< 100	U
67-64-1	**Acetone**	**250**	**170**	**J**
75-15-0	Carbon Disulfide	50	< 50	U
75-35-4	1,1-Dichloroethene	50	< 50	U
75-34-3	1,1-Dichloroethane	50	< 50	U
156-60-5	trans-1,2-Dichloroethene	50	< 50	U
156-59-2	cis-1,2-Dichloroethene	50	< 50	U
67-66-3	Chloroform	50	< 50	U
107-06-2	1,2-Dichloroethane	50	< 50	U
78-93-3	2-Butanone	250	< 250	U
71-55-6	1,1,1-Trichloroethane	50	< 50	U
56-23-5	Carbon Tetrachloride	50	< 50	U
108-05-4	Vinyl Acetate	250	< 250	U
75-27-4	Bromodichloromethane	50	< 50	U
78-87-5	1,2-Dichloropropane	50	< 50	U
10061-01-5	cis-1,3-Dichloropropene	50	< 50	U
79-01-6	Trichloroethene	50	< 50	U
124-48-1	Dibromochloromethane	50	< 50	U
79-00-5	1,1,2-Trichloroethane	50	< 50	U
71-43-2	Benzene	50	< 50	U
10061-02-6	trans-1,3-Dichloropropene	50	< 50	U
110-75-8	2-Chloroethylvinylether	250	< 250	U
75-25-2	Bromoform	50	< 50	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	250	< 250	U
591-78-6	2-Hexanone	250	< 250	U
127-18-4	Tetrachloroethene	50	< 50	U
79-34-5	1,1,2,2-Tetrachloroethane	50	< 50	U
108-88-3	Toluene	50	< 50	U
108-90-7	Chlorobenzene	50	< 50	U
100-41-4	Ethylbenzene	50	< 50	U
100-42-5	Styrene	50	< 50	U
75-69-4	Trichlorofluoromethane	50	< 50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	100	< 100	U
179601-23-1	m,p-Xylene	50	< 50	U
95-47-6	o-Xylene	50	< 50	U
95-50-1	1,2-Dichlorobenzene	50	< 50	U
541-73-1	1,3-Dichlorobenzene	50	< 50	U
106-46-7	1,4-Dichlorobenzene	50	< 50	U
107-02-8	Acrolein	2,500	< 2,500	U
74-88-4	**Iodomethane**	**50**	**33**	**J**
74-96-4	Bromoethane	100	< 100	U
107-13-1	Acrylonitrile	250	< 250	U
563-58-6	1,1-Dichloropropene	50	< 50	U
74-95-3	Dibromomethane	50	< 50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	< 50	U
96-12-8	1,2-Dibromo-3-chloropropane	250	< 250	U
96-18-4	1,2,3-Trichloropropane	100	< 100	U
110-57-6	trans-1,4-Dichloro-2-butene	250	< 250	U
108-67-8	1,3,5-Trimethylbenzene	50	< 50	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-120412A**
 METHOD BLANK

Lab Sample ID: MB-120412A
LIMS ID: 12-23842
Matrix: Soil
Date Analyzed: 12/04/12 09:01

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	50	< 50	U
87-68-3	Hexachlorobutadiene	250	< 250	U
106-93-4	1,2-Dibromoethane	50	< 50	U
74-97-5	Bromochloromethane	50	< 50	U
594-20-7	2,2-Dichloropropane	50	< 50	U
142-28-9	1,3-Dichloropropane	50	< 50	U
98-82-8	Isopropylbenzene	50	< 50	U
103-65-1	n-Propylbenzene	50	< 50	U
108-86-1	Bromobenzene	50	< 50	U
95-49-8	2-Chlorotoluene	50	< 50	U
106-43-4	4-Chlorotoluene	50	< 50	U
98-06-6	tert-Butylbenzene	50	< 50	U
135-98-8	sec-Butylbenzene	50	< 50	U
99-87-6	4-Isopropyltoluene	50	< 50	U
104-51-8	n-Butylbenzene	50	< 50	U
120-82-1	**1,2,4-Trichlorobenzene**	**250**	**29**	**J**
91-20-3	**Naphthalene**	**250**	**35**	**J**
87-61-6	**1,2,3-Trichlorobenzene**	**250**	**33**	**J**

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	108%
d8-Toluene	101%
Bromofluorobenzene	94.8%
d4-1,2-Dichlorobenzene	103%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-120412A**
Page 1 of 2 **LAB CONTROL SAMPLE**

Lab Sample ID: LCS-120412A
LIMS ID: 12-23842
Matrix: Soil
Data Release Authorized:
Reported: 12/05/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT9/PAB
LCSD: NT9/PAB
Date Analyzed LCS: 12/04/12 08:16
LCSD: 12/04/12 08:39

Sample Amount LCS: 100 mg-dry-wt
LCSD: 100 mg-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	2280		2500	91.2%	2240		2500	89.6%	1.8%
Bromomethane	2590	B	2500	104%	2550	B	2500	102%	1.6%
Vinyl Chloride	3030		2500	121%	2940		2500	118%	3.0%
Chloroethane	3070		2500	123%	2890		2500	116%	6.0%
Methylene Chloride	2730		2500	109%	2710		2500	108%	0.7%
Acetone	15800	QB	12500	126%	15800	QB	12500	126%	0.0%
Carbon Disulfide	3100		2500	124%	3010		2500	120%	2.9%
1,1-Dichloroethene	2990		2500	120%	2890		2500	116%	3.4%
1,1-Dichloroethane	2780		2500	111%	2730		2500	109%	1.8%
trans-1,2-Dichloroethene	2830		2500	113%	2730		2500	109%	3.6%
cis-1,2-Dichloroethene	3150		2500	126%	3100		2500	124%	1.6%
Chloroform	2830		2500	113%	2760		2500	110%	2.5%
1,2-Dichloroethane	2470		2500	98.8%	2480		2500	99.2%	0.4%
2-Butanone	13200		12500	106%	14000		12500	112%	5.9%
1,1,1-Trichloroethane	2910		2500	116%	2840		2500	114%	2.4%
Carbon Tetrachloride	2840		2500	114%	2770		2500	111%	2.5%
Vinyl Acetate	2760		2500	110%	2830		2500	113%	2.5%
Bromodichloromethane	2690		2500	108%	2680		2500	107%	0.4%
1,2-Dichloropropane	2570		2500	103%	2560		2500	102%	0.4%
cis-1,3-Dichloropropene	2760		2500	110%	2730		2500	109%	1.1%
Trichloroethene	2720		2500	109%	2640		2500	106%	3.0%
Dibromochloromethane	2700		2500	108%	2740		2500	110%	1.5%
1,1,2-Trichloroethane	2570		2500	103%	2600		2500	104%	1.2%
Benzene	2640		2500	106%	2590		2500	104%	1.9%
trans-1,3-Dichloropropene	2820		2500	113%	2800		2500	112%	0.7%
2-Chloroethylvinylether	2060		2500	82.4%	2080		2500	83.2%	1.0%
Bromoform	2240		2500	89.6%	2340		2500	93.6%	4.4%
4-Methyl-2-Pentanone (MIBK)	13100		12500	105%	14100		12500	113%	7.4%
2-Hexanone	12800		12500	102%	13400		12500	107%	4.6%
Tetrachloroethene	2620		2500	105%	2570		2500	103%	1.9%
1,1,2,2-Tetrachloroethane	2470		2500	98.8%	2560		2500	102%	3.6%
Toluene	2690		2500	108%	2640		2500	106%	1.9%
Chlorobenzene	2600		2500	104%	2570		2500	103%	1.2%
Ethylbenzene	2660		2500	106%	2600		2500	104%	2.3%
Styrene	2740		2500	110%	2680		2500	107%	2.2%
Trichlorofluoromethane	3340	Q	2500	134%	3110	Q	2500	124%	7.1%
1,1,2-Trichloro-1,2,2-trifluoroetha	3080		2500	123%	2960		2500	118%	4.0%

Lab Sample ID: LCS-120412A
LIMS ID: 12-23842
Matrix: Soil

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
m,p-Xylene	5320	5000	106%	5220	5000	104%	1.9%
o-Xylene	2710	2500	108%	2630	2500	105%	3.0%
1,2-Dichlorobenzene	2540	2500	102%	2500	2500	100%	1.6%
1,3-Dichlorobenzene	2540	2500	102%	2500	2500	100%	1.6%
1,4-Dichlorobenzene	2560	2500	102%	2510	2500	100%	2.0%
Acrolein	13000	12500	104%	13800	12500	110%	6.0%
Iodomethane	2860 B	2500	114%	2860 B	2500	114%	0.0%
Bromoethane	3020	2500	121%	2990	2500	120%	1.0%
Acrylonitrile	2520	2500	101%	2710	2500	108%	7.3%
1,1-Dichloropropene	2670	2500	107%	2600	2500	104%	2.7%
Dibromomethane	2540	2500	102%	2570	2500	103%	1.2%
1,1,1,2-Tetrachloroethane	2700	2500	108%	2690	2500	108%	0.4%
1,2-Dibromo-3-chloropropane	2590	2500	104%	2780	2500	111%	7.1%
1,2,3-Trichloropropane	2470	2500	98.8%	2570	2500	103%	4.0%
trans-1,4-Dichloro-2-butene	2440	2500	97.6%	2540	2500	102%	4.0%
1,3,5-Trimethylbenzene	2590	2500	104%	2530	2500	101%	2.3%
1,2,4-Trimethylbenzene	2580	2500	103%	2540	2500	102%	1.6%
Hexachlorobutadiene	2720	2500	109%	2660	2500	106%	2.2%
1,2-Dibromoethane	2570	2500	103%	2650	2500	106%	3.1%
Bromochloromethane	2950	2500	118%	2900	2500	116%	1.7%
2,2-Dichloropropane	2950	2500	118%	2840	2500	114%	3.8%
1,3-Dichloropropane	2450	2500	98.0%	2510	2500	100%	2.4%
Isopropylbenzene	2600	2500	104%	2570	2500	103%	1.2%
n-Propylbenzene	2590	2500	104%	2540	2500	102%	1.9%
Bromobenzene	2500	2500	100%	2470	2500	98.8%	1.2%
2-Chlorotoluene	2500	2500	100%	2470	2500	98.8%	1.2%
4-Chlorotoluene	2520	2500	101%	2470	2500	98.8%	2.0%
tert-Butylbenzene	2610	2500	104%	2580	2500	103%	1.2%
sec-Butylbenzene	2630	2500	105%	2570	2500	103%	2.3%
4-Isopropyltoluene	2700	2500	108%	2640	2500	106%	2.2%
n-Butylbenzene	2750	2500	110%	2650	2500	106%	3.7%
1,2,4-Trichlorobenzene	2650 B	2500	106%	2560 B	2500	102%	3.5%
Naphthalene	2550 B	2500	102%	2610 B	2500	104%	2.3%
1,2,3-Trichlorobenzene	2540 B	2500	102%	2490 B	2500	99.6%	2.0%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	104%	104%
d8-Toluene	102%	102%
Bromofluorobenzene	99.2%	97.9%
d4-1,2-Dichlorobenzene	103%	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-120412A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-120412A
LIMS ID: 12-23843
Matrix: Soil
Data Release Authorized: JB
Reported: 12/05/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford 0747.01.02
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT9/PAB
LCSD: NT9/PAB
Date Analyzed LCS: 12/04/12 08:16
LCSD: 12/04/12 08:39

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	45.7	50.0	91.4%	44.8	50.0	89.6%	2.0%
Bromomethane	51.9 B	50.0	104%	51.0 B	50.0	102%	1.7%
Vinyl Chloride	60.7	50.0	121%	58.8	50.0	118%	3.2%
Chloroethane	61.5	50.0	123%	57.8	50.0	116%	6.2%
Methylene Chloride	54.6	50.0	109%	54.2	50.0	108%	0.7%
Acetone	316 QB	250	126%	316 QB	250	126%	0.0%
Carbon Disulfide	62.0	50.0	124%	60.3	50.0	121%	2.8%
1,1-Dichloroethene	59.8	50.0	120%	57.8	50.0	116%	3.4%
1,1-Dichloroethane	55.6	50.0	111%	54.6	50.0	109%	1.8%
trans-1,2-Dichloroethene	56.6	50.0	113%	54.7	50.0	109%	3.4%
cis-1,2-Dichloroethene	63.0	50.0	126%	61.9	50.0	124%	1.8%
Chloroform	56.7	50.0	113%	55.2	50.0	110%	2.7%
1,2-Dichloroethane	49.5	50.0	99.0%	49.6	50.0	99.2%	0.2%
2-Butanone	264	250	106%	279	250	112%	5.5%
1,1,1-Trichloroethane	58.2	50.0	116%	56.9	50.0	114%	2.3%
Carbon Tetrachloride	56.7	50.0	113%	55.4	50.0	111%	2.3%
Vinyl Acetate	55.1	50.0	110%	56.5	50.0	113%	2.5%
Bromodichloromethane	53.8	50.0	108%	53.7	50.0	107%	0.2%
1,2-Dichloropropane	51.4	50.0	103%	51.2	50.0	102%	0.4%
cis-1,3-Dichloropropene	55.2	50.0	110%	54.6	50.0	109%	1.1%
Trichloroethene	54.4	50.0	109%	52.8	50.0	106%	3.0%
Dibromochloromethane	54.0	50.0	108%	54.9	50.0	110%	1.7%
1,1,2-Trichloroethane	51.3	50.0	103%	52.1	50.0	104%	1.5%
Benzene	52.8	50.0	106%	51.8	50.0	104%	1.9%
trans-1,3-Dichloropropene	56.5	50.0	113%	56.0	50.0	112%	0.9%
2-Chloroethylvinylether	41.2	50.0	82.4%	41.6	50.0	83.2%	1.0%
Bromoform	44.8	50.0	89.6%	46.8	50.0	93.6%	4.4%
4-Methyl-2-Pentanone (MIBK)	263	250	105%	282	250	113%	7.0%
2-Hexanone	256	250	102%	269	250	108%	5.0%
Tetrachloroethene	52.4	50.0	105%	51.3	50.0	103%	2.1%
1,1,2,2-Tetrachloroethane	49.3	50.0	98.6%	51.1	50.0	102%	3.6%
Toluene	53.9	50.0	108%	52.9	50.0	106%	1.9%
Chlorobenzene	51.9	50.0	104%	51.4	50.0	103%	1.0%
Ethylbenzene	53.2	50.0	106%	52.1	50.0	104%	2.1%
Styrene	54.7	50.0	109%	53.5	50.0	107%	2.2%
Trichlorofluoromethane	66.9 Q	50.0	134%	62.2 Q	50.0	124%	7.3%
1,1,2-Trichloro-1,2,2-trifluoroetha	61.7	50.0	123%	59.2	50.0	118%	4.1%

Lab Sample ID: LCS-120412A
LIMS ID: 12-23843
Matrix: Soil

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
m,p-Xylene	106	100	106%	104	100	104%	1.9%
o-Xylene	54.1	50.0	108%	52.7	50.0	105%	2.6%
1,2-Dichlorobenzene	50.7	50.0	101%	49.9	50.0	99.8%	1.6%
1,3-Dichlorobenzene	50.8	50.0	102%	50.1	50.0	100%	1.4%
1,4-Dichlorobenzene	51.1	50.0	102%	50.2	50.0	100%	1.8%
Acrolein	259	250	104%	276	250	110%	6.4%
Iodomethane	57.3 B	50.0	115%	57.3 B	50.0	115%	0.0%
Bromoethane	60.3	50.0	121%	59.9	50.0	120%	0.7%
Acrylonitrile	50.5	50.0	101%	54.1	50.0	108%	6.9%
1,1-Dichloropropene	53.3	50.0	107%	52.0	50.0	104%	2.5%
Dibromomethane	50.9	50.0	102%	51.3	50.0	103%	0.8%
1,1,1,2-Tetrachloroethane	53.9	50.0	108%	53.7	50.0	107%	0.4%
1,2-Dibromo-3-chloropropane	51.9	50.0	104%	55.6	50.0	111%	6.9%
1,2,3-Trichloropropane	49.5	50.0	99.0%	51.4	50.0	103%	3.8%
trans-1,4-Dichloro-2-butene	48.8	50.0	97.6%	50.9	50.0	102%	4.2%
1,3,5-Trimethylbenzene	51.8	50.0	104%	50.7	50.0	101%	2.1%
1,2,4-Trimethylbenzene	51.7	50.0	103%	50.7	50.0	101%	2.0%
Hexachlorobutadiene	54.4	50.0	109%	53.2	50.0	106%	2.2%
1,2-Dibromoethane	51.5	50.0	103%	53.0	50.0	106%	2.9%
Bromochloromethane	58.9	50.0	118%	57.9	50.0	116%	1.7%
2,2-Dichloropropane	59.0	50.0	118%	56.8	50.0	114%	3.8%
1,3-Dichloropropane	49.0	50.0	98.0%	50.2	50.0	100%	2.4%
Isopropylbenzene	51.9	50.0	104%	51.5	50.0	103%	0.8%
n-Propylbenzene	51.9	50.0	104%	50.8	50.0	102%	2.1%
Bromobenzene	50.0	50.0	100%	49.3	50.0	98.6%	1.4%
2-Chlorotoluene	49.9	50.0	99.8%	49.4	50.0	98.8%	1.0%
4-Chlorotoluene	50.4	50.0	101%	49.4	50.0	98.8%	2.0%
tert-Butylbenzene	52.2	50.0	104%	51.6	50.0	103%	1.2%
sec-Butylbenzene	52.7	50.0	105%	51.4	50.0	103%	2.5%
4-Isopropyltoluene	54.0	50.0	108%	52.7	50.0	105%	2.4%
n-Butylbenzene	55.0	50.0	110%	53.1	50.0	106%	3.5%
1,2,4-Trichlorobenzene	52.9 B	50.0	106%	51.1 B	50.0	102%	3.5%
Naphthalene	51.1 B	50.0	102%	52.3 B	50.0	105%	2.3%
1,2,3-Trichlorobenzene	50.8 B	50.0	102%	49.8 B	50.0	99.6%	2.0%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	104%	104%
d8-Toluene	102%	102%
Bromofluorobenzene	99.2%	97.9%
d4-1,2-Dichlorobenzene	103%	102%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-120412A	Method Blank	Med	108%	101%	94.8%	103%	0
LCS-120412A	Lab Control	Med	104%	102%	99.2%	103%	0
LCSD-120412A	Lab Control Dup	Med	104%	102%	97.9%	102%	0
VU67E	GP-11-S-1.25	Med	107%	103%	98.3%	102%	0
MB-120412A	Method Blank	Low	108%	101%	94.8%	103%	0
LCS-120412A	Lab Control	Low	104%	102%	99.2%	103%	0
LCSD-120412A	Lab Control Dup	Low	104%	102%	97.9%	102%	0
VU67F	GP-13-S-1.6	Low	115%	101%	98.3%	104%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260C	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	80-122	76-120	80-149	69-120
(TOL) = d8-Toluene	80-120	80-120	77-120	80-120
(BFB) = Bromofluorobenzene	80-120	80-120	80-120	76-128
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-120	80-120	80-120

Log Number Range: 12-23842 to 12-23843

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt9.i Injection Date: 04-DEC-2012 07:16
Lab File ID: 0501204.d Init. Cal. Date(s): 29-NOV-2012 29-NOV-2012
Analysis Type: SOIL Init. Cal. Times: 07:42 14:06
Lab Sample ID: CC1204 Quant Type: ISTD
Method: /chem1/nt9.i/04DEC12.b/VO061912S.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 Dichlorodifluoromethane	0.53440	0.62104	0.62104	0.100	16.21271	20.00000	Averaged	
2 Chloromethane	1.01152	0.85769	0.85769	0.100	-15.20720	20.00000	Averaged	
3 Vinyl Chloride	0.71109	0.78207	0.78207	0.100	9.98137	20.00000	Averaged	
4 Bromomethane	0.37566	0.35657	0.35657	0.100	-5.08254	20.00000	Averaged	
5 Chloroethane	0.18595	0.21105	0.21105	0.080	13.49869	20.00000	Averaged	
6 Trichlorofluoromethane	62.07889	50.00000	0.35985	0.100	24.15779	20.00000	Linear	<-
7 1,1-Dichloroethene	0.39325	0.42459	0.42459	0.100	7.96954	20.00000	Averaged	
8 Carbon Disulfide	1.18242	1.32023	1.32023	0.010	11.65467	20.00000	Averaged	
9 112Trichloro122Trifluoroeth	0.37937	0.41629	0.41629	0.010	9.73138	20.00000	Averaged	
10 Iodomethane	0.41948	0.46190	0.46190	0.010	10.11125	20.00000	Averaged	
11 Bromoethane	0.25567	0.28651	0.28651	0.100	12.06536	20.00000	Averaged	
12 Acrolein	0.05484	0.05748	0.05748	0.000	4.82212	20.00000	Averaged	
13 Methylene Chloride	0.43869	0.46334	0.46334	0.010	5.61943	20.00000	Averaged	
14 Acetone	322	250	0.10363	0.001	28.84747	20.00000	Linear	<-
15 Trans-1,2-Dichloroethene	0.47229	0.49035	0.49035	0.010	3.82366	20.00000	Averaged	
16 Methyl tert butyl ether	1.16844	1.25699	1.25699	0.100	7.57864	20.00000	Averaged	
17 1,1-Dichloroethane	0.79273	0.82431	0.82431	0.100	3.98358	20.00000	Averaged	
18 Acrylonitrile	0.11269	0.12486	0.12486	0.001	10.80045	20.00000	Averaged	
19 Vinyl Acetate	0.49758	0.55342	0.55342	0.010	11.22275	20.00000	Averaged	
20 Cis-1,2-Dichloroethene	0.58190	0.69104	0.69104	0.010	18.75510	20.00000	Averaged	
22 2,2-Dichloropropane	0.76418	0.82131	0.82131	0.010	7.47683	20.00000	Averaged	
23 Bromochloromethane	0.25072	0.28979	0.28979	0.050	15.58396	20.00000	Averaged	
24 Chloroform	0.89884	0.96635	0.96635	0.100	7.51049	20.00000	Averaged	
25 Carbon Tetrachloride	0.35110	0.38099	0.38099	0.100	8.51267	20.00000	Averaged	
$ 27 Dibromofluoromethane	0.48645	0.51632	0.51632	0.100	6.13958	20.00000	Averaged	
26 1,1,1-Trichloroethane	0.80869	0.88508	0.88508	0.100	9.44533	20.00000	Averaged	
28 1,1-Dichloropropene	0.43743	0.43859	0.43859	0.010	0.26440	20.00000	Averaged	
29 2-Butanone	0.05311	0.06109	0.06109	0.001	15.01696	20.00000	Averaged	
30 Benzene	1.34254	1.35686	1.35686	0.100	1.06652	20.00000	Averaged	
$ 32 d4-1,2-Dichloroethane	0.48501	0.49581	0.49581	0.010	2.22571	20.00000	Averaged	
33 1,2-Dichloroethane	0.33265	0.33138	0.33138	0.100	-0.38182	20.00000	Averaged	
34 Trichloroethene	0.32002	0.33380	0.33380	0.100	4.30548	20.00000	Averaged	
37 Dibromomethane	0.15057	0.15668	0.15668	0.010	4.05846	20.00000	Averaged	
38 1,2-Dichloropropane	0.31614	0.31814	0.31814	0.100	0.63320	20.00000	Averaged	
39 Bromodichloromethane	0.35018	0.37244	0.37244	0.100	6.35761	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt9.i Injection Date: 04-DEC-2012 07:16
Lab File ID: 0501204.d Init. Cal. Date(s): 29-NOV-2012 29-NOV-2012
Analysis Type: SOIL Init. Cal. Times: 07:42 14:06
Lab Sample ID: CC1204 Quant Type: ISTD
Method: /chem1/nt9.i/04DEC12.b/VO061912S.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
40 2-Chloroethyl Vinyl Ether	0.08486	0.07103	0.07103	0.000	-16.29862	20.00000	Averaged
41 Cis 1,3-dichloropropene	0.46130	0.50049	0.50049	0.100	8.49566	20.00000	Averaged
$ 42 d8-Toluene	1.21269	1.23875	1.23875	0.010	2.14862	20.00000	Averaged
43 Toluene	0.86481	0.89524	0.89524	0.100	3.51945	20.00000	Averaged
44 Tetrachloroethene	0.36071	0.36659	0.36659	0.100	1.63174	20.00000	Averaged
45 4-Methyl-2-Pentanone	0.08778	0.10236	0.10236	0.000	16.60974	20.00000	Averaged
46 Trans 1,3-Dichloropropene	0.37044	0.42076	0.42076	0.010	13.58163	20.00000	Averaged
47 1,1,2-Trichloroethane	0.24242	0.25892	0.25892	0.100	6.80772	20.00000	Averaged
48 Chlorodibromomethane	0.25725	0.29333	0.29333	0.100	14.02447	20.00000	Averaged
49 1,3-Dichloropropane	0.46150	0.47824	0.47824	0.100	3.62779	20.00000	Averaged
50 1,2-Dibromoethane	0.23674	0.25799	0.25799	0.010	8.97732	20.00000	Averaged
51 2-Hexanone	0.16165	0.18429	0.18429	0.010	14.00362	20.00000	Averaged
53 Chlorobenzene	0.95077	0.97980	0.97980	0.300	3.05347	20.00000	Averaged
54 Ethyl Benzene	1.70785	1.77770	1.77770	0.100	4.08995	20.00000	Averaged
55 1,1,1,2-Tetrachloroethane	0.28155	0.30738	0.30738	0.010	9.17481	20.00000	Averaged
56 m,p-xylene	0.64917	0.67208	0.67208	0.100	3.52942	20.00000	Averaged
57 o-Xylene	0.64244	0.67783	0.67783	0.100	5.50860	20.00000	Averaged
58 Styrene	1.04269	1.10991	1.10991	0.100	6.44644	20.00000	Averaged
59 Bromoform	50.19876	50.00000	0.42672	0.100	0.39752	20.00000	Linear
60 Isopropyl Benzene	3.59911	3.73619	3.73619	0.010	3.80878	20.00000	Averaged
$ 62 4-Bromofluorobenzene	0.48753	0.47492	0.47492	0.200	-2.58810	20.00000	Averaged
63 Bromobenzene	0.79594	0.81616	0.81616	0.010	2.54046	20.00000	Averaged
64 N-Propyl Benzene	4.21251	4.28118	4.28118	0.010	1.63011	20.00000	Averaged
65 1,1,2,2-Tetrachloroethane	0.65413	0.70865	0.70865	0.300	8.33380	20.00000	Averaged
66 2-Chloro Toluene	2.56673	2.56790	2.56790	0.010	0.04578	20.00000	Averaged
67 1,3,5-Trimethyl Benzene	2.89302	2.96860	2.96860	0.010	2.61253	20.00000	Averaged
68 1,2,3-Trichloropropane	0.19829	0.21701	0.21701	0.010	9.43774	20.00000	Averaged
69 Trans-1,4-Dichloro 2-Butene	0.18226	0.20351	0.20351	0.001	11.66082	20.00000	Averaged
70 4-Chloro Toluene	2.59074	2.57404	2.57404	0.010	-0.64479	20.00000	Averaged
71 T-Butyl Benzene	2.52376	2.63763	2.63763	0.010	4.51203	20.00000	Averaged
72 1,2,4-Trimethylbenzene	2.87587	2.95928	2.95928	0.010	2.90056	20.00000	Averaged
73 S-Butyl Benzene	3.96163	4.11415	4.11415	0.010	3.84986	20.00000	Averaged
74 4-Isopropyl Toluene	3.04994	3.22183	3.22183	0.010	5.63588	20.00000	Averaged
75 1,3-Dichlorobenzene	1.60968	1.63929	1.63929	0.100	1.83981	20.00000	Averaged
77 1,4-Dichlorobenzene	1.56453	1.59995	1.59995	0.100	2.26394	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt9.i Injection Date: 04-DEC-2012 07:16
Lab File ID: 0501204.d Init. Cal. Date(s): 29-NOV-2012 29-NOV-2012
Analysis Type: SOIL Init. Cal. Times: 07:42 14:06
Lab Sample ID: CC1204 Quant Type: ISTD
Method: /chem1/nt9.i/04DEC12.b/VO061912S.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
78 N-Butyl Benzene	2.92501	3.10715	3.10715	0.010	6.22691	20.00000	Averaged
$ 79 d4-1,2-Dichlorobenzene	0.86889	0.88978	0.88978	0.010	2.40395	20.00000	Averaged
80 1,2-Dichlorobenzene	1.41420	1.44389	1.44389	0.100	2.09906	20.00000	Averaged
81 1,2-Dibromo 3-Chloropropane	0.09822	0.11739	0.11739	0.010	19.51854	20.00000	Averaged
82 Hexachloro 1,3-Butadiene	0.58649	0.61807	0.61807	0.010	5.38503	20.00000	Averaged
83 1,2,4-Trichlorobenzene	0.97631	0.99465	0.99465	0.010	1.87850	20.00000	Averaged
84 Naphthalene	2.09900	2.32926	2.32926	0.010	10.97014	20.00000	Averaged
85 1,2,3-Trichlorobenzene	0.88652	0.90157	0.90157	0.010	1.69698	20.00000	Averaged

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-120712A**
Page 1 of 2 **METHOD BLANK**

Lab Sample ID: MB-120712A
LIMS ID: 12-23838
Matrix: Water
Data Release Authorized: MW
Reported: 12/12/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford 0747.01.02
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PAB
Date Analyzed: 12/07/12 11:57

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: MB-120712A
LIMS ID: 12-23838
Matrix: Water
Date Analyzed: 12/07/12 11:57

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	**Hexachlorobutadiene**	**0.50**	**0.37**	**J**
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.9%
d8-Toluene	99.1%
Bromofluorobenzene	91.1%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP11-W-17.5**
Page 1 of 2 **SAMPLE**

Lab Sample ID: VU67A
LIMS ID: 12-23838
Matrix: Water
Data Release Authorized: MW
Reported: 12/12/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Instrument/Analyst: NT2/PAB
Date Analyzed: 12/07/12 17:27

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**2.4**	**J**
75-15-0	**Carbon Disulfide**	**0.20**	**0.19**	**J**
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	**1,2-Dichloroethane**	**0.20**	**0.19**	**J**
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	**1,2-Dichloropropane**	**0.20**	**0.18**	**J**
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	**Benzene**	**0.20**	**0.61**	
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	**Toluene**	**0.20**	**0.26**	
108-90-7	**Chlorobenzene**	**0.20**	**49**	
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	**o-Xylene**	**0.20**	**0.16**	**J**
95-50-1	**1,2-Dichlorobenzene**	**0.20**	**0.21**	
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	**1,4-Dichlorobenzene**	**0.20**	**0.52**	

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP11-W-17.5**
 SAMPLE

Lab Sample ID: VU67A
LIMS ID: 12-23838
Matrix: Water
Date Analyzed: 12/07/12 17:27

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	**1,2,4-Trimethylbenzene**	**0.20**	**0.53**	
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	**2-Chlorotoluene**	**0.20**	**0.23**	
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	97.3%
d8-Toluene	101%
Bromofluorobenzene	94.9%
d4-1,2-Dichlorobenzene	106%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP12-W-7.5**
Page 1 of 2 **SAMPLE**

Lab Sample ID: VU67B
LIMS ID: 12-23839
Matrix: Water
Data Release Authorized:
Reported: 12/12/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Instrument/Analyst: NT2/PAB
Date Analyzed: 12/07/12 17:53

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**3.4**	**J**
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	**Chlorobenzene**	**0.20**	**0.20**	
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP12-W-7.5**
 SAMPLE

Lab Sample ID: VU67B
LIMS ID: 12-23839
Matrix: Water
Date Analyzed: 12/07/12 17:53

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	97.1%
d8-Toluene	99.8%
Bromofluorobenzene	91.2%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-120712A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-120712A
LIMS ID: 12-23838
Matrix: Water
Data Release Authorized: MW
Reported: 12/12/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PAB
LCSD: NT2/PAB
Date Analyzed LCS: 12/07/12 10:36
LCSD: 12/07/12 11:03

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	8.50	10.0	85.0%	8.58	10.0	85.8%	0.9%
Bromomethane	9.42	10.0	94.2%	9.22	10.0	92.2%	2.1%
Vinyl Chloride	9.27	10.0	92.7%	9.02	10.0	90.2%	2.7%
Chloroethane	9.32	10.0	93.2%	9.07	10.0	90.7%	2.7%
Methylene Chloride	8.19 Q	10.0	81.9%	8.45 Q	10.0	84.5%	3.1%
Acetone	43.2 Q	50.0	86.4%	42.7 Q	50.0	85.4%	1.2%
Carbon Disulfide	8.78	10.0	87.8%	8.62	10.0	86.2%	1.8%
1,1-Dichloroethene	8.93	10.0	89.3%	8.72	10.0	87.2%	2.4%
1,1-Dichloroethane	9.01	10.0	90.1%	9.06	10.0	90.6%	0.6%
trans-1,2-Dichloroethene	9.02	10.0	90.2%	9.12	10.0	91.2%	1.1%
cis-1,2-Dichloroethene	8.92	10.0	89.2%	8.99	10.0	89.9%	0.8%
Chloroform	9.20	10.0	92.0%	9.06	10.0	90.6%	1.5%
1,2-Dichloroethane	9.42	10.0	94.2%	9.59	10.0	95.9%	1.8%
2-Butanone	48.3	50.0	96.6%	48.5	50.0	97.0%	0.4%
1,1,1-Trichloroethane	9.49	10.0	94.9%	9.52	10.0	95.2%	0.3%
Carbon Tetrachloride	9.83	10.0	98.3%	9.92	10.0	99.2%	0.9%
Vinyl Acetate	8.03 Q	10.0	80.3%	8.32 Q	10.0	83.2%	3.5%
Bromodichloromethane	10.2	10.0	102%	10.2	10.0	102%	0.0%
1,2-Dichloropropane	9.97	10.0	99.7%	10.3	10.0	103%	3.3%
cis-1,3-Dichloropropene	10.9	10.0	109%	11.1	10.0	111%	1.8%
Trichloroethene	9.95	10.0	99.5%	10.2	10.0	102%	2.5%
Dibromochloromethane	10.8	10.0	108%	10.7	10.0	107%	0.9%
1,1,2-Trichloroethane	10.3	10.0	103%	11.0	10.0	110%	6.6%
Benzene	9.75	10.0	97.5%	10.0	10.0	100%	2.5%
trans-1,3-Dichloropropene	10.9	10.0	109%	11.2	10.0	112%	2.7%
2-Chloroethylvinylether	10.6	10.0	106%	11.0	10.0	110%	3.7%
Bromoform	8.90	10.0	89.0%	8.95	10.0	89.5%	0.6%
4-Methyl-2-Pentanone (MIBK)	53.5	50.0	107%	55.2	50.0	110%	3.1%
2-Hexanone	55.7	50.0	111%	56.5	50.0	113%	1.4%
Tetrachloroethene	10.2	10.0	102%	10.3	10.0	103%	1.0%
1,1,2,2-Tetrachloroethane	9.99	10.0	99.9%	10.0	10.0	100%	0.1%
Toluene	9.98	10.0	99.8%	10.2	10.0	102%	2.2%
Chlorobenzene	10.0	10.0	100%	10.2	10.0	102%	2.0%
Ethylbenzene	10.3	10.0	103%	10.5	10.0	105%	1.9%
Styrene	11.1	10.0	111%	11.2	10.0	112%	0.9%
Trichlorofluoromethane	9.17	10.0	91.7%	9.29	10.0	92.9%	1.3%
1,1,2-Trichloro-1,2,2-trifluoroetha	9.11	10.0	91.1%	9.53	10.0	95.3%	4.5%
m,p-Xylene	20.9	20.0	104%	21.2	20.0	106%	1.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-120712A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-120712A QC Report No: VU67-Maul Foster & Alongi
LIMS ID: 12-23838 Project: Sims- N.Cascade Ford
Matrix: Water 0747.01.02

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.4	10.0	104%	10.4	10.0	104%	0.0%
1,2-Dichlorobenzene	9.78	10.0	97.8%	9.98	10.0	99.8%	2.0%
1,3-Dichlorobenzene	10.3	10.0	103%	10.4	10.0	104%	1.0%
1,4-Dichlorobenzene	9.96	10.0	99.6%	10.2	10.0	102%	2.4%
Acrolein	37.0 Q	50.0	74.0%	37.6 Q	50.0	75.2%	1.6%
Iodomethane	8.73	10.0	87.3%	9.56	10.0	95.6%	9.1%
Bromoethane	9.08	10.0	90.8%	9.43	10.0	94.3%	3.8%
Acrylonitrile	9.52	10.0	95.2%	8.82	10.0	88.2%	7.6%
1,1-Dichloropropene	9.88	10.0	98.8%	10.1	10.0	101%	2.2%
Dibromomethane	9.83	10.0	98.3%	10.2	10.0	102%	3.7%
1,1,1,2-Tetrachloroethane	9.93	10.0	99.3%	9.87	10.0	98.7%	0.6%
1,2-Dibromo-3-chloropropane	9.80	10.0	98.0%	10.2	10.0	102%	4.0%
1,2,3-Trichloropropane	10.6	10.0	106%	10.7	10.0	107%	0.9%
trans-1,4-Dichloro-2-butene	10.9	10.0	109%	11.2	10.0	112%	2.7%
1,3,5-Trimethylbenzene	10.9	10.0	109%	10.9	10.0	109%	0.0%
1,2,4-Trimethylbenzene	10.8	10.0	108%	10.8	10.0	108%	0.0%
Hexachlorobutadiene	11.8 B	10.0	118%	11.6 B	10.0	116%	1.7%
1,2-Dibromoethane	10.1	10.0	101%	10.3	10.0	103%	2.0%
Bromochloromethane	8.89	10.0	88.9%	9.25	10.0	92.5%	4.0%
2,2-Dichloropropane	9.39	10.0	93.9%	9.43	10.0	94.3%	0.4%
1,3-Dichloropropane	10.5	10.0	105%	10.7	10.0	107%	1.9%
Isopropylbenzene	10.8	10.0	108%	11.0	10.0	110%	1.8%
n-Propylbenzene	10.6	10.0	106%	10.7	10.0	107%	0.9%
Bromobenzene	10.2	10.0	102%	10.5	10.0	105%	2.9%
2-Chlorotoluene	10.3	10.0	103%	10.4	10.0	104%	1.0%
4-Chlorotoluene	10.5	10.0	105%	10.7	10.0	107%	1.9%
tert-Butylbenzene	10.9	10.0	109%	10.9	10.0	109%	0.0%
sec-Butylbenzene	10.8	10.0	108%	10.8	10.0	108%	0.0%
4-Isopropyltoluene	10.8	10.0	108%	11.0	10.0	110%	1.8%
n-Butylbenzene	10.6	10.0	106%	10.6	10.0	106%	0.0%
1,2,4-Trichlorobenzene	9.53	10.0	95.3%	9.72	10.0	97.2%	2.0%
Naphthalene	9.50	10.0	95.0%	9.51	10.0	95.1%	0.1%
1,2,3-Trichlorobenzene	10.0	10.0	100%	10.1	10.0	101%	1.0%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	94.4%	93.4%
d8-Toluene	102%	103%
Bromofluorobenzene	95.9%	95.3%
d4-1,2-Dichlorobenzene	101%	98.8%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-120712A	Method Blank	10	98.9%	99.1%	91.1%	102%	0
LCS-120712A	Lab Control	10	94.4%	102%	95.9%	101%	0
LCSD-120712A	Lab Control Dup	10	93.4%	103%	95.3%	98.8%	0
VU67A	GP11-W-17.5	10	97.3%	101%	94.9%	106%	0
VU67B	GP12-W-7.5	10	97.1%	99.8%	91.2%	103%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 12-23838 to 12-23839

Data File: /chem3/nt2.i/20121207.b/cc1207.d
Report Date: 07-Dec-2012 10:38

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i
Lab File ID: cc1207.d
Analysis Type: WATER
Lab Sample ID: CC1207
Method: /chem3/nt2.i/20121207.b/82601126L.m

Injection Date: 07-DEC-2012 10:09
Init. Cal. Date(s): 26-NOV-2012 26-NOV-2012
Init. Cal. Times: 11:48 15:25
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 Dichlorodifluoromethane	0.56184	0.50148	0.50148	0.010	-10.74336	20.00000	Averaged	
2 Chloromethane	0.61650	0.51522	0.51522	0.100	-16.42729	20.00000	Averaged	
3 Vinyl Chloride	0.57124	0.49912	0.49912	0.100	-12.62506	20.00000	Averaged	
4 Bromomethane	0.30749	0.26711	0.26711	0.100	-13.13093	20.00000	Averaged	
5 Chloroethane	0.33861	0.30079	0.30079	0.010	-11.16994	20.00000	Averaged	
6 Trichlorofluoromethane	0.79328	0.71365	0.71365	0.010	-10.03839	20.00000	Averaged	
7 1,1-Dichloroethene	0.48880	0.46215	0.46215	0.100	-5.45065	20.00000	Averaged	
8 Carbon Disulfide	1.41703	1.31541	1.31541	0.010	-7.17081	20.00000	Averaged	
9 112Trichloro122Trifluoroeth	0.46522	0.43973	0.43973	0.010	-5.47841	20.00000	Averaged	
10 Iodomethane	0.80021	0.75181	0.75181	0.010	-6.04945	20.00000	Averaged	
11 Bromoethane	0.37477	0.33651	0.33651	0.100	-10.20775	20.00000	Averaged	
12 Acrolein	0.03767	0.02325	0.02325	0.000	-38.28511	20.00000	Averaged	<-
13 Methylene Chloride	0.57354	0.45823	0.45823	0.010	-20.10540	20.00000	Averaged	<-
14 Acetone	0.07249	0.05653	0.05653	0.001	-22.00632	20.00000	Averaged	<-
15 Trans-1,2-Dichloroethene	0.55996	0.48350	0.48350	0.010	-13.65548	20.00000	Averaged	
17 Methyl tert butyl ether	1.32088	1.16854	1.16854	0.100	-11.53332	20.00000	Averaged	
18 1,1-Dichloroethane	0.93932	0.81136	0.81136	0.200	-13.62327	20.00000	Averaged	
19 Acrylonitrile	0.09434	0.08353	0.08353	0.001	-11.45795	20.00000	Averaged	
20 Vinyl Acetate	7.42833	10.00000	0.35786	0.010	-25.71669	20.00000	Linear	<-
22 Cis-1,2-Dichloroethene	0.56391	0.49167	0.49167	0.010	-12.81039	20.00000	Averaged	
23 2,2-Dichloropropane	0.61874	0.56223	0.56223	0.010	-9.13327	20.00000	Averaged	
24 Bromochloromethane	0.25083	0.21954	0.21954	0.050	-12.47627	20.00000	Averaged	
25 Chloroform	0.94058	0.84504	0.84504	0.200	-10.15697	20.00000	Averaged	
26 Carbon Tetrachloride	0.51938	0.49505	0.49505	0.100	-4.68322	20.00000	Averaged	
$ 27 Dibromofluoromethane	0.47533	0.43841	0.43841	0.100	-7.76650	20.00000	Averaged	
28 1,1,1-Trichloroethane	0.85286	0.77471	0.77471	0.100	-9.16363	20.00000	Averaged	
29 2-Butanone	0.10403	0.09295	0.09295	0.001	-10.64921	20.00000	Averaged	
30 1,1-Dichloropropene	0.47726	0.46500	0.46500	0.010	-2.56882	20.00000	Averaged	
31 Benzene	1.33392	1.26440	1.26440	0.500	-5.21160	20.00000	Averaged	
$ 33 d4-1,2-Dichloroethane	0.51351	0.47675	0.47675	0.010	-7.15942	20.00000	Averaged	
34 1,2-Dichloroethane	0.41545	0.38161	0.38161	0.100	-8.14539	20.00000	Averaged	
36 Trichloroethene	0.36410	0.35174	0.35174	0.100	-3.39662	20.00000	Averaged	
38 Dibromomethane	0.15122	0.14533	0.14533	0.010	-3.89541	20.00000	Averaged	
39 1,2-Dichloropropane	0.28456	0.27913	0.27913	0.100	-1.90566	20.00000	Averaged	
40 Bromodichloromethane	0.40988	0.39980	0.39980	0.100	-2.46008	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i Injection Date: 07-DEC-2012 10:09
Lab File ID: cc1207.d Init. Cal. Date(s): 26-NOV-2012 26-NOV-2012
Analysis Type: WATER Init. Cal. Times: 11:48 15:25
Lab Sample ID: CC1207 Quant Type: ISTD
Method: /chem3/nt2.i/20121207.b/82601126L.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
41 2-Chloroethyl Vinyl Ether	0.10870	0.10478	0.10478	0.000	-3.60555	20.00000	Averaged
42 Cis 1,3-dichloropropene	0.41502	0.43427	0.43427	0.200	4.63695	20.00000	Averaged
$ 43 d8-Toluene	1.12113	1.15009	1.15009	0.010	2.58291	20.00000	Averaged
44 Toluene	0.78353	0.77823	0.77823	0.400	-0.67658	20.00000	Averaged
45 4-Methyl-2-Pentanone	0.06717	0.06863	0.06863	0.000	2.18544	20.00000	Averaged
46 Tetrachloroethene	0.41746	0.41794	0.41794	0.200	0.11609	20.00000	Averaged
47 Trans 1,3-Dichloropropene	0.36327	0.38878	0.38878	0.010	7.02155	20.00000	Averaged
48 1,1,2-Trichloroethane	0.19628	0.19613	0.19613	0.100	-0.07987	20.00000	Averaged
49 Chlorodibromomethane	0.28436	0.28656	0.28656	0.100	0.77466	20.00000	Averaged
50 1,3-Dichloropropane	0.39977	0.39487	0.39487	0.100	-1.22548	20.00000	Averaged
51 1,2-Dibromoethane	0.21112	0.20188	0.20188	0.010	-4.37663	20.00000	Averaged
52 2-Hexanone	0.11392	0.11765	0.11765	0.010	3.27576	20.00000	Averaged
54 Chlorobenzene	0.93721	0.90832	0.90832	0.500	-3.08240	20.00000	Averaged
55 Ethyl Benzene	0.52339	0.52385	0.52385	0.100	0.08631	20.00000	Averaged
56 1,1,1,2-Tetrachloroethane	0.37950	0.36584	0.36584	0.010	-3.59851	20.00000	Averaged
57 m,p-xylene	0.63415	0.64868	0.64868	0.300	2.29105	20.00000	Averaged
58 o-Xylene	0.63306	0.64033	0.64033	0.300	1.14862	20.00000	Averaged
59 Styrene	0.95796	1.01669	1.01669	0.300	6.13074	20.00000	Averaged
60 Bromoform	8.18692	10.00000	0.31563	0.010	-18.13081	20.00000	Linear
61 Isopropyl Benzene	2.91164	3.03860	3.03860	0.010	4.36027	20.00000	Averaged
$ 62 4-Bromofluorobenzene	0.52227	0.50714	0.50714	0.200	-2.89585	20.00000	Averaged
63 Bromobenzene	0.76778	0.75668	0.75668	0.010	-1.44579	20.00000	Averaged
64 N-Propyl Benzene	3.11599	3.18542	3.18542	0.010	2.22819	20.00000	Averaged
65 1,1,2,2-Tetrachloroethane	0.47420	0.45256	0.45256	0.100	-4.56167	20.00000	Averaged
66 2-Chloro Toluene	2.27723	2.28577	2.28577	0.010	0.37506	20.00000	Averaged
67 1,3,5-Trimethyl Benzene	2.32647	2.41658	2.41658	0.010	3.87360	20.00000	Averaged
68 1,2,3-Trichloropropane	0.15932	0.16480	0.16480	0.010	3.43591	20.00000	Averaged
69 Trans-1,4-Dichloro 2-Butene	0.13154	0.14173	0.14173	0.001	7.74946	20.00000	Averaged
70 4-Chloro Toluene	2.10486	2.14482	2.14482	0.010	1.89878	20.00000	Averaged
71 T-Butyl Benzene	1.88384	1.96739	1.96739	0.010	4.43536	20.00000	Averaged
72 1,2,4-Trimethylbenzene	2.31665	2.39036	2.39036	0.010	3.18138	20.00000	Averaged
73 S-Butyl Benzene	2.64870	2.72086	2.72086	0.010	2.72419	20.00000	Averaged
74 4-Isopropyl Toluene	2.16300	2.26426	2.26426	0.010	4.68111	20.00000	Averaged
75 1,3-Dichlorobenzene	1.34760	1.33338	1.33338	0.600	-1.05551	20.00000	Averaged
77 1,4-Dichlorobenzene	1.38948	1.35664	1.35664	0.500	-2.36353	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i Injection Date: 07-DEC-2012 10:09
Lab File ID: cc1207.d Init. Cal. Date(s): 26-NOV-2012 26-NOV-2012
Analysis Type: WATER Init. Cal. Times: 11:48 15:25
Lab Sample ID: CC1207 Quant Type: ISTD
Method: /chem3/nt2.i/20121207.b/82601126L.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
78 N-Butyl Benzene	1.81139	1.86334	1.86334	0.010	2.86801	20.00000	Averaged
$ 79 d4-1,2-Dichlorobenzene	0.81139	0.80613	0.80613	0.010	-0.64880	20.00000	Averaged
80 1,2-Dichlorobenzene	1.17774	1.12322	1.12322	0.400	-4.62990	20.00000	Averaged
81 1,2-Dibromo 3-Chloropropane	0.05364	0.04894	0.04894	0.010	-8.77693	20.00000	Averaged
83 Hexachloro 1,3-Butadiene	11.55198	10.00000	0.25665	0.010	15.51985	20.00000	Linear
84 1,2,4-Trichlorobenzene	0.49406	0.45428	0.45428	0.010	-8.05143	20.00000	Averaged
85 Naphthalene	0.68221	0.60244	0.60244	0.010	-11.69229	20.00000	Averaged
86 1,2,3-Trichlorobenzene	0.29227	0.27476	0.27476	0.010	-5.99020	20.00000	Averaged

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Matrix: Soil

Data Release Authorized:
Reported: 12/10/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

ARI ID	Client ID	Analysis Date	Basis	Range	Result
MB-120512	Method Blank	12/05/12	Dry	Gasoline	< 5.0 U
12-23842		PID1		HC ID	---
				Trifluorotoluene	95.3%
				Bromobenzene	99.3%
VU67E	GP-11-S-1.25	12/05/12	Dry	**Gasoline**	**590**
12-23842		PID1		HC ID	GRO
				Trifluorotoluene	94.2%
				Bromobenzene	102%
VU67F	GP-13-S-1.6	12/05/12	Dry	Gasoline	< 8.9 U
12-23843		PID1		HC ID	---
				Trifluorotoluene	93.0%
				Bromobenzene	100%

Gasoline values reported in mg/kg (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-120512
LAB CONTROL SAMPLE

Lab Sample ID: LCS-120512
LIMS ID: 12-23842
Matrix: Soil
Data Release Authorized:
Reported: 12/10/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 12/05/12 11:03
LCSD: 12/05/12 11:32
Instrument/Analyst LCS: PID1/PKC
LCSD: PID1/PKC

Purge Volume: 5.0 mL

Sample Amount LCS: 100 mg-dry-wt
LCSD: 100 mg-dry-wt

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	52.4	50.0	105%	54.1	50.0	108%	3.2%

Reported in mg/kg (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	99.5%	101%
Bromobenzene	97.9%	100%

ANALYTICAL RESOURCES INCORPORATED

TPHG SOIL SURROGATE RECOVERY SUMMARY

ARI Job: VU67
Matrix: Soil

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
Event: 0747.01.02

Client ID	BFB	TFT	BBZ	TOT OUT
MB-120512	NA	95.3%	99.3%	0
LCS-120512	NA	99.5%	97.9%	0
LCSD-120512	NA	101%	100%	0
GP-11-S-1.25	NA	94.2%	102%	0
GP-13-S-1.6	NA	93.0%	100%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(65-128)
(BBZ) = Bromobenzene	(80-120)	(52-149)

Log Number Range: 12-23842 to 12-23843

Data File: /chem3/pid1.i/20121205-1.b/1205a004.d

Date : 05-DEC-2012 11:03

Client ID:

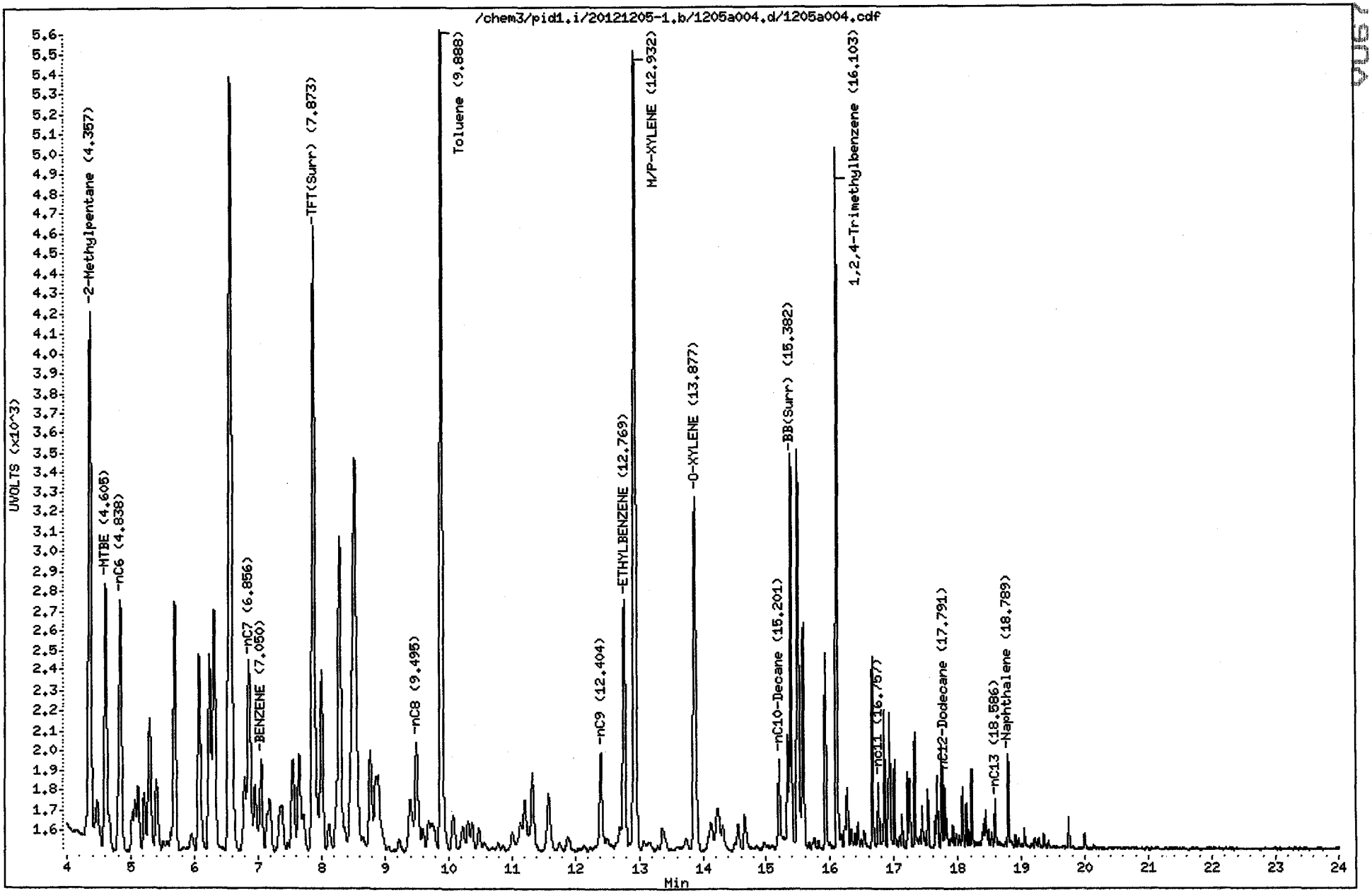
Sample Info: LCS1205

Column phase: RTX 502-2 FID

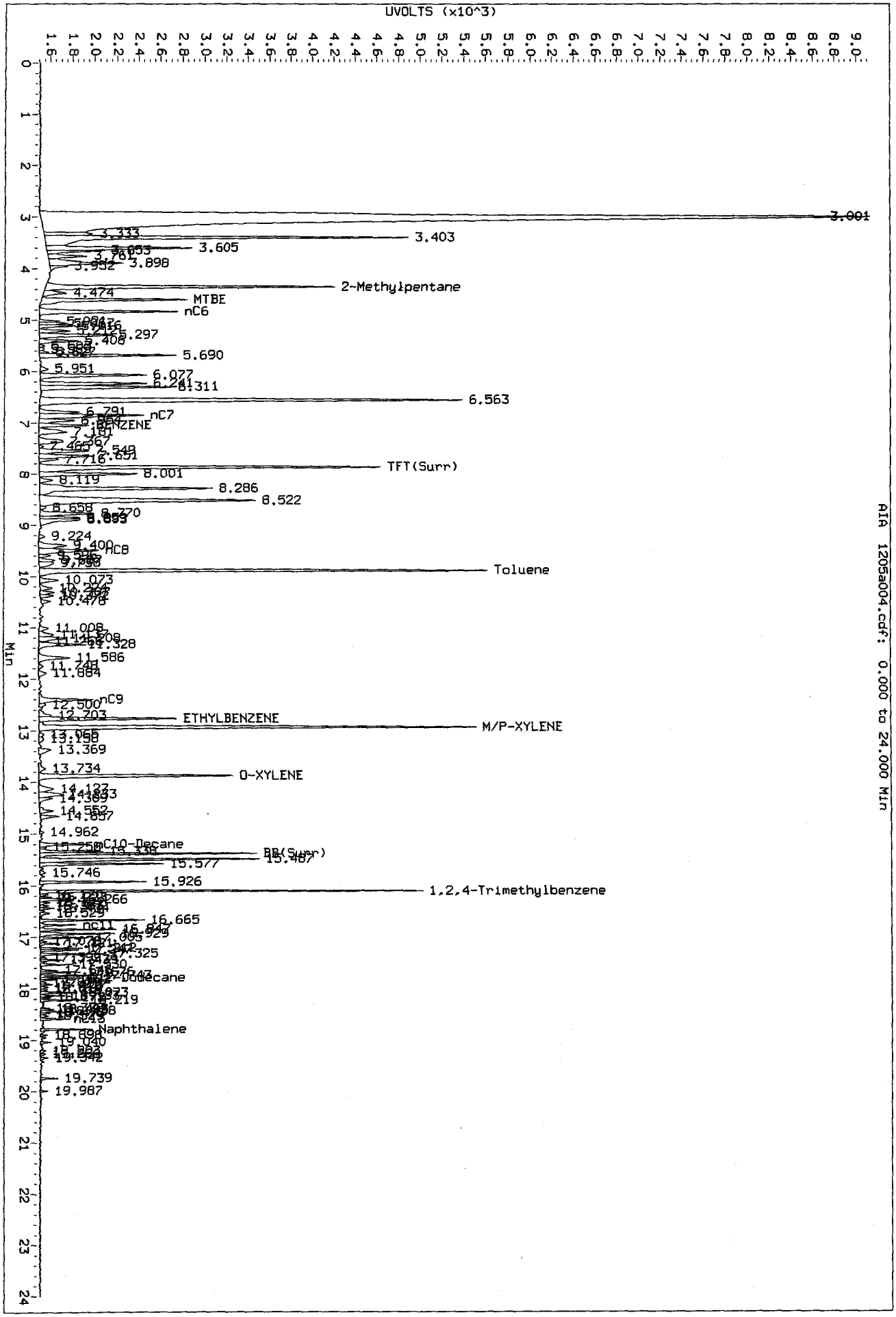
Instrument: pid1.i

Operator: PC

Column diameter: 0.18

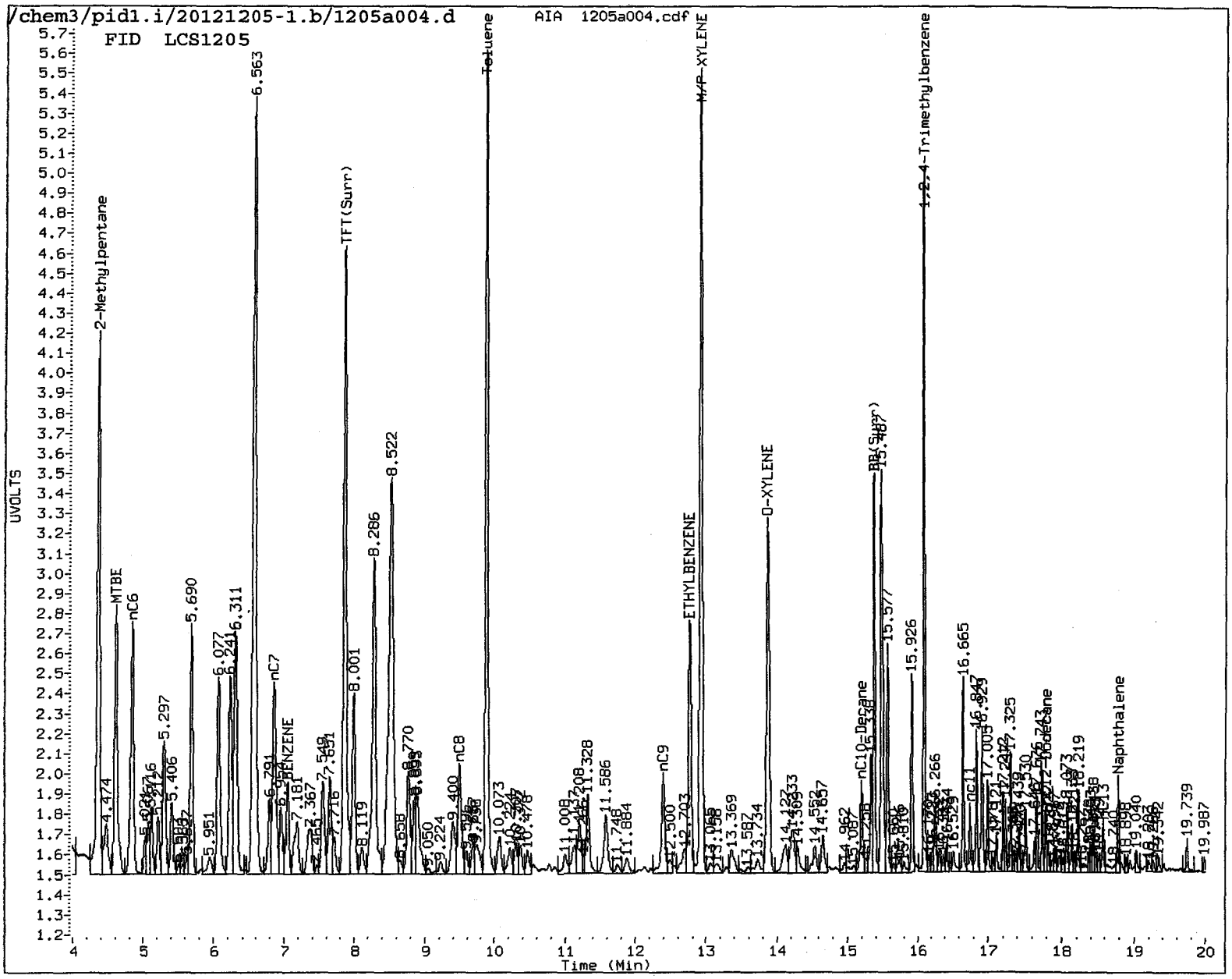


VUG 000039



Data File: /chem3/pid1.i/20121205-1.b/1205a004.d/1205a004.cdf
Injection Date: 05-DEC-2012 11:03
Instrument: pid1.i
Client Sample ID:

AIA 1205a004.cdf: 0.000 to 24.000 Min



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: YC Date: 12/7/12

Data File: /chem3/pid1.i/20121205-1.b/1205a005.d

Date : 05-DEC-2012 11:32

Client ID:

Sample Info: LCSD1205

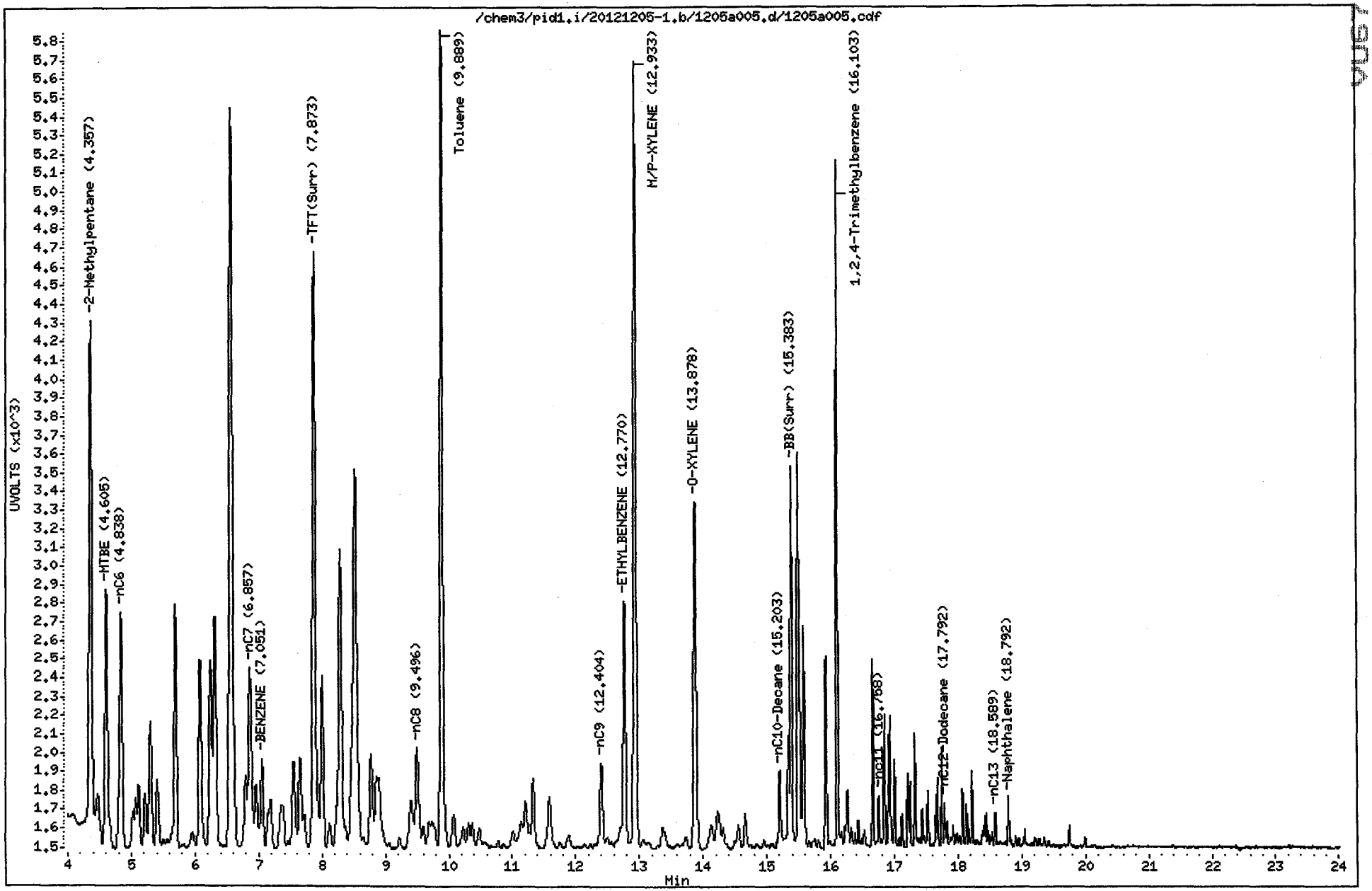
Column phase: RTX 502-2 FID

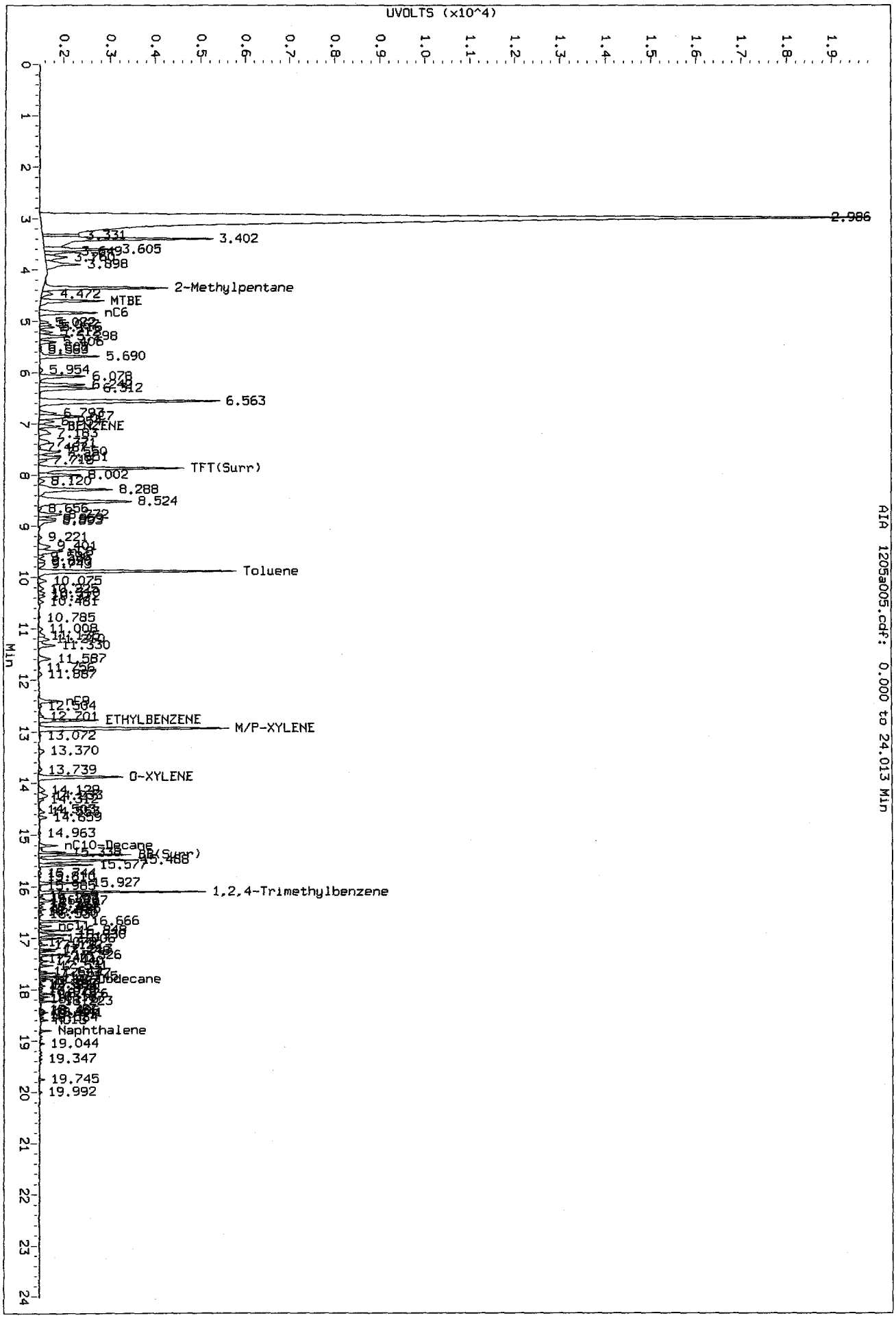
Instrument: pid1.i

Operator: PC

Column diameter: 0.18

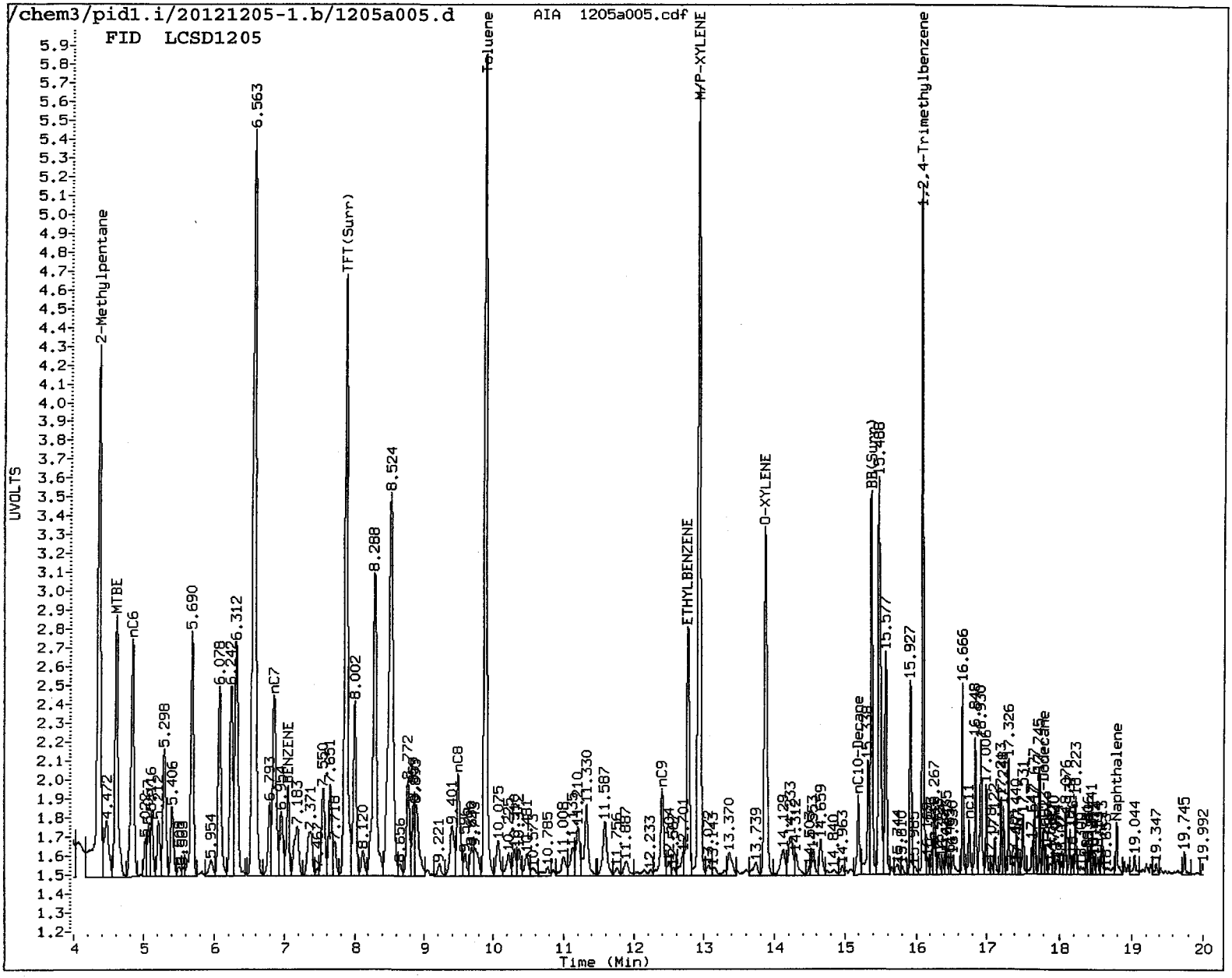
CHEMTECH 000042





Data File: /chem3/pid1.i/20121205-1.b/1205a005.d/1205a005.cdf
Injection Date: 05-DEC-2012 11:32
Instrument: pid1.i
Client Sample ID:

12/7/12



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: RC Date: 12/7/12

Data File: /chem3/pid1.i/20121205-1.b/1205a006.d

Date : 05-DEC-2012 12:02

Client ID:

Sample Info: MB1205

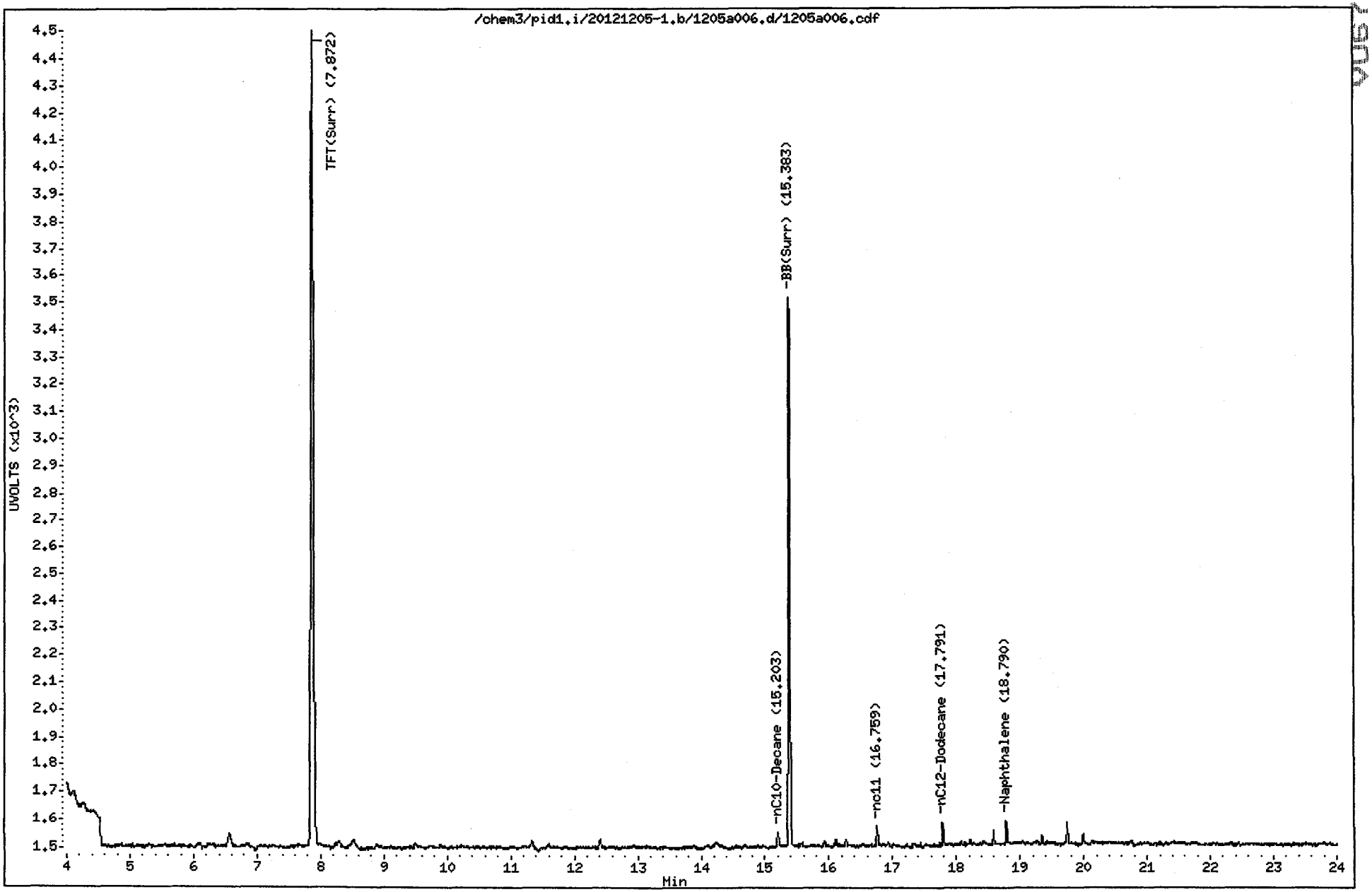
Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: PC

Column diameter: 0.18

VUSTL 000415



Data File: /chem3/pid1.i/20121205-1.b/1205a016.d

Date : 05-DEC-2012 17:37

Client ID: GP-11-S-1.25

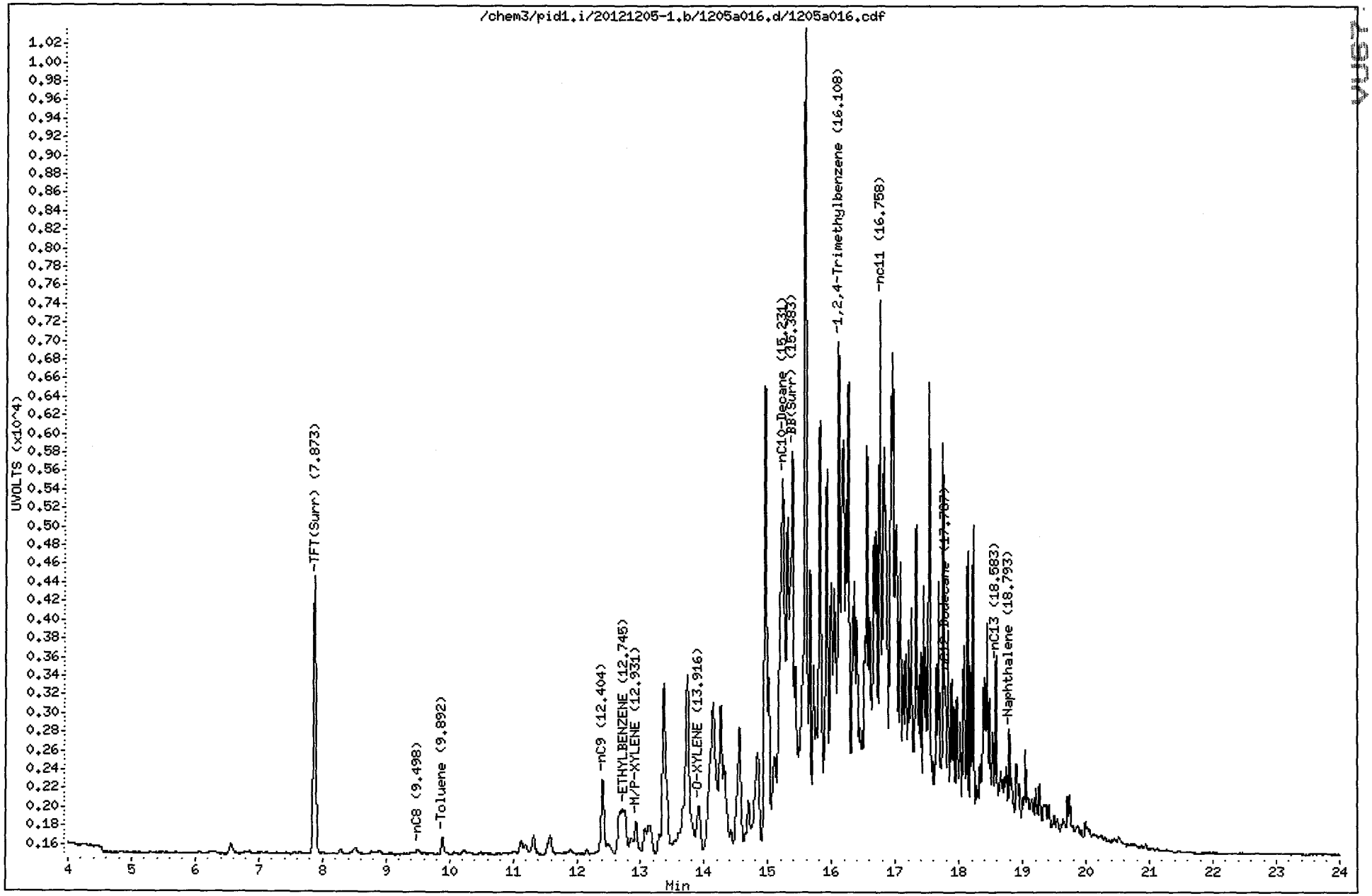
Sample Info: VU67E

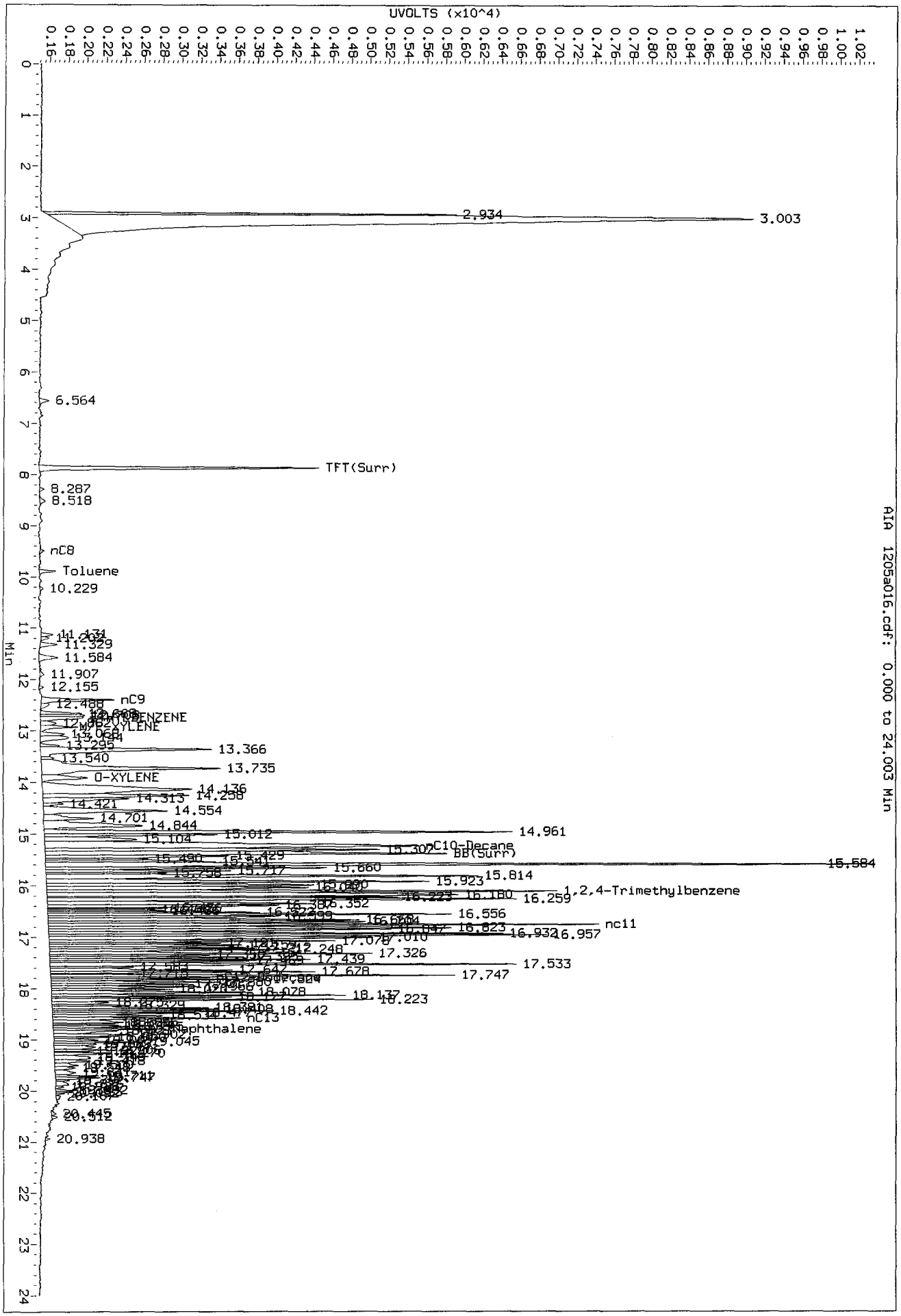
Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: PC

Column diameter: 0.18

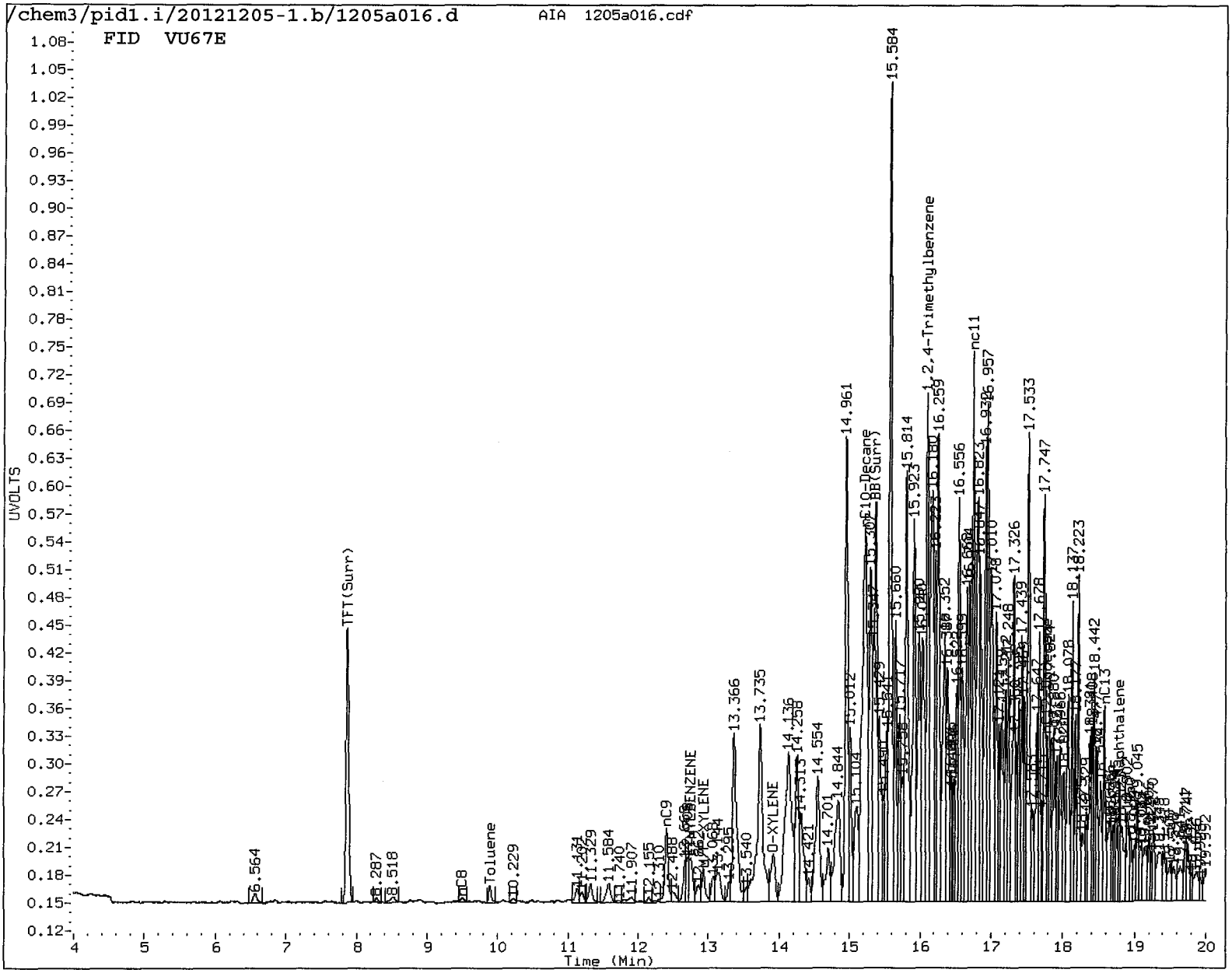




Data File: /chem3/pid1.i/20121205-1.b/1205a016.d/1205a016.cdf
Injection Date: 05-DEC-2012 17:37
Instrument: pid1.i
Client Sample ID: GP-11-S-1.25

AIA 1205a016.cdf: 0.000 to 24.003 Min

PC
12/7/12



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: PC Date: 12/7/12

Data File: /chem3/pid1.i/20121205-1.b/1205a017.d

Date : 05-DEC-2012 18:07

Client ID: GP-13-S-1.6

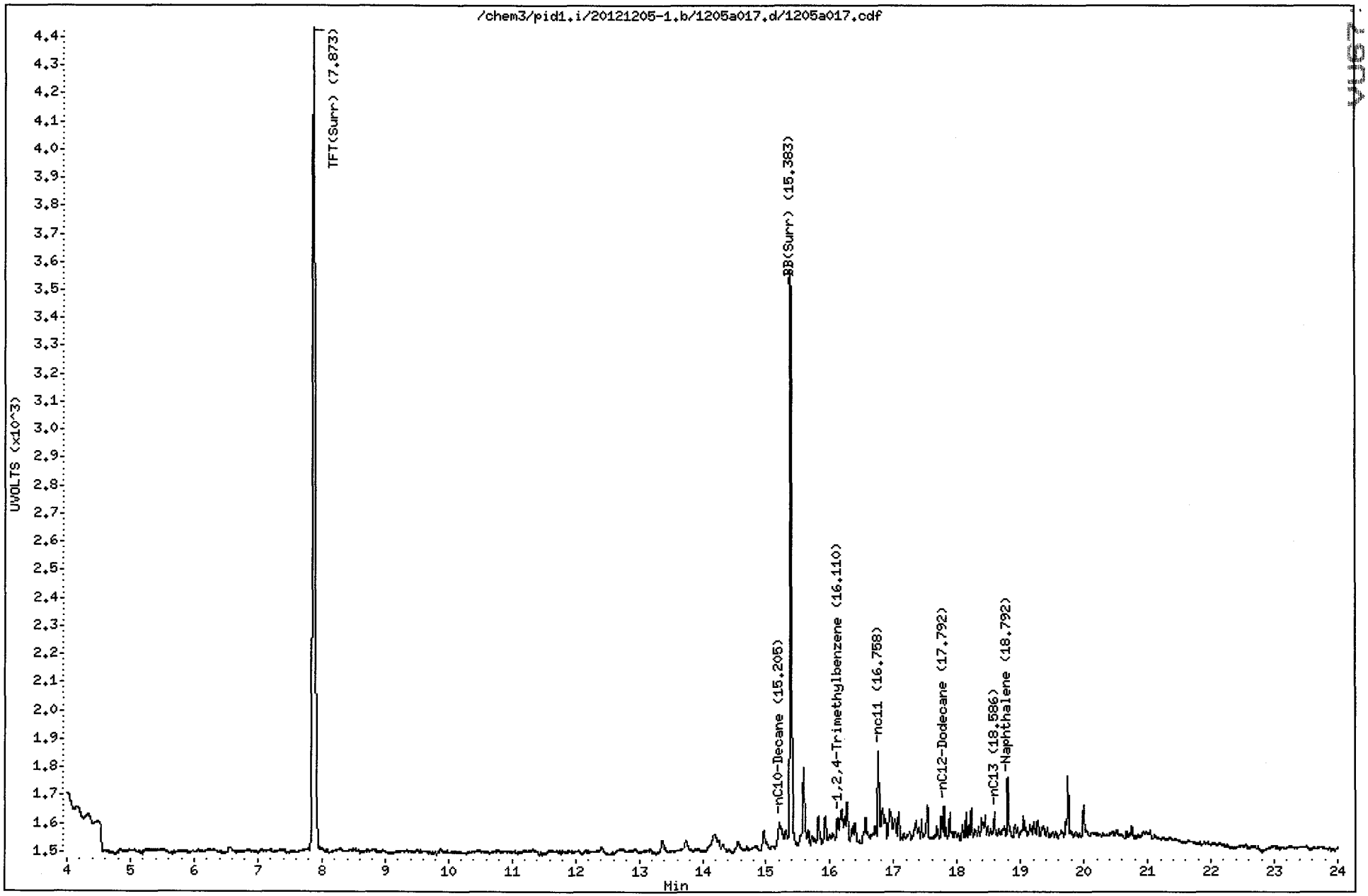
Sample Info: VU67F

Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: PC

Column diameter: 0.18



VU67 000413

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Matrix: Water

Data Release Authorized:
Reported: 12/10/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

ARI ID	Client ID	Analysis Date	DL	Range	Result
MB-120512	Method Blank	12/05/12	1.0	Gasoline	< 0.25 U
12-23838		PID1		HC ID	---
				Trifluorotoluene	95.3%
				Bromobenzene	99.3%
VU67A	GP11-W-17.5	12/05/12	1.0	Gasoline	< 0.25 U
12-23838		PID1		HC ID	---
				Trifluorotoluene	96.0%
				Bromobenzene	98.4%
VU67B	GP12-W-7.5	12/05/12	1.0	Gasoline	< 0.25 U
12-23839		PID1		HC ID	---
				Trifluorotoluene	95.8%
				Bromobenzene	98.7%
VU67D	GP16-W-17.5	12/05/12	1.0	Gasoline	< 0.25 U
12-23841		PID1		HC ID	---
				Trifluorotoluene	95.8%
				Bromobenzene	98.0%

Gasoline values reported in mg/L (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-120512
LAB CONTROL SAMPLE

Lab Sample ID: LCS-120512
LIMS ID: 12-23838
Matrix: Water
Data Release Authorized:
Reported: 12/10/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 12/05/12 11:03
LCSD: 12/05/12 11:32
Instrument/Analyst LCS: PID1/PKC
LCSD: PID1/PKC

Purge Volume: 5.0 mL

Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	1.05	1.00	105%	1.08	1.00	108%	2.8%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	99.5%	101%
Bromobenzene	97.9%	100%

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: VU67
Matrix: Water

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
Event: 0747.01.02

Client ID	TFT	BBZ	TOT OUT
MB-120512	95.3%	99.3%	0
LCS-120512	99.5%	97.9%	0
LCSD-120512	101%	100%	0
GP11-W-17.5	96.0%	98.4%	0
GP12-W-7.5	95.8%	98.7%	0
GP16-W-17.5	95.8%	98.0%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 12-23838 to 12-23841

FORM II TPHG

VU67:00052

Data File: /chem3/pid1.i/20121205-1.b/1205a004.d

Date : 05-DEC-2012 11:03

Client ID:

Sample Info: LCS1205

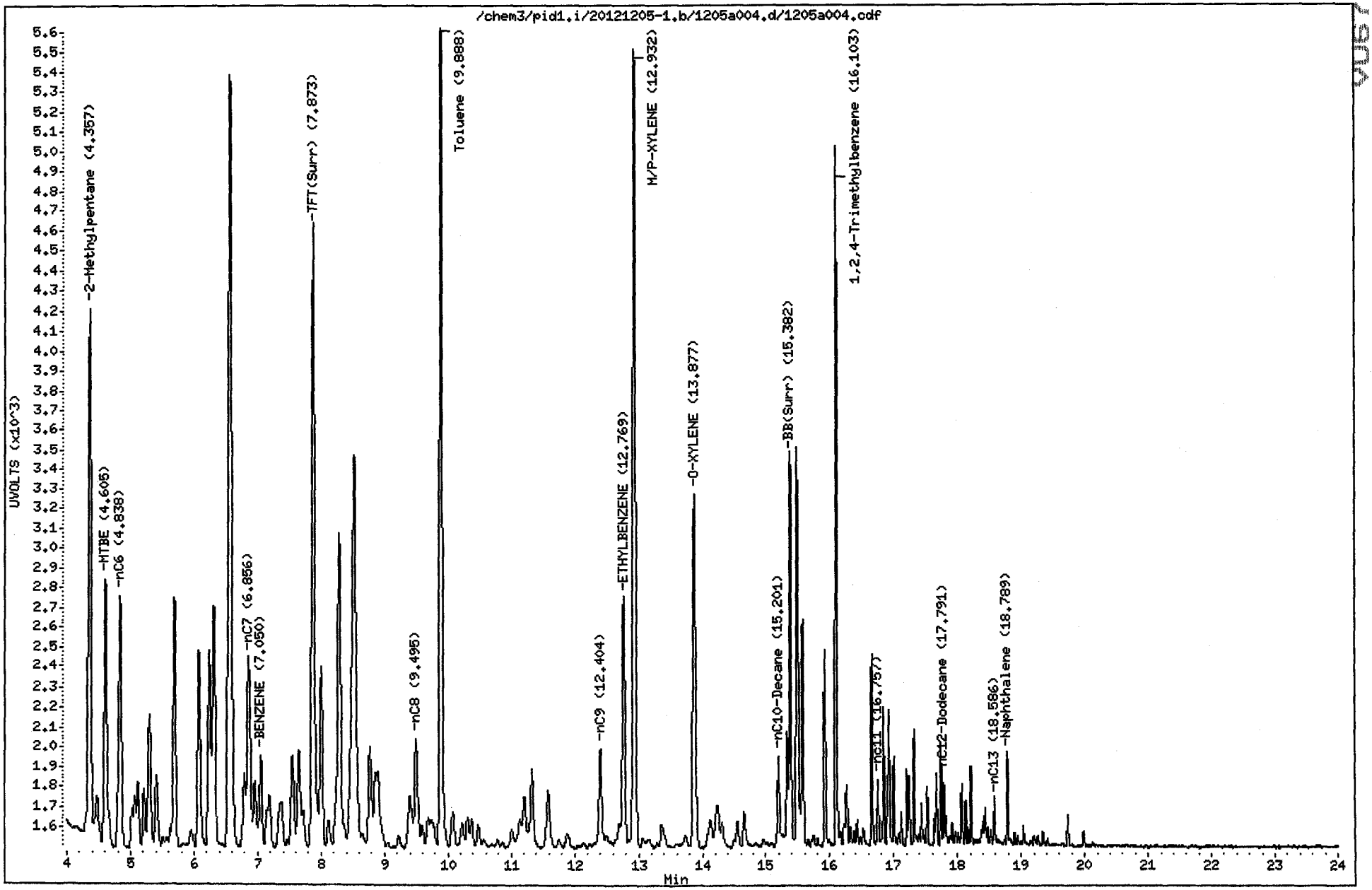
Column phase: RTX 502-2 FID

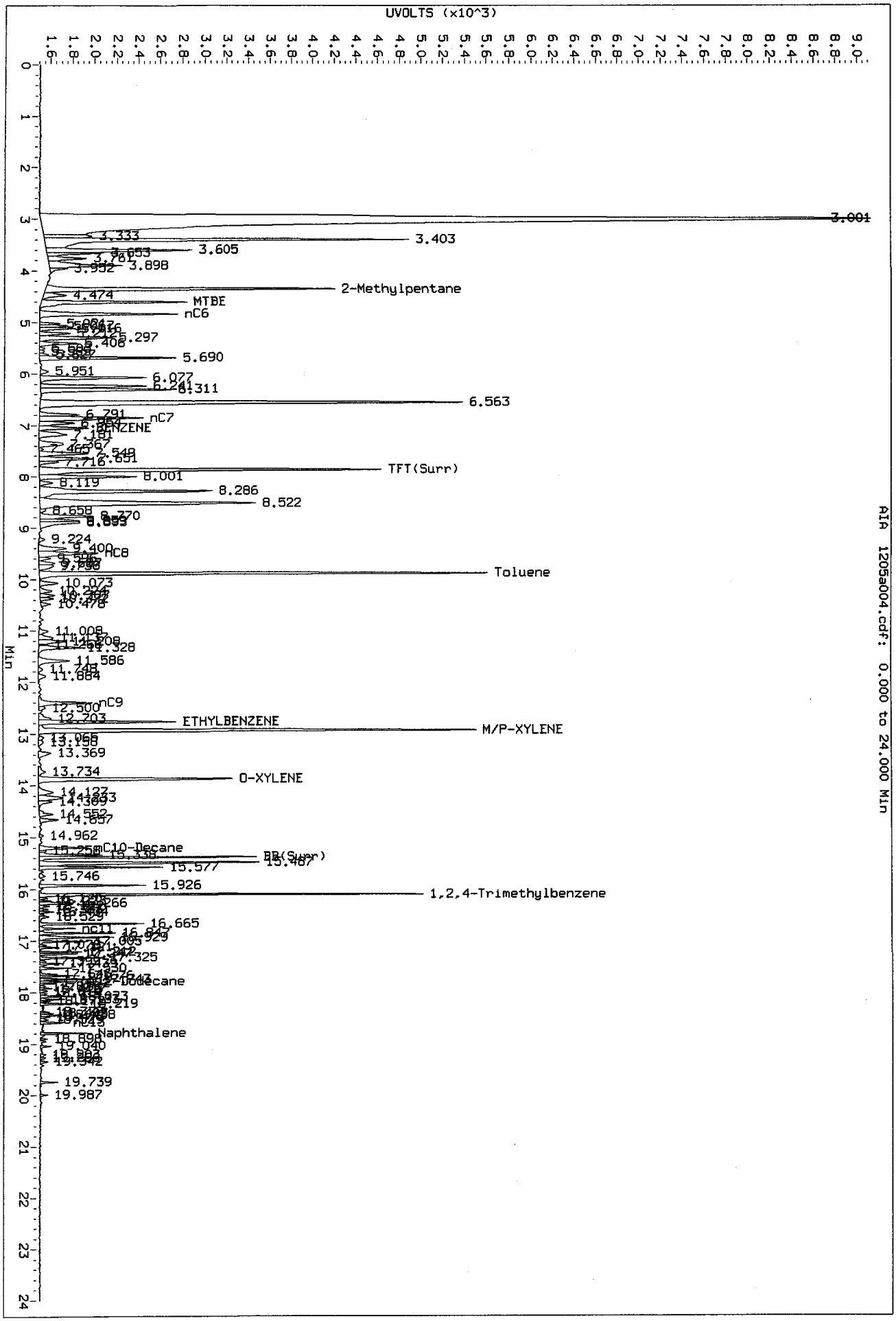
Instrument: pid1.i

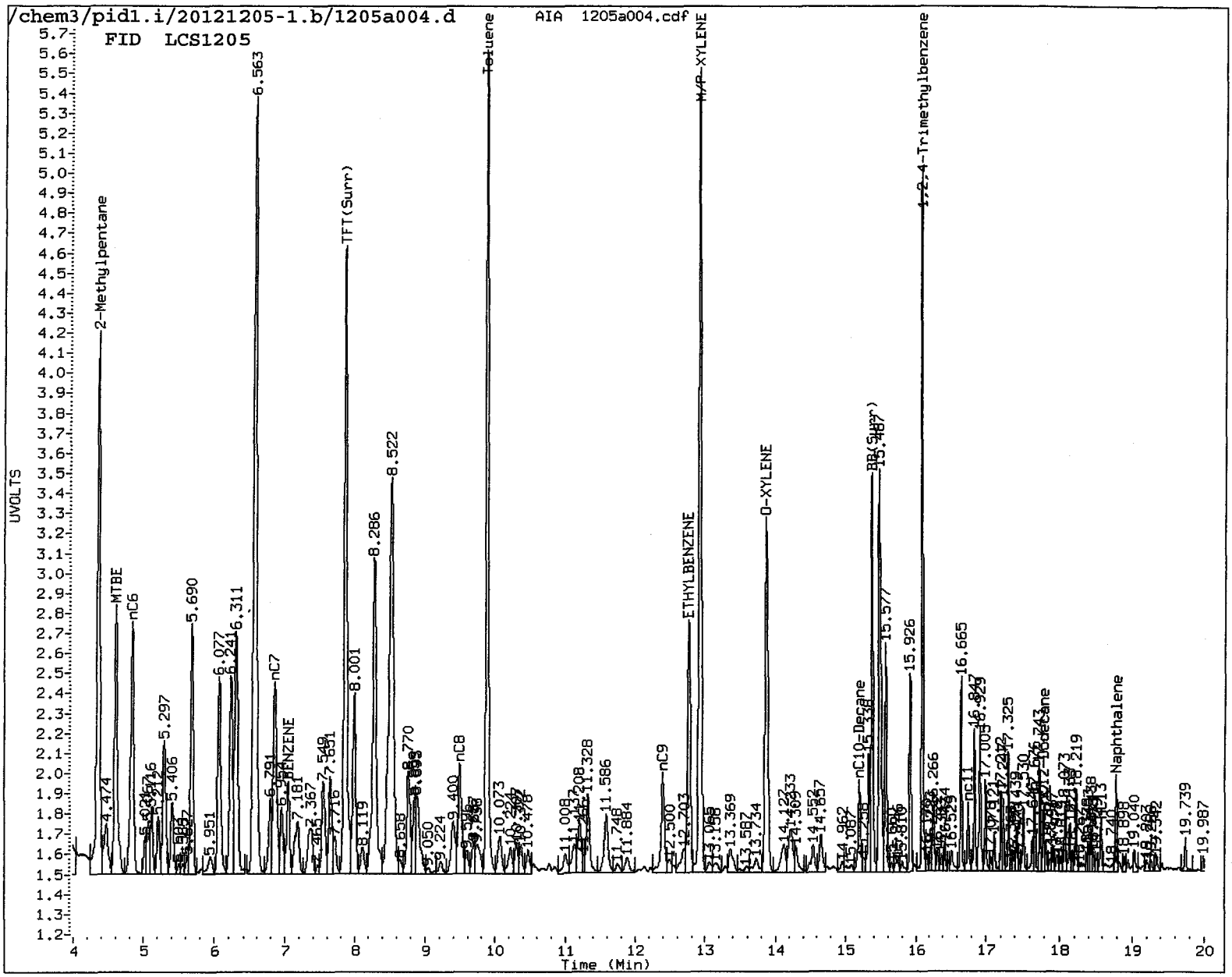
Operator: PC

Column diameter: 0.18

VOST 00053




UVOLTS (x10^3)
Min
3.001
3.333
3.403
3.605
3.898
2-Methylpentane
4.474
MTBE
nC6
5.690
5.951
6.077
6.311
6.563
nC7
TFT(Surr)
8.001
8.119
8.286
8.522
9.224
nC8
Toluene
10.073
11.008
11.328
11.586
nC9
12.500
12.703
ETHYLBENZENE
M/P-XYLENE
13.369
13.734
O-XYLENE
14.962
nC10-Decane
15.577
15.746
15.926
1,2,4-Trimethylbenzene
16.665
Naphthalene
19.739
19.987
Data File: /chem3/pid1.i/20121205-1.b/1205a004.d/1205a004.cdf
Injection Date: 05-DEC-2012 11:03
Instrument: pid1.i
Client Sample ID:
AIA 1205a004.cdf: 0.000 to 24.000 Min



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: YC Date: 12/7/12

Data File: /chem3/pid1.i/20121205-1.b/1205a005.d

Date : 05-DEC-2012 11:32

Client ID:

Sample Info: LCSD1205

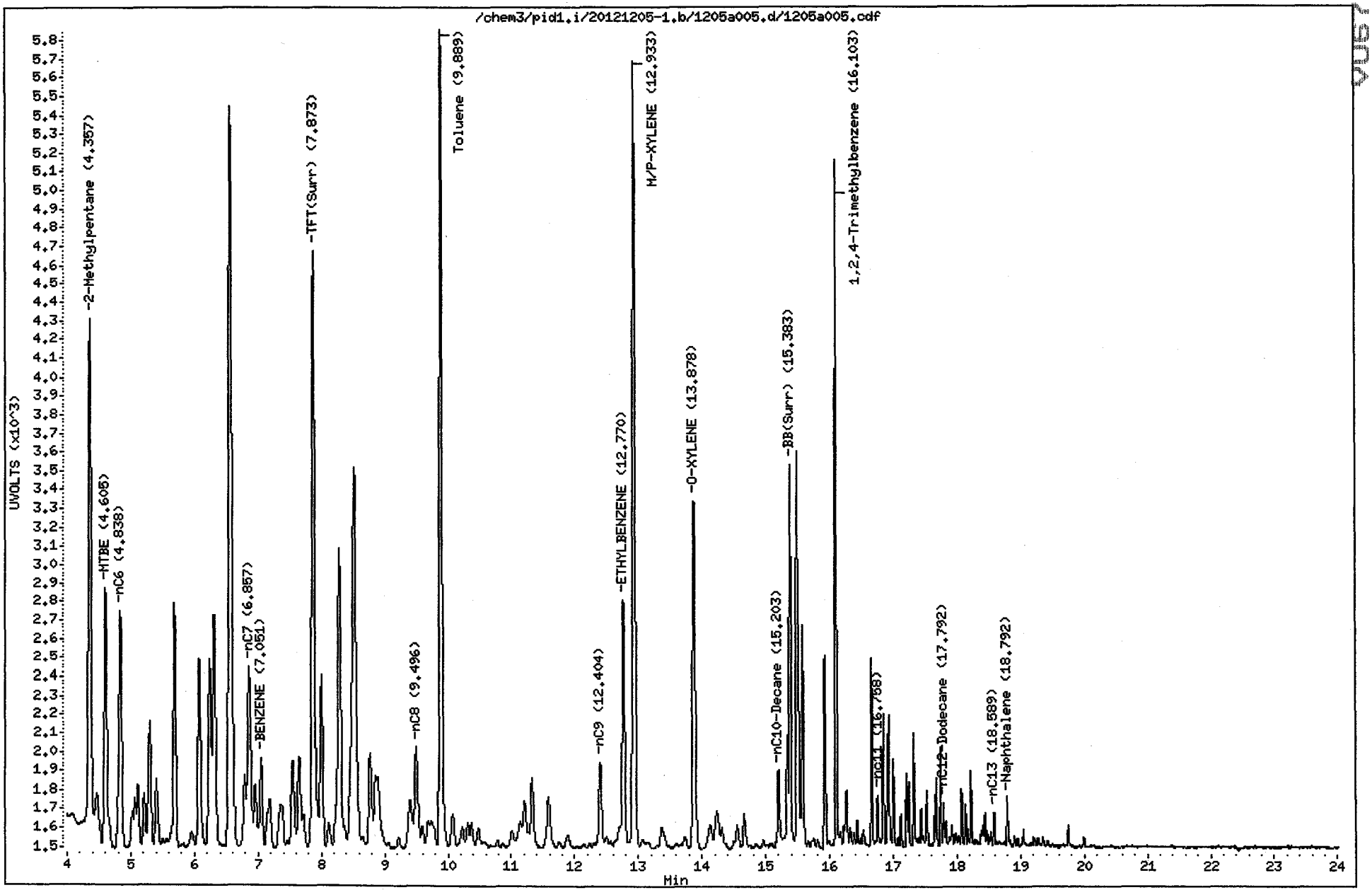
Column phase: RTX 502-2 FID

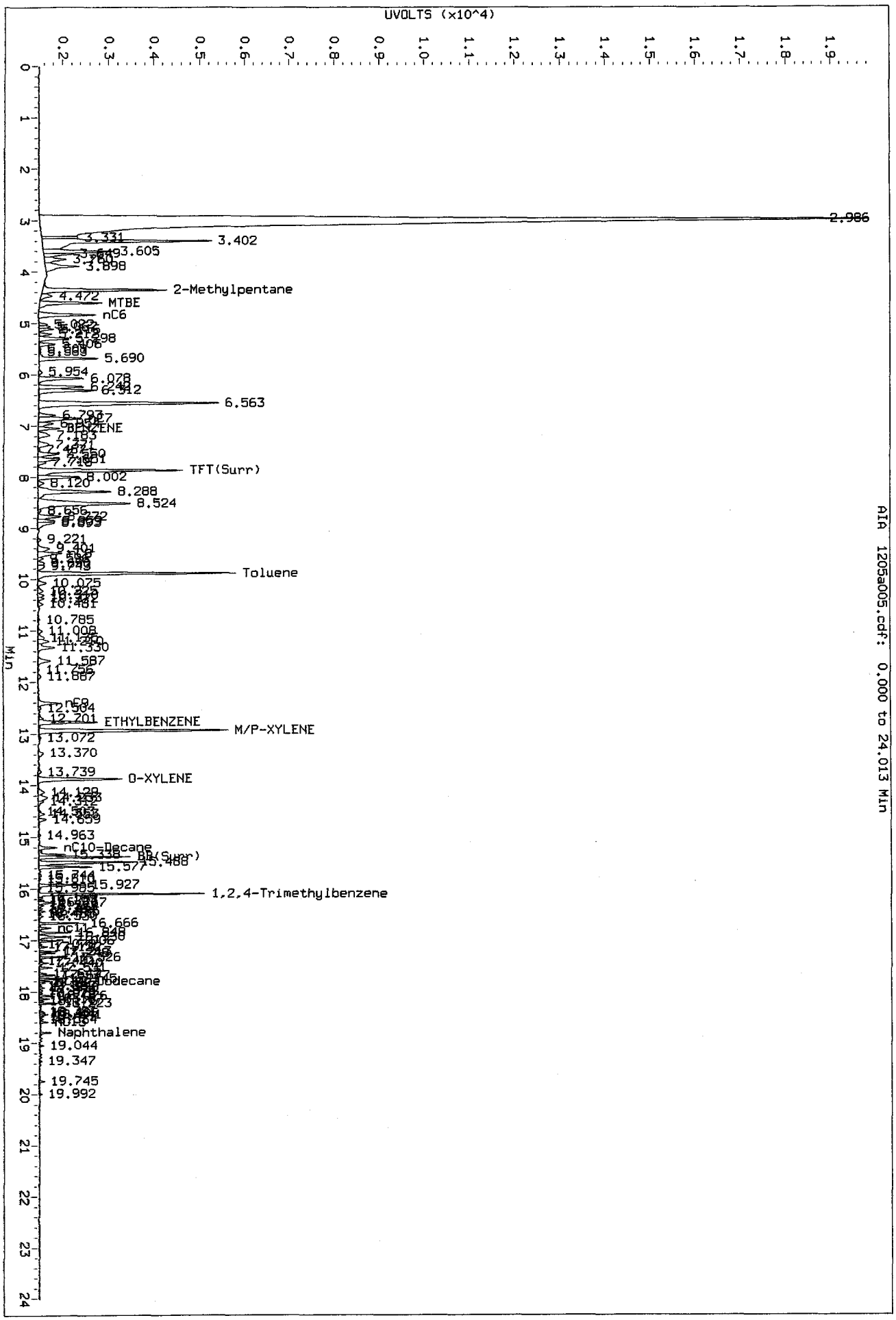
Instrument: pid1.i

Operator: PC

Column diameter: 0.18

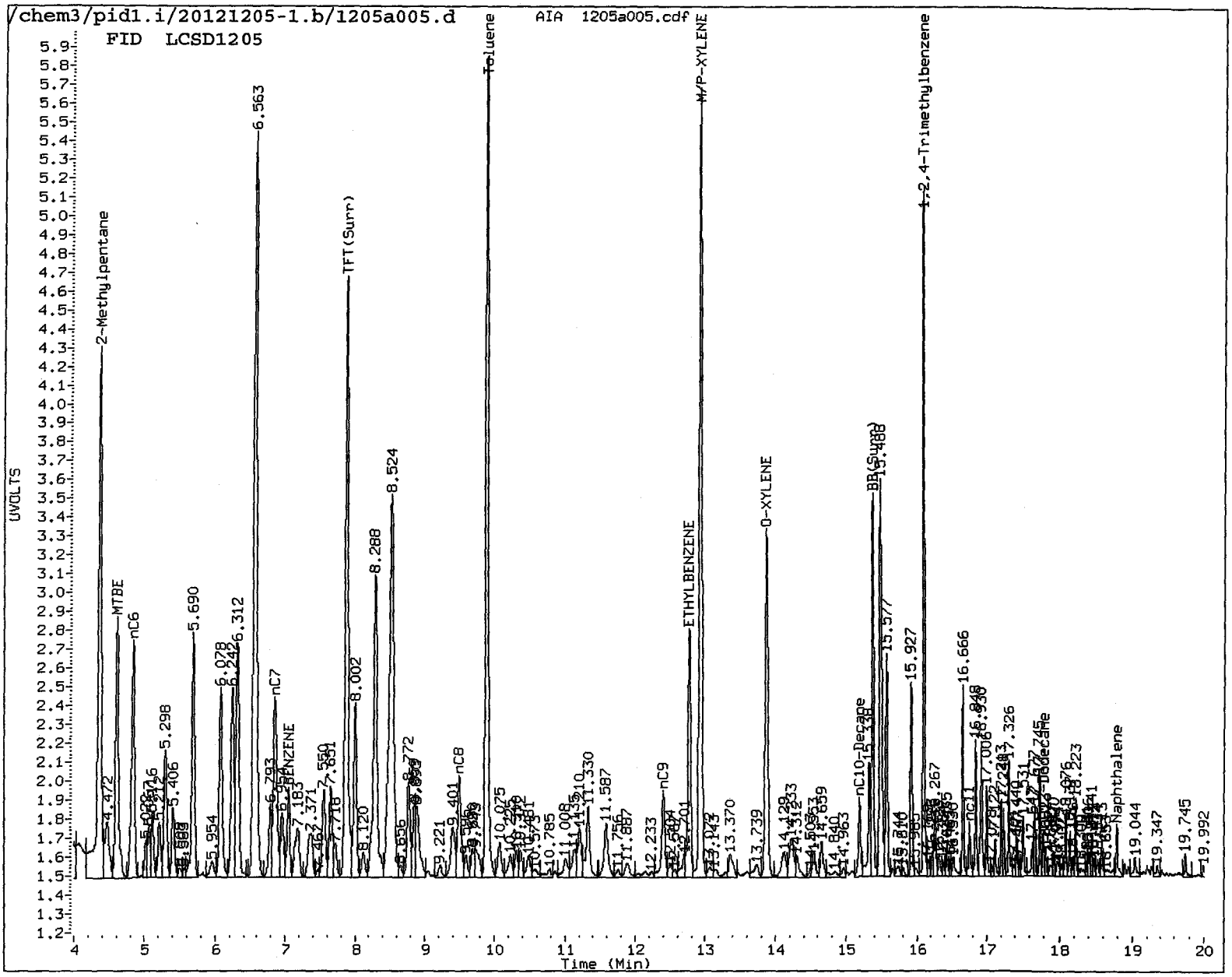
VOST: 00056





Data File: /chem3/pid1.i/20121205-1.b/1205a005.d/1205a005.cdf
Injection Date: 05-DEC-2012 11:32
Instrument: pid1.i
Client Sample ID:

12/7/12



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: PC Date: 12/7/12

Data File: /chem3/pid1.i/20121205-1.b/1205a006.d

Date : 05-DEC-2012 12:02

Client ID:

Sample Info: MB1205

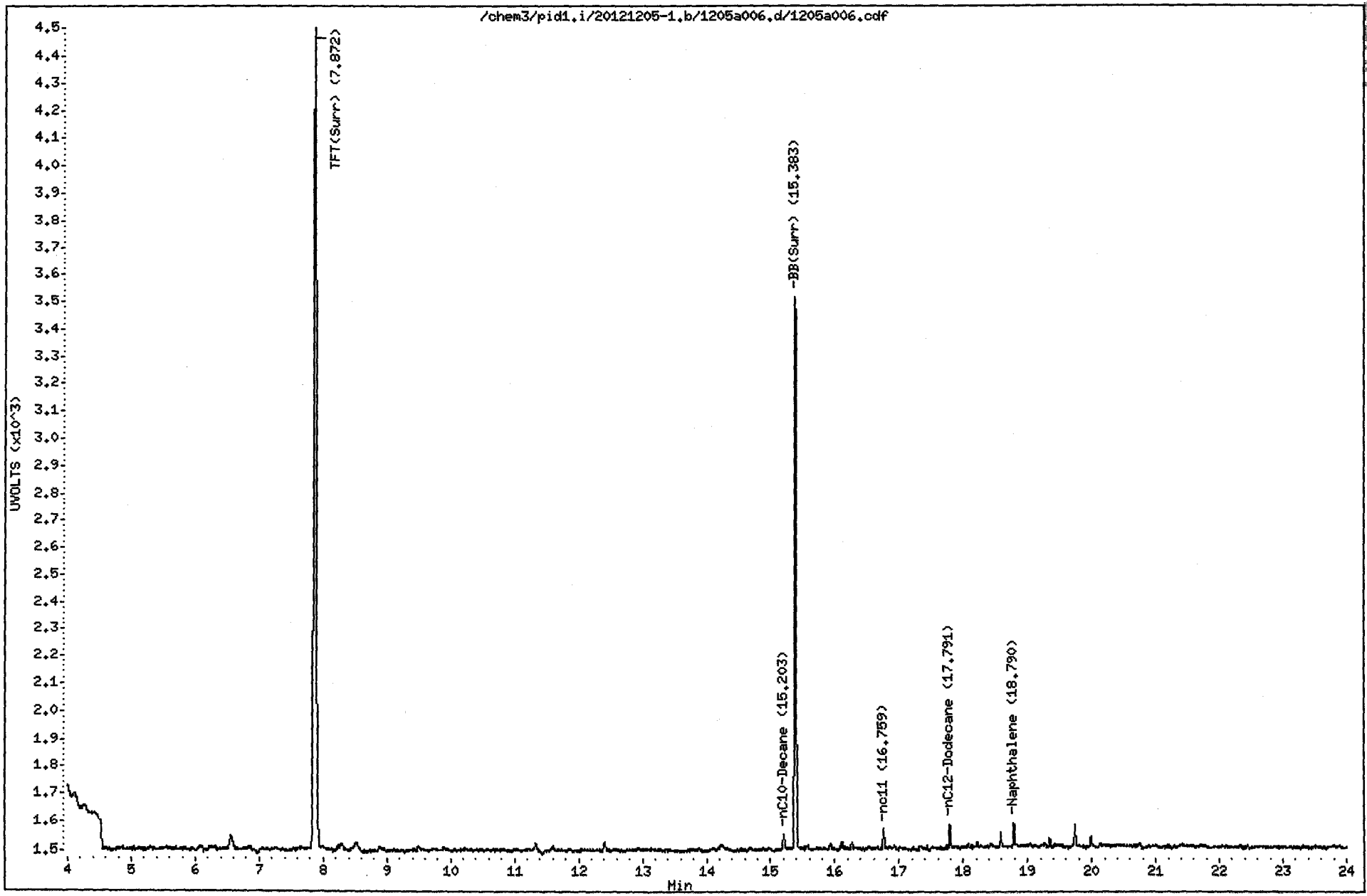
Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: PC

Column diameter: 0.18

VOST 00059



Data File: /chem3/pid1.i/20121205-1.b/1205a011.d

Date : 05-DEC-2012 15:12

Client ID: GP11-W-17.5

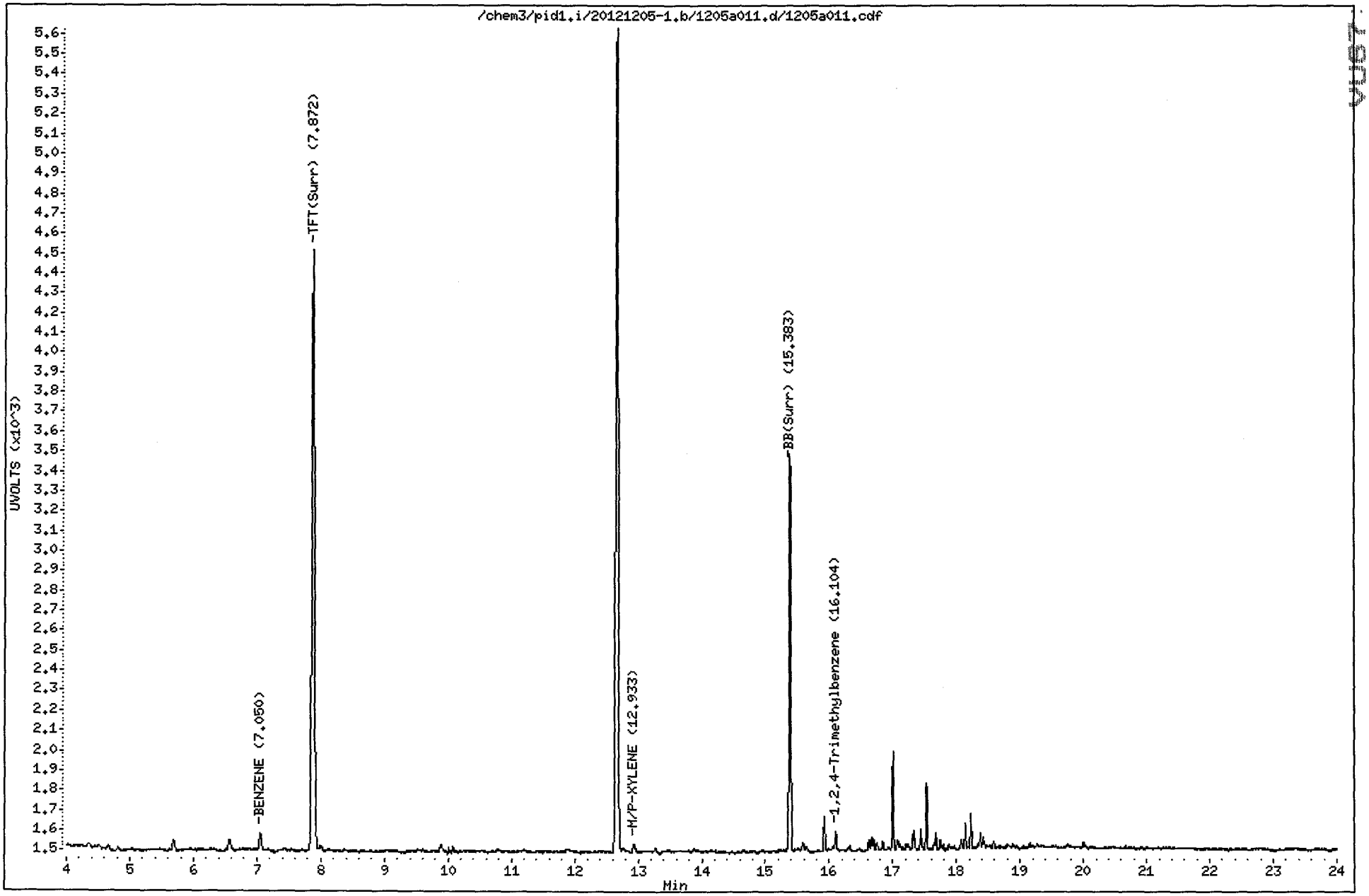
Sample Info: VU67A

Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: PC

Column diameter: 0.18



VU67 000059

Data File: /chem3/pid1.i/20121205-1.b/1205a012.d

Page 1

Date : 05-DEC-2012 15:41

Client ID: GP12-W-7.5

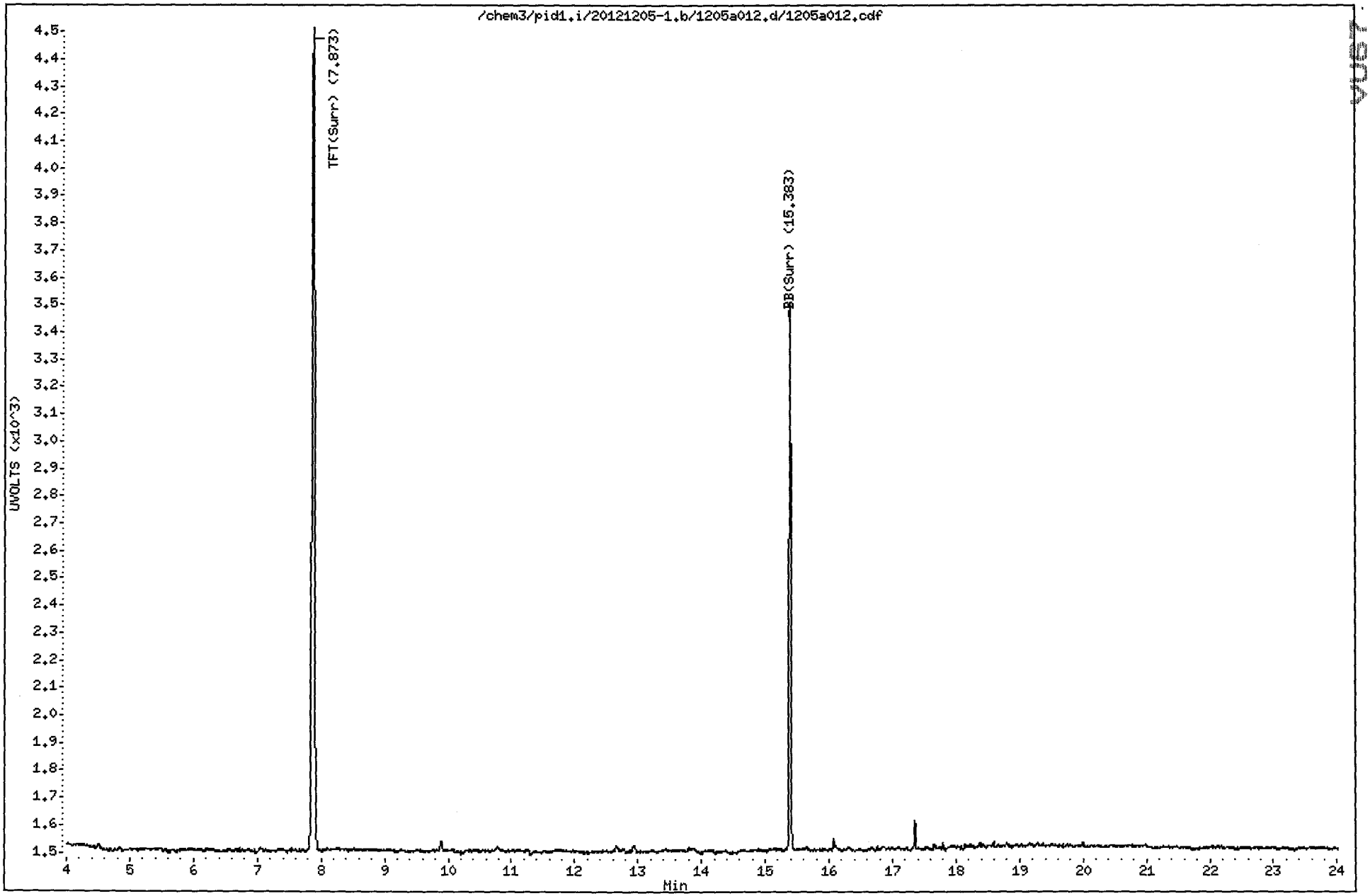
Instrument: pid1.i

Sample Info: VU67B

Operator: PC

Column phase: RTX 502-2 FID

Column diameter: 0.18



VU67 00061

Data File: /chem3/pid1.i/20121205-1.b/1205a013.d

Page 1

Date : 05-DEC-2012 16:10

Client ID: GP16-W-17.5

Instrument: pid1.i

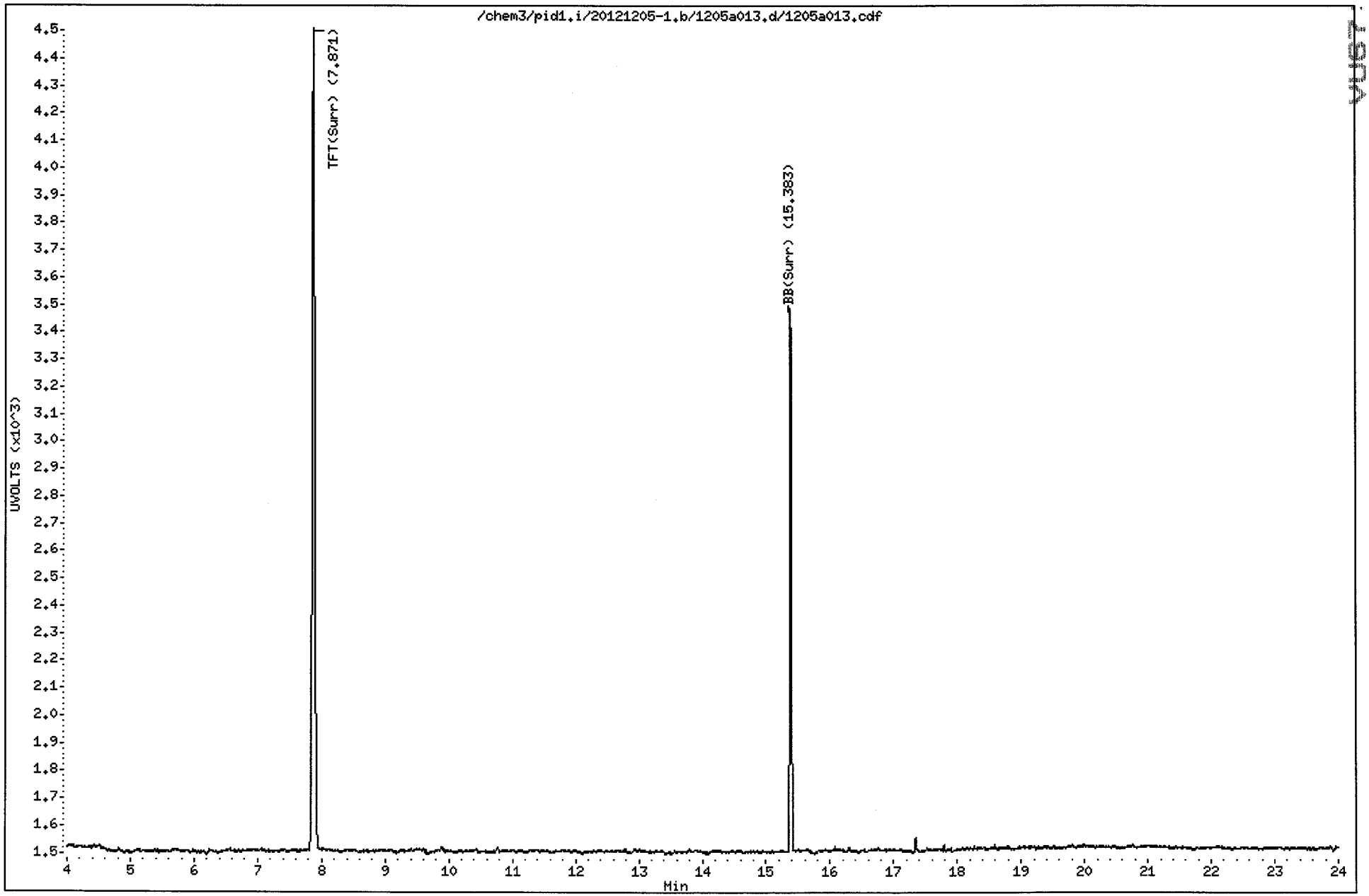
Sample Info: VU67D

Operator: PC

Column phase: RTX 502-2 FID

Column diameter: 0.18

VU67 60062



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP-11-S-1.25
SAMPLE

Lab Sample ID: VU67E
LIMS ID: 12-23842
Matrix: Soil
Data Release Authorized:
Reported: 12/12/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Date Extracted: 12/10/12
Date Analyzed: 12/11/12 15:05
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 2.10 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 7.0%

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**24**	**510**
91-57-6	**2-Methylnaphthalene**	**24**	**390**
90-12-0	**1-Methylnaphthalene**	**24**	**230**
208-96-8	Acenaphthylene	24	< 24 U
83-32-9	Acenaphthene	24	< 24 U
86-73-7	**Fluorene**	**24**	**29**
85-01-8	Phenanthrene	24	< 24 U
120-12-7	Anthracene	24	< 24 U
206-44-0	**Fluoranthene**	**24**	**86**
129-00-0	Pyrene	24	< 24 U
56-55-3	Benzo(a)anthracene	24	< 24 U
218-01-9	**Chrysene**	**24**	**75**
50-32-8	**Benzo(a)pyrene**	**24**	**24 J**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**24**	**23 J**
53-70-3	Dibenz(a,h)anthracene	24	< 24 U
191-24-2	**Benzo(g,h,i)perylene**	**24**	**57**
132-64-9	**Dibenzofuran**	**24**	**14 J**
TOTBFA	**Total Benzofluoranthenes**	**24**	**200 M**

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	56.7%
d14-Dibenzo(a,h)anthracen	86.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP-13-S-1.6
SAMPLE

Lab Sample ID: VU67F
LIMS ID: 12-23843
Matrix: Soil
Data Release Authorized:
Reported: 12/12/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Date Extracted: 12/10/12
Date Analyzed: 12/11/12 15:36
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.79 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 23.8%

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**4.6**	**2.6 J**
91-57-6	2-Methylnaphthalene	4.6	< 4.6 U
90-12-0	1-Methylnaphthalene	4.6	< 4.6 U
208-96-8	Acenaphthylene	4.6	< 4.6 U
83-32-9	Acenaphthene	4.6	< 4.6 U
86-73-7	Fluorene	4.6	< 4.6 U
85-01-8	Phenanthrene	4.6	< 4.6 U
120-12-7	Anthracene	4.6	< 4.6 U
206-44-0	Fluoranthene	4.6	< 4.6 U
129-00-0	Pyrene	4.6	< 4.6 U
56-55-3	Benzo(a)anthracene	4.6	< 4.6 U
218-01-9	Chrysene	4.6	< 4.6 U
50-32-8	Benzo(a)pyrene	4.6	< 4.6 U
193-39-5	Indeno(1,2,3-cd)pyrene	4.6	< 4.6 U
53-70-3	Dibenz(a,h)anthracene	4.6	< 4.6 U
191-24-2	Benzo(g,h,i)perylene	4.6	< 4.6 U
132-64-9	Dibenzofuran	4.6	< 4.6 U
TOTBFA	Total Benzofluoranthenes	4.6	< 4.6 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	49.7%
d14-Dibenzo(a,h)anthracen	89.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: MB-121012
METHOD BLANK

Lab Sample ID: MB-121012
LIMS ID: 12-23842
Matrix: Soil
Data Release Authorized:
Reported: 12/12/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 12/10/12
Date Analyzed: 12/11/12 13:29
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.00 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	5.0	< 5.0 U
90-12-0	1-Methylnaphthalene	5.0	< 5.0 U
208-96-8	Acenaphthylene	5.0	< 5.0 U
83-32-9	Acenaphthene	5.0	< 5.0 U
86-73-7	Fluorene	5.0	< 5.0 U
85-01-8	Phenanthrene	5.0	< 5.0 U
120-12-7	Anthracene	5.0	< 5.0 U
206-44-0	Fluoranthene	5.0	< 5.0 U
129-00-0	Pyrene	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	5.0	< 5.0 U
218-01-9	Chrysene	5.0	< 5.0 U
50-32-8	Benzo(a)pyrene	5.0	< 5.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	< 5.0 U
53-70-3	Dibenz(a,h)anthracene	5.0	< 5.0 U
191-24-2	Benzo(g,h,i)perylene	5.0	< 5.0 U
132-64-9	Dibenzofuran	5.0	< 5.0 U
TOTBFA	Total Benzofluoranthenes	5.0	< 5.0 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	57.0%
d14-Dibenzo(a,h)anthracen	95.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: LCS-121012
LAB CONTROL SAMPLE

Lab Sample ID: LCS-121012
LIMS ID: 12-23842
Matrix: Soil
Data Release Authorized:
Reported: 12/12/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 12/10/12

Date Analyzed LCS: 12/11/12 14:01
LCSD: 12/11/12 14:33
Instrument/Analyst LCS: NT4/JZ
LCSD: NT4/JZ

Sample Amount LCS: 10.00 g-dry-wt
LCSD: 10.00 g-dry-wt
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Naphthalene	85.8	150	57.2%	80.8	150	53.9%	6.0%
2-Methylnaphthalene	79.8	150	53.2%	77.2	150	51.5%	3.3%
1-Methylnaphthalene	89.7	150	59.8%	84.1	150	56.1%	6.4%
Acenaphthylene	90.0	150	60.0%	86.6	150	57.7%	3.9%
Acenaphthene	90.2	150	60.1%	88.6	150	59.1%	1.8%
Fluorene	94.5	150	63.0%	89.3	150	59.5%	5.7%
Phenanthrene	97.6	150	65.1%	97.2	150	64.8%	0.4%
Anthracene	101	150	67.3%	101	150	67.3%	0.0%
Fluoranthene	102	150	68.0%	104	150	69.3%	1.9%
Pyrene	105	150	70.0%	110	150	73.3%	4.7%
Benzo(a)anthracene	108	150	72.0%	112	150	74.7%	3.6%
Chrysene	111	150	74.0%	114	150	76.0%	2.7%
Benzo(a)pyrene	97.2	150	64.8%	96.2	150	64.1%	1.0%
Indeno(1,2,3-cd)pyrene	115	150	76.7%	115	150	76.7%	0.0%
Dibenz(a,h)anthracene	118	150	78.7%	120	150	80.0%	1.7%
Benzo(g,h,i)perylene	105	150	70.0%	110	150	73.3%	4.7%
Dibenzofuran	89.8	150	59.9%	86.6	150	57.7%	3.6%
Total Benzofluoranthenes	304	450	67.6%	307	450	68.2%	1.0%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

SIM Semivolatile Surrogate Recovery

	LCS	LCSD
d10-2-Methylnaphthalene	54.7%	48.3%
d14-Dibenzo(a,h)anthracen	95.0%	90.3%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

Client ID	MNP	DBA	TOT OUT
MB-121012	57.0%	95.3%	0
LCS-121012	54.7%	95.0%	0
LCSD-121012	48.3%	90.3%	0
GP-11-S-1.25	56.7%	86.7%	0
GP-13-S-1.6	49.7%	89.0%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(35-100)	(34-100)
(DBA) = d14-Dibenzo(a,h)anthracene	(37-120)	(10-117)

Prep Method: SW3546
Log Number Range: 12-23842 to 12-23843

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Extraction Method: SW3520C

Sample ID: MB-120512
METHOD BLANK

Lab Sample ID: MB-120512
LIMS ID: 12-23838
Matrix: Water
Data Release Authorized:
Reported: 12/14/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 12/05/12
Date Analyzed: 12/07/12 13:24
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	54.0%
d14-Dibenzo(a,h)anthracene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Extraction Method: SW3520C

Sample ID: GP11-W-17.5
SAMPLE

Lab Sample ID: VU67A
LIMS ID: 12-23838
Matrix: Water
Data Release Authorized:
Reported: 12/14/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Date Extracted: 12/05/12
Date Analyzed: 12/07/12 16:02
Instrument/Analyst: NT4/JZ

Sample Amount: 450 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.11	< 0.11 U
91-57-6	2-Methylnaphthalene	0.11	< 0.11 U
90-12-0	1-Methylnaphthalene	0.11	< 0.11 U
208-96-8	Acenaphthylene	0.11	< 0.11 U
83-32-9	Acenaphthene	0.11	< 0.11 U
86-73-7	Fluorene	0.11	< 0.11 U
85-01-8	Phenanthrene	0.11	< 0.11 U
120-12-7	Anthracene	0.11	< 0.11 U
206-44-0	Fluoranthene	0.11	< 0.11 U
129-00-0	Pyrene	0.11	< 0.11 U
56-55-3	Benzo(a)anthracene	0.11	< 0.11 U
218-01-9	Chrysene	0.11	< 0.11 U
50-32-8	Benzo(a)pyrene	0.11	< 0.11 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.11	< 0.11 U
53-70-3	Dibenz(a,h)anthracene	0.11	< 0.11 U
191-24-2	Benzo(g,h,i)perylene	0.11	< 0.11 U
132-64-9	Dibenzofuran	0.11	< 0.11 U
TOTBFA	Total Benzofluoranthenes	0.22	< 0.22 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	46.3%
d14-Dibenzo(a,h)anthracene	37.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Extraction Method: SW3520C
Page 1 of 1

Sample ID: GP12-W-7.5
SAMPLE

Lab Sample ID: VU67B
LIMS ID: 12-23839
Matrix: Water
Data Release Authorized:
Reported: 12/14/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Date Extracted: 12/05/12
Date Analyzed: 12/07/12 16:34
Instrument/Analyst: NT4/JZ

Sample Amount: 480 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	**2-Methylnaphthalene**	**0.10**	**0.06 J**
90-12-0	**1-Methylnaphthalene**	**0.10**	**0.06 J**
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.21	< 0.21 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	48.7%
d14-Dibenzo(a,h)anthracene	81.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: LCS-120512
LAB CONTROL SAMPLE

Lab Sample ID: LCS-120512
LIMS ID: 12-23838
Matrix: Water
Data Release Authorized:
Reported: 12/14/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 12/05/12
Date Analyzed LCS: 12/07/12 13:55
Instrument/Analyst LCS: NT4/JZ

Sample Amount LCS: 500 mL
Final Extract Volume LCS: 0.50 mL
Dilution Factor LCS: 1.00

Analyte	LCS	Spike Added	Recovery
Naphthalene	1.62	3.00	54.0%
2-Methylnaphthalene	1.50	3.00	50.0%
1-Methylnaphthalene	1.69	3.00	56.3%
Acenaphthylene	1.76	3.00	58.7%
Acenaphthene	1.81	3.00	60.3%
Fluorene	1.83	3.00	61.0%
Phenanthrene	1.93	3.00	64.3%
Anthracene	1.93	3.00	64.3%
Fluoranthene	2.10	3.00	70.0%
Pyrene	2.17	3.00	72.3%
Benzo(a)anthracene	2.11	3.00	70.3%
Chrysene	2.21	3.00	73.7%
Benzo(a)pyrene	1.96	3.00	65.3%
Indeno(1,2,3-cd)pyrene	2.30	3.00	76.7%
Dibenz(a,h)anthracene	2.26	3.00	75.3%
Benzo(g,h,i)perylene	2.20	3.00	73.3%
Dibenzofuran	1.80	3.00	60.0%
Total Benzofluoranthenes	6.66	9.00	74.0%

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	53.3%
d14-Dibenzo(a,h)anthracene	83.3%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

Client ID	MNP	DBA	TOT OUT
MB-120512	54.0%	101%	0
LCS-120512	53.3%	83.3%	0
GP11-W-17.5	46.3%	37.7%	0
GP12-W-7.5	48.7%	81.0%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(40-110)	(33-107)
(DBA) = d14-Dibenzo(a,h)anthracene	(33-140)	(10-142)

Prep Method: SW3520C
Log Number Range: 12-23838 to 12-23839

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082A
Extraction Method: SW3546
Page 1 of 1

Sample ID: GP-11-S-1.25
SAMPLE

Lab Sample ID: VU67E
LIMS ID: 12-23842
Matrix: Soil
Data Release Authorized:
Reported: 12/14/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Date Extracted: 12/08/12
Date Analyzed: 12/11/12 19:16
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.2 g-dry-wt
Final Extract Volume: 4.00 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 7.0%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	< 33 U
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	**Aroclor 1248**	**33**	**70**
11097-69-1	**Aroclor 1254**	**33**	**88**
11096-82-5	**Aroclor 1260**	**33**	**120**
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	92.5%
Tetrachlorometaxylene	81.2%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082A
Extraction Method: SW3546
Page 1 of 1

Sample ID: GP-13-S-1.6
SAMPLE

Lab Sample ID: VU67F
LIMS ID: 12-23843
Matrix: Soil
Data Release Authorized:
Reported: 12/14/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Date Extracted: 12/08/12
Date Analyzed: 12/11/12 19:37
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.2 g-dry-wt
Final Extract Volume: 4.00 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 23.8%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	< 33 U
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	Aroclor 1248	33	< 33 U
11097-69-1	Aroclor 1254	33	< 33 U
11096-82-5	Aroclor 1260	33	< 33 U
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	93.8%
Tetrachlorometaxylene	81.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082A
Extraction Method: SW3546

Sample ID: MB-120812
METHOD BLANK

Lab Sample ID: MB-120812
LIMS ID: 12-23842
Matrix: Soil
Data Release Authorized:
Reported: 12/14/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 12/08/12
Date Analyzed: 12/11/12 18:37
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.0 g
Final Extract Volume: 4.00 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: NA

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	< 33 U
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	Aroclor 1248	33	< 33 U
11097-69-1	Aroclor 1254	33	< 33 U
11096-82-5	Aroclor 1260	33	< 33 U
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	88.0%
Tetrachlorometaxylene	90.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082A
Page 1 of 1

Sample ID: LCS-120812
LAB CONTROL

Lab Sample ID: LCS-120812
LIMS ID: 12-23842
Matrix: Soil
Data Release Authorized:
Reported: 12/14/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 12/08/12
Date Analyzed: 12/11/12 18:57
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.0 g-dry-wt
Final Extract Volume: 4.00 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
Aroclor 1016	149	167	89.2%
Aroclor 1260	152	167	91.0%

PCB Surrogate Recovery

Decachlorobiphenyl	90.2%
Tetrachlorometaxylene	86.2%

Results reported in µg/kg (ppb)

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-120812	88.0%	49-126	90.8%	53-108	0
LCS-120812	90.2%	49-126	86.2%	53-108	0
GP-11-S-1.25	92.5%	31-140	81.2%	39-122	0
GP-13-S-1.6	93.8%	31-140	81.0%	39-122	0

Microwave (MARS) Control Limits PCBSMI
Prep Method: SW3546
Log Number Range: 12-23842 to 12-23843

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS

NWTPHD by GC/FID
Extraction Method: SW3546
Page 1 of 1

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

Matrix: Soil

Date Received: 12/03/12

Data Release Authorized:
Reported: 12/10/12

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range/Surrogate	RL	Result
MB-120512	Method Blank	12/05/12	12/06/12	1.00	Diesel Range	5.0	< 5.0 U
12-23842	HC ID: ---		FID4A	1.0	Motor Oil Range	10	< 10 U
					o-Terphenyl		98.5%
VU67E	GP-11-S-1.25	12/05/12	12/07/12	1.00	**Diesel Range**	**110**	**1,700**
12-23842	HC ID: **DIESEL/MOTOR OIL**		FID4A	20	**Motor Oil Range**	**210**	**6,500**
					o-Terphenyl		D
VU67F	GP-13-S-1.6	12/05/12	12/07/12	1.00	Diesel Range	6.5	< 6.5 U
12-23843	HC ID: ---		FID4A	1.0	Motor Oil Range	13	< 13 U
					o-Terphenyl		95.5%

Reported in mg/kg (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: LCS-120512
LAB CONTROL

Lab Sample ID: LCS-120512
LIMS ID: 12-23842
Matrix: Soil
Data Release Authorized:
Reported: 12/10/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 12/05/12
Date Analyzed: 12/06/12 21:55
Instrument/Analyst: FID4A/VTS

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
Diesel	127	150	84.7%

TPHD Surrogate Recovery

o-Terphenyl	91.6%

Results reported in mg/kg

FORM III

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: VU67
Matrix: Soil Project: Sims- N.Cascade Ford
Date Received: 12/03/12 0747.01.02

ARI ID	Client ID	Client Amt	Final Vol	Basis	Prep Date
12-23842-120512MB1	Method Blank	10.0 g	1.00 mL	-	12/05/12
12-23842-120512LCS1	Lab Control	10.0 g	1.00 mL	-	12/05/12
12-23842-VU67E	GP-11-S-1.25	9.37 g	1.00 mL	D	12/05/12
12-23843-VU67F	GP-13-S-1.6	7.67 g	1.00 mL	D	12/05/12

Basis: D=Dry Weight W=As Received

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

Client ID	OTER	TOT OUT
120512MBS	98.5%	0
120512LCS	91.6%	0
GP-11-S-1.25	D	0
GP-13-S-1.6	95.5%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3546
Log Number Range: 12-23842 to 12-23843

FORM-II TPHD

VU67:00081

Data File: /chem3/fid4a.i/20121206.b/1206a024.d

Date : 06-DEC-2012 21:35

Client ID:

Sample Info: VU67MBS1

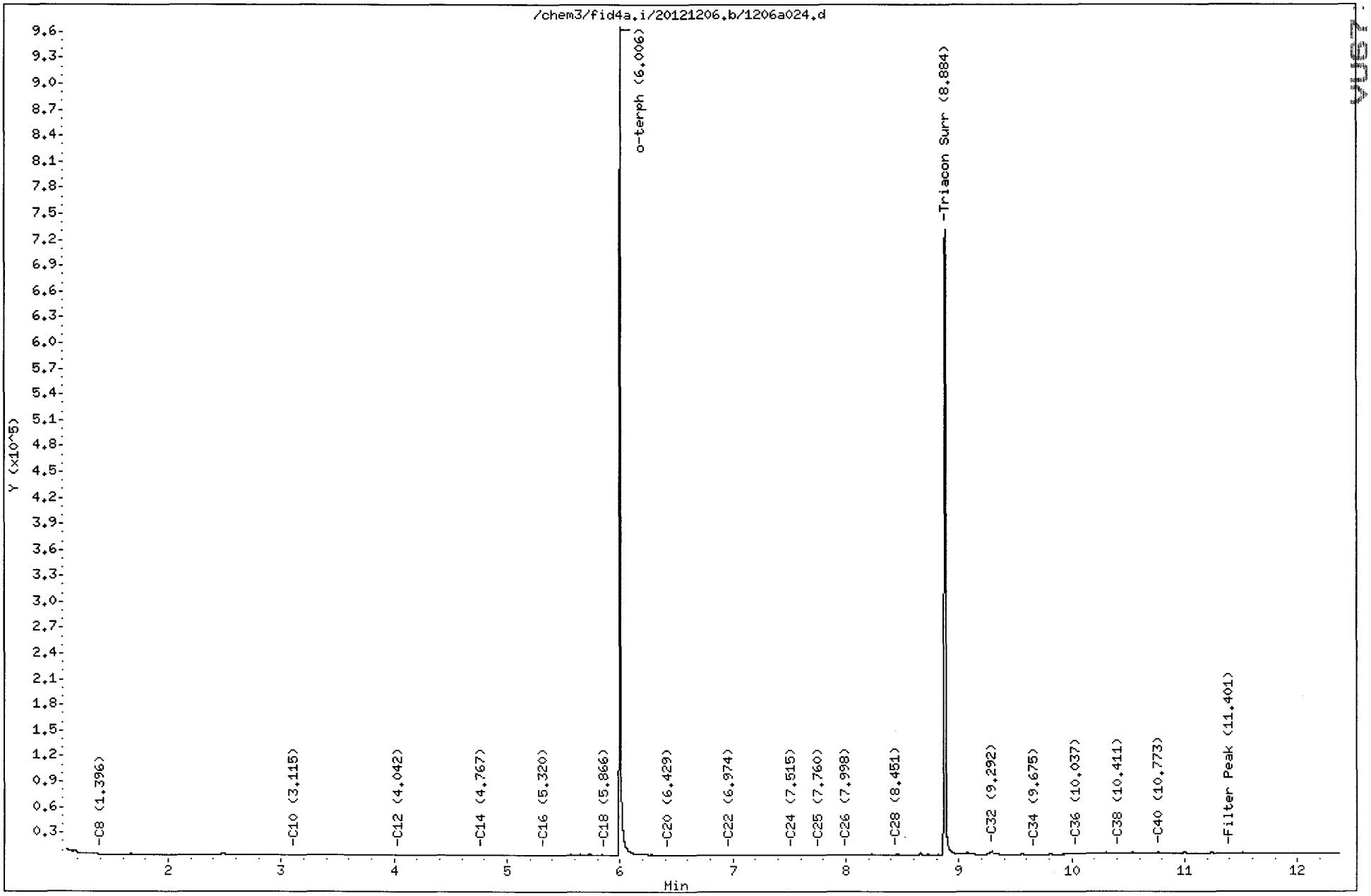
Column phase: RTX-1

Instrument: fid4a.i

Operator: JR/VTS

Column diameter: 0.25

VU67-000062



Data File: /chem3/fid4a.i/20121206.b/1206a025.d
Date : 06-DEC-2012 21:55
Client ID:
Sample Info: VU67LCSS1

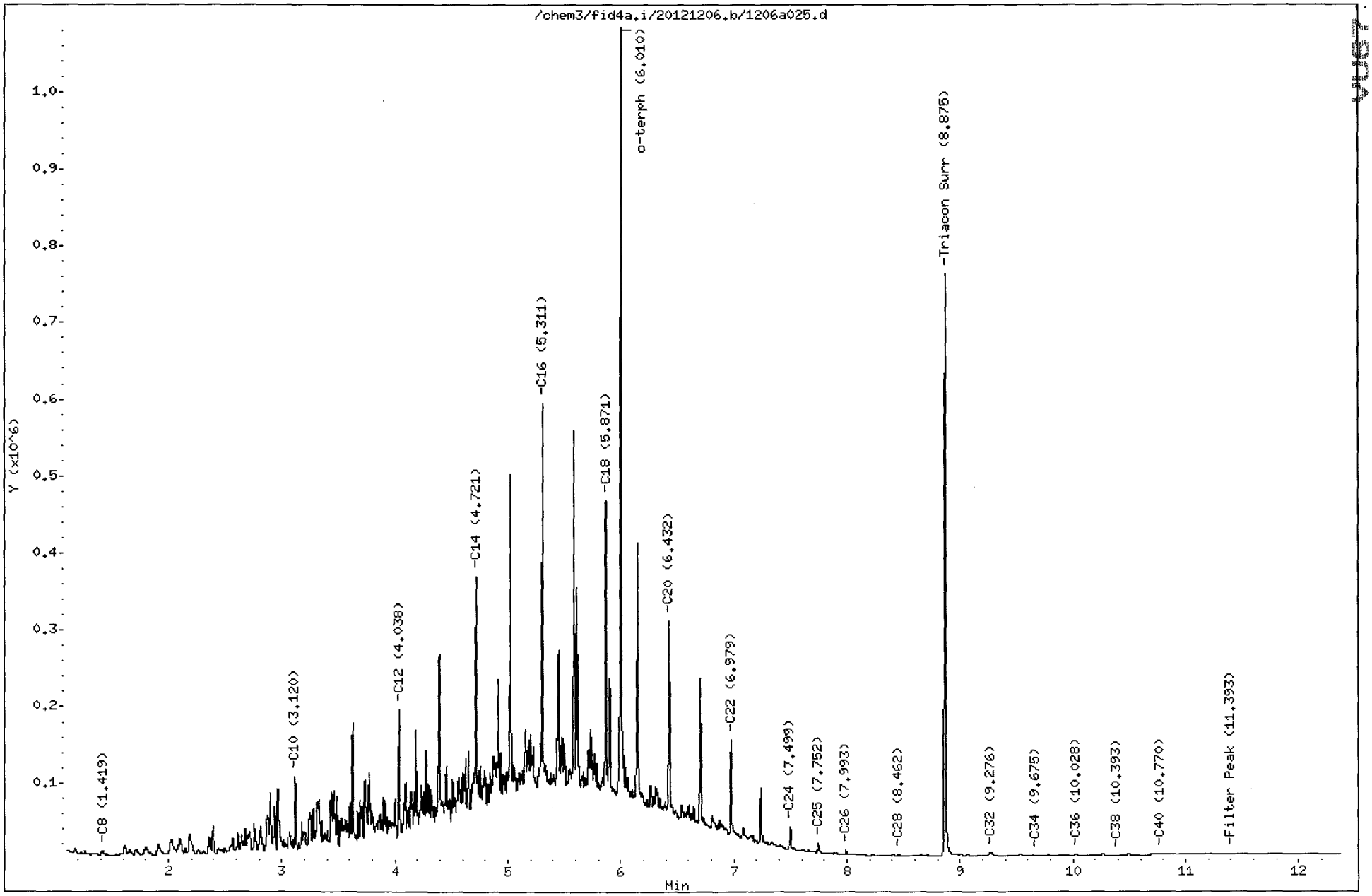
Column phase: RTX-1

VT
12-7-12

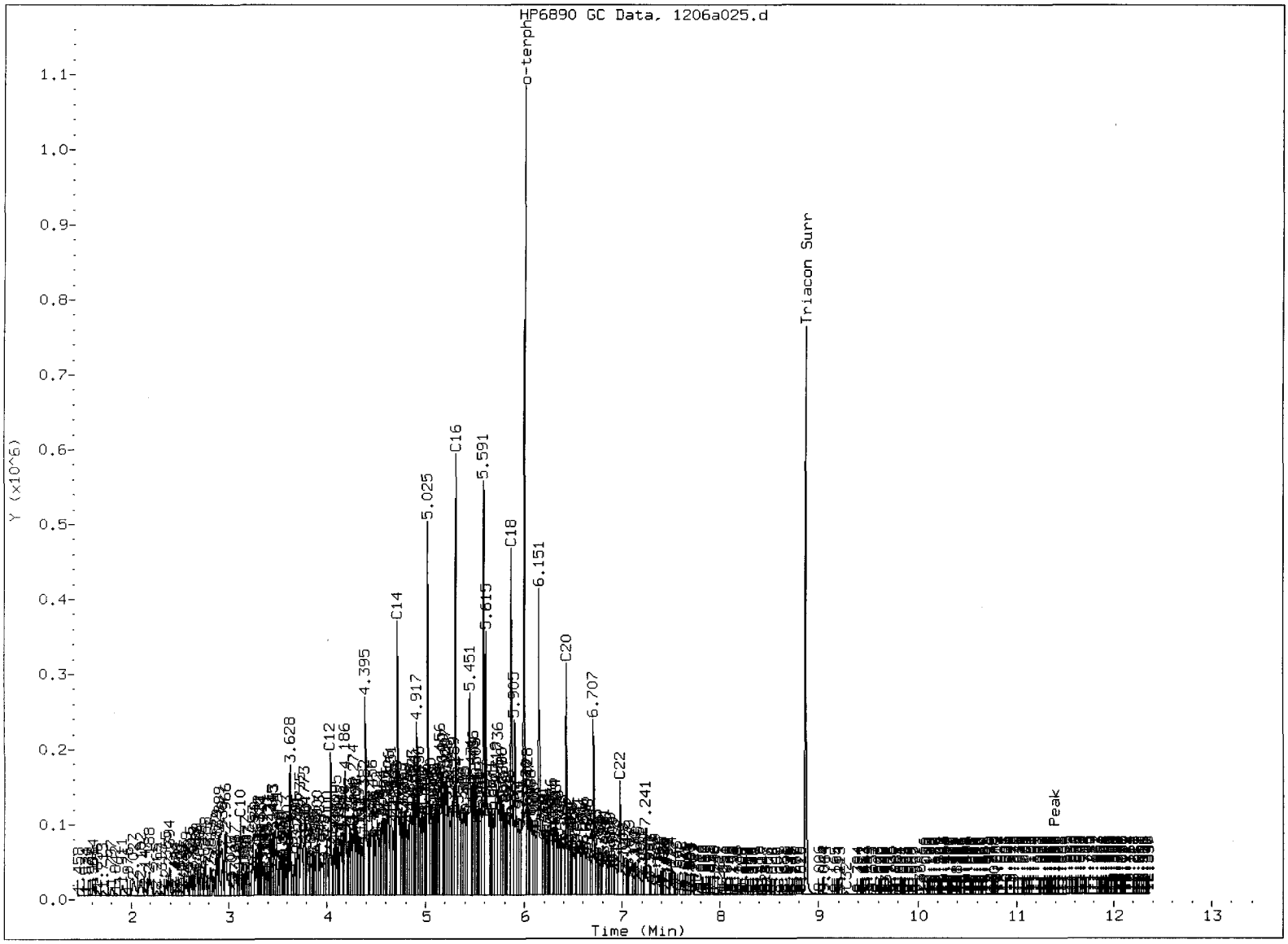
Instrument: fid4a.i

Operator: JR/VTS
Column diameter: 0.25

VU67 20893



FID:4A-2C/RTX-1 VU67LCSS1 FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: VD Date: 12-7-12

VT 12.8.12

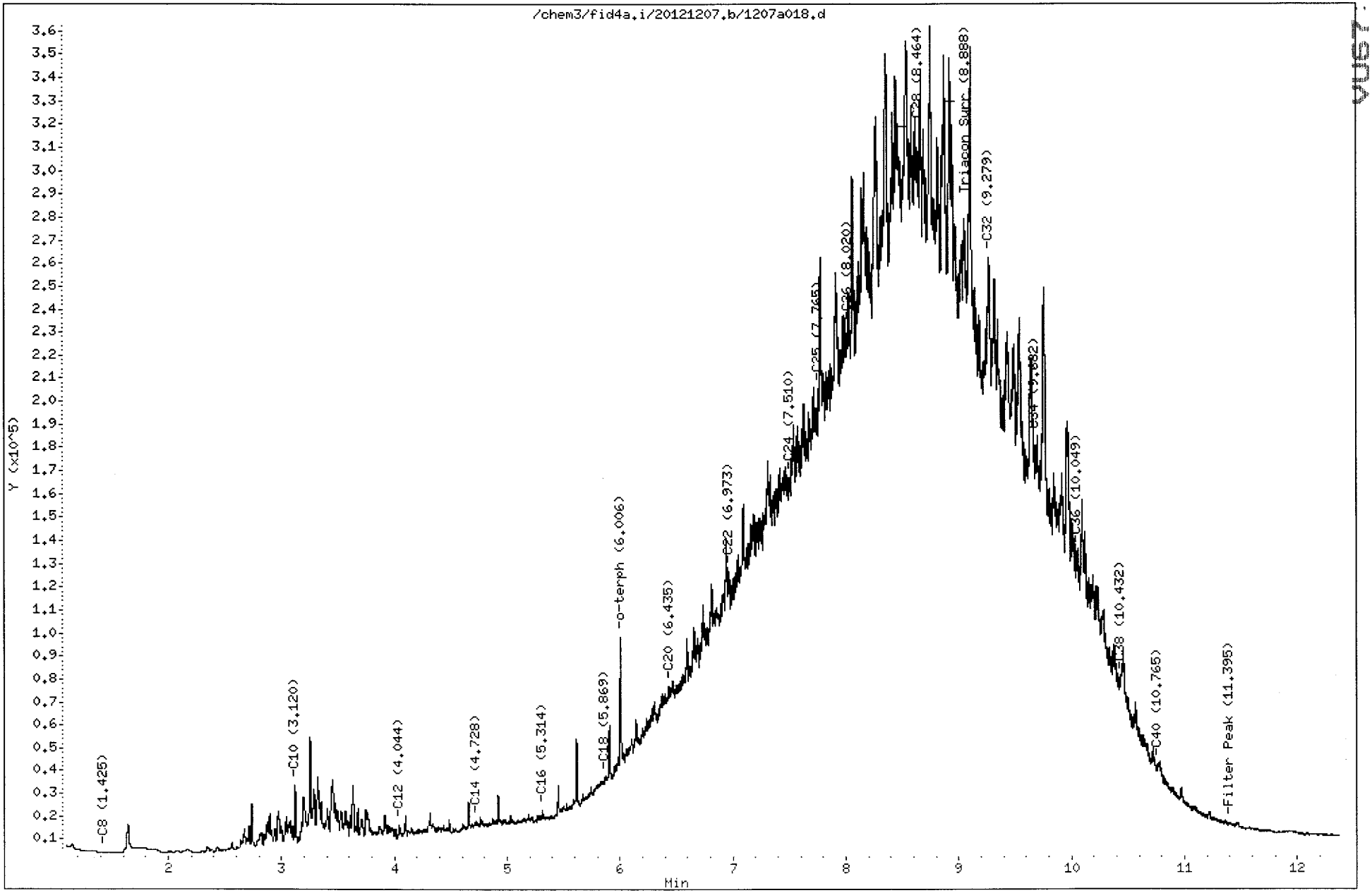
Data File: /chem3/fid4a.i/20121207.b/1207a018.d
Date : 07-DEC-2012 16:21
Client ID: GP-11-S-1.25
Sample Info: VU67E,20

Column phase: RTX-1

Instrument: fid4a.i

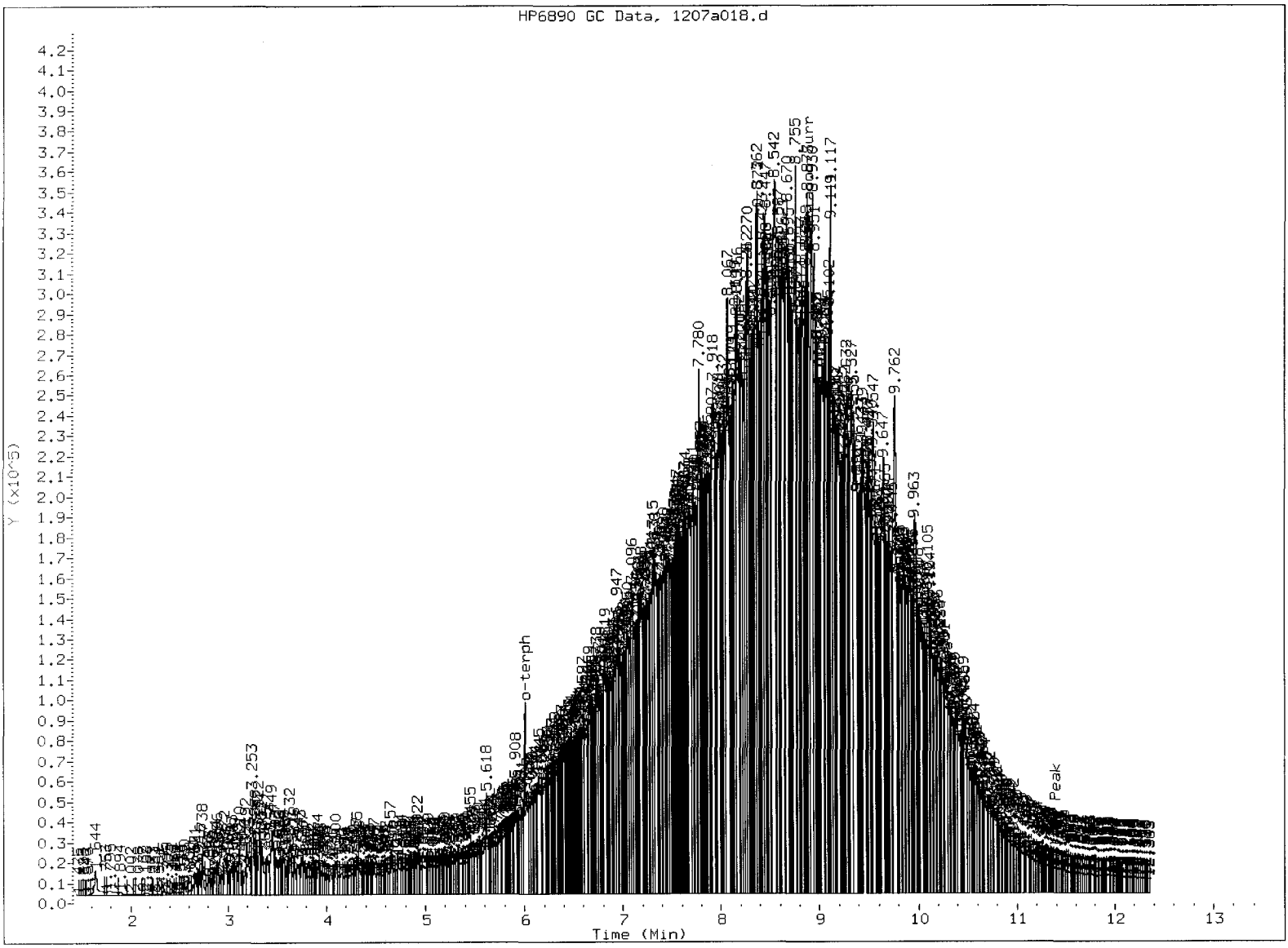
Operator: JR/VTS
Column diameter: 0.25

VU67.00085



FID:4A-2C/RTX-1 VU67E

FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: VD Date: 12-8-12

VU 12-7-12

Data File: /chem3/fid4a.i/20121207.b/1207a014.d

Date : 07-DEC-2012 11:13

Client ID:

Sample Info: VU67F

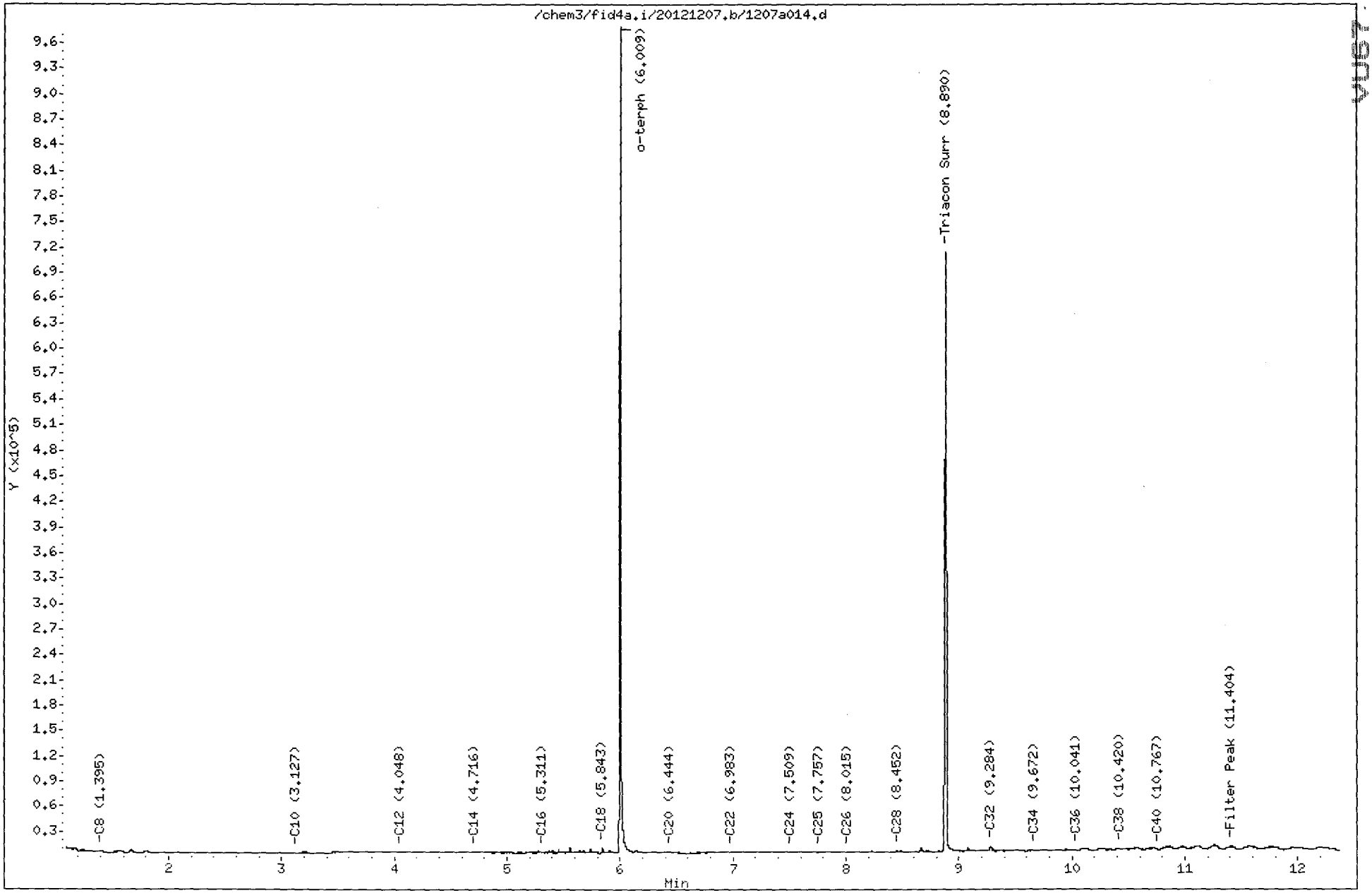
Column phase: RTX-1

Instrument: fid4a.i

Operator: JR/VTS

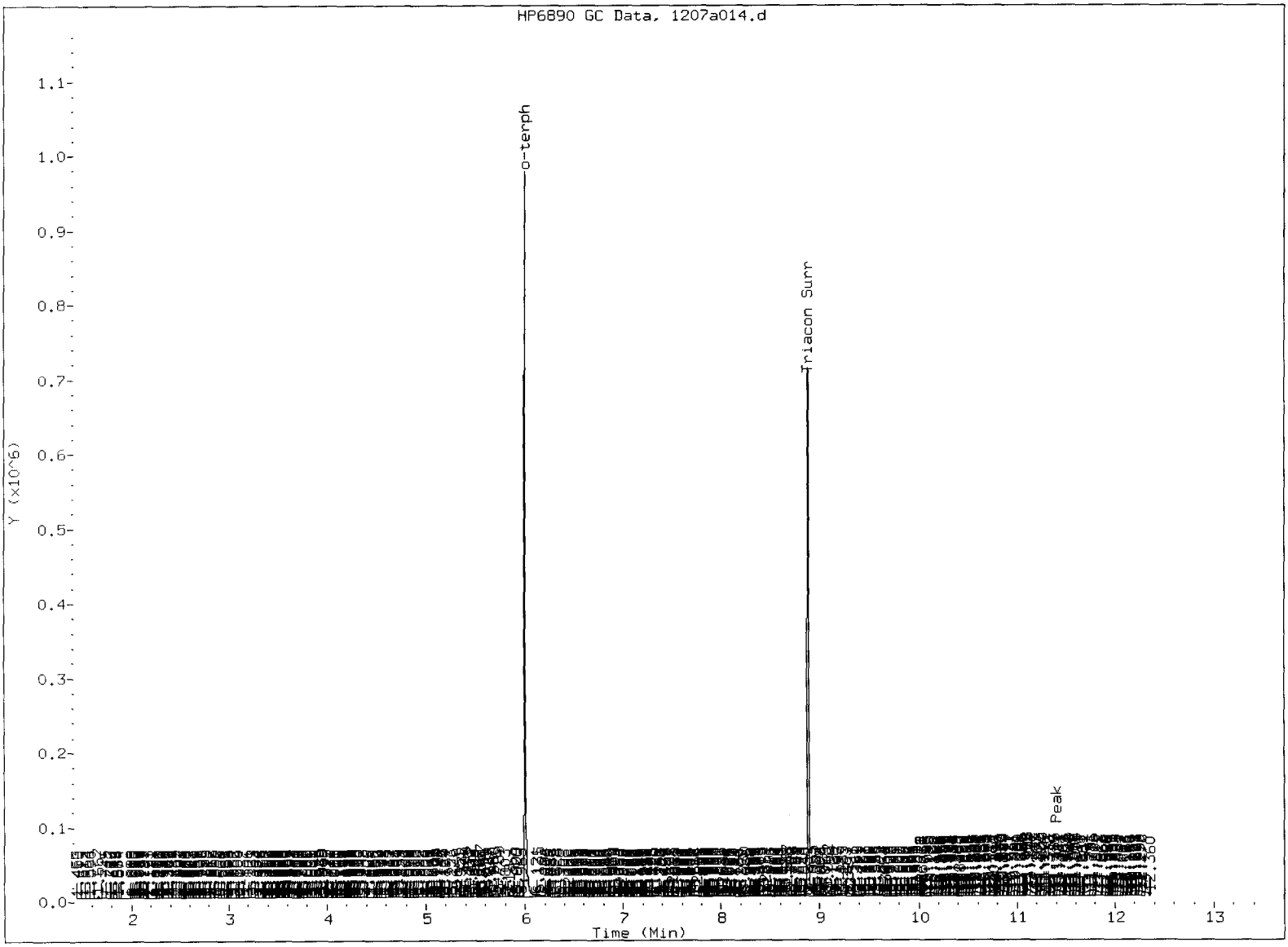
Column diameter: 0.25

VU67 120207



FID:4A-2C/RTX-1 VU67F

FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: VJ Date: 12-7-12

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Extraction Method: SW3510C

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

Matrix: Water

Date Received: 12/03/12

Data Release Authorized:
Reported: 12/07/12

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range/Surrogate	RL	Result
MB-120512	Method Blank	12/05/12	12/05/12	1.00	Diesel Range	0.10	< 0.10 U
12-23838	HC ID: ---		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		88.6%
VU67A	GP11-W-17.5	12/05/12	12/05/12	1.00	**Diesel Range**	**0.10**	**0.98**
12-23838	HC ID: **DIESEL/RRO**		FID4A	1.0	**Motor Oil Range**	**0.20**	**0.31**
					o-Terphenyl		82.3%
VU67B	GP12-W-7.5	12/05/12	12/05/12	1.00	**Diesel Range**	**0.10**	**0.71**
12-23839	HC ID: **DIESEL/RRO**		FID4A	1.0	**Motor Oil Range**	**0.20**	**0.40**
					o-Terphenyl		95.2%
VU67D	GP16-W-17.5	12/05/12	12/05/12	1.00	Diesel Range	0.10	< 0.10 U
12-23841	HC ID: ---		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		92.2%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: LCS-120512
LCS/LCSD

Lab Sample ID: LCS-120512
LIMS ID: 12-23838
Matrix: Water
Data Release Authorized:
Reported: 12/07/12

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 12/05/12

Date Analyzed LCS: 12/05/12 18:06
LCSD: 12/05/12 18:26
Instrument/Analyst LCS: FID4A/VTS
LCSD: FID4A/VTS

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 1.0 mL
LCSD: 1.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	2.55	3.00	85.0%	2.56	3.00	85.3%	0.4%

TPHD Surrogate Recovery

	LCS	LCSD
o-Terphenyl	91.9%	92.4%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

FORM III

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

Matrix: Water
Date Received: 12/03/12

ARI Job: VU67
Project: Sims- N.Cascade Ford
0747.01.02

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
12-23838-120512MB1	Method Blank	500 mL	1.00 mL	12/05/12
12-23838-120512LCS1	Lab Control	500 mL	1.00 mL	12/05/12
12-23838-120512LCSD1	Lab Control Dup	500 mL	1.00 mL	12/05/12
12-23838-VU67A	GP11-W-17.5	500 mL	1.00 mL	12/05/12
12-23839-VU67B	GP12-W-7.5	500 mL	1.00 mL	12/05/12
12-23841-VU67D	GP16-W-17.5	500 mL	1.00 mL	12/05/12

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VU67-Maul Foster & Alongi
Project: Sims- N.Cascade Ford
0747.01.02

Client ID	OTER	TOT OUT
MB-120512	88.6%	0
LCS-120512	91.9%	0
LCSD-120512	92.4%	0
GP11-W-17.5	82.3%	0
GP12-W-7.5	95.2%	0
GP16-W-17.5	92.2%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3510C
Log Number Range: 12-23838 to 12-23841

Data File: /chem3/fid4a.i/20121205.b/1205a011.d

Date : 05-DEC-2012 17:45

Client ID:

Sample Info: VU65MBW1

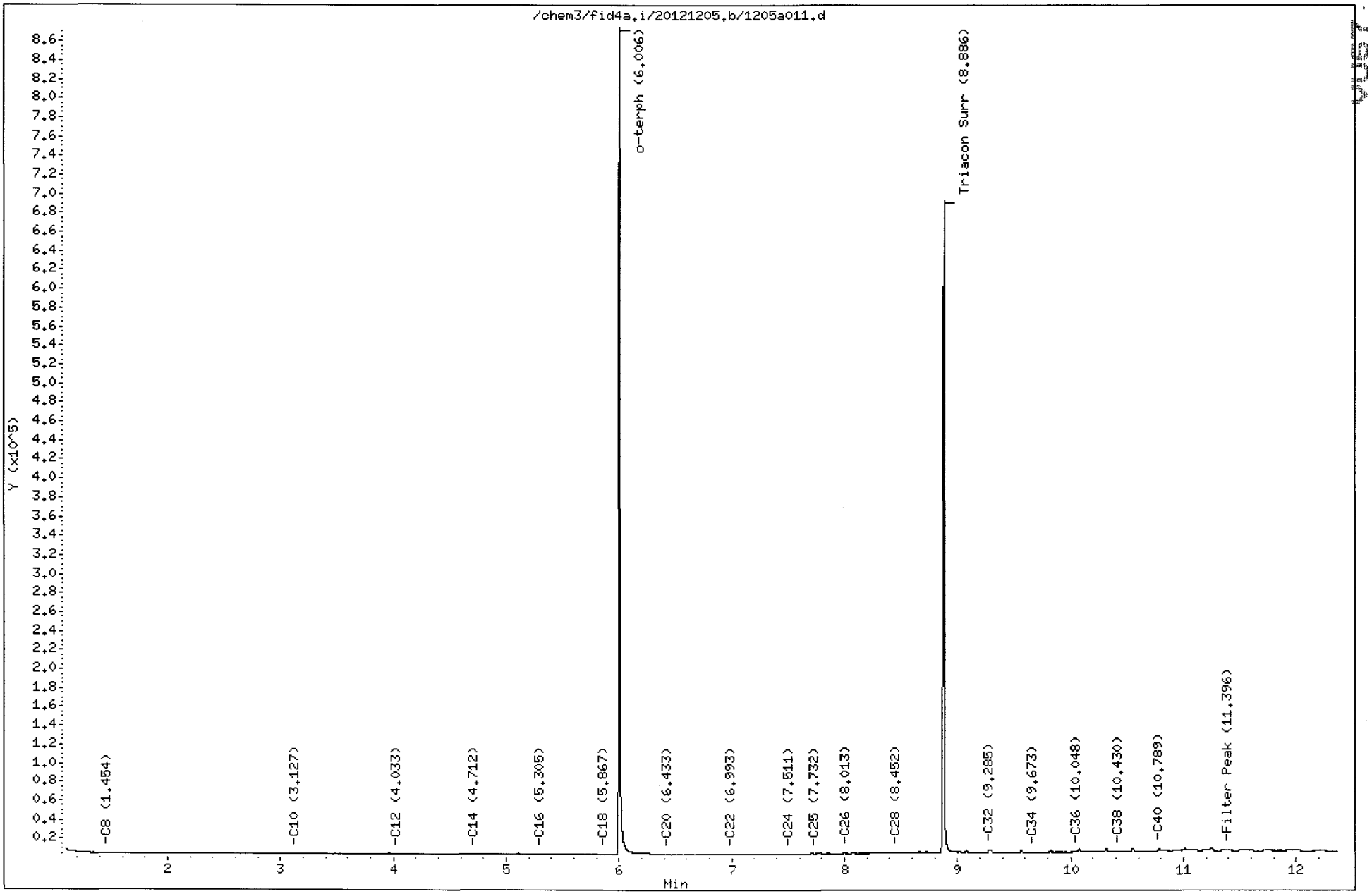
Column phase: RTX-1

Instrument: fid4a.i

Operator: JR/VTS

Column diameter: 0.25

VU65 20053



Data File: /chem3/fid4a.i/20121205.b/1205a012.d
Date : 05-DEC-2012 18:06
Client ID:
Sample Info: VU65LCSW1

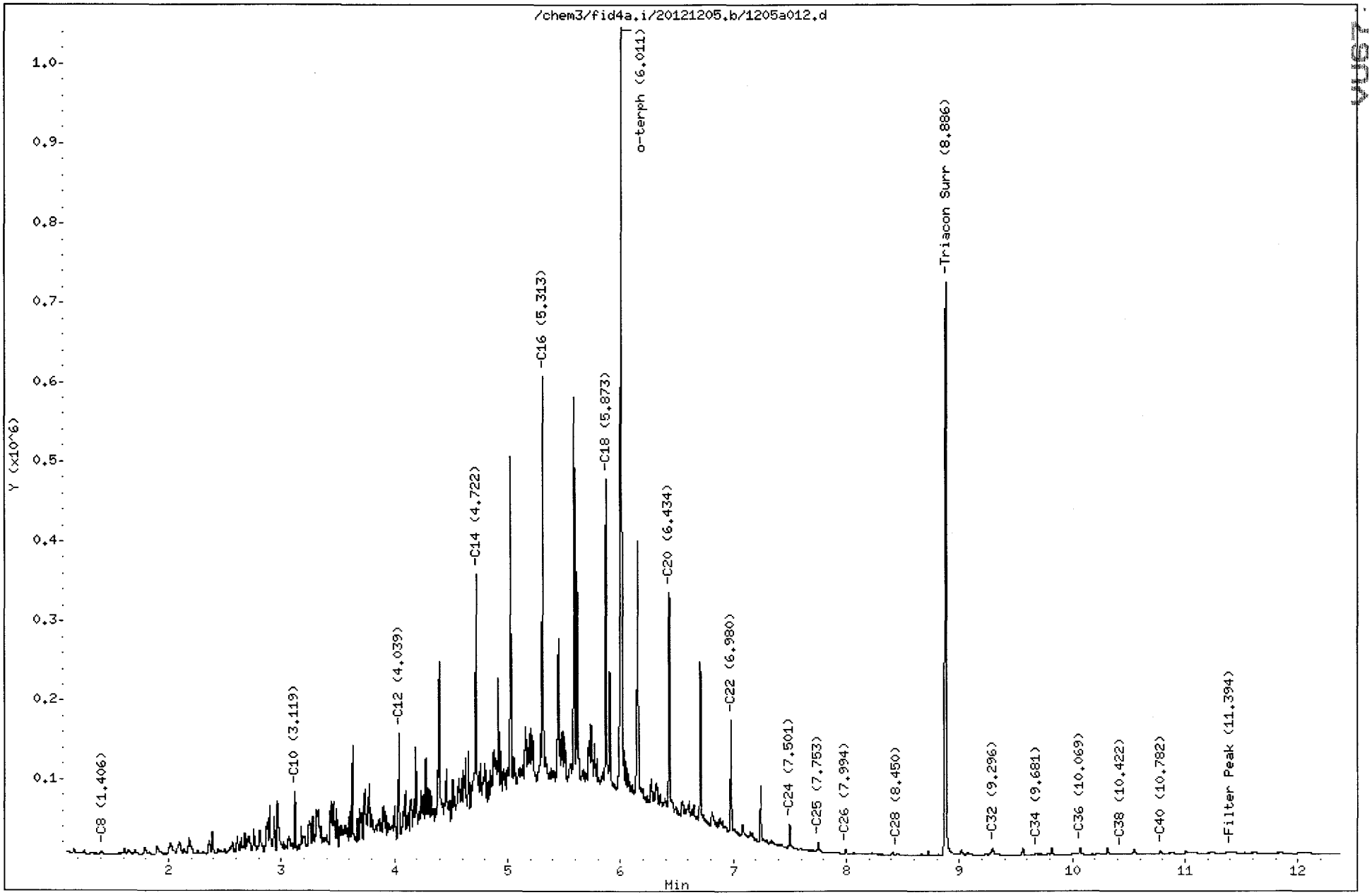
Column phase: RTX-1

VP
12.7.12

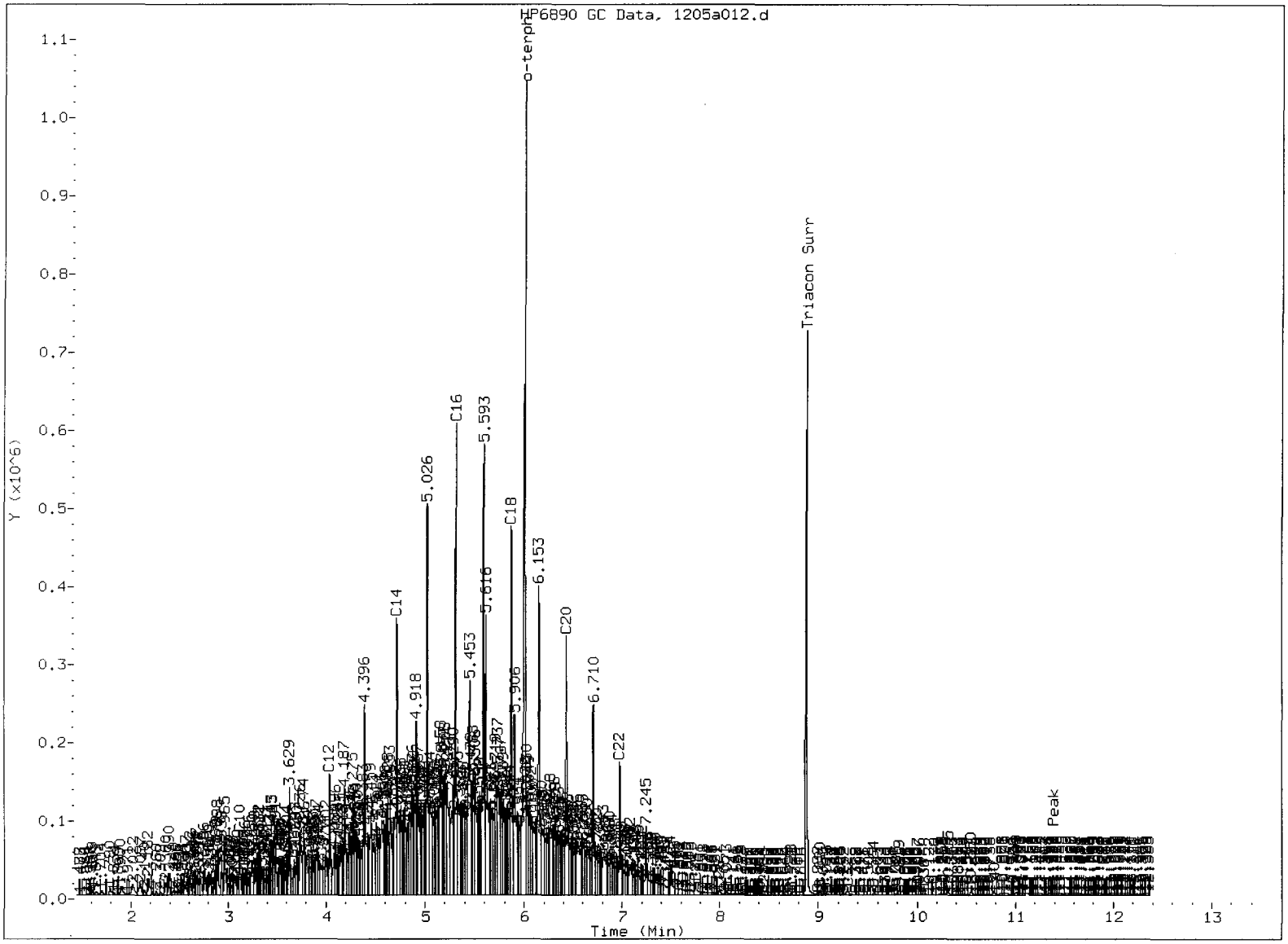
Instrument: fid4a.i

Operator: JR/VTS
Column diameter: 0.25

VU65T.000911



FID:4A-2C/RTX-1 VU65LCSW1 FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: VD Date: 12-7-12

Data File: /chem3/fid4a.i/20121205.b/1205a013.d
Date : 05-DEC-2012 18:26
Client ID:
Sample Info: VU65LCSDW1

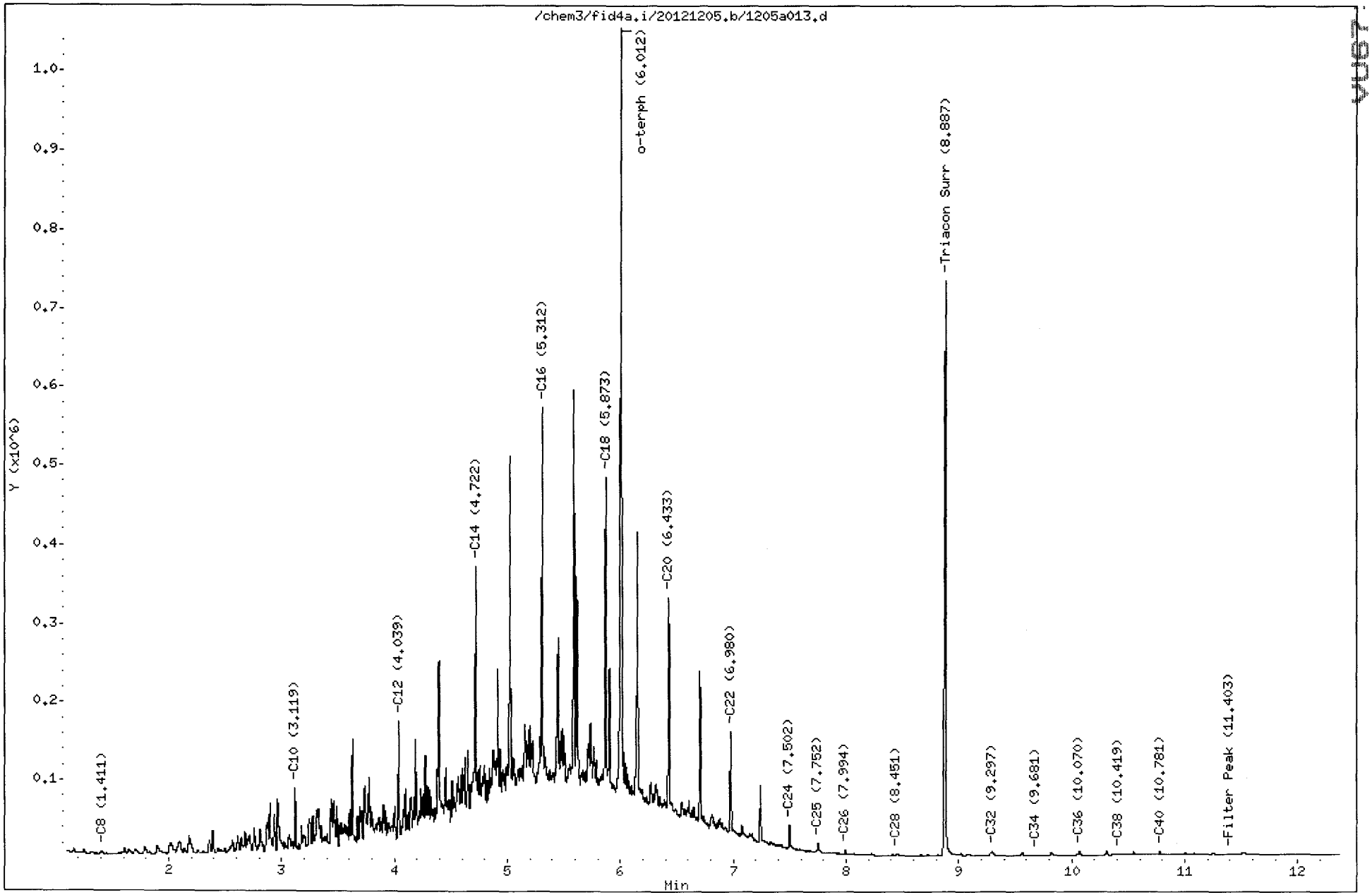
Column phase: RTX-1

VP 12.7.12

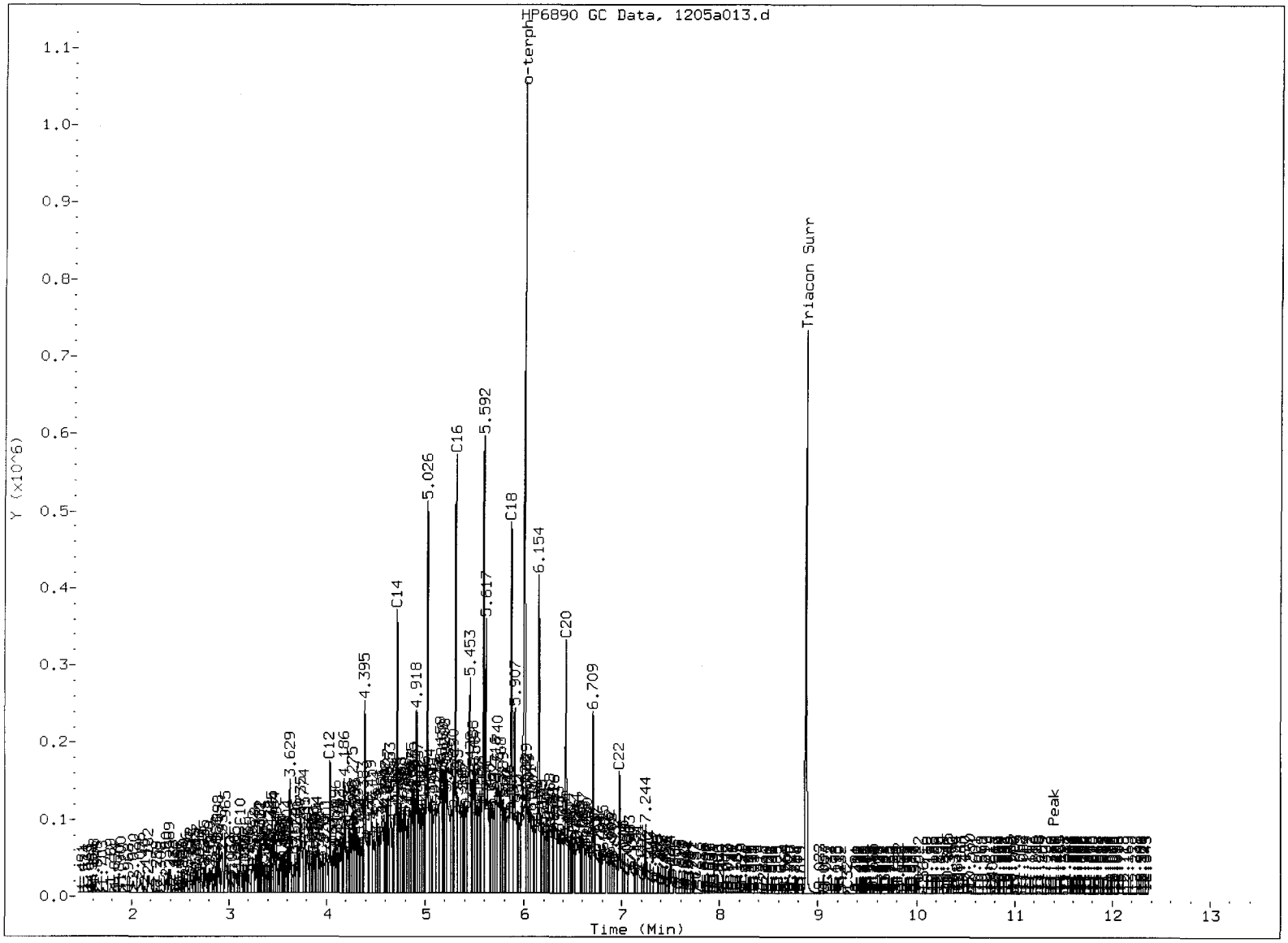
Instrument: fid4a.i

Operator: JR/VTS
Column diameter: 0.25

VU67 00035



FID:4A-2C/RTX-1 VU65LCSDW1 FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: VD Date: 12-7-R

Data File: /chem3/fid4a.i/20121205.b/1205a016.d

Date : 05-DEC-2012 19:28

Client ID:

Sample Info: VU67A

Column phase: RTX-1

VD

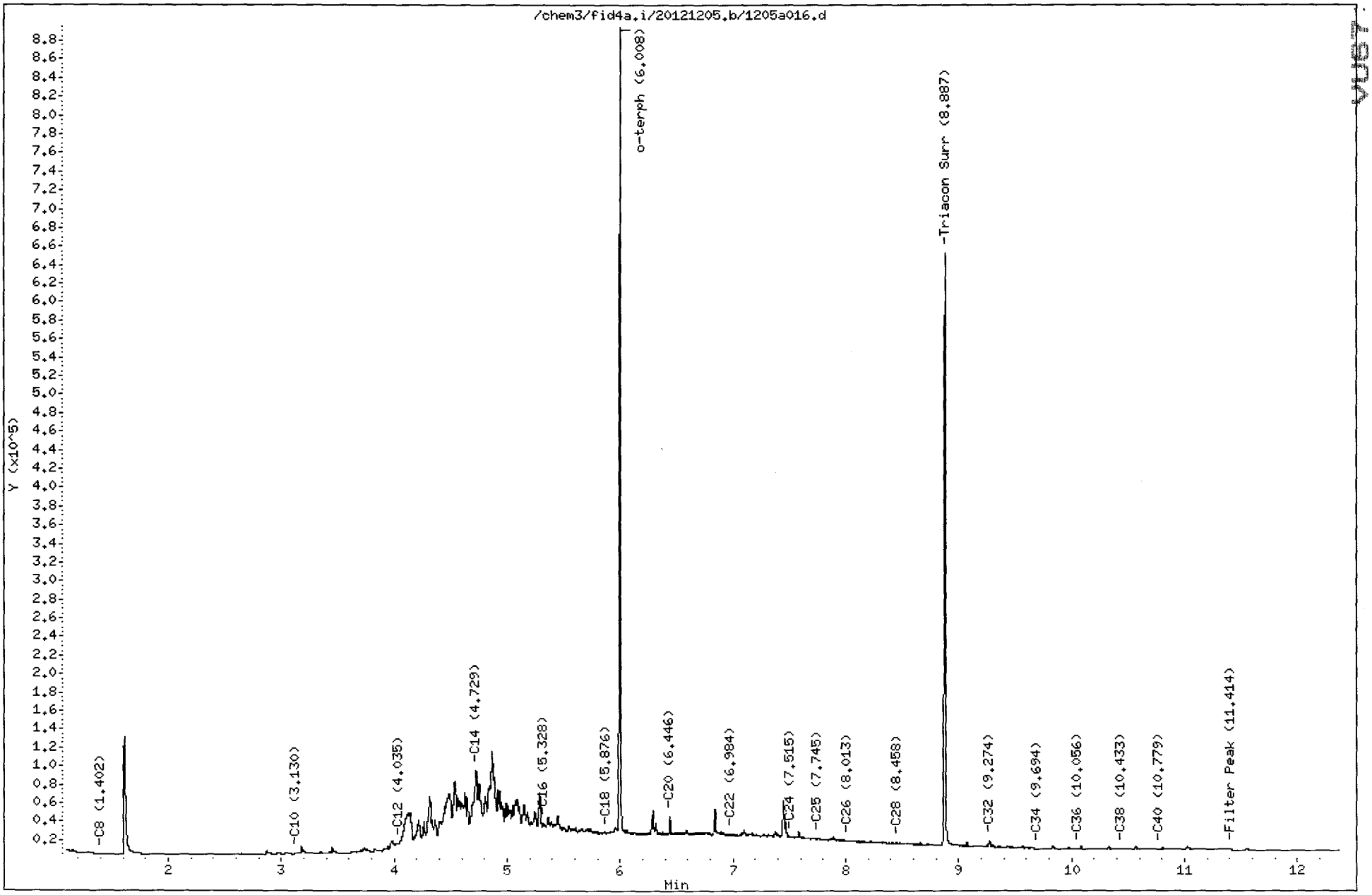
12.7.12

Instrument: fid4a.i

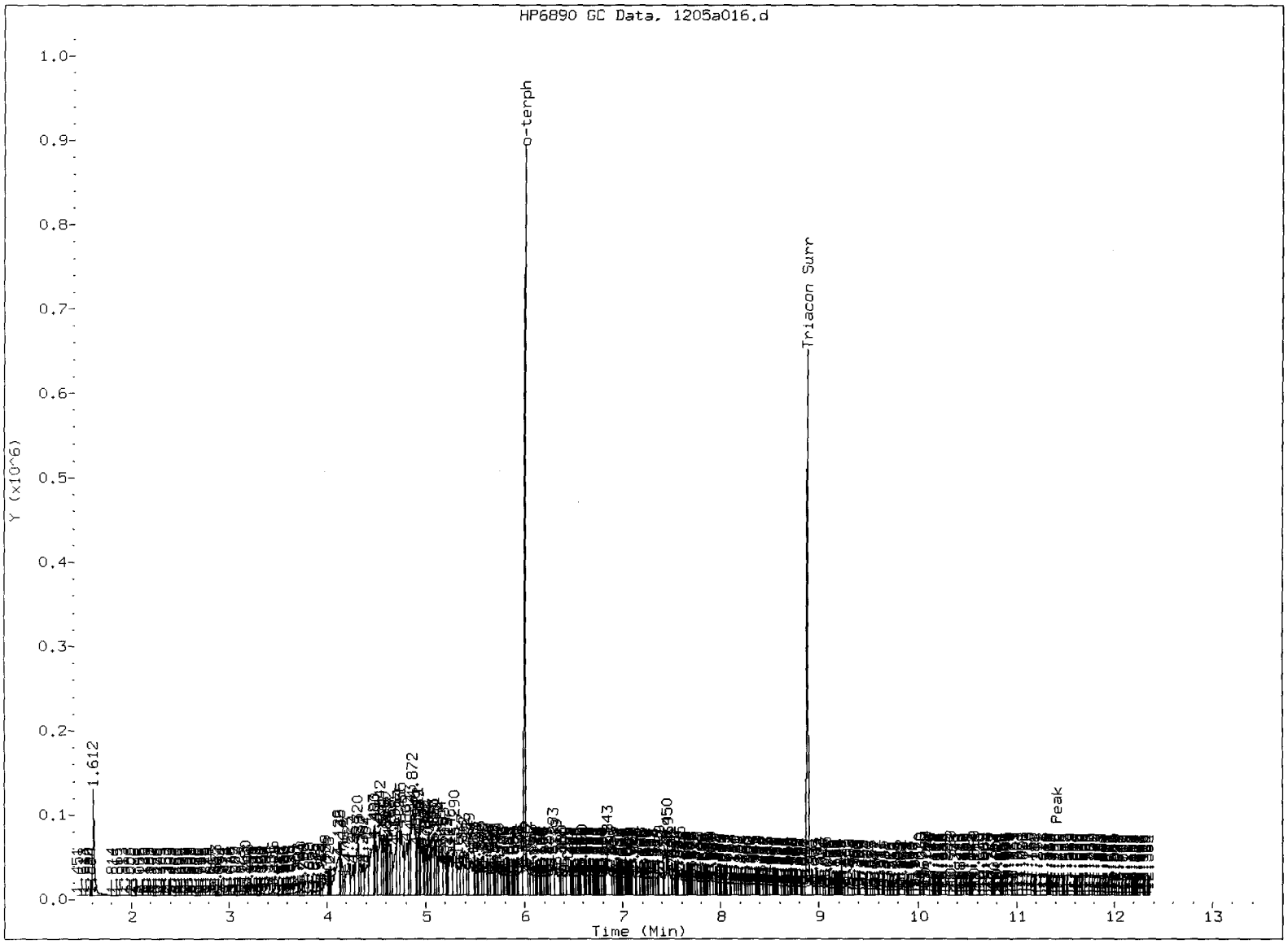
Operator: JR/VTS

Column diameter: 0.25

VU67 60034



FID:4A-2C/RTX-1 VU67A FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
(5) Skimmed surrogate

Analyst: VD Date: 12-7-12

Data File: /chem3/fid4a.i/20121205.b/1205a017.d
Date : 05-DEC-2012 19:48
Client ID:
Sample Info: VU67B

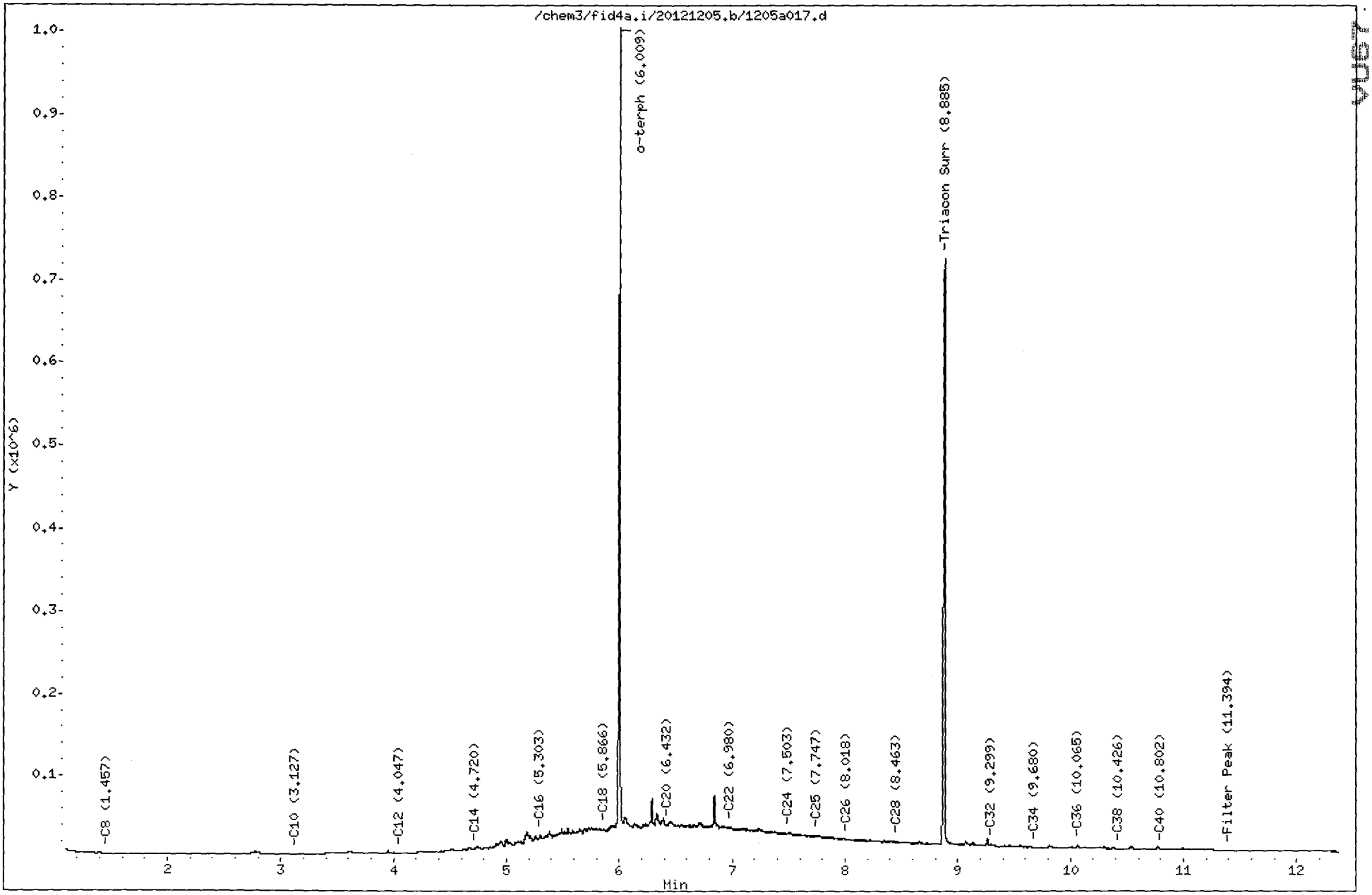
Column phase: RTX-1

VD
12.7.12

Instrument: fid4a.i

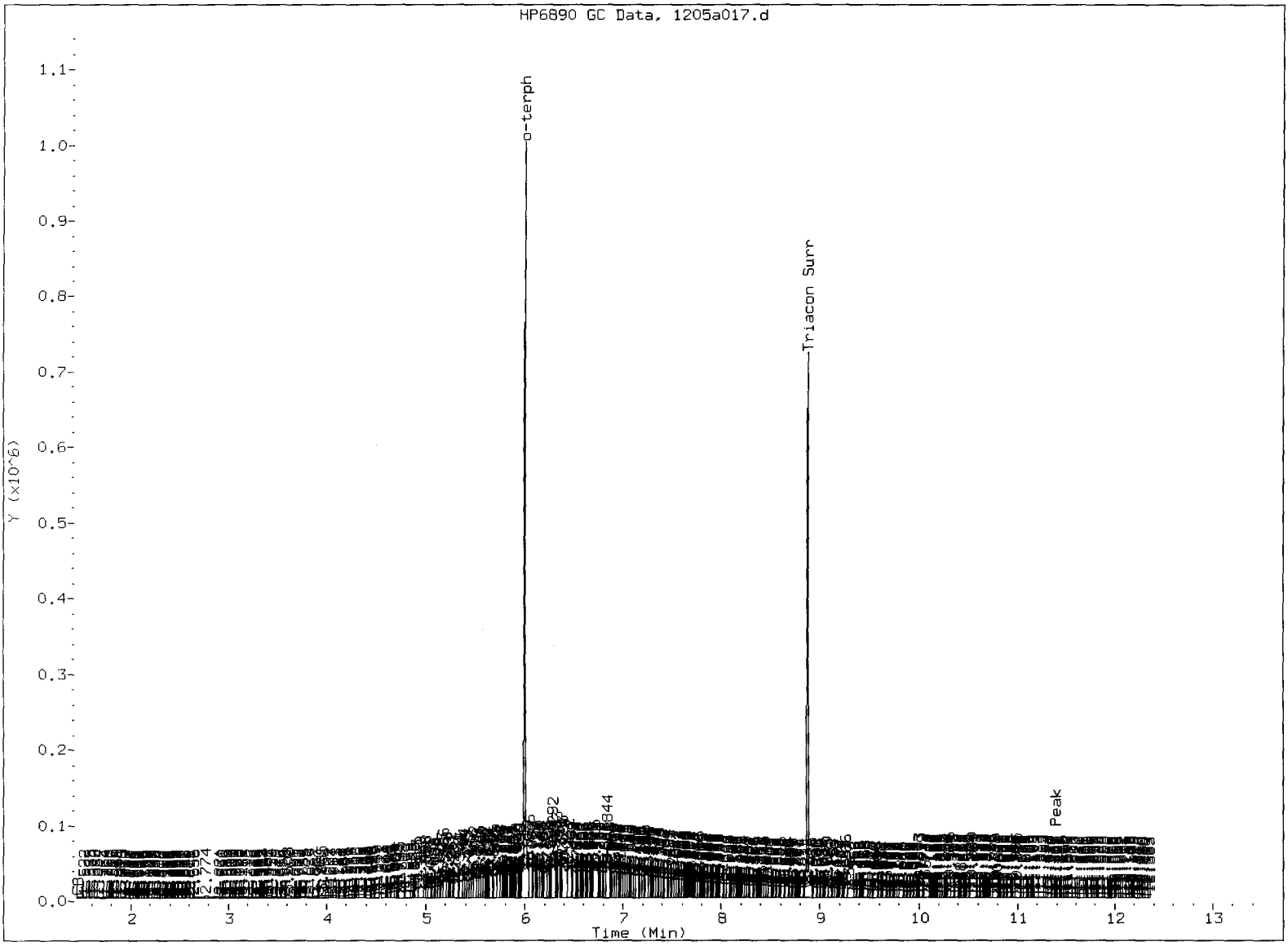
Operator: JR/VTS
Column diameter: 0.25

VU67-091209



FID:4A-2C/RTX-1 VU67B

FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: VD Date: 12-7-12

Data File: /chem3/fid4a.i/20121205.b/1205a018.d

Date : 05-DEC-2012 20:09

Client ID:

Sample Info: VU67D

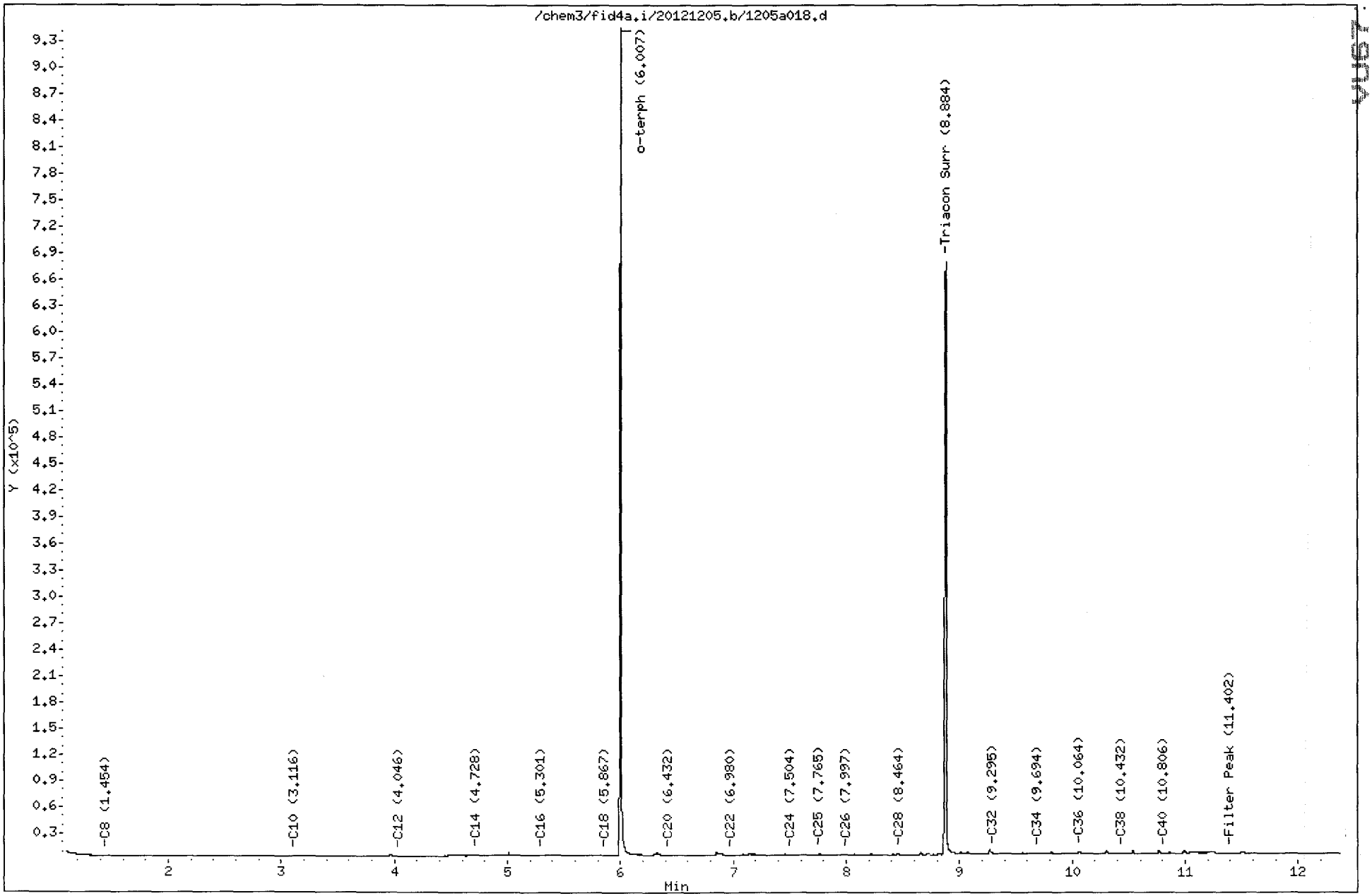
Column phase: RTX-1

Instrument: fid4a.i

Operator: JR/VTS

Column diameter: 0.25

VU67.001.002



SAMPLE RESULTS-CONVENTIONALS
VU67-Maul Foster & Alongi

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 12/11/12

Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Client ID: GP11-S-7.5
ARI ID: 12-23844 VU67G

Analyte	Date	Method	Units	RL	Sample
Total Solids	12/03/12 120312#1	SM2540B	Percent	0.01	72.20
Total Organic Carbon	12/10/12 121012#1	EPA 9060M	Percent	0.020	0.304

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
VU67-Maul Foster & Alongi

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 12/11/12

Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Client ID: GP12-S-12.0
ARI ID: 12-23845 VU67H

Analyte	Date	Method	Units	RL	Sample
Total Solids	12/03/12 120312#1	SM2540B	Percent	0.01	67.70
Total Organic Carbon	12/10/12 121012#1	EPA 9060M	Percent	0.020	0.814

RL Analytical reporting limit
U Undetected at reported detection limit

METHOD BLANK RESULTS-CONVENTIONALS
VU67-Maul Foster & Alongi

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 12/11/12

Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	12/03/12	Percent	< 0.01 U
Total Organic Carbon	12/10/12	Percent	< 0.020 U

VU67 : 00105

LAB CONTROL RESULTS-CONVENTIONALS
VU67-Maul Foster & Alongi

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 12/11/12

Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Total Organic Carbon EPA 9060M	ICVL	12/10/12	Percent	0.102	0.100	102.0%

STANDARD REFERENCE RESULTS-CONVENTIONALS
VU67-Maul Foster & Alongi

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 12/11/12

Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon NIST 1941B	12/10/12	Percent	3.02	2.99	101.0%

REPLICATE RESULTS-CONVENTIONALS
VU67-Maul Foster & Alongi

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 12/11/12

Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: VU67G Client ID: GP11-S-7.5					
Total Solids	12/03/12	Percent	72.20	71.40 71.90	0.6%
Total Organic Carbon	12/10/12	Percent	0.304	0.243 0.228	15.6%

MS/MSD RESULTS-CONVENTIONALS
VU67-Maul Foster & Alongi

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 12/11/12

Project: Sims- N.Cascade Ford
Event: 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: VU67G Client ID: GP11-S-7.5						
Total Organic Carbon	12/10/12	Percent	0.304	0.559	0.266	95.7%

VU67 : 00109

Analytical Resources, Incorporated
Analytical Chemists and Consultants

14 December 2012

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: Sims-N Cascade Ford, 0747.01.02
ARI Job No.: VU76

Dear Heather:

Please find enclosed the original chain of custody records and the final results for the samples from the project referenced above. These samples were received on December 4, 2012. The samples were analyzed for VOAs, NWTPH-G, SIM-PAHs, PCBs, NWTPH-Dx, TOC and total metals as requested.

The percent differences (%Ds) for methylene chloride, acetone, vinyl acetate, 2-chloroethylvinylether, trichlorofluoromethane and acrolein were high for the CCALs that bracketed the VOA analyses of these samples. All positive results for these compounds have been flagged with a "Q" qualifier to denote the high %Ds.

It was noted prior to extraction that the amber bottles for the water samples contained a fine, but noticeable layer of sediment. As instructed, the sediment layer was not included in the extraction for NWTPH-Dx or SIM-PAHs. No solvent bottle rinse was performed for any of these extractions.

The percent recovery for the surrogate, DCBP, was high following the PCB analysis of sample GP10-S-2.0. Since no target compounds were detected in this sample, the high bias does not compromise any RL. No corrective actions were taken.

The remaining analyses proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file VU76

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: VU76	Turn-around Requested: Std	Page: 1 of 2	
ARI Client Company: Maul Foster & Alonge	Phone: 360.927.1309	Date: 12/3/12	Ice Present? Y
Client Contact: Heather Hirsch		No. of Coolers: 2	Cooler Temps: 5.8, 3.4
Client Project Name: Sims - N. Cascade Ford			
Client Project #: 0747.01.02	Samplers: Hirsch / Gallagher		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: NWTPH-Dx	NWTPH-Gx	VOCs by 8260B	PAHs by 8270SIM	PCBs by 8082	TOC by 9060A	As by 6020	Cd, Pb by 6010	Notes/Comments
GP17-S-9.5	12/3/12	0910	SOIL	1	X			Hold					
GP10-S-2.0		1005		9	X	X	X	X	X	X			
GP18-S-1.9		1314		2				Hold			Hold	Hold	
GP19-S-0.7		1325		2				X			X	X	
GP20-S-1.5		1337		2				Hold			Hold	Hold	
GP21-S-1.4		1345		2				Hold			Hold	Hold	
GP22-S-1.8		1410		2				X			X	X	
GP23-S-0.9		1425		2				X			X	X	
GP24-S-0.8		1440		2				X			X	X	
GP25-S-1.1		1500		2				X			X	X	

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
No trip blanks provided.	Printed Name: Heather Hirsch	Printed Name: Tiffani Sledge	Printed Name:	Printed Name:
	Company: Maul Foster & Alonge	Company: Analytical Resources	Company:	Company:
	Date & Time: 12/4/12 0830	Date & Time: 12-4-12 08:45	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Version: 3/1/2005

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: V1176	Turn-around Requested: Std	Page: 2 of 2	
ARI Client Company: Maul Foster & Alonge	Phone: 360.927.1309	Date: 12/3/12	Ice Present? Y
Client Contact: Heather Hirsch		No. of Coolers: 1	Cooler Temps: 5.8, 3.4
Client Project Name: Simc - N. Cascade Ford			
Client Project #: 0747.01.02	Samplers: Hirsch / Gallagher		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: NWTPH-Dx	NWTPH-Gx	VOCs by 8260B	PAHs by 8270SIM	Lead by 6010	Notes/Comments
GP17-W-12.5	12/3/12	0940	Water	10	X	X	Hold	Hold	Hold	
GP10-W-7.5		1030		9	X	X	X	X		
GPDUP-W-7.5		1030		9	X	X	X	X		
GP10-W-16.5		1120		9	Hold	Hold	Hold	Hold		
GP14-W-7.5		1200		2	X					
GP15-W-7.5	↓	1245	↓	2	X					

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: Heather Hirsch	Printed Name: Tiffani Sledge	Printed Name:	Printed Name:
	Company: Maul Foster & Alonge	Company: Analytical Resources	Company:	Company:
	Date & Time: 12/4/12 0830	Date & Time: 12-4-12 08:45	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

COC_GLOBAL.DOC

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Maul, Foster + Alonga Project Name: SIMS - N Cascade Ford

COC No(s): _____ (NA) Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: _____ Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO
Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)	5.8 3.4	
If cooler temperature is out of compliance fill out form 00070F	Temp Gun ID#:	90877952

Cooler Accepted by: JM Date: 12/4/12 Time: 845

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used?	(Bubble Wrap) (Wet Ice) Gel Packs Baggies Foam Block Paper Other:		
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	(NA)	YES	NO
Were all VOC vials free of air bubbles?	NA	(YES)	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

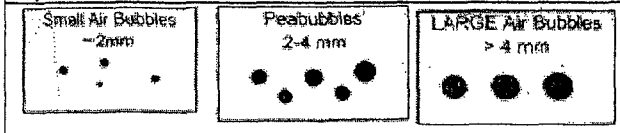
Samples Logged by: JM Date: 12/4/12 Time: 1430

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

VU76 : 00004

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: VU76
Client: Maul Foster & Alongi
Project Event: 0747.01.02
Project Name: Sims - N Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	GP17-S-9.5	VU76A	12-23870	Soil	12/03/12 09:10	12/04/12 08:45
2.	GP10-S-2.0	VU76B	12-23871	Soil	12/03/12 10:05	12/04/12 08:45
3.	GP19-S-0.7	VU76C	12-23872	Soil	12/03/12 13:25	12/04/12 08:45
4.	GP22-S-1.8	VU76D	12-23873	Soil	12/03/12 14:10	12/04/12 08:45
5.	GP23-S-0.9	VU76E	12-23874	Soil	12/03/12 14:25	12/04/12 08:45
6.	GP24-S-0.8	VU76F	12-23875	Soil	12/03/12 14:40	12/04/12 08:45
7.	GP25-S-1.1	VU76G	12-23876	Soil	12/03/12 15:00	12/04/12 08:45
8.	GP17-W-12.5	VU76H	12-23877	Water	12/03/12 09:40	12/04/12 08:45
9.	GP-10-W-7.5	VU76I	12-23878	Water	12/03/12 10:30	12/04/12 08:45
10.	GPDUP-W-7.5	VU76J	12-23879	Water	12/03/12 10:30	12/04/12 08:45
11.	GP-14-W-7.5	VU76K	12-23880	Water	12/03/12 12:00	12/04/12 08:45
12.	GP15-W-7.5	VU76L	12-23881	Water	12/03/12 12:45	12/04/12 08:45
13.	GP18-S-1.9	VU76M	12-23882	Soil	12/03/12 13:14	12/04/12 08:45
14.	GP20-S-1.5	VU76N	12-23883	Soil	12/03/12 13:37	12/04/12 08:45
15.	GP21-S-1.4	VU76O	12-23884	Soil	12/03/12 13:45	12/04/12 08:45
16.	GP10-W-16.5	VU76P	12-23885	Water	12/03/12 11:20	12/04/12 08:45

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Duplicate RPD is not within established control limits
B	Reported value is less than the CRDL but ≥ the Reporting Limit
N	Matrix Spike recovery not within established control limits
NA	Not Applicable, analyte not spiked
H	The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
L	Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Flagged value is not within established control limits
B	Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
J	Estimated concentration when the value is less than ARI's established reporting limits
D	The spiked compound was not detected due to sample extract dilution
E	Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

VU76 : 00006

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

VU76 : 00007

Geotechnical Data

A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F Samples were frozen prior to particle size determination

SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots was below the level required for accurate weighting

VU76 : 00009

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-120612A**
 METHOD BLANK

Lab Sample ID: MB-120612A
LIMS ID: 12-23871
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford 0747.01.02
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT9/PKC
Date Analyzed: 12/06/12 17:33

Sample Amount: 5.00 g-dry-wt
Purge Volume: 5.0 mL
Moisture: NA

CAS Number	Analyte	RL	Result	Q
74-87-3	**Chloromethane**	**1.0**	**1.1**	
74-83-9	**Bromomethane**	**1.0**	**0.9**	**J**
75-01-4	Vinyl Chloride	1.0	< 1.0	U
75-00-3	Chloroethane	1.0	< 1.0	U
75-09-2	**Methylene Chloride**	**2.0**	**2.5**	
67-64-1	**Acetone**	**5.0**	**4.8**	**J**
75-15-0	Carbon Disulfide	1.0	< 1.0	U
75-35-4	1,1-Dichloroethene	1.0	< 1.0	U
75-34-3	1,1-Dichloroethane	1.0	< 1.0	U
156-60-5	trans-1,2-Dichloroethene	1.0	< 1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	< 1.0	U
67-66-3	Chloroform	1.0	< 1.0	U
107-06-2	1,2-Dichloroethane	1.0	< 1.0	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	1.0	< 1.0	U
56-23-5	Carbon Tetrachloride	1.0	< 1.0	U
108-05-4	Vinyl Acetate	5.0	< 5.0	U
75-27-4	Bromodichloromethane	1.0	< 1.0	U
78-87-5	1,2-Dichloropropane	1.0	< 1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	< 1.0	U
79-01-6	Trichloroethene	1.0	< 1.0	U
124-48-1	Dibromochloromethane	1.0	< 1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	< 1.0	U
71-43-2	Benzene	1.0	< 1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	< 1.0	U
110-75-8	2-Chloroethylvinylether	5.0	< 5.0	U
75-25-2	Bromoform	1.0	< 1.0	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	1.0	< 1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	< 1.0	U
108-88-3	Toluene	1.0	< 1.0	U
108-90-7	Chlorobenzene	1.0	< 1.0	U
100-41-4	Ethylbenzene	1.0	< 1.0	U
100-42-5	Styrene	1.0	< 1.0	U
75-69-4	Trichlorofluoromethane	1.0	< 1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	< 2.0	U
179601-23-1	m,p-Xylene	1.0	< 1.0	U
95-47-6	o-Xylene	1.0	< 1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	< 1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	< 1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	< 1.0	U
107-02-8	Acrolein	50	< 50	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	2.0	< 2.0	U
107-13-1	Acrylonitrile	5.0	< 5.0	U
563-58-6	1,1-Dichloropropene	1.0	< 1.0	U
74-95-3	Dibromomethane	1.0	< 1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	< 1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	< 5.0	U
96-18-4	1,2,3-Trichloropropane	2.0	< 2.0	U
110-57-6	trans-1,4-Dichloro-2-butene	5.0	< 5.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	< 1.0	U

Lab Sample ID: MB-120612A
LIMS ID: 12-23871
Matrix: Soil
Date Analyzed: 12/06/12 17:33

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02

CAS Number	Analyte	RL	Result	Q
95-63-6	1,2,4-Trimethylbenzene	1.0	< 1.0	U
87-68-3	Hexachlorobutadiene	5.0	< 5.0	U
106-93-4	1,2-Dibromoethane	1.0	< 1.0	U
74-97-5	Bromochloromethane	1.0	< 1.0	U
594-20-7	2,2-Dichloropropane	1.0	< 1.0	U
142-28-9	1,3-Dichloropropane	1.0	< 1.0	U
98-82-8	Isopropylbenzene	1.0	< 1.0	U
103-65-1	n-Propylbenzene	1.0	< 1.0	U
108-86-1	Bromobenzene	1.0	< 1.0	U
95-49-8	2-Chlorotoluene	1.0	< 1.0	U
106-43-4	4-Chlorotoluene	1.0	< 1.0	U
98-06-6	tert-Butylbenzene	1.0	< 1.0	U
135-98-8	sec-Butylbenzene	1.0	< 1.0	U
99-87-6	4-Isopropyltoluene	1.0	< 1.0	U
104-51-8	n-Butylbenzene	1.0	< 1.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	< 5.0	U
91-20-3	Naphthalene	5.0	< 5.0	U
87-61-6	1,2,3-Trichlorobenzene	5.0	< 5.0	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	110%
d8-Toluene	105%
Bromofluorobenzene	96.4%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP10-S-2.0**
 SAMPLE

Lab Sample ID: VU76B
LIMS ID: 12-23871
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Instrument/Analyst: NT9/PKC
Date Analyzed: 12/06/12 20:30

Sample Amount: 3.33 g-dry-wt
Purge Volume: 5.0 mL
Moisture: 28.0%

CAS Number	Analyte	RL	Result	Q
74-87-3	Chloromethane	1.5	< 1.5	U
74-83-9	Bromomethane	1.5	< 1.5	U
75-01-4	Vinyl Chloride	1.5	< 1.5	U
75-00-3	Chloroethane	1.5	< 1.5	U
75-09-2	**Methylene Chloride**	**3.0**	**4.3**	**B**
67-64-1	**Acetone**	**7.5**	**160**	**B**
75-15-0	Carbon Disulfide	1.5	< 1.5	U
75-35-4	1,1-Dichloroethene	1.5	< 1.5	U
75-34-3	1,1-Dichloroethane	1.5	< 1.5	U
156-60-5	trans-1,2-Dichloroethene	1.5	< 1.5	U
156-59-2	cis-1,2-Dichloroethene	1.5	< 1.5	U
67-66-3	Chloroform	1.5	< 1.5	U
107-06-2	1,2-Dichloroethane	1.5	< 1.5	U
78-93-3	**2-Butanone**	**7.5**	**10**	
71-55-6	1,1,1-Trichloroethane	1.5	< 1.5	U
56-23-5	Carbon Tetrachloride	1.5	< 1.5	U
108-05-4	Vinyl Acetate	7.5	< 7.5	U
75-27-4	Bromodichloromethane	1.5	< 1.5	U
78-87-5	1,2-Dichloropropane	1.5	< 1.5	U
10061-01-5	cis-1,3-Dichloropropene	1.5	< 1.5	U
79-01-6	Trichloroethene	1.5	< 1.5	U
124-48-1	Dibromochloromethane	1.5	< 1.5	U
79-00-5	1,1,2-Trichloroethane	1.5	< 1.5	U
71-43-2	Benzene	1.5	< 1.5	U
10061-02-6	trans-1,3-Dichloropropene	1.5	< 1.5	U
110-75-8	2-Chloroethylvinylether	7.5	< 7.5	U
75-25-2	Bromoform	1.5	< 1.5	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	7.5	< 7.5	U
591-78-6	2-Hexanone	7.5	< 7.5	U
127-18-4	Tetrachloroethene	1.5	< 1.5	U
79-34-5	1,1,2,2-Tetrachloroethane	1.5	< 1.5	U
108-88-3	Toluene	1.5	< 1.5	U
108-90-7	Chlorobenzene	1.5	< 1.5	U
100-41-4	Ethylbenzene	1.5	< 1.5	U
100-42-5	Styrene	1.5	< 1.5	U
75-69-4	Trichlorofluoromethane	1.5	< 1.5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	3.0	< 3.0	U
179601-23-1	m,p-Xylene	1.5	< 1.5	U
95-47-6	o-Xylene	1.5	< 1.5	U
95-50-1	1,2-Dichlorobenzene	1.5	< 1.5	U
541-73-1	1,3-Dichlorobenzene	1.5	< 1.5	U
106-46-7	1,4-Dichlorobenzene	1.5	< 1.5	U
107-02-8	Acrolein	75	< 75	U
74-88-4	Iodomethane	1.5	< 1.5	U
74-96-4	Bromoethane	3.0	< 3.0	U
107-13-1	Acrylonitrile	7.5	< 7.5	U
563-58-6	1,1-Dichloropropene	1.5	< 1.5	U
74-95-3	Dibromomethane	1.5	< 1.5	U
630-20-6	1,1,1,2-Tetrachloroethane	1.5	< 1.5	U
96-12-8	1,2-Dibromo-3-chloropropane	7.5	< 7.5	U
96-18-4	1,2,3-Trichloropropane	3.0	< 3.0	U
110-57-6	trans-1,4-Dichloro-2-butene	7.5	< 7.5	U
108-67-8	1,3,5-Trimethylbenzene	1.5	< 1.5	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP10-S-2.0**
 SAMPLE

Lab Sample ID: VU76B
LIMS ID: 12-23871
Matrix: Soil
Date Analyzed: 12/06/12 20:30

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02

CAS Number	Analyte	RL	Result	Q
95-63-6	**1,2,4-Trimethylbenzene**	**1.5**	**1.5**	
87-68-3	Hexachlorobutadiene	7.5	< 7.5	U
106-93-4	1,2-Dibromoethane	1.5	< 1.5	U
74-97-5	Bromochloromethane	1.5	< 1.5	U
594-20-7	2,2-Dichloropropane	1.5	< 1.5	U
142-28-9	1,3-Dichloropropane	1.5	< 1.5	U
98-82-8	Isopropylbenzene	1.5	< 1.5	U
103-65-1	n-Propylbenzene	1.5	< 1.5	U
108-86-1	Bromobenzene	1.5	< 1.5	U
95-49-8	2-Chlorotoluene	1.5	< 1.5	U
106-43-4	4-Chlorotoluene	1.5	< 1.5	U
98-06-6	tert-Butylbenzene	1.5	< 1.5	U
135-98-8	sec-Butylbenzene	1.5	< 1.5	U
99-87-6	4-Isopropyltoluene	1.5	< 1.5	U
104-51-8	n-Butylbenzene	1.5	< 1.5	U
120-82-1	1,2,4-Trichlorobenzene	7.5	< 7.5	U
91-20-3	Naphthalene	7.5	< 7.5	U
87-61-6	1,2,3-Trichlorobenzene	7.5	< 7.5	U

Reported in µg/kg (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	134%
d8-Toluene	104%
Bromofluorobenzene	93.5%
d4-1,2-Dichlorobenzene	104%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-120612A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-120612A
LIMS ID: 12-23871
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT9/PKC
LCSD: NT9/PKC
Date Analyzed LCS: 12/06/12 15:09
LCSD: 12/06/12 15:31

Sample Amount LCS: 5.00 g-dry-wt
LCSD: 5.00 g-dry-wt
Purge Volume LCS: 5.0 mL
LCSD: 5.0 mL
Moisture: NA

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	41.0 B	50.0	82.0%	38.8 B	50.0	77.6%	5.5%
Bromomethane	43.8 B	50.0	87.6%	43.7 B	50.0	87.4%	0.2%
Vinyl Chloride	52.6	50.0	105%	49.4	50.0	98.8%	6.3%
Chloroethane	55.3	50.0	111%	51.8	50.0	104%	6.5%
Methylene Chloride	52.2 B	50.0	104%	50.0 B	50.0	100%	4.3%
Acetone	266 B	250	106%	267 B	250	107%	0.4%
Carbon Disulfide	54.5	50.0	109%	51.9	50.0	104%	4.9%
1,1-Dichloroethene	52.6	50.0	105%	50.9	50.0	102%	3.3%
1,1-Dichloroethane	52.6	50.0	105%	49.6	50.0	99.2%	5.9%
trans-1,2-Dichloroethene	52.3	50.0	105%	48.6	50.0	97.2%	7.3%
cis-1,2-Dichloroethene	60.2	50.0	120%	57.2	50.0	114%	5.1%
Chloroform	54.2	50.0	108%	50.8	50.0	102%	6.5%
1,2-Dichloroethane	45.2	50.0	90.4%	43.3	50.0	86.6%	4.3%
2-Butanone	245	250	98.0%	242	250	96.8%	1.2%
1,1,1-Trichloroethane	55.3	50.0	111%	50.9	50.0	102%	8.3%
Carbon Tetrachloride	51.2	50.0	102%	46.9	50.0	93.8%	8.8%
Vinyl Acetate	52.2	50.0	104%	52.1	50.0	104%	0.2%
Bromodichloromethane	50.2	50.0	100%	47.3	50.0	94.6%	5.9%
1,2-Dichloropropane	47.2	50.0	94.4%	44.6	50.0	89.2%	5.7%
cis-1,3-Dichloropropene	50.5	50.0	101%	48.2	50.0	96.4%	4.7%
Trichloroethene	48.6	50.0	97.2%	45.0	50.0	90.0%	7.7%
Dibromochloromethane	51.0	50.0	102%	47.7	50.0	95.4%	6.7%
1,1,2-Trichloroethane	47.1	50.0	94.2%	45.7	50.0	91.4%	3.0%
Benzene	47.8	50.0	95.6%	44.9	50.0	89.8%	6.3%
trans-1,3-Dichloropropene	51.6	50.0	103%	49.3	50.0	98.6%	4.6%
2-Chloroethylvinylether	36.4 Q	50.0	72.8%	37.7 Q	50.0	75.4%	3.5%
Bromoform	43.3	50.0	86.6%	41.7	50.0	83.4%	3.8%
4-Methyl-2-Pentanone (MIBK)	230	250	92.0%	241	250	96.4%	4.7%
2-Hexanone	212	250	84.8%	221	250	88.4%	4.2%
Tetrachloroethene	47.6	50.0	95.2%	42.3	50.0	84.6%	11.8%
1,1,2,2-Tetrachloroethane	44.5	50.0	89.0%	44.3	50.0	88.6%	0.5%
Toluene	49.0	50.0	98.0%	45.6	50.0	91.2%	7.2%
Chlorobenzene	47.1	50.0	94.2%	43.8	50.0	87.6%	7.3%
Ethylbenzene	48.3	50.0	96.6%	44.4	50.0	88.8%	8.4%
Styrene	48.9	50.0	97.8%	45.5	50.0	91.0%	7.2%
Trichlorofluoromethane	57.8 Q	50.0	116%	51.5 Q	50.0	103%	11.5%
1,1,2-Trichloro-1,2,2-trifluoroetha	54.0	50.0	108%	48.9	50.0	97.8%	9.9%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-120612A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-120612A QC Report No: VU76-Maul Foster & Alongi
LIMS ID: 12-23871 Project: Sims - N Cascade Ford
Matrix: Soil 0747.01.02

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
m,p-Xylene	94.8	100	94.8%	88.1	100	88.1%	7.3%
o-Xylene	48.2	50.0	96.4%	44.7	50.0	89.4%	7.5%
1,2-Dichlorobenzene	45.0	50.0	90.0%	42.8	50.0	85.6%	5.0%
1,3-Dichlorobenzene	46.4	50.0	92.8%	42.9	50.0	85.8%	7.8%
1,4-Dichlorobenzene	45.7	50.0	91.4%	43.0	50.0	86.0%	6.1%
Acrolein	231	250	92.4%	242	250	96.8%	4.7%
Iodomethane	50.0	50.0	100%	49.1	50.0	98.2%	1.8%
Bromoethane	56.2	50.0	112%	52.6	50.0	105%	6.6%
Acrylonitrile	46.7	50.0	93.4%	48.6	50.0	97.2%	4.0%
1,1-Dichloropropene	47.9	50.0	95.8%	44.2	50.0	88.4%	8.0%
Dibromomethane	46.5	50.0	93.0%	44.9	50.0	89.8%	3.5%
1,1,1,2-Tetrachloroethane	51.1	50.0	102%	46.8	50.0	93.6%	8.8%
1,2-Dibromo-3-chloropropane	44.0	50.0	88.0%	44.8	50.0	89.6%	1.8%
1,2,3-Trichloropropane	43.9	50.0	87.8%	44.9	50.0	89.8%	2.3%
trans-1,4-Dichloro-2-butene	42.7	50.0	85.4%	41.7	50.0	83.4%	2.4%
1,3,5-Trimethylbenzene	49.0	50.0	98.0%	44.5	50.0	89.0%	9.6%
1,2,4-Trimethylbenzene	48.3	50.0	96.6%	44.4	50.0	88.8%	8.4%
Hexachlorobutadiene	46.6	50.0	93.2%	40.8	50.0	81.6%	13.3%
1,2-Dibromoethane	46.9	50.0	93.8%	45.7	50.0	91.4%	2.6%
Bromochloromethane	55.9	50.0	112%	54.2	50.0	108%	3.1%
2,2-Dichloropropane	54.5	50.0	109%	50.2	50.0	100%	8.2%
1,3-Dichloropropane	46.4	50.0	92.8%	43.4	50.0	86.8%	6.7%
Isopropylbenzene	50.1	50.0	100%	45.4	50.0	90.8%	9.8%
n-Propylbenzene	49.3	50.0	98.6%	44.3	50.0	88.6%	10.7%
Bromobenzene	47.7	50.0	95.4%	44.3	50.0	88.6%	7.4%
2-Chlorotoluene	47.9	50.0	95.8%	44.0	50.0	88.0%	8.5%
4-Chlorotoluene	46.8	50.0	93.6%	43.5	50.0	87.0%	7.3%
tert-Butylbenzene	49.4	50.0	98.8%	45.1	50.0	90.2%	9.1%
sec-Butylbenzene	49.3	50.0	98.6%	44.6	50.0	89.2%	10.0%
4-Isopropyltoluene	49.4	50.0	98.8%	44.6	50.0	89.2%	10.2%
n-Butylbenzene	49.1	50.0	98.2%	43.5	50.0	87.0%	12.1%
1,2,4-Trichlorobenzene	45.8	50.0	91.6%	42.0	50.0	84.0%	8.7%
Naphthalene	44.6	50.0	89.2%	43.2	50.0	86.4%	3.2%
1,2,3-Trichlorobenzene	44.2	50.0	88.4%	40.9	50.0	81.8%	7.8%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	106%	108%
d8-Toluene	103%	104%
Bromofluorobenzene	96.0%	96.7%
d4-1,2-Dichlorobenzene	100%	102%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02

ARI ID	Client ID	Level	DCE	TOL	BFB	DCB	TOT OUT
MB-120612A	Method Blank	Low	110%	105%	96.4%	102%	0
LCS-120612A	Lab Control	Low	106%	103%	96.0%	100%	0
LCSD-120612A	Lab Control Dup	Low	108%	104%	96.7%	102%	0
VU76B	GP10-S-2.0	Low	134%	104%	93.5%	104%	0

	LCS/MB LIMITS		QC LIMITS	
SW8260C	Low	Med	Low	Med
(DCE) = d4-1,2-Dichloroethane	80-122	76-120	80-149	69-120
(TOL) = d8-Toluene	80-120	80-120	77-120	80-120
(BFB) = Bromofluorobenzene	80-120	80-120	80-120	76-128
(DCB) = d4-1,2-Dichlorobenzene	80-120	80-120	80-120	80-120

Log Number Range: 12-23871 to 12-23871

VU76:00015

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt9.i Injection Date: 06-DEC-2012 14:47
Lab File ID: 0501206.d Init. Cal. Date(s): 29-NOV-2012 29-NOV-2012
Analysis Type: SOIL Init. Cal. Times: 07:42 14:06
Lab Sample ID: CC1206 Quant Type: ISTD
Method: /chem1/nt9.i/06DEC12.b/VO061912S.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 Dichlorodifluoromethane	0.53440	0.54485	0.54485	0.100	1.95545	20.00000	Averaged	
2 Chloromethane	1.01152	0.81916	0.81916	0.100	-19.01715	20.00000	Averaged	
3 Vinyl Chloride	0.71109	0.73895	0.73895	0.100	3.91683	20.00000	Averaged	
4 Bromomethane	0.37566	0.33722	0.33722	0.100	-10.23212	20.00000	Averaged	
5 Chloroethane	0.18595	0.20720	0.20720	0.080	11.42790	20.00000	Averaged	
6 Trichlorofluoromethane	60.36386	50.00000	0.34991	0.100	20.72773	20.00000	Linear	<-
7 1,1-Dichloroethene	0.39325	0.41992	0.41992	0.100	6.78177	20.00000	Averaged	
8 Carbon Disulfide	1.18242	1.29922	1.29922	0.010	9.87833	20.00000	Averaged	
9 112Trichloro122Trifluoroeth	0.37937	0.40570	0.40570	0.010	6.93845	20.00000	Averaged	
10 Iodomethane	0.41948	0.35678	0.35678	0.010	-14.94843	20.00000	Averaged	
11 Bromoethane	0.25567	0.27982	0.27982	0.100	9.44811	20.00000	Averaged	
12 Acrolein	0.05484	0.04867	0.04867	0.000	-11.25356	20.00000	Averaged	
13 Methylene Chloride	0.43869	0.44976	0.44976	0.010	2.52340	20.00000	Averaged	
14 Acetone	274	250	0.08807	0.001	9.50114	20.00000	Linear	
15 Trans-1,2-Dichloroethene	0.47229	0.48504	0.48504	0.010	2.69927	20.00000	Averaged	
16 Methyl tert butyl ether	1.16844	1.25040	1.25040	0.100	7.01458	20.00000	Averaged	
17 1,1-Dichloroethane	0.79273	0.83309	0.83309	0.100	5.09158	20.00000	Averaged	
18 Acrylonitrile	0.11269	0.10458	0.10458	0.001	-7.20091	20.00000	Averaged	
19 Vinyl Acetate	0.49758	0.51681	0.51681	0.010	3.86558	20.00000	Averaged	
20 Cis-1,2-Dichloroethene	0.58190	0.69517	0.69517	0.010	19.46557	20.00000	Averaged	
22 2,2-Dichloropropane	0.76418	0.83401	0.83401	0.010	9.13830	20.00000	Averaged	
23 Bromochloromethane	0.25072	0.28052	0.28052	0.050	11.88604	20.00000	Averaged	
24 Chloroform	0.89884	0.96765	0.96765	0.100	7.65473	20.00000	Averaged	
25 Carbon Tetrachloride	0.35110	0.35558	0.35558	0.100	1.27430	20.00000	Averaged	
$ 27 Dibromofluoromethane	0.48645	0.56890	0.56890	0.100	16.94742	20.00000	Averaged	
26 1,1,1-Trichloroethane	0.80869	0.87998	0.87998	0.100	8.81548	20.00000	Averaged	
28 1,1-Dichloropropene	0.43743	0.40882	0.40882	0.010	-6.53973	20.00000	Averaged	
29 2-Butanone	0.05311	0.05102	0.05102	0.001	-3.94310	20.00000	Averaged	
30 Benzene	1.34254	1.26779	1.26779	0.100	-5.56837	20.00000	Averaged	
$ 32 d4-1,2-Dichloroethane	0.48501	0.52868	0.52868	0.010	9.00309	20.00000	Averaged	
33 1,2-Dichloroethane	0.33265	0.30481	0.30481	0.100	-8.36992	20.00000	Averaged	
34 Trichloroethene	0.32002	0.30730	0.30730	0.100	-3.97355	20.00000	Averaged	
37 Dibromomethane	0.15057	0.14008	0.14008	0.010	-6.96630	20.00000	Averaged	
38 1,2-Dichloropropane	0.31614	0.29952	0.29952	0.100	-5.25656	20.00000	Averaged	
39 Bromodichloromethane	0.35018	0.35316	0.35316	0.100	0.85005	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt9.i
Lab File ID: 0501206.d
Analysis Type: SOIL
Lab Sample ID: CC1206
Method: /chem1/nt9.i/06DEC12.b/VO061912S.m

Injection Date: 06-DEC-2012 14:47
Init. Cal. Date(s): 29-NOV-2012 29-NOV-2012
Init. Cal. Times: 07:42 14:06
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
40 2-Chloroethyl Vinyl Ether	0.08486	0.06260	0.06260	0.000	-26.23575	20.00000	Averaged	<-
41 Cis 1,3-dichloropropene	0.46130	0.47195	0.47195	0.100	2.30742	20.00000	Averaged	
$ 42 d8-Toluene	1.21269	1.26106	1.26106	0.010	3.98842	20.00000	Averaged	
43 Toluene	0.86481	0.83848	0.83848	0.100	-3.04371	20.00000	Averaged	
44 Tetrachloroethene	0.36071	0.32872	0.32872	0.100	-8.86620	20.00000	Averaged	
45 4-Methyl-2-Pentanone	0.08778	0.08318	0.08318	0.000	-5.24011	20.00000	Averaged	
46 Trans 1,3-Dichloropropene	0.37044	0.38992	0.38992	0.010	5.25596	20.00000	Averaged	
47 1,1,2-Trichloroethane	0.24242	0.23001	0.23001	0.100	-5.12081	20.00000	Averaged	
48 Chlorodibromomethane	0.25725	0.26006	0.26006	0.100	1.09231	20.00000	Averaged	
49 1,3-Dichloropropane	0.46150	0.42067	0.42067	0.100	-8.84689	20.00000	Averaged	
50 1,2-Dibromoethane	0.23674	0.22689	0.22689	0.010	-4.16086	20.00000	Averaged	
51 2-Hexanone	0.16165	0.14000	0.14000	0.010	-13.39022	20.00000	Averaged	
53 Chlorobenzene	0.95077	0.88498	0.88498	0.300	-6.91960	20.00000	Averaged	
54 Ethyl Benzene	1.70785	1.61741	1.61741	0.100	-5.29537	20.00000	Averaged	
55 1,1,1,2-Tetrachloroethane	0.28155	0.28322	0.28322	0.010	0.59503	20.00000	Averaged	
56 m,p-xylene	0.64917	0.61242	0.61242	0.100	-5.66090	20.00000	Averaged	
57 o-Xylene	0.64244	0.61705	0.61705	0.100	-3.95190	20.00000	Averaged	
58 Styrene	1.04269	1.02680	1.02680	0.100	-1.52479	20.00000	Averaged	
59 Bromoform	43.90689	50.00000	0.37324	0.100	-12.18621	20.00000	Linear	
60 Isopropyl Benzene	3.59911	3.51485	3.51485	0.010	-2.34109	20.00000	Averaged	
$ 62 4-Bromofluorobenzene	0.48753	0.47101	0.47101	0.200	-3.38969	20.00000	Averaged	
63 Bromobenzene	0.79594	0.75647	0.75647	0.010	-4.95939	20.00000	Averaged	
64 N-Propyl Benzene	4.21251	4.06155	4.06155	0.010	-3.58364	20.00000	Averaged	
65 1,1,2,2-Tetrachloroethane	0.65413	0.59481	0.59481	0.300	-9.06857	20.00000	Averaged	
66 2-Chloro Toluene	2.56673	2.43356	2.43356	0.010	-5.18824	20.00000	Averaged	
67 1,3,5-Trimethyl Benzene	2.89302	2.79444	2.79444	0.010	-3.40769	20.00000	Averaged	
68 1,2,3-Trichloropropane	0.19829	0.18368	0.18368	0.010	-7.36655	20.00000	Averaged	
69 Trans-1,4-Dichloro 2-Butene	0.18226	0.15987	0.15987	0.001	-12.28244	20.00000	Averaged	
70 4-Chloro Toluene	2.59074	2.42486	2.42486	0.010	-6.40283	20.00000	Averaged	
71 T-Butyl Benzene	2.52376	2.44085	2.44085	0.010	-3.28494	20.00000	Averaged	
72 1,2,4-Trimethylbenzene	2.87587	2.77503	2.77503	0.010	-3.50629	20.00000	Averaged	
73 S-Butyl Benzene	3.96163	3.82754	3.82754	0.010	-3.38469	20.00000	Averaged	
74 4-Isopropyl Toluene	3.04994	3.01702	3.01702	0.010	-1.07957	20.00000	Averaged	
75 1,3-Dichlorobenzene	1.60968	1.52244	1.52244	0.100	-5.41942	20.00000	Averaged	
77 1,4-Dichlorobenzene	1.56453	1.48798	1.48798	0.100	-4.89269	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt9.i Injection Date: 06-DEC-2012 14:47
Lab File ID: 0501206.d Init. Cal. Date(s): 29-NOV-2012 29-NOV-2012
Analysis Type: SOIL Init. Cal. Times: 07:42 14:06
Lab Sample ID: CC1206 Quant Type: ISTD
Method: /chem1/nt9.i/06DEC12.b/VO061912S.m

COMPOUND	RRF / AMOUNT	RF50	CCAL RRF50	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
78 N-Butyl Benzene	2.92501	2.91332	2.91332	0.010	-0.39947	20.00000	Averaged
$ 79 d4-1,2-Dichlorobenzene	0.86889	0.86766	0.86766	0.010	-0.14202	20.00000	Averaged
80 1,2-Dichlorobenzene	1.41420	1.31564	1.31564	0.100	-6.96932	20.00000	Averaged
81 1,2-Dibromo 3-Chloropropane	0.09822	0.09230	0.09230	0.010	-6.02153	20.00000	Averaged
82 Hexachloro 1,3-Butadiene	0.58649	0.56269	0.56269	0.010	-4.05810	20.00000	Averaged
83 1,2,4-Trichlorobenzene	0.97631	0.95203	0.95203	0.010	-2.48737	20.00000	Averaged
84 Naphthalene	2.09900	1.97242	1.97242	0.010	-6.03014	20.00000	Averaged
85 1,2,3-Trichlorobenzene	0.88652	0.83275	0.83275	0.010	-6.06539	20.00000	Averaged

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-120712A**
 METHOD BLANK

Lab Sample ID: MB-120712A
LIMS ID: 12-23878
Matrix: Water
Data Release Authorized:
Reported: 12/12/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PAB
Date Analyzed: 12/07/12 11:57

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-120712A**
 METHOD BLANK

Lab Sample ID: MB-120712A QC Report No: VU76-Maul Foster & Alongi
LIMS ID: 12-23878 Project: Sims - N Cascade Ford
Matrix: Water 0747.01.02
Date Analyzed: 12/07/12 11:57

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	**Hexachlorobutadiene**	**0.50**	**0.37**	**J**
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	98.9%
d8-Toluene	99.1%
Bromofluorobenzene	91.1%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP-10-W-7.5**
 SAMPLE

Lab Sample ID: VU76I
LIMS ID: 12-23878
Matrix: Water
Data Release Authorized:
Reported: 12/12/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Instrument/Analyst: NT2/PAB
Date Analyzed: 12/07/12 19:13

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP-10-W-7.5**
 SAMPLE

Lab Sample ID: VU76I
LIMS ID: 12-23878
Matrix: Water
Date Analyzed: 12/07/12 19:13

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	101%
d8-Toluene	100%
Bromofluorobenzene	91.4%
d4-1,2-Dichlorobenzene	103%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GPDUP-W-7.5**
Page 1 of 2 **SAMPLE**

Lab Sample ID: VU76J
LIMS ID: 12-23879
Matrix: Water
Data Release Authorized:
Reported: 12/12/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Instrument/Analyst: NT2/PAB
Date Analyzed: 12/07/12 19:39

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	**Acetone**	**5.0**	**2.5**	**J**
75-15-0	**Carbon Disulfide**	**0.20**	**0.12**	**J**
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

Lab Sample ID: VU76J
LIMS ID: 12-23879
Matrix: Water
Date Analyzed: 12/07/12 19:39

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	100%
d8-Toluene	101%
Bromofluorobenzene	88.7%
d4-1,2-Dichlorobenzene	107%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-120712A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-120712A
LIMS ID: 12-23878
Matrix: Water
Data Release Authorized:
Reported: 12/12/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PAB
LCSD: NT2/PAB
Date Analyzed LCS: 12/07/12 10:36
LCSD: 12/07/12 11:03

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	8.50	10.0	85.0%	8.58	10.0	85.8%	0.9%
Bromomethane	9.42	10.0	94.2%	9.22	10.0	92.2%	2.1%
Vinyl Chloride	9.27	10.0	92.7%	9.02	10.0	90.2%	2.7%
Chloroethane	9.32	10.0	93.2%	9.07	10.0	90.7%	2.7%
Methylene Chloride	8.19 Q	10.0	81.9%	8.45 Q	10.0	84.5%	3.1%
Acetone	43.2 Q	50.0	86.4%	42.7 Q	50.0	85.4%	1.2%
Carbon Disulfide	8.78	10.0	87.8%	8.62	10.0	86.2%	1.8%
1,1-Dichloroethene	8.93	10.0	89.3%	8.72	10.0	87.2%	2.4%
1,1-Dichloroethane	9.01	10.0	90.1%	9.06	10.0	90.6%	0.6%
trans-1,2-Dichloroethene	9.02	10.0	90.2%	9.12	10.0	91.2%	1.1%
cis-1,2-Dichloroethene	8.92	10.0	89.2%	8.99	10.0	89.9%	0.8%
Chloroform	9.20	10.0	92.0%	9.06	10.0	90.6%	1.5%
1,2-Dichloroethane	9.42	10.0	94.2%	9.59	10.0	95.9%	1.8%
2-Butanone	48.3	50.0	96.6%	48.5	50.0	97.0%	0.4%
1,1,1-Trichloroethane	9.49	10.0	94.9%	9.52	10.0	95.2%	0.3%
Carbon Tetrachloride	9.83	10.0	98.3%	9.92	10.0	99.2%	0.9%
Vinyl Acetate	8.03 Q	10.0	80.3%	8.32 Q	10.0	83.2%	3.5%
Bromodichloromethane	10.2	10.0	102%	10.2	10.0	102%	0.0%
1,2-Dichloropropane	9.97	10.0	99.7%	10.3	10.0	103%	3.3%
cis-1,3-Dichloropropene	10.9	10.0	109%	11.1	10.0	111%	1.8%
Trichloroethene	9.95	10.0	99.5%	10.2	10.0	102%	2.5%
Dibromochloromethane	10.8	10.0	108%	10.7	10.0	107%	0.9%
1,1,2-Trichloroethane	10.3	10.0	103%	11.0	10.0	110%	6.6%
Benzene	9.75	10.0	97.5%	10.0	10.0	100%	2.5%
trans-1,3-Dichloropropene	10.9	10.0	109%	11.2	10.0	112%	2.7%
2-Chloroethylvinylether	10.6	10.0	106%	11.0	10.0	110%	3.7%
Bromoform	8.90	10.0	89.0%	8.95	10.0	89.5%	0.6%
4-Methyl-2-Pentanone (MIBK)	53.5	50.0	107%	55.2	50.0	110%	3.1%
2-Hexanone	55.7	50.0	111%	56.5	50.0	113%	1.4%
Tetrachloroethene	10.2	10.0	102%	10.3	10.0	103%	1.0%
1,1,2,2-Tetrachloroethane	9.99	10.0	99.9%	10.0	10.0	100%	0.1%
Toluene	9.98	10.0	99.8%	10.2	10.0	102%	2.2%
Chlorobenzene	10.0	10.0	100%	10.2	10.0	102%	2.0%
Ethylbenzene	10.3	10.0	103%	10.5	10.0	105%	1.9%
Styrene	11.1	10.0	111%	11.2	10.0	112%	0.9%
Trichlorofluoromethane	9.17	10.0	91.7%	9.29	10.0	92.9%	1.3%
1,1,2-Trichloro-1,2,2-trifluoroetha	9.11	10.0	91.1%	9.53	10.0	95.3%	4.5%
m,p-Xylene	20.9	20.0	104%	21.2	20.0	106%	1.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-120712A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-120712A QC Report No: VU76-Maul Foster & Alongi
LIMS ID: 12-23878 Project: Sims - N Cascade Ford
Matrix: Water 0747.01.02

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.4	10.0	104%	10.4	10.0	104%	0.0%
1,2-Dichlorobenzene	9.78	10.0	97.8%	9.98	10.0	99.8%	2.0%
1,3-Dichlorobenzene	10.3	10.0	103%	10.4	10.0	104%	1.0%
1,4-Dichlorobenzene	9.96	10.0	99.6%	10.2	10.0	102%	2.4%
Acrolein	37.0 Q	50.0	74.0%	37.6 Q	50.0	75.2%	1.6%
Iodomethane	8.73	10.0	87.3%	9.56	10.0	95.6%	9.1%
Bromoethane	9.08	10.0	90.8%	9.43	10.0	94.3%	3.8%
Acrylonitrile	9.52	10.0	95.2%	8.82	10.0	88.2%	7.6%
1,1-Dichloropropene	9.88	10.0	98.8%	10.1	10.0	101%	2.2%
Dibromomethane	9.83	10.0	98.3%	10.2	10.0	102%	3.7%
1,1,1,2-Tetrachloroethane	9.93	10.0	99.3%	9.87	10.0	98.7%	0.6%
1,2-Dibromo-3-chloropropane	9.80	10.0	98.0%	10.2	10.0	102%	4.0%
1,2,3-Trichloropropane	10.6	10.0	106%	10.7	10.0	107%	0.9%
trans-1,4-Dichloro-2-butene	10.9	10.0	109%	11.2	10.0	112%	2.7%
1,3,5-Trimethylbenzene	10.9	10.0	109%	10.9	10.0	109%	0.0%
1,2,4-Trimethylbenzene	10.8	10.0	108%	10.8	10.0	108%	0.0%
Hexachlorobutadiene	11.8 B	10.0	118%	11.6 B	10.0	116%	1.7%
1,2-Dibromoethane	10.1	10.0	101%	10.3	10.0	103%	2.0%
Bromochloromethane	8.89	10.0	88.9%	9.25	10.0	92.5%	4.0%
2,2-Dichloropropane	9.39	10.0	93.9%	9.43	10.0	94.3%	0.4%
1,3-Dichloropropane	10.5	10.0	105%	10.7	10.0	107%	1.9%
Isopropylbenzene	10.8	10.0	108%	11.0	10.0	110%	1.8%
n-Propylbenzene	10.6	10.0	106%	10.7	10.0	107%	0.9%
Bromobenzene	10.2	10.0	102%	10.5	10.0	105%	2.9%
2-Chlorotoluene	10.3	10.0	103%	10.4	10.0	104%	1.0%
4-Chlorotoluene	10.5	10.0	105%	10.7	10.0	107%	1.9%
tert-Butylbenzene	10.9	10.0	109%	10.9	10.0	109%	0.0%
sec-Butylbenzene	10.8	10.0	108%	10.8	10.0	108%	0.0%
4-Isopropyltoluene	10.8	10.0	108%	11.0	10.0	110%	1.8%
n-Butylbenzene	10.6	10.0	106%	10.6	10.0	106%	0.0%
1,2,4-Trichlorobenzene	9.53	10.0	95.3%	9.72	10.0	97.2%	2.0%
Naphthalene	9.50	10.0	95.0%	9.51	10.0	95.1%	0.1%
1,2,3-Trichlorobenzene	10.0	10.0	100%	10.1	10.0	101%	1.0%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	94.4%	93.4%
d8-Toluene	102%	103%
Bromofluorobenzene	95.9%	95.3%
d4-1,2-Dichlorobenzene	101%	98.8%

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-120712A	Method Blank	10	98.9%	99.1%	91.1%	102%	0
LCS-120712A	Lab Control	10	94.4%	102%	95.9%	101%	0
LCSD-120712A	Lab Control Dup	10	93.4%	103%	95.3%	98.8%	0
VU76I	GP-10-W-7.5	10	101%	100%	91.4%	103%	0
VU76J	GPDUP-W-7.5	10	100%	101%	88.7%	107%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 12-23878 to 12-23879

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i Injection Date: 07-DEC-2012 10:09
Lab File ID: cc1207.d Init. Cal. Date(s): 26-NOV-2012 26-NOV-2012
Analysis Type: WATER Init. Cal. Times: 11:48 15:25
Lab Sample ID: CC1207 Quant Type: ISTD
Method: /chem3/nt2.i/20121207.b/82601126L.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
1 Dichlorodifluoromethane	0.56184	0.50148	0.50148	0.010	-10.74336	20.00000	Averaged	
2 Chloromethane	0.61650	0.51522	0.51522	0.100	-16.42729	20.00000	Averaged	
3 Vinyl Chloride	0.57124	0.49912	0.49912	0.100	-12.62506	20.00000	Averaged	
4 Bromomethane	0.30749	0.26711	0.26711	0.100	-13.13093	20.00000	Averaged	
5 Chloroethane	0.33861	0.30079	0.30079	0.010	-11.16994	20.00000	Averaged	
6 Trichlorofluoromethane	0.79328	0.71365	0.71365	0.010	-10.03839	20.00000	Averaged	
7 1,1-Dichloroethene	0.48880	0.46215	0.46215	0.100	-5.45065	20.00000	Averaged	
8 Carbon Disulfide	1.41703	1.31541	1.31541	0.010	-7.17081	20.00000	Averaged	
9 112Trichloro122Trifluoroeth	0.46522	0.43973	0.43973	0.010	-5.47841	20.00000	Averaged	
10 Iodomethane	0.80021	0.75181	0.75181	0.010	-6.04945	20.00000	Averaged	
11 Bromoethane	0.37477	0.33651	0.33651	0.100	-10.20775	20.00000	Averaged	
12 Acrolein	0.03767	0.02325	0.02325	0.000	-38.28511	20.00000	Averaged	<-
13 Methylene Chloride	0.57354	0.45823	0.45823	0.010	-20.10540	20.00000	Averaged	<-
14 Acetone	0.07249	0.05653	0.05653	0.001	-22.00632	20.00000	Averaged	<-
15 Trans-1,2-Dichloroethene	0.55996	0.48350	0.48350	0.010	-13.65548	20.00000	Averaged	
17 Methyl tert butyl ether	1.32088	1.16854	1.16854	0.100	-11.53332	20.00000	Averaged	
18 1,1-Dichloroethane	0.93932	0.81136	0.81136	0.200	-13.62327	20.00000	Averaged	
19 Acrylonitrile	0.09434	0.08353	0.08353	0.001	-11.45795	20.00000	Averaged	
20 Vinyl Acetate	7.42833	10.00000	0.35786	0.010	-25.71669	20.00000	Linear	<-
22 Cis-1,2-Dichloroethene	0.56391	0.49167	0.49167	0.010	-12.81039	20.00000	Averaged	
23 2,2-Dichloropropane	0.61874	0.56223	0.56223	0.010	-9.13327	20.00000	Averaged	
24 Bromochloromethane	0.25083	0.21954	0.21954	0.050	-12.47627	20.00000	Averaged	
25 Chloroform	0.94058	0.84504	0.84504	0.200	-10.15697	20.00000	Averaged	
26 Carbon Tetrachloride	0.51938	0.49505	0.49505	0.100	-4.68322	20.00000	Averaged	
$ 27 Dibromofluoromethane	0.47533	0.43841	0.43841	0.100	-7.76650	20.00000	Averaged	
28 1,1,1-Trichloroethane	0.85286	0.77471	0.77471	0.100	-9.16363	20.00000	Averaged	
29 2-Butanone	0.10403	0.09295	0.09295	0.001	-10.64921	20.00000	Averaged	
30 1,1-Dichloropropene	0.47726	0.46500	0.46500	0.010	-2.56882	20.00000	Averaged	
31 Benzene	1.33392	1.26440	1.26440	0.500	-5.21160	20.00000	Averaged	
$ 33 d4-1,2-Dichloroethane	0.51351	0.47675	0.47675	0.010	-7.15942	20.00000	Averaged	
34 1,2-Dichloroethane	0.41545	0.38161	0.38161	0.100	-8.14539	20.00000	Averaged	
36 Trichloroethene	0.36410	0.35174	0.35174	0.100	-3.39662	20.00000	Averaged	
38 Dibromomethane	0.15122	0.14533	0.14533	0.010	-3.89541	20.00000	Averaged	
39 1,2-Dichloropropane	0.28456	0.27913	0.27913	0.100	-1.90566	20.00000	Averaged	
40 Bromodichloromethane	0.40988	0.39980	0.39980	0.100	-2.46008	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i Injection Date: 07-DEC-2012 10:09
Lab File ID: cc1207.d Init. Cal. Date(s): 26-NOV-2012 26-NOV-2012
Analysis Type: WATER Init. Cal. Times: 11:48 15:25
Lab Sample ID: CC1207 Quant Type: ISTD
Method: /chem3/nt2.i/20121207.b/82601126L.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
41 2-Chloroethyl Vinyl Ether	0.10870	0.10478	0.10478	0.000	-3.60555	20.00000	Averaged
42 Cis 1,3-dichloropropene	0.41502	0.43427	0.43427	0.200	4.63695	20.00000	Averaged
$ 43 d8-Toluene	1.12113	1.15009	1.15009	0.010	2.58291	20.00000	Averaged
44 Toluene	0.78353	0.77823	0.77823	0.400	-0.67658	20.00000	Averaged
45 4-Methyl-2-Pentanone	0.06717	0.06863	0.06863	0.000	2.18544	20.00000	Averaged
46 Tetrachloroethene	0.41746	0.41794	0.41794	0.200	0.11609	20.00000	Averaged
47 Trans 1,3-Dichloropropene	0.36327	0.38878	0.38878	0.010	7.02155	20.00000	Averaged
48 1,1,2-Trichloroethane	0.19628	0.19613	0.19613	0.100	-0.07987	20.00000	Averaged
49 Chlorodibromomethane	0.28436	0.28656	0.28656	0.100	0.77466	20.00000	Averaged
50 1,3-Dichloropropane	0.39977	0.39487	0.39487	0.100	-1.22548	20.00000	Averaged
51 1,2-Dibromoethane	0.21112	0.20188	0.20188	0.010	-4.37663	20.00000	Averaged
52 2-Hexanone	0.11392	0.11765	0.11765	0.010	3.27576	20.00000	Averaged
54 Chlorobenzene	0.93721	0.90832	0.90832	0.500	-3.08240	20.00000	Averaged
55 Ethyl Benzene	0.52339	0.52385	0.52385	0.100	0.08631	20.00000	Averaged
56 1,1,1,2-Tetrachloroethane	0.37950	0.36584	0.36584	0.010	-3.59851	20.00000	Averaged
57 m,p-xylene	0.63415	0.64868	0.64868	0.300	2.29105	20.00000	Averaged
58 o-Xylene	0.63306	0.64033	0.64033	0.300	1.14862	20.00000	Averaged
59 Styrene	0.95796	1.01669	1.01669	0.300	6.13074	20.00000	Averaged
60 Bromoform	8.18692	10.00000	0.31563	0.010	-18.13081	20.00000	Linear
61 Isopropyl Benzene	2.91164	3.03860	3.03860	0.010	4.36027	20.00000	Averaged
$ 62 4-Bromofluorobenzene	0.52227	0.50714	0.50714	0.200	-2.89585	20.00000	Averaged
63 Bromobenzene	0.76778	0.75668	0.75668	0.010	-1.44579	20.00000	Averaged
64 N-Propyl Benzene	3.11599	3.18542	3.18542	0.010	2.22819	20.00000	Averaged
65 1,1,2,2-Tetrachloroethane	0.47420	0.45256	0.45256	0.100	-4.56167	20.00000	Averaged
66 2-Chloro Toluene	2.27723	2.28577	2.28577	0.010	0.37506	20.00000	Averaged
67 1,3,5-Trimethyl Benzene	2.32647	2.41658	2.41658	0.010	3.87360	20.00000	Averaged
68 1,2,3-Trichloropropane	0.15932	0.16480	0.16480	0.010	3.43591	20.00000	Averaged
69 Trans-1,4-Dichloro 2-Butene	0.13154	0.14173	0.14173	0.001	7.74946	20.00000	Averaged
70 4-Chloro Toluene	2.10486	2.14482	2.14482	0.010	1.89878	20.00000	Averaged
71 T-Butyl Benzene	1.88384	1.96739	1.96739	0.010	4.43536	20.00000	Averaged
72 1,2,4-Trimethylbenzene	2.31665	2.39036	2.39036	0.010	3.18138	20.00000	Averaged
73 S-Butyl Benzene	2.64870	2.72086	2.72086	0.010	2.72419	20.00000	Averaged
74 4-Isopropyl Toluene	2.16300	2.26426	2.26426	0.010	4.68111	20.00000	Averaged
75 1,3-Dichlorobenzene	1.34760	1.33338	1.33338	0.600	-1.05551	20.00000	Averaged
77 1,4-Dichlorobenzene	1.38948	1.35664	1.35664	0.500	-2.36353	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt2.i Injection Date: 07-DEC-2012 10:09
Lab File ID: cc1207.d Init. Cal. Date(s): 26-NOV-2012 26-NOV-2012
Analysis Type: WATER Init. Cal. Times: 11:48 15:25
Lab Sample ID: CC1207 Quant Type: ISTD
Method: /chem3/nt2.i/20121207.b/82601126L.m

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
78 N-Butyl Benzene	1.81139	1.86334	1.86334	0.010	2.86801	20.00000	Averaged
$ 79 d4-1,2-Dichlorobenzene	0.81139	0.80613	0.80613	0.010	-0.64880	20.00000	Averaged
80 1,2-Dichlorobenzene	1.17774	1.12322	1.12322	0.400	-4.62990	20.00000	Averaged
81 1,2-Dibromo 3-Chloropropane	0.05364	0.04894	0.04894	0.010	-8.77693	20.00000	Averaged
83 Hexachloro 1,3-Butadiene	11.55198	10.00000	0.25665	0.010	15.51985	20.00000	Linear
84 1,2,4-Trichlorobenzene	0.49406	0.45428	0.45428	0.010	-8.05143	20.00000	Averaged
85 Naphthalene	0.68221	0.60244	0.60244	0.010	-11.69229	20.00000	Averaged
86 1,2,3-Trichlorobenzene	0.29227	0.27476	0.27476	0.010	-5.99020	20.00000	Averaged

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Matrix: Soil

Data Release Authorized: MW
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

ARI ID	Client ID	Analysis Date	Basis	Range	Result
MB-120512	Method Blank	12/05/12	Dry	Gasoline	< 5.0 U
12-23871		PID1		HC ID	---
				Trifluorotoluene	95.3%
				Bromobenzene	99.3%
VU76B	GP10-S-2.0	12/05/12	Dry	Gasoline	< 9.3 U
12-23871		PID1		HC ID	---
				Trifluorotoluene	95.1%
				Bromobenzene	99.6%

Gasoline values reported in mg/kg (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

Results corrected for soil moisture content per Section 11.10.5 of EPA Method 8000C.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-120512
LAB CONTROL SAMPLE

Lab Sample ID: LCS-120512
LIMS ID: 12-23871
Matrix: Soil
Data Release Authorized: MW
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 12/05/12 11:03
LCSD: 12/05/12 11:32
Instrument/Analyst LCS: PID1/PKC
LCSD: PID1/PKC

Purge Volume: 5.0 mL

Sample Amount LCS: 100 mg-dry-wt
LCSD: 100 mg-dry-wt

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	52.4	50.0	105%	54.1	50.0	108%	3.2%

Reported in mg/kg (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	99.5%	101%
Bromobenzene	97.9%	100%

ANALYTICAL RESOURCES INCORPORATED

TPHG SOIL SURROGATE RECOVERY SUMMARY

ARI Job: VU76
Matrix: Soil

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02

Client ID	BFB	TFT	BBZ	TOT OUT
MB-120512	NA	95.3%	99.3%	0
LCS-120512	NA	99.5%	97.9%	0
LCSD-120512	NA	101%	100%	0
GP10-S-2.0	NA	95.1%	99.6%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(65-128)
(BBZ) = Bromobenzene	(80-120)	(52-149)

Log Number Range: 12-23871 to 12-23871

Data File: /chem3/pid1.i/20121205-1.b/1205a004.d

Date : 05-DEC-2012 11:03

Client ID:

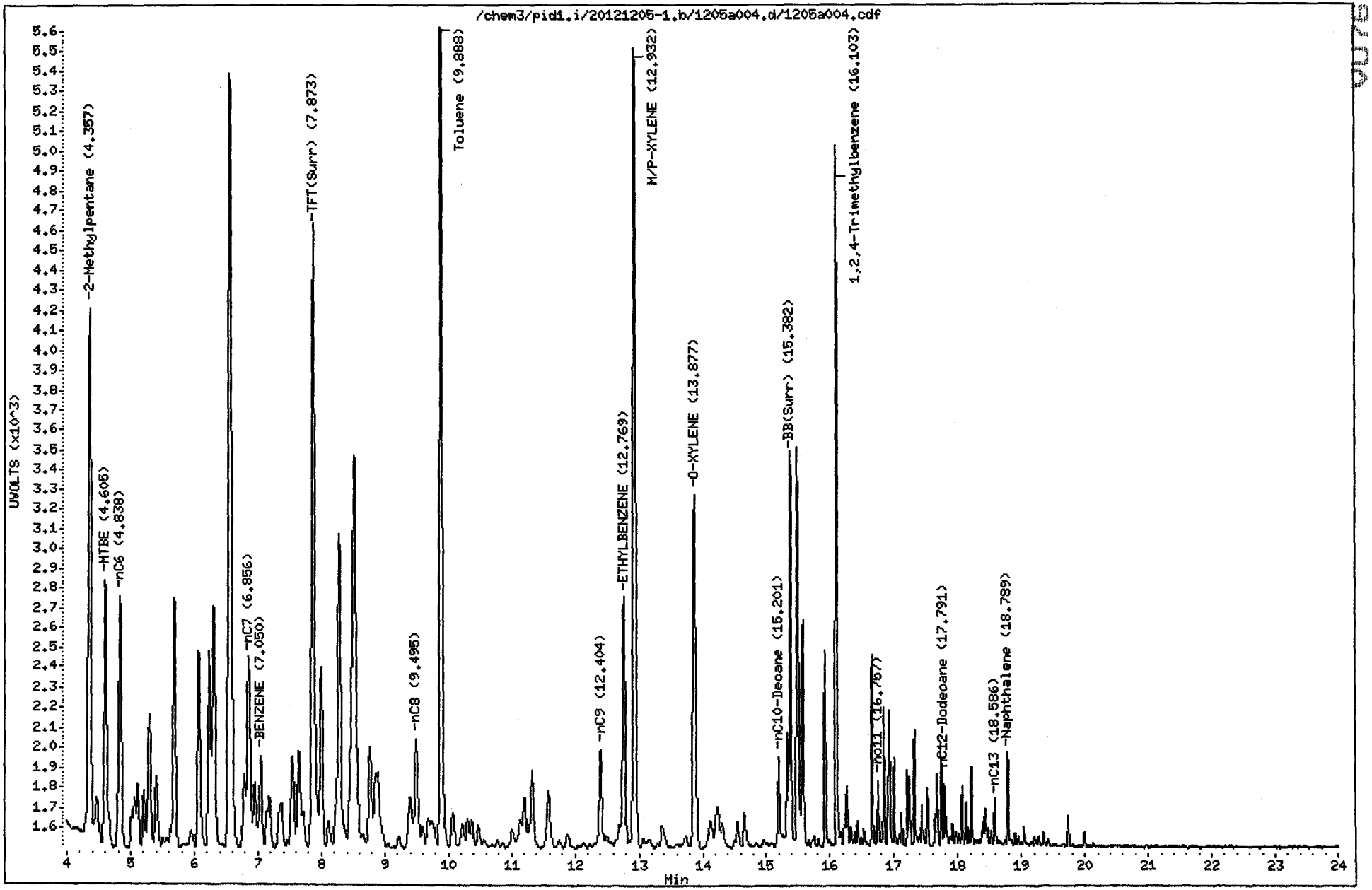
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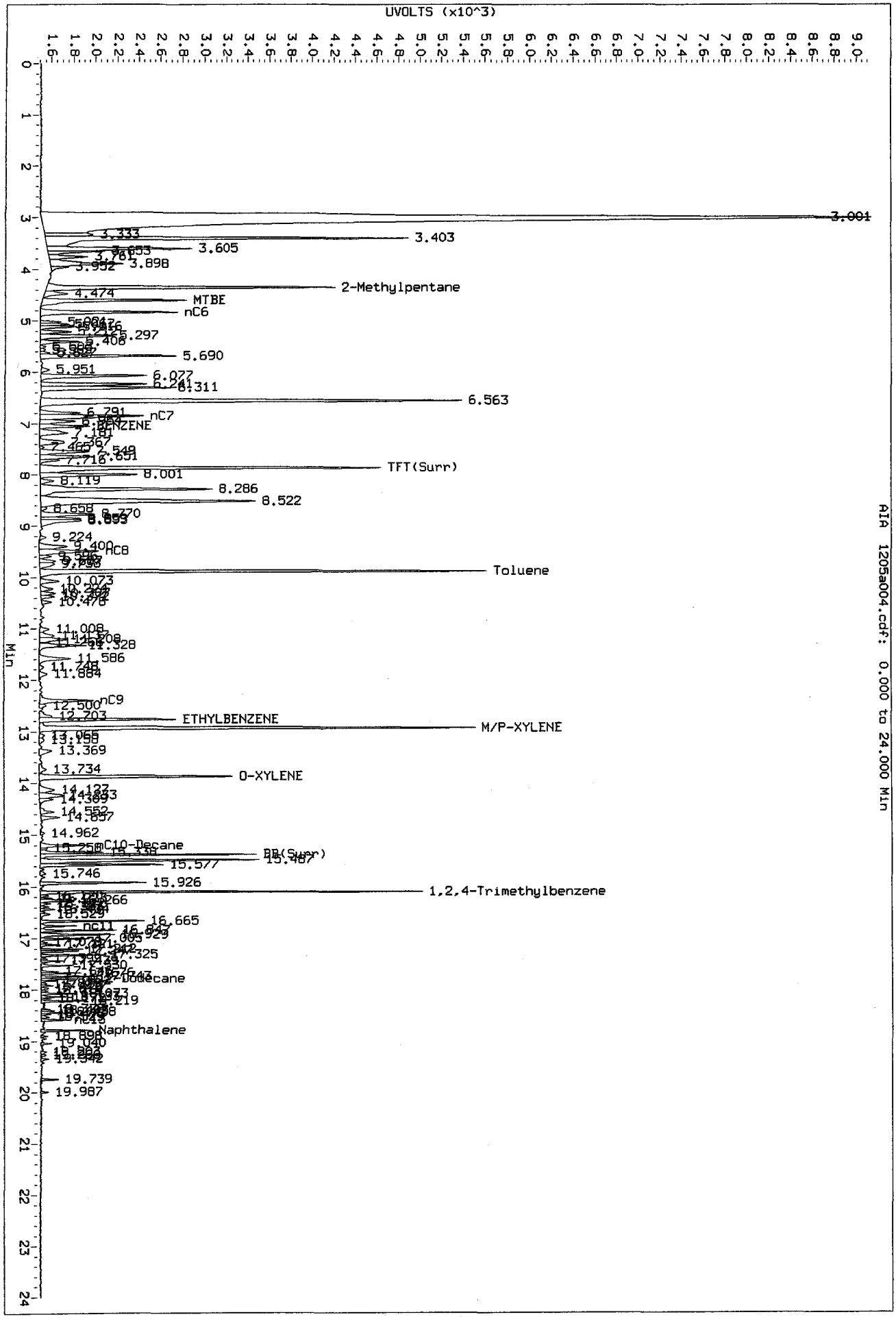
Column phase: RTX 502-2 FID

Instrument: pid1.i

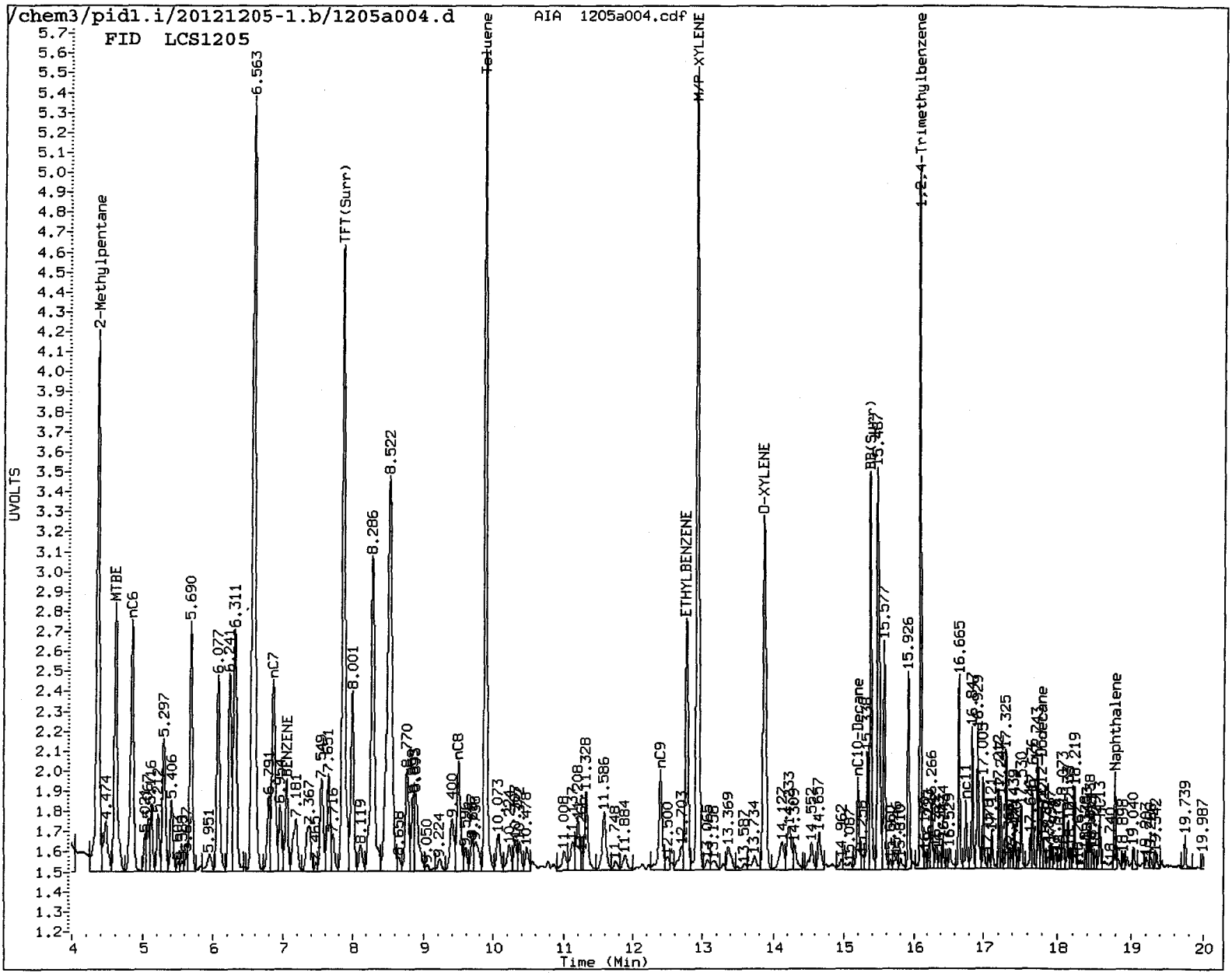
Operator: PC

Column diameter: 0.18





Data File: /chem3/pid1.i/20121205-1.b/1205a004.d/1205a004.cdf
Injection Date: 05-DEC-2012 11:03
Instrument: pid1.i
Client Sample ID:



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: YC Date: 12/7/12

Data File: /chem3/pid1.i/20121205-1.b/1205a005.d

Date : 05-DEC-2012 11:32

Client ID:

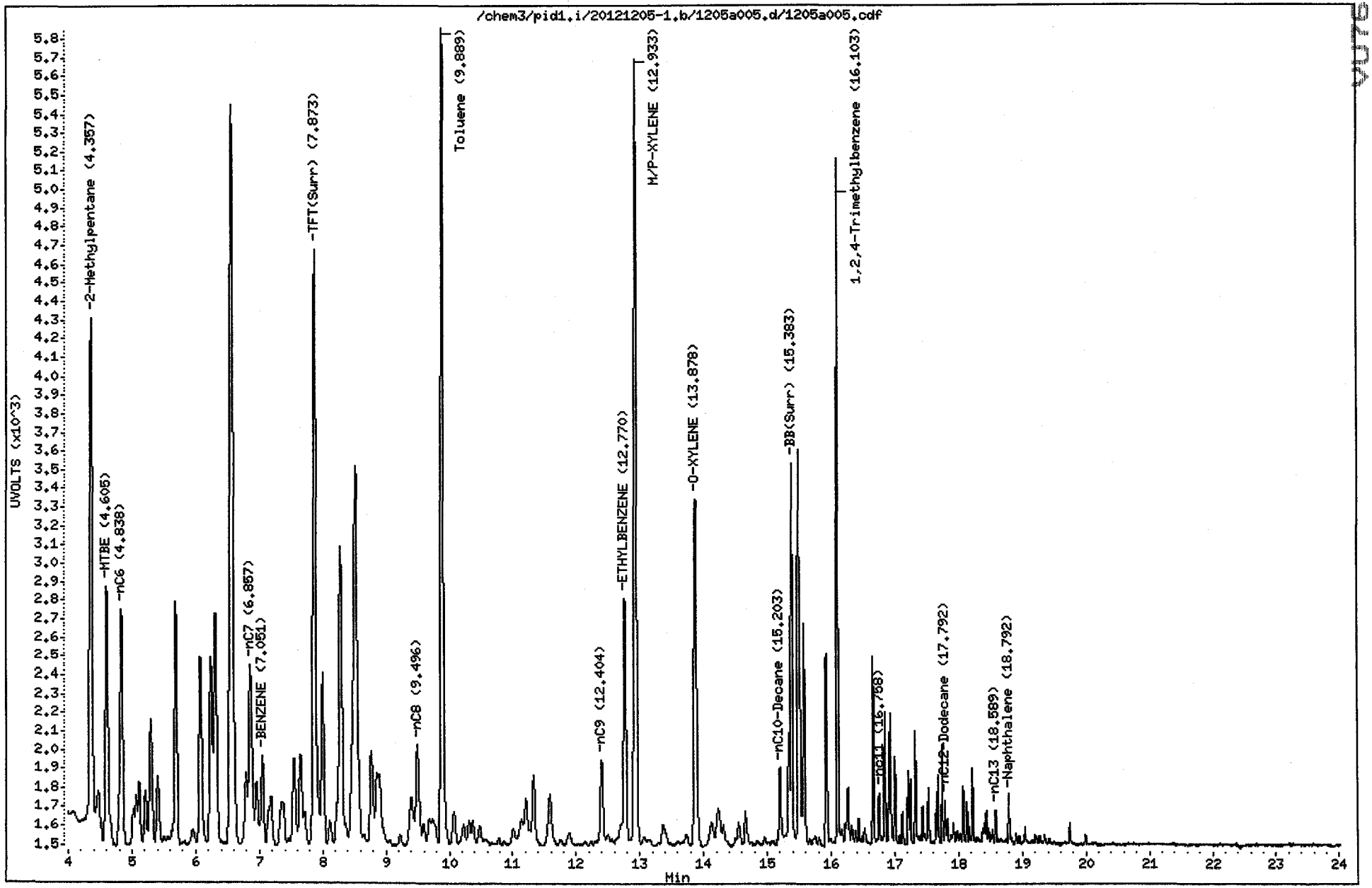
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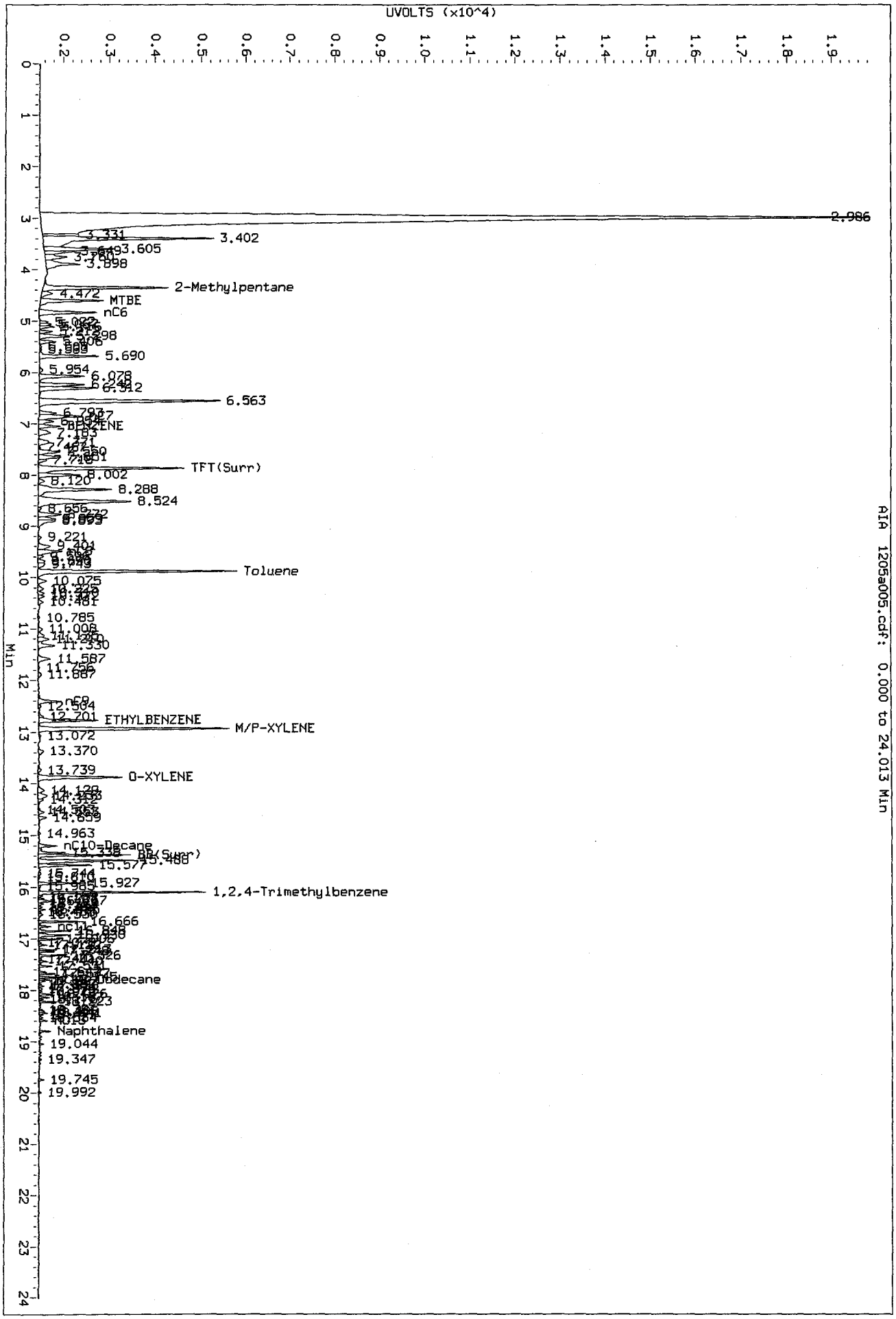
Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: PC

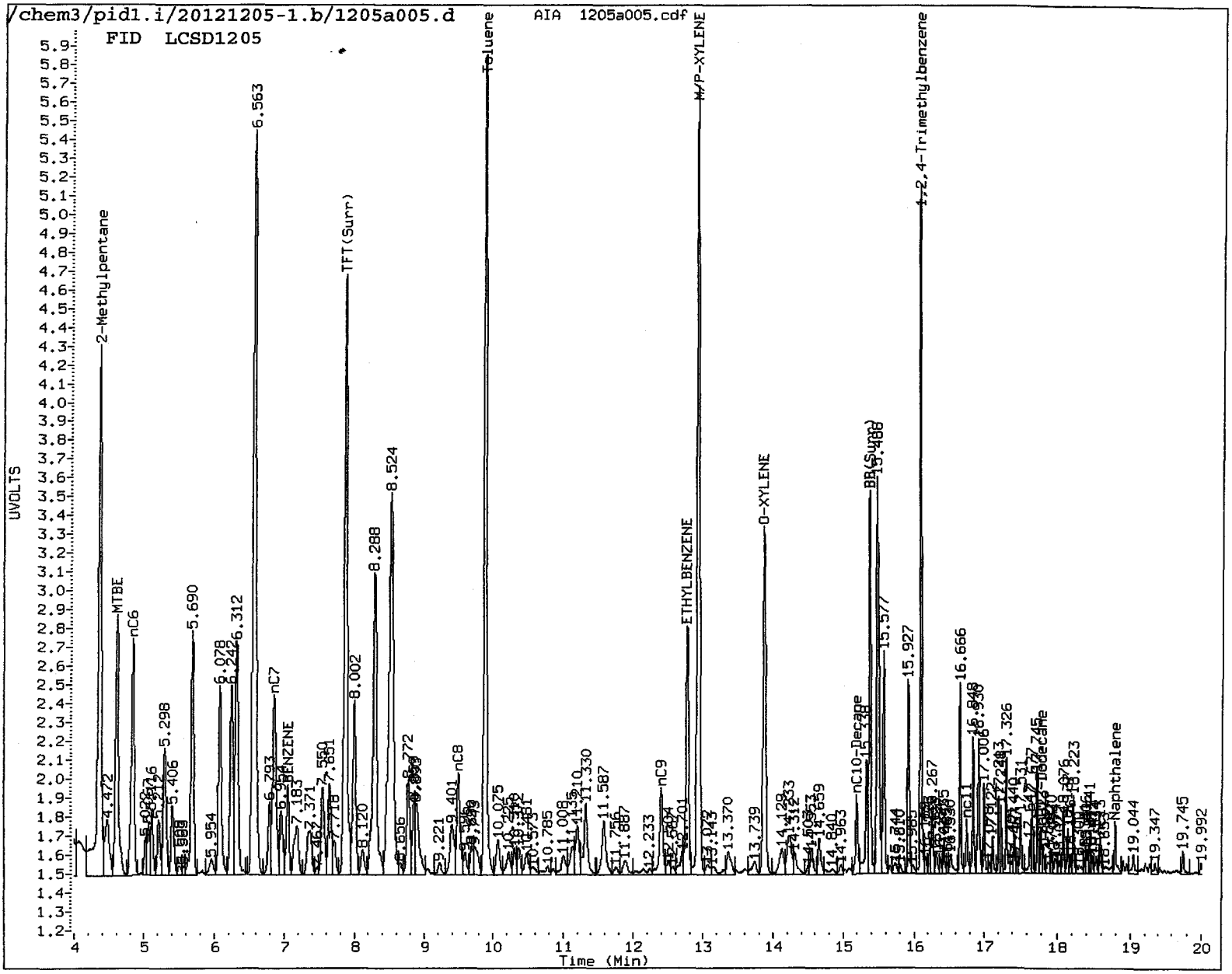
Column diameter: 0.18





Data File: /chem3/pid1.i/20121205-1.b/1205a005.d/1205a005.cdf
Injection Date: 05-DEC-2012 11:32
Instrument: pid1.1
Client Sample ID:

12/7/12



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: PC Date: 12/7/12

Data File: /chem3/pid1.i/20121205-1.b/1205a006.d

Date : 05-DEC-2012 12:02

Client ID:

Sample Info: MB1205

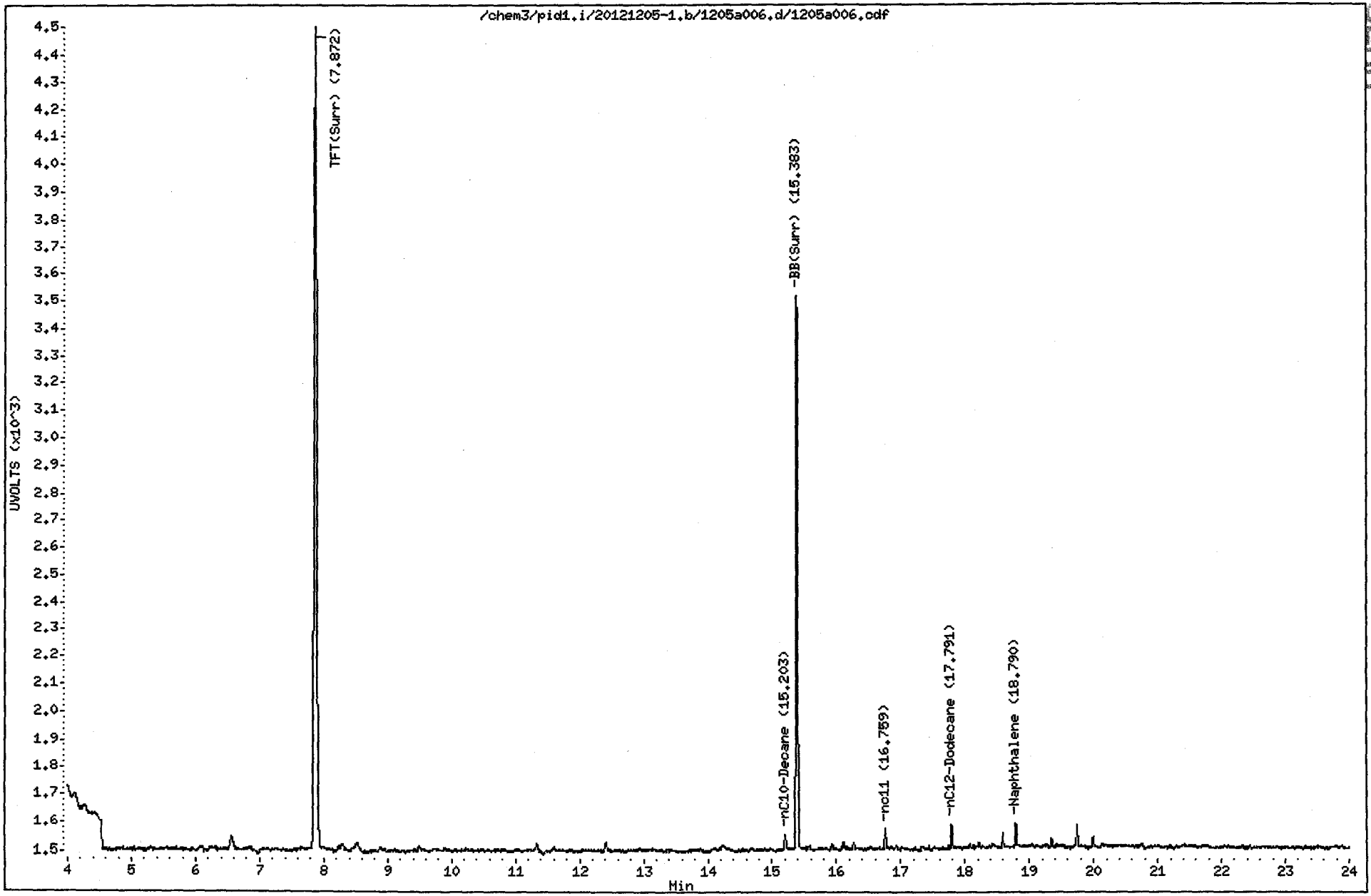
Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: PC

Column diameter: 0.18

VUTS-000419



Data File: /chem3/pid1.i/20121205-1.b/1205a018.d

Page 1

Date : 05-DEC-2012 18:36

Client ID: GP10-S-2.0

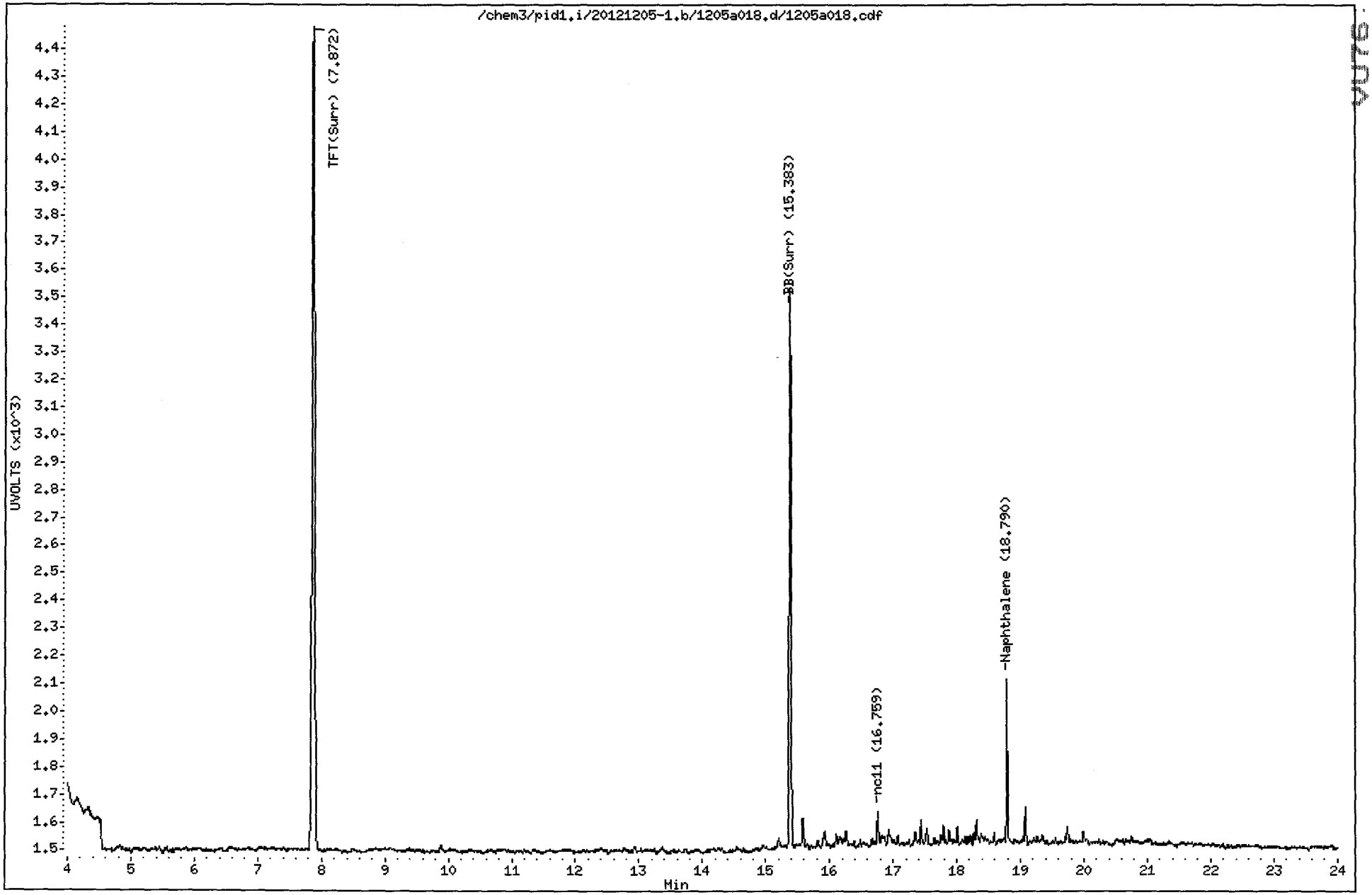
Instrument: pid1.i

Sample Info: VU76B

Operator: PC

Column phase: RTX 502-2 FID

Column diameter: 0.18



VU76-0001

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Matrix: Water

Data Release Authorized: MW
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

ARI ID	Client ID	Analysis Date	DL	Range	Result
MB-120512	Method Blank	12/05/12	1.0	Gasoline	< 0.25 U
12-23877		PID1		HC ID	---
				Trifluorotoluene	95.3%
				Bromobenzene	99.3%
VU76H	GP17-W-12.5	12/05/12	1.0	Gasoline	< 0.25 U
12-23877		PID1		HC ID	---
				Trifluorotoluene	95.0%
				Bromobenzene	96.8%
VU76I	GP-10-W-7.5	12/05/12	1.0	Gasoline	< 0.25 U
12-23878		PID1		HC ID	---
				Trifluorotoluene	96.5%
				Bromobenzene	100%
VU76J	GPDUP-W-7.5	12/05/12	1.0	Gasoline	< 0.25 U
12-23879		PID1		HC ID	---
				Trifluorotoluene	95.1%
				Bromobenzene	99.9%

Gasoline values reported in mg/L (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Page 1 of 1

Sample ID: LCS-120512
LAB CONTROL SAMPLE

Lab Sample ID: LCS-120512
LIMS ID: 12-23877
Matrix: Water
Data Release Authorized: MW
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 12/05/12 11:03
LCSD: 12/05/12 11:32
Instrument/Analyst LCS: PID1/PKC
LCSD: PID1/PKC

Purge Volume: 5.0 mL

Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	1.05	1.00	105%	1.08	1.00	108%	2.8%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	99.5%	101%
Bromobenzene	97.9%	100%

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: VU76
Matrix: Water

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02

Client ID	TFT	BBZ	TOT OUT
MB-120512	95.3%	99.3%	0
LCS-120512	99.5%	97.9%	0
LCSD-120512	101%	100%	0
GP17-W-12.5	95.0%	96.8%	0
GP-10-W-7.5	96.5%	100%	0
GPDUP-W-7.5	95.1%	99.9%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 12-23877 to 12-23879

Data File: /chem3/pid1.i/20121205-1.b/1205a004.d

Date : 05-DEC-2012 11:03

Client ID:

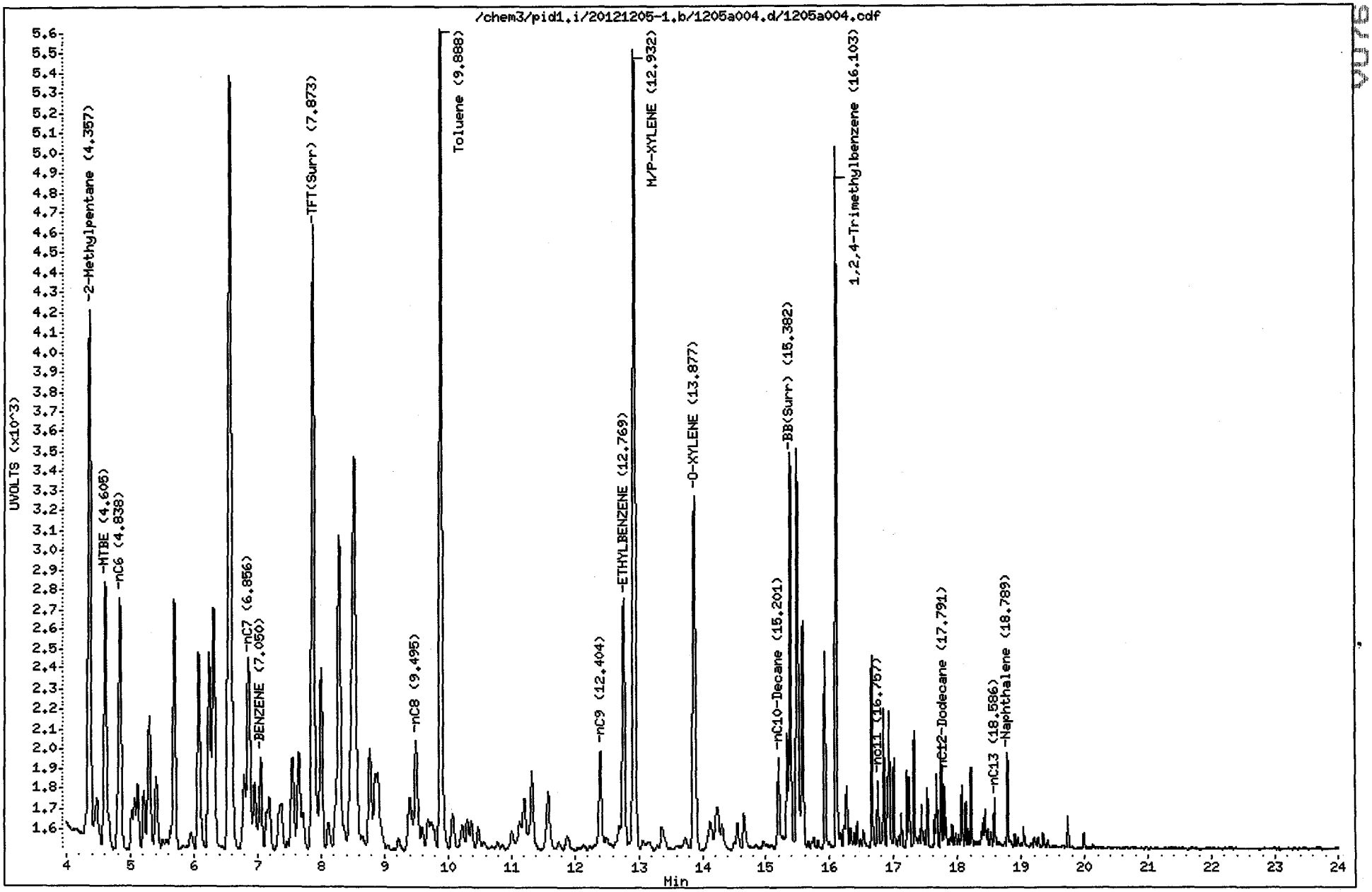
Sample Info: LCS1205

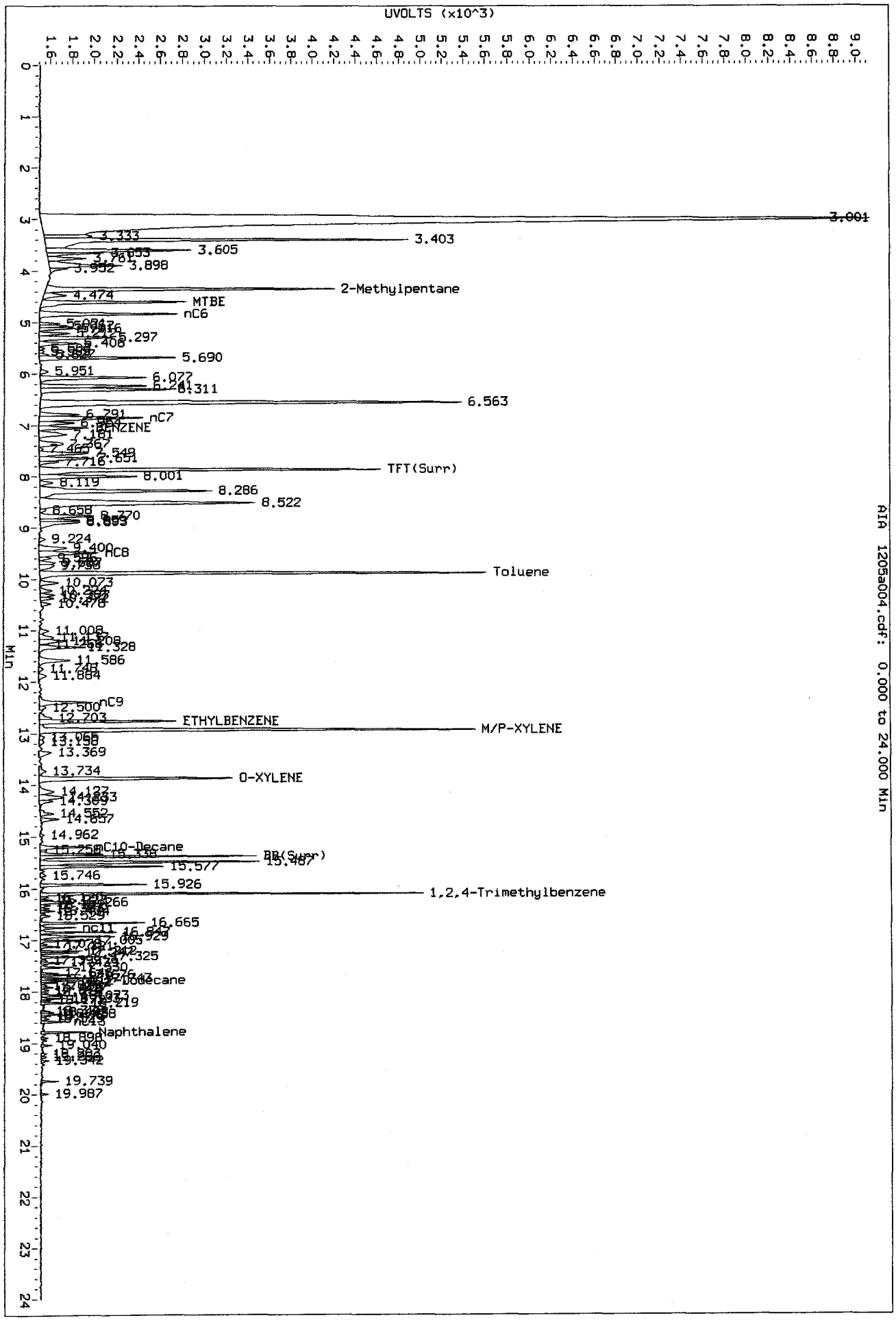
Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: PC

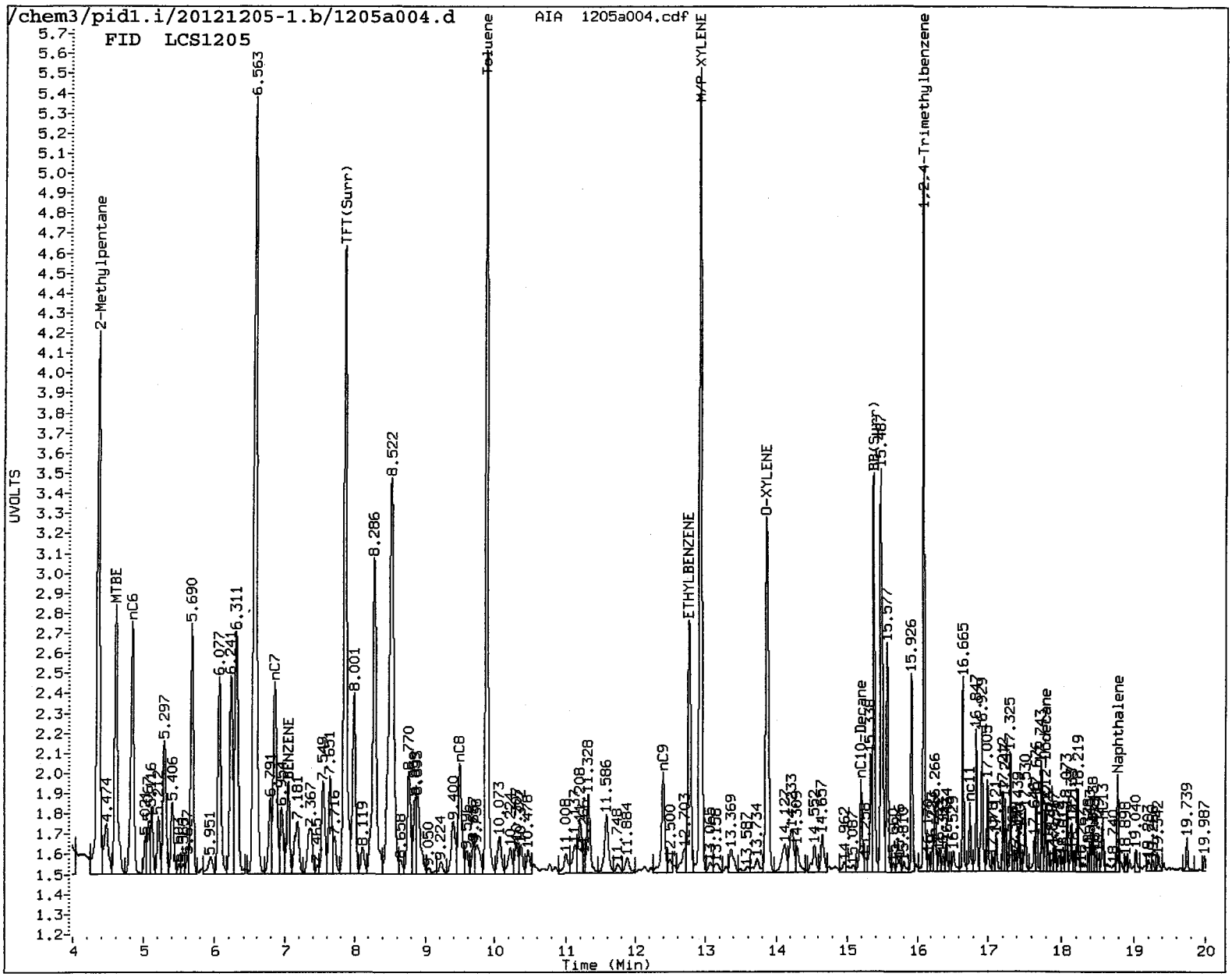
Column diameter: 0.18





Data File: /chem3/pid1.i/20121205-1.b/1205a004.d/1205a004.cdf
Injection Date: 05-DEC-2012 11:03
Instrument: pid1.i
Client Sample ID:

AIA 1205a004.cdf: 0.000 to 24.000 Min



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: YC Date: 12/7/12

Data File: /chem3/pid1.i/20121205-1.b/1205a005.d

Date : 05-DEC-2012 11:32

Client ID:

Sample Info: LCSD1205

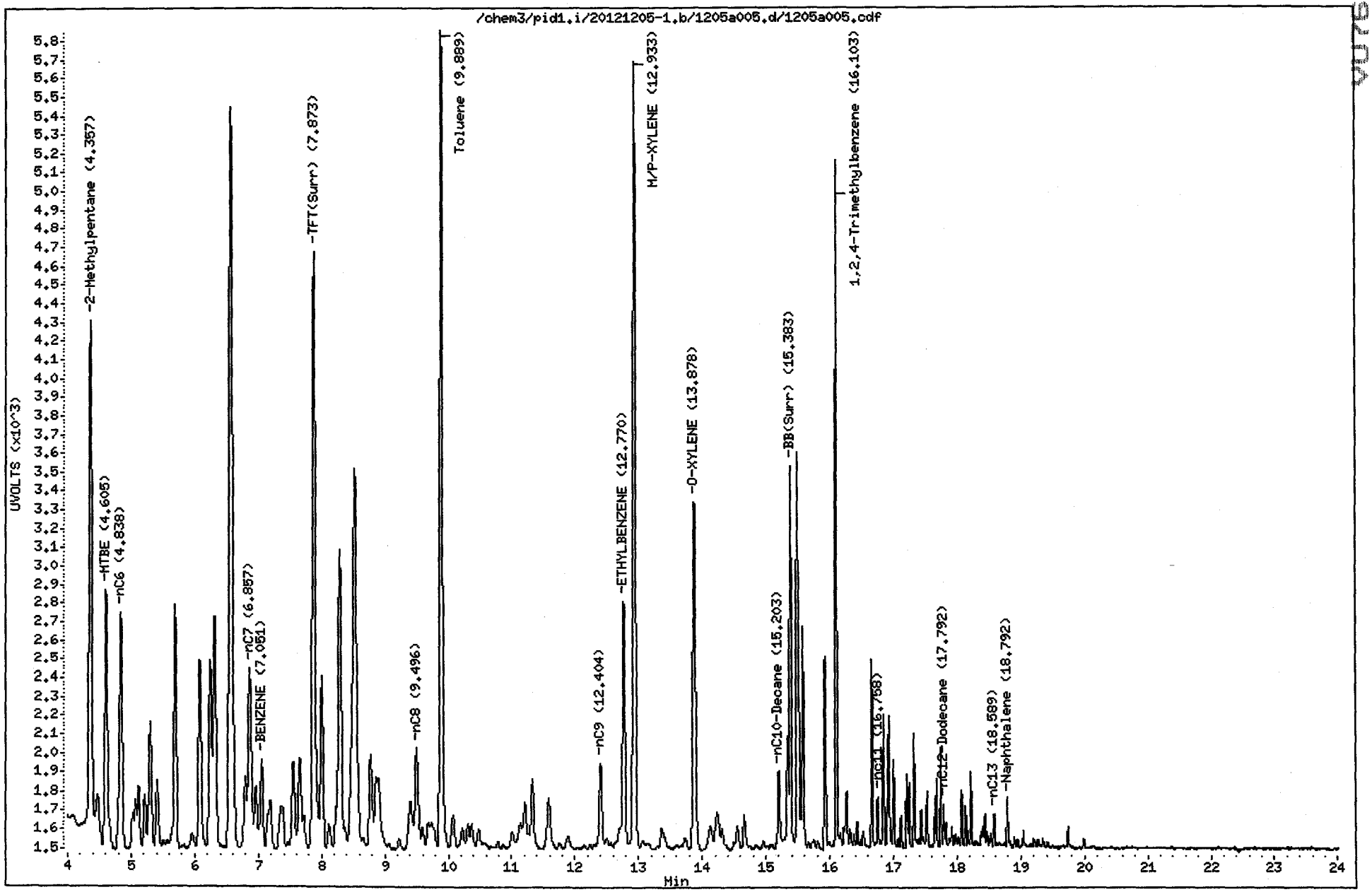
Column phase: RTX 502-2 FID

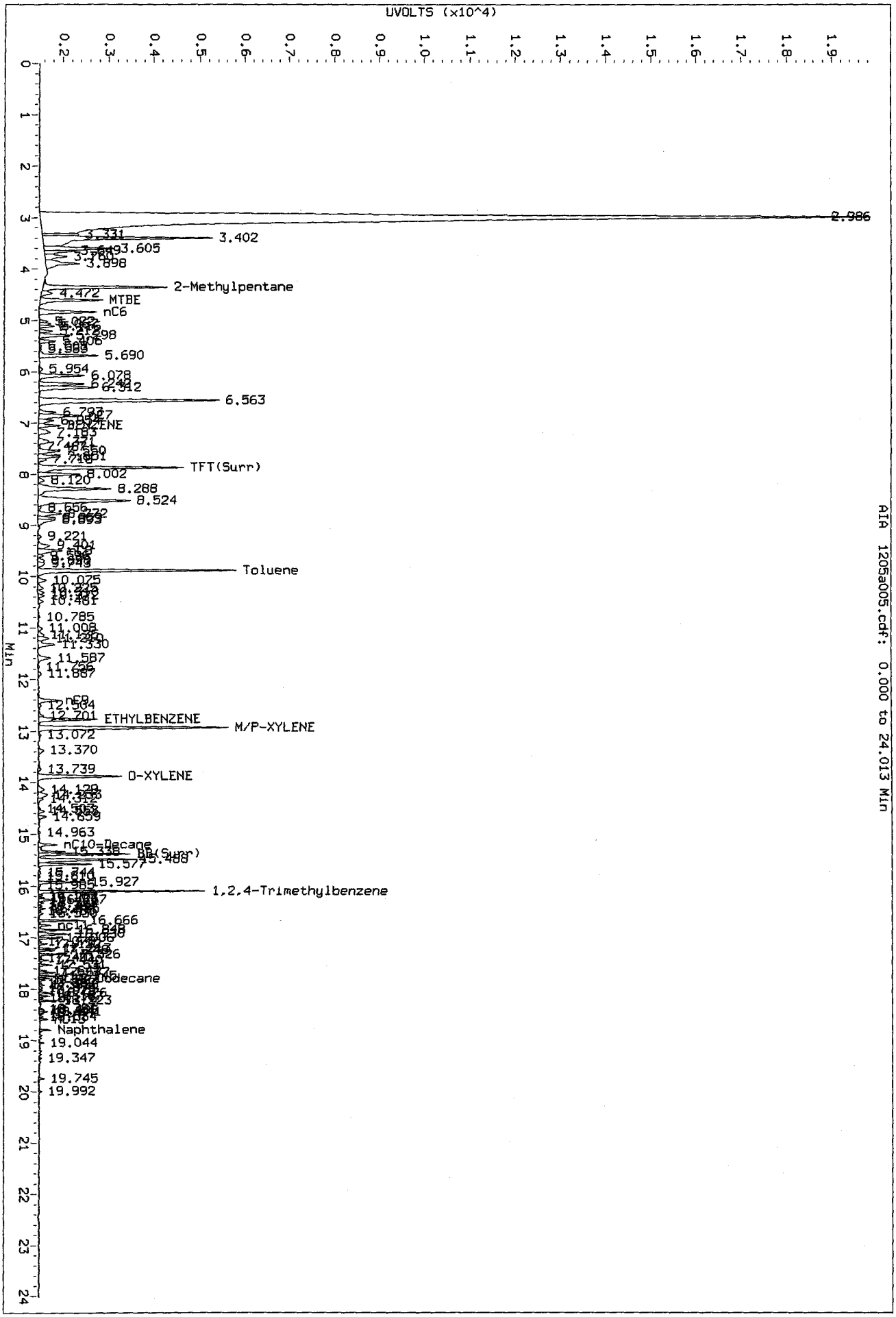
Instrument: pid1.i

Operator: PC

Column diameter: 0.18

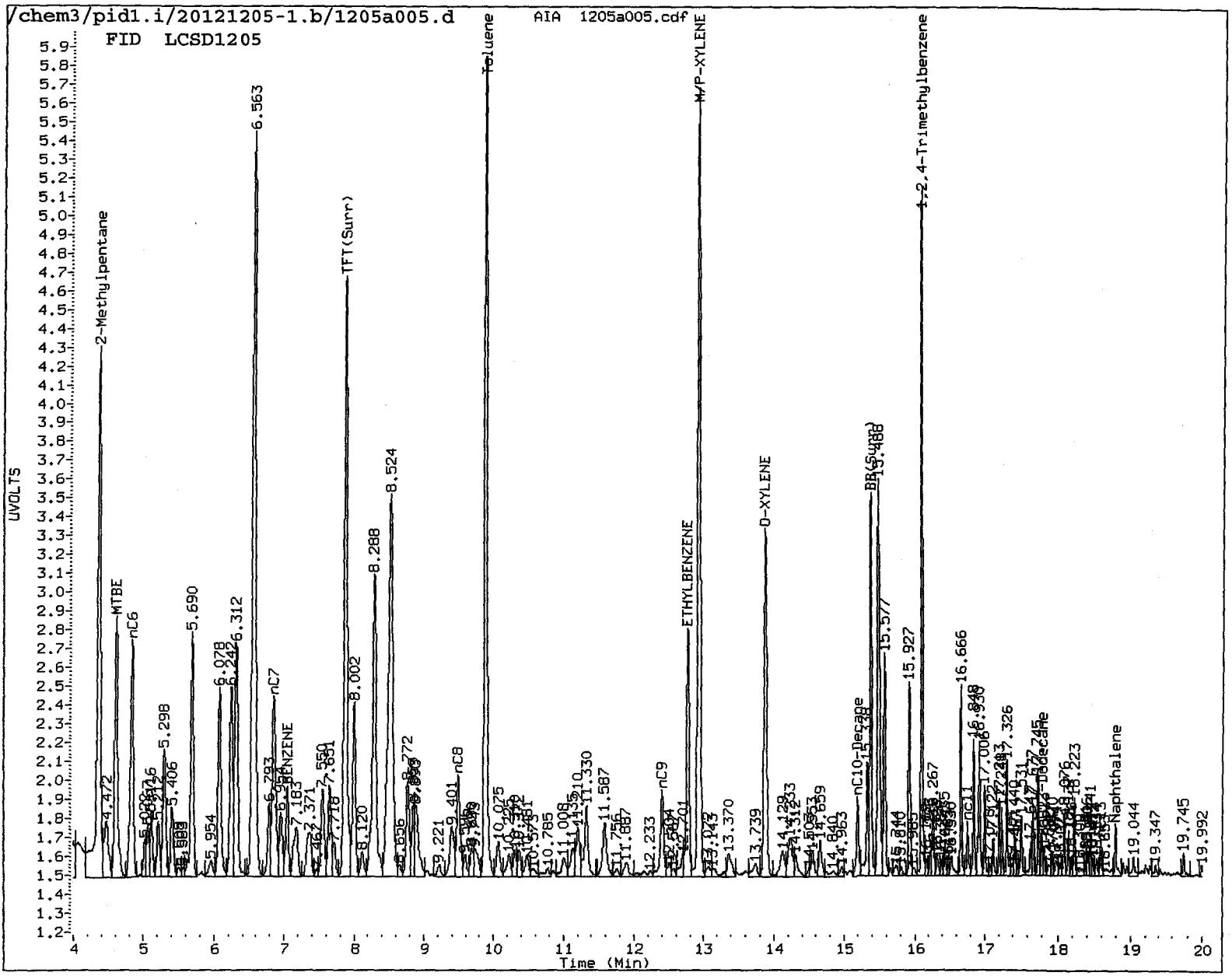
V1175 : 000113





Data File: /chem3/pid1.i/20121205-1.b/1205a005.d/1205a005.cdf
Injection Date: 05-DEC-2012 11:32
Instrument: pid1.i
Client Sample ID:

12/7/12



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: PC Date: 12/7/12

Data File: /chem3/pid1.i/20121205-1.b/1205a006.d

Date : 05-DEC-2012 12:02

Client ID:

Sample Info: MB1205

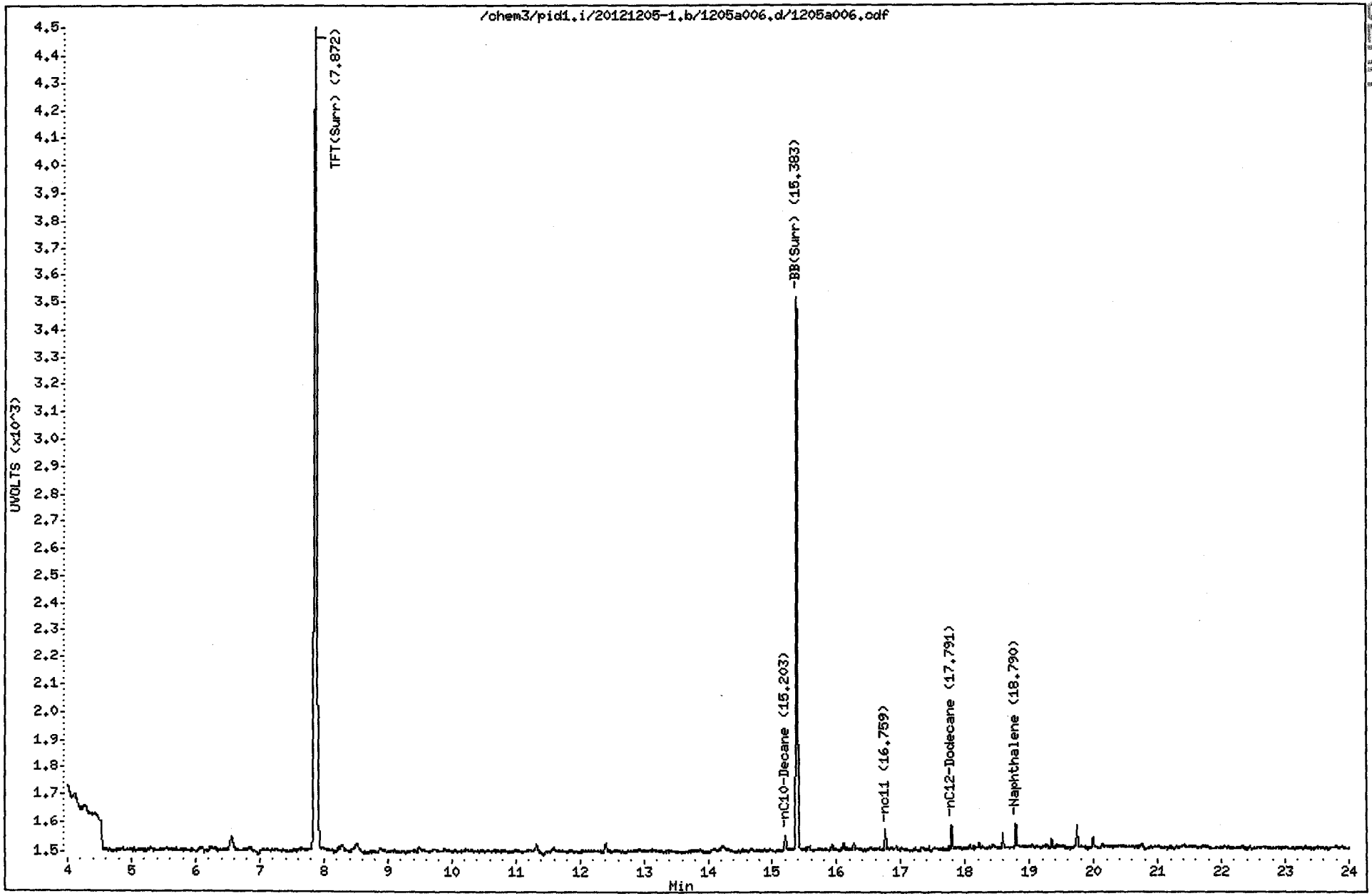
Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: PC

Column diameter: 0.18

VI75 00054



Data File: /chem3/pid1.i/20121205-1.b/1205a019.d

Page 1

Date : 05-DEC-2012 19:05

Client ID: GP17-W-12.5

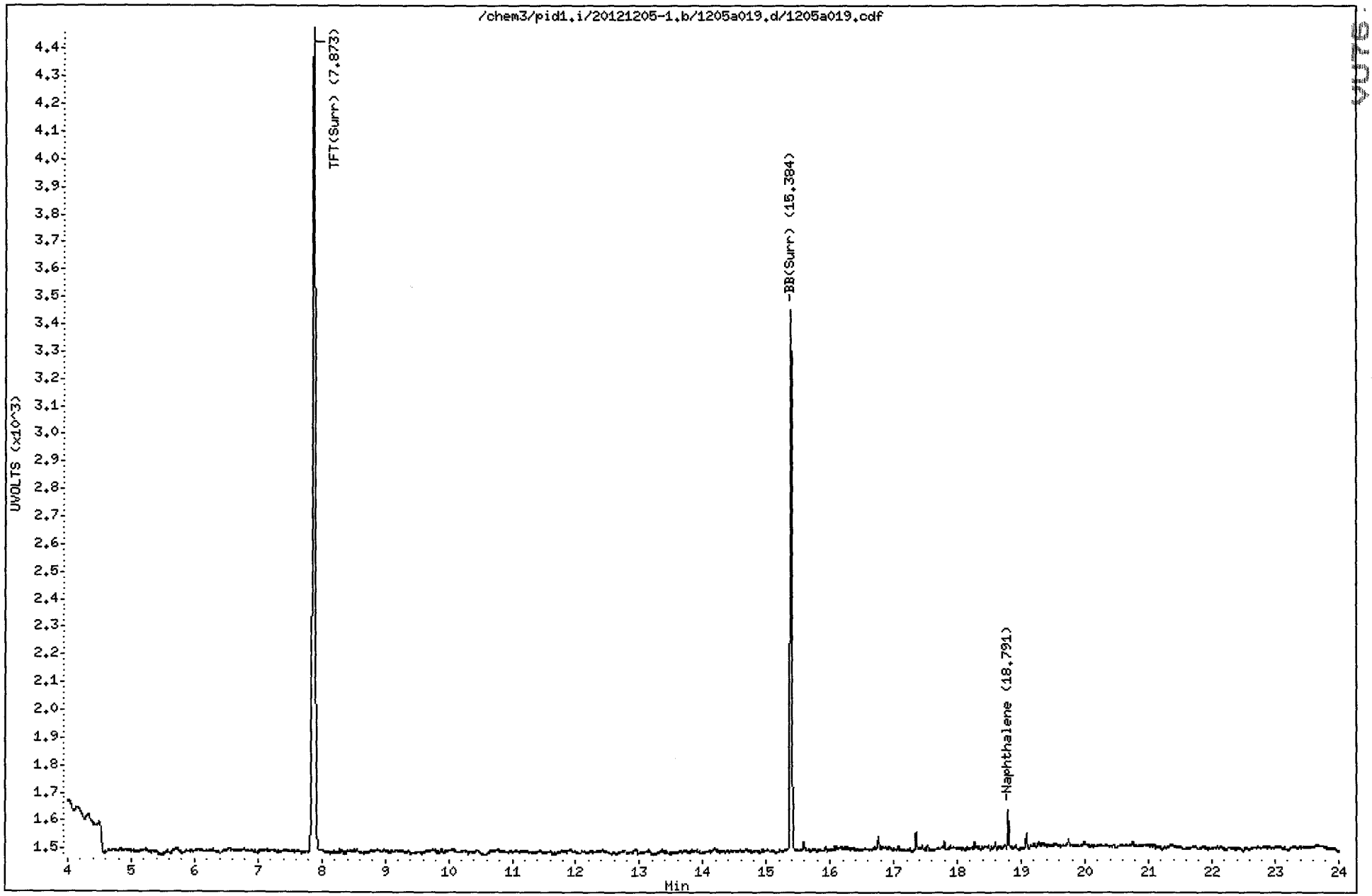
Instrument: pid1.i

Sample Info: VU76H

Operator: PC

Column phase: RTX 502-2 FID

Column diameter: 0.18



VU76 99852

Data File: /chem3/pid1.i/20121205-1.b/1205a020.d

Page 1

Date : 05-DEC-2012 19:34

Client ID: GP-10-W-7.5

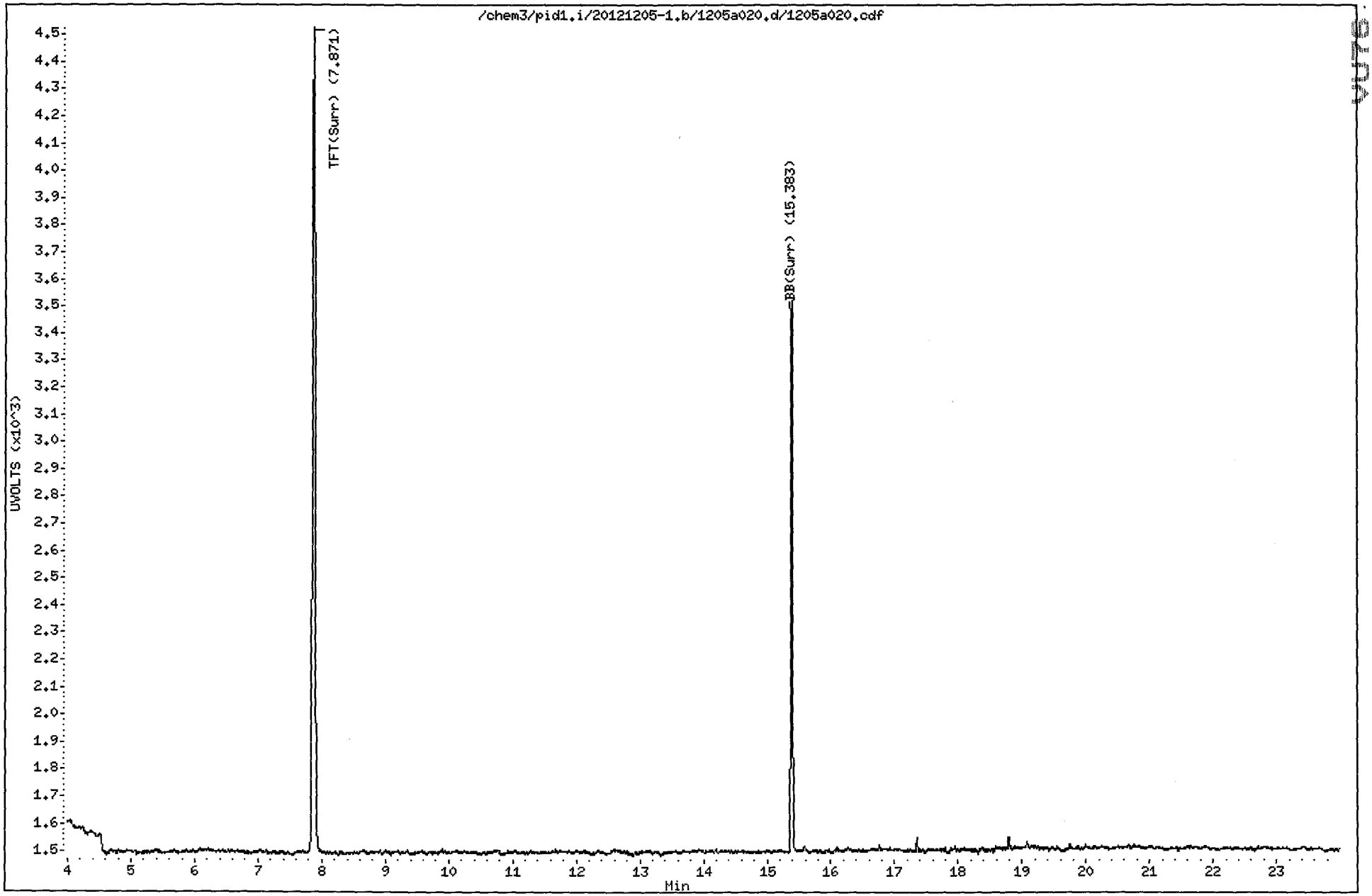
Instrument: pid1.i

Sample Info: VU76I

Operator: PC

Column phase: RTX 502-2 FID

Column diameter: 0.18



VU76 68052

Data File: /chem3/pid1.i/20121205-1.b/1205a021.d

Page 1

Date : 05-DEC-2012 20:03

Client ID: GPDUP-W-7.5

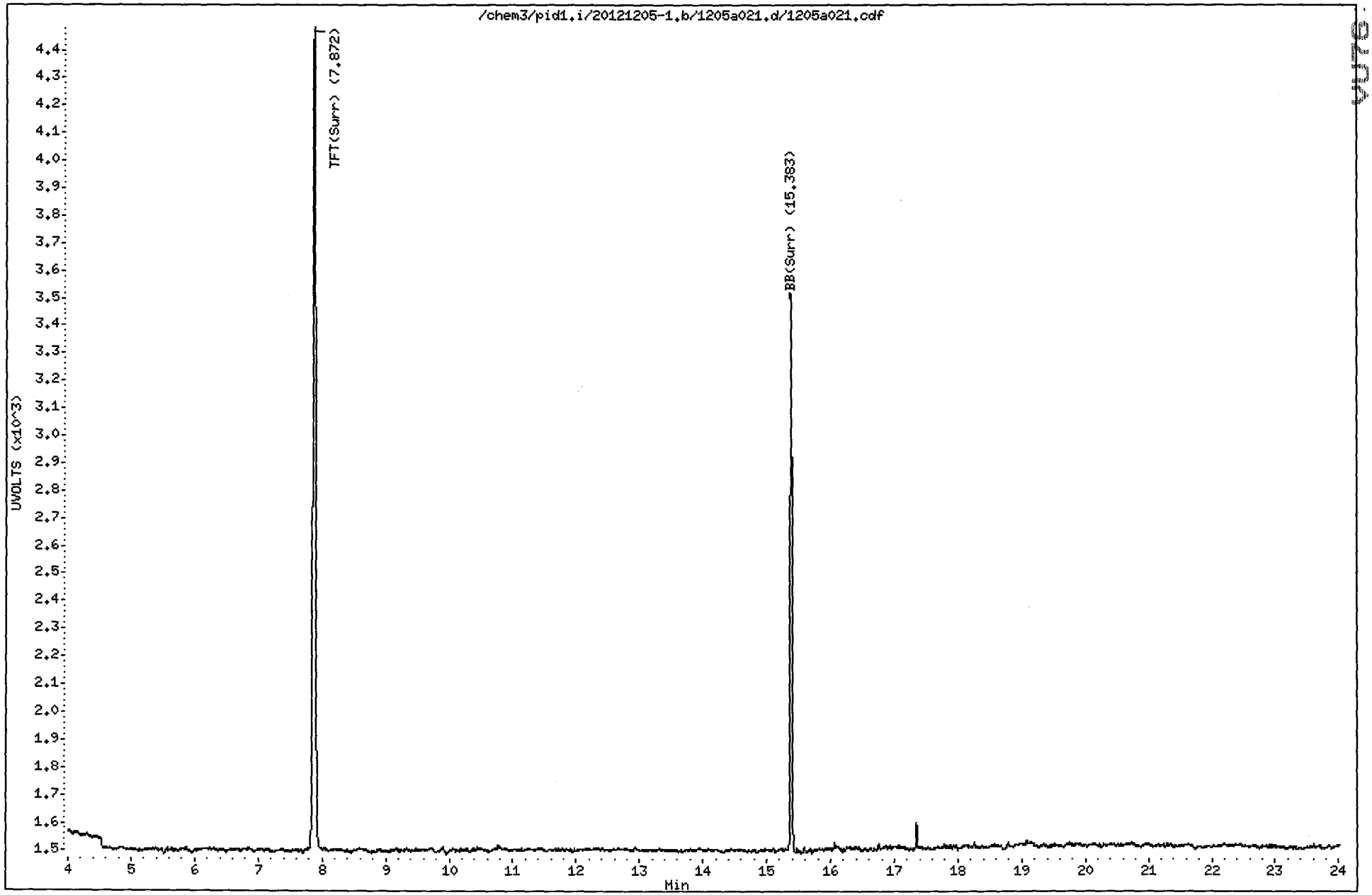
Instrument: pid1.i

Sample Info: VU76J

Operator: PC

Column phase: RTX 502-2 FID

Column diameter: 0.18



VU76 000051

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP10-S-2.0
SAMPLE

Lab Sample ID: VU76B
LIMS ID: 12-23871
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Date Extracted: 12/10/12
Date Analyzed: 12/11/12 16:08
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.14 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 28.0%

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	4.9	82
91-57-6	2-Methylnaphthalene	4.9	40
90-12-0	1-Methylnaphthalene	4.9	35
208-96-8	Acenaphthylene	4.9	28
83-32-9	Acenaphthene	4.9	5.0
86-73-7	Fluorene	4.9	12
85-01-8	Phenanthrene	4.9	190
120-12-7	Anthracene	4.9	23
206-44-0	Fluoranthene	4.9	260
129-00-0	Pyrene	4.9	300
56-55-3	Benzo(a)anthracene	4.9	110
218-01-9	Chrysene	4.9	180
50-32-8	Benzo(a)pyrene	4.9	150
193-39-5	Indeno(1,2,3-cd)pyrene	4.9	110
53-70-3	Dibenz(a,h)anthracene	4.9	30
191-24-2	Benzo(g,h,i)perylene	4.9	130
132-64-9	Dibenzofuran	4.9	20
TOTBFA	Total Benzofluoranthenes	4.9	270

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	51.0%
d14-Dibenzo(a,h)anthracen	78.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP19-S-0.7
SAMPLE

Lab Sample ID: VU76C
LIMS ID: 12-23872
Matrix: Soil
Data Release Authorized: B
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Date Extracted: 12/10/12
Date Analyzed: 12/11/12 16:40
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.26 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 31.9%

CAS Number	Analyte	RL	Result	
91-20-3	**Naphthalene**	**4.9**	**290**	
91-57-6	**2-Methylnaphthalene**	**4.9**	**930**	**E**
90-12-0	**1-Methylnaphthalene**	**4.9**	**1,500**	**ES**
208-96-8	Acenaphthylene	4.9	< 4.9	U
83-32-9	**Acenaphthene**	**4.9**	**6.8**	
86-73-7	Fluorene	4.9	< 4.9	U
85-01-8	**Phenanthrene**	**4.9**	**630**	**E**
120-12-7	**Anthracene**	**4.9**	**36**	
206-44-0	**Fluoranthene**	**4.9**	**57**	
129-00-0	**Pyrene**	**4.9**	**980**	**ES**
56-55-3	**Benzo(a)anthracene**	**4.9**	**80**	
218-01-9	**Chrysene**	**4.9**	**160**	
50-32-8	**Benzo(a)pyrene**	**4.9**	**48**	
193-39-5	**Indeno(1,2,3-cd)pyrene**	**4.9**	**7.4**	
53-70-3	**Dibenz(a,h)anthracene**	**4.9**	**15**	
191-24-2	**Benzo(g,h,i)perylene**	**4.9**	**24**	
132-64-9	**Dibenzofuran**	**4.9**	**240**	
TOTBFA	**Total Benzofluoranthenes**	**4.9**	**57**	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	52.0%
d14-Dibenzo(a,h)anthracen	66.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP19-S-0.7
DILUTION

Lab Sample ID: VU76C
LIMS ID: 12-23872
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Date Extracted: 12/10/12
Date Analyzed: 12/12/12 14:01
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.26 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 10.0
Percent Moisture: 31.9%

CAS Number	Analyte	RL	Result	
91-20-3	**Naphthalene**	**49**	**330**	
91-57-6	**2-Methylnaphthalene**	**49**	**1,100**	
90-12-0	**1-Methylnaphthalene**	**49**	**1,700**	
208-96-8	Acenaphthylene	49	< 49	U
83-32-9	Acenaphthene	49	< 49	U
86-73-7	Fluorene	49	< 49	U
85-01-8	**Phenanthrene**	**49**	**830**	
120-12-7	**Anthracene**	**49**	**32**	**J**
206-44-0	**Fluoranthene**	**49**	**93**	
129-00-0	**Pyrene**	**49**	**1,100**	
56-55-3	**Benzo(a)anthracene**	**49**	**89**	
218-01-9	**Chrysene**	**49**	**180**	
50-32-8	**Benzo(a)pyrene**	**49**	**70**	
193-39-5	Indeno(1,2,3-cd)pyrene	49	< 49	U
53-70-3	Dibenz(a,h)anthracene	49	< 49	U
191-24-2	Benzo(g,h,i)perylene	49	< 49	U
132-64-9	**Dibenzofuran**	**49**	**340**	
TOTBFA	Total Benzofluoranthenes	49	< 49	U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	46.7%
d14-Dibenzo(a,h)anthracen	73.3%

VU76:00057

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP22-S-1.8
SAMPLE

Lab Sample ID: VU76D
LIMS ID: 12-23873
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Date Extracted: 12/10/12
Date Analyzed: 12/11/12 17:11
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.67 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 18.7%

CAS Number	Analyte	RL	Result	
91-20-3	Naphthalene	4.7	650	E
91-57-6	2-Methylnaphthalene	4.7	820	E
90-12-0	1-Methylnaphthalene	4.7	760	E
208-96-8	Acenaphthylene	4.7	250	
83-32-9	Acenaphthene	4.7	32	
86-73-7	Fluorene	4.7	100	
85-01-8	Phenanthrene	4.7	1,600	ES
120-12-7	Anthracene	4.7	340	
206-44-0	Fluoranthene	4.7	1,700	ES
129-00-0	Pyrene	4.7	2,200	ES
56-55-3	Benzo(a)anthracene	4.7	730	E
218-01-9	Chrysene	4.7	930	E
50-32-8	Benzo(a)pyrene	4.7	1,000	ES
193-39-5	Indeno(1,2,3-cd)pyrene	4.7	910	E
53-70-3	Dibenz(a,h)anthracene	4.7	200	
191-24-2	Benzo(g,h,i)perylene	4.7	1,100	ES
132-64-9	Dibenzofuran	4.7	230	
TOTBFA	Total Benzofluoranthenes	4.7	1,700	E

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	55.0%
d14-Dibenzo(a,h)anthracen	72.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP22-S-1.8
DILUTION

Lab Sample ID: VU76D
LIMS ID: 12-23873
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Date Extracted: 12/10/12
Date Analyzed: 12/12/12 14:33
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.67 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 10.0
Percent Moisture: 18.7%

CAS Number	Analyte	RL	Result	
91-20-3	Naphthalene	47	770	
91-57-6	2-Methylnaphthalene	47	960	
90-12-0	1-Methylnaphthalene	47	870	
208-96-8	Acenaphthylene	47	260	
83-32-9	Acenaphthene	47	31	J
86-73-7	Fluorene	47	120	
85-01-8	Phenanthrene	47	2,100	
120-12-7	Anthracene	47	370	
206-44-0	Fluoranthene	47	2,200	
129-00-0	Pyrene	47	3,200	
56-55-3	Benzo(a)anthracene	47	830	
218-01-9	Chrysene	47	1,100	
50-32-8	Benzo(a)pyrene	47	1,200	
193-39-5	Indeno(1,2,3-cd)pyrene	47	1,000	
53-70-3	Dibenz(a,h)anthracene	47	180	
191-24-2	Benzo(g,h,i)perylene	47	1,300	
132-64-9	Dibenzofuran	47	280	
TOTBFA	Total Benzofluoranthenes	47	1,800	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	60.0%
d14-Dibenzo(a,h)anthracen	83.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP23-S-0.9
SAMPLE

Lab Sample ID: VU76E
LIMS ID: 12-23874
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Date Extracted: 12/10/12
Date Analyzed: 12/11/12 18:47
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 3.72 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 10.7%

CAS Number	Analyte	RL	Result	
91-20-3	**Naphthalene**	**13**	**74**	
91-57-6	**2-Methylnaphthalene**	**13**	**120**	
90-12-0	**1-Methylnaphthalene**	**13**	**110**	
208-96-8	**Acenaphthylene**	**13**	**15**	
83-32-9	Acenaphthene	13	< 13	U
86-73-7	**Fluorene**	**13**	**8.3**	**J**
85-01-8	**Phenanthrene**	**13**	**140**	
120-12-7	**Anthracene**	**13**	**12**	**J**
206-44-0	**Fluoranthene**	**13**	**91**	
129-00-0	**Pyrene**	**13**	**150**	
56-55-3	**Benzo(a)anthracene**	**13**	**46**	
218-01-9	**Chrysene**	**13**	**83**	
50-32-8	**Benzo(a)pyrene**	**13**	**60**	
193-39-5	**Indeno(1,2,3-cd)pyrene**	**13**	**32**	
53-70-3	**Dibenz(a,h)anthracene**	**13**	**9.8**	**J**
191-24-2	**Benzo(g,h,i)perylene**	**13**	**42**	
132-64-9	**Dibenzofuran**	**13**	**28**	
TOTBFA	**Total Benzofluoranthenes**	**13**	**130**	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	45.3%
d14-Dibenzo(a,h)anthracen	76.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546
Page 1 of 1

Sample ID: GP24-S-0.8
SAMPLE

Lab Sample ID: VU76F
LIMS ID: 12-23875
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Date Extracted: 12/10/12
Date Analyzed: 12/11/12 19:18
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.36 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 20.9%

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	4.8	1,700 ES
91-57-6	2-Methylnaphthalene	4.8	1,600 ES
90-12-0	1-Methylnaphthalene	4.8	1,300 ES
208-96-8	Acenaphthylene	4.8	810 E
83-32-9	Acenaphthene	4.8	54
86-73-7	Fluorene	4.8	130
85-01-8	Phenanthrene	4.8	1,500 ES
120-12-7	Anthracene	4.8	400
206-44-0	Fluoranthene	4.8	1,800 ES
129-00-0	Pyrene	4.8	2,600 ES
56-55-3	Benzo(a)anthracene	4.8	1,300 ES
218-01-9	Chrysene	4.8	1,600 ES
50-32-8	Benzo(a)pyrene	4.8	1,800 ES
193-39-5	Indeno(1,2,3-cd)pyrene	4.8	1,100 ES
53-70-3	Dibenz(a,h)anthracene	4.8	400
191-24-2	Benzo(g,h,i)perylene	4.8	1,200 ES
132-64-9	Dibenzofuran	4.8	310
TOTBFA	Total Benzofluoranthenes	4.8	2,500 ES

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	55.3%
d14-Dibenzo(a,h)anthracen	107%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP24-S-0.8
DILUTION

Lab Sample ID: VU76F
LIMS ID: 12-23875
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Date Extracted: 12/10/12
Date Analyzed: 12/12/12 15:05
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.36 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 10.0
Percent Moisture: 20.9%

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	48	2,100
91-57-6	2-Methylnaphthalene	48	1,900
90-12-0	1-Methylnaphthalene	48	1,400
208-96-8	Acenaphthylene	48	1,000
83-32-9	Acenaphthene	48	62
86-73-7	Fluorene	48	160
85-01-8	Phenanthrene	48	1,900
120-12-7	Anthracene	48	440
206-44-0	Fluoranthene	48	2,300
129-00-0	Pyrene	48	3,900
56-55-3	Benzo(a)anthracene	48	1,600
218-01-9	Chrysene	48	1,900
50-32-8	Benzo(a)pyrene	48	1,900
193-39-5	Indeno(1,2,3-cd)pyrene	48	1,200
53-70-3	Dibenz(a,h)anthracene	48	400
191-24-2	Benzo(g,h,i)perylene	48	1,400
132-64-9	Dibenzofuran	48	380
TOTBFA	Total Benzofluoranthenes	48	2,700

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	60.0%
d14-Dibenzo(a,h)anthracen	83.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP25-S-1.1
SAMPLE

Lab Sample ID: VU76G
LIMS ID: 12-23876
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Date Extracted: 12/10/12
Date Analyzed: 12/11/12 19:50
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.83 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 10.7%

CAS Number	Analyte	RL	Result	
91-20-3	Naphthalene	4.6	160	
91-57-6	2-Methylnaphthalene	4.6	250	
90-12-0	1-Methylnaphthalene	4.6	200	
208-96-8	Acenaphthylene	4.6	25	
83-32-9	Acenaphthene	4.6	11	
86-73-7	Fluorene	4.6	13	
85-01-8	Phenanthrene	4.6	610	E
120-12-7	Anthracene	4.6	31	
206-44-0	Fluoranthene	4.6	510	E
129-00-0	Pyrene	4.6	570	E
56-55-3	Benzo(a)anthracene	4.6	130	
218-01-9	Chrysene	4.6	270	
50-32-8	Benzo(a)pyrene	4.6	170	
193-39-5	Indeno(1,2,3-cd)pyrene	4.6	130	
53-70-3	Dibenz(a,h)anthracene	4.6	40	
191-24-2	Benzo(g,h,i)perylene	4.6	130	
132-64-9	Dibenzofuran	4.6	69	
TOTBFA	Total Benzofluoranthenes	4.6	320	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	52.0%
d14-Dibenzo(a,h)anthracen	80.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP25-S-1.1
DILUTION

Lab Sample ID: VU76G
LIMS ID: 12-23876
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Date Extracted: 12/10/12
Date Analyzed: 12/13/12 14:33
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.83 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 5.00
Percent Moisture: 10.7%

CAS Number	Analyte	RL	Result	
91-20-3	**Naphthalene**	**23**	**170**	
91-57-6	**2-Methylnaphthalene**	**23**	**270**	
90-12-0	**1-Methylnaphthalene**	**23**	**220**	
208-96-8	**Acenaphthylene**	**23**	**29**	
83-32-9	Acenaphthene	23	< 23	U
86-73-7	**Fluorene**	**23**	**15**	**J**
85-01-8	**Phenanthrene**	**23**	**660**	
120-12-7	**Anthracene**	**23**	**30**	
206-44-0	**Fluoranthene**	**23**	**530**	
129-00-0	**Pyrene**	**23**	**700**	
56-55-3	**Benzo(a)anthracene**	**23**	**130**	
218-01-9	**Chrysene**	**23**	**280**	
50-32-8	**Benzo(a)pyrene**	**23**	**180**	
193-39-5	**Indeno(1,2,3-cd)pyrene**	**23**	**120**	
53-70-3	**Dibenz(a,h)anthracene**	**23**	**29**	
191-24-2	**Benzo(g,h,i)perylene**	**23**	**150**	
132-64-9	**Dibenzofuran**	**23**	**76**	
TOTBFA	**Total Benzofluoranthenes**	**23**	**390**	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	55.0%
d14-Dibenzo(a,h)anthracen	73.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: MB-121012
METHOD BLANK

Lab Sample ID: MB-121012
LIMS ID: 12-23871
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 12/10/12
Date Analyzed: 12/11/12 13:29
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.00 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	5.0	< 5.0 U
90-12-0	1-Methylnaphthalene	5.0	< 5.0 U
208-96-8	Acenaphthylene	5.0	< 5.0 U
83-32-9	Acenaphthene	5.0	< 5.0 U
86-73-7	Fluorene	5.0	< 5.0 U
85-01-8	Phenanthrene	5.0	< 5.0 U
120-12-7	Anthracene	5.0	< 5.0 U
206-44-0	Fluoranthene	5.0	< 5.0 U
129-00-0	Pyrene	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	5.0	< 5.0 U
218-01-9	Chrysene	5.0	< 5.0 U
50-32-8	Benzo(a)pyrene	5.0	< 5.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	< 5.0 U
53-70-3	Dibenz(a,h)anthracene	5.0	< 5.0 U
191-24-2	Benzo(g,h,i)perylene	5.0	< 5.0 U
132-64-9	Dibenzofuran	5.0	< 5.0 U
TOTBFA	Total Benzofluoranthenes	5.0	< 5.0 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	57.0%
d14-Dibenzo(a,h)anthracen	95.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: LCS-121012
LAB CONTROL SAMPLE

Lab Sample ID: LCS-121012
LIMS ID: 12-23871
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 12/10/12

Sample Amount LCS: 10.00 g-dry-wt
LCSD: 10.00 g-dry-wt

Date Analyzed LCS: 12/11/12 14:01
LCSD: 12/11/12 14:33

Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL

Instrument/Analyst LCS: NT4/JZ
LCSD: NT4/JZ

Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Naphthalene	85.8	150	57.2%	80.8	150	53.9%	6.0%
2-Methylnaphthalene	79.8	150	53.2%	77.2	150	51.5%	3.3%
1-Methylnaphthalene	89.7	150	59.8%	84.1	150	56.1%	6.4%
Acenaphthylene	90.0	150	60.0%	86.6	150	57.7%	3.9%
Acenaphthene	90.2	150	60.1%	88.6	150	59.1%	1.8%
Fluorene	94.5	150	63.0%	89.3	150	59.5%	5.7%
Phenanthrene	97.6	150	65.1%	97.2	150	64.8%	0.4%
Anthracene	101	150	67.3%	101	150	67.3%	0.0%
Fluoranthene	102	150	68.0%	104	150	69.3%	1.9%
Pyrene	105	150	70.0%	110	150	73.3%	4.7%
Benzo(a)anthracene	108	150	72.0%	112	150	74.7%	3.6%
Chrysene	111	150	74.0%	114	150	76.0%	2.7%
Benzo(a)pyrene	97.2	150	64.8%	96.2	150	64.1%	1.0%
Indeno(1,2,3-cd)pyrene	115	150	76.7%	115	150	76.7%	0.0%
Dibenz(a,h)anthracene	118	150	78.7%	120	150	80.0%	1.7%
Benzo(g,h,i)perylene	105	150	70.0%	110	150	73.3%	4.7%
Dibenzofuran	89.8	150	59.9%	86.6	150	57.7%	3.6%
Total Benzofluoranthenes	304	450	67.6%	307	450	68.2%	1.0%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

SIM Semivolatile Surrogate Recovery

	LCS	LCSD
d10-2-Methylnaphthalene	54.7%	48.3%
d14-Dibenzo(a,h)anthracen	95.0%	90.3%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02

Client ID	MNP	DBA	TOT OUT
MB-121012	57.0%	95.3%	0
LCS-121012	54.7%	95.0%	0
LCSD-121012	48.3%	90.3%	0
GP10-S-2.0	51.0%	78.3%	0
GP19-S-0.7	52.0%	66.3%	0
GP19-S-0.7 DL	46.7%	73.3%	0
GP22-S-1.8	55.0%	72.0%	0
GP22-S-1.8 DL	60.0%	83.3%	0
GP23-S-0.9	45.3%	76.0%	0
GP24-S-0.8	55.3%	107%	0
GP24-S-0.8 DL	60.0%	83.3%	0
GP25-S-1.1	52.0%	80.7%	0
GP25-S-1.1 DL	55.0%	73.3%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(35-100)	(34-100)
(DBA) = d14-Dibenzo(a,h)anthracene	(37-120)	(10-117)

Prep Method: SW3546
Log Number Range: 12-23871 to 12-23876

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Extraction Method: SW3520C

Sample ID: GP-10-W-7.5
SAMPLE

Lab Sample ID: VU76I
LIMS ID: 12-23878
Matrix: Water
Data Release Authorized:
Reported: 12/10/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Date Extracted: 12/05/12
Date Analyzed: 12/07/12 17:05
Instrument/Analyst: NT4/JZ

Sample Amount: 475 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.21	< 0.21 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	45.7%
d14-Dibenzo(a,h)anthracene	74.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Extraction Method: SW3520C
Page 1 of 1

Sample ID: GPDUP-W-7.5
SAMPLE

Lab Sample ID: VU76J
LIMS ID: 12-23879
Matrix: Water
Data Release Authorized:
Reported: 12/10/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Date Extracted: 12/05/12
Date Analyzed: 12/07/12 17:37
Instrument/Analyst: NT4/JZ

Sample Amount: 465 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.11	< 0.11 U
91-57-6	2-Methylnaphthalene	0.11	< 0.11 U
90-12-0	1-Methylnaphthalene	0.11	< 0.11 U
208-96-8	Acenaphthylene	0.11	< 0.11 U
83-32-9	Acenaphthene	0.11	< 0.11 U
86-73-7	Fluorene	0.11	< 0.11 U
85-01-8	Phenanthrene	0.11	< 0.11 U
120-12-7	Anthracene	0.11	< 0.11 U
206-44-0	Fluoranthene	0.11	< 0.11 U
129-00-0	Pyrene	0.11	< 0.11 U
56-55-3	Benzo(a)anthracene	0.11	< 0.11 U
218-01-9	Chrysene	0.11	< 0.11 U
50-32-8	Benzo(a)pyrene	0.11	< 0.11 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.11	< 0.11 U
53-70-3	Dibenz(a,h)anthracene	0.11	< 0.11 U
191-24-2	Benzo(g,h,i)perylene	0.11	< 0.11 U
132-64-9	Dibenzofuran	0.11	< 0.11 U
TOTBFA	Total Benzofluoranthenes	0.22	< 0.22 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	46.3%
d14-Dibenzo(a,h)anthracene	73.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Extraction Method: SW3520C

Sample ID: MB-120512
METHOD BLANK

Lab Sample ID: MB-120512
LIMS ID: 12-23878
Matrix: Water
Data Release Authorized:
Reported: 12/10/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 12/05/12
Date Analyzed: 12/07/12 13:24
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	54.0%
d14-Dibenzo(a,h)anthracene	101%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: LCS-120512
LAB CONTROL SAMPLE

Lab Sample ID: LCS-120512
LIMS ID: 12-23878
Matrix: Water
Data Release Authorized:
Reported: 12/10/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 12/05/12
Date Analyzed LCS: 12/07/12 13:55
Instrument/Analyst LCS: NT4/JZ

Sample Amount LCS: 500 mL
Final Extract Volume LCS: 0.50 mL
Dilution Factor LCS: 1.00

Analyte	LCS	Spike Added	Recovery
Naphthalene	1.62	3.00	54.0%
2-Methylnaphthalene	1.50	3.00	50.0%
1-Methylnaphthalene	1.69	3.00	56.3%
Acenaphthylene	1.76	3.00	58.7%
Acenaphthene	1.81	3.00	60.3%
Fluorene	1.83	3.00	61.0%
Phenanthrene	1.93	3.00	64.3%
Anthracene	1.93	3.00	64.3%
Fluoranthene	2.10	3.00	70.0%
Pyrene	2.17	3.00	72.3%
Benzo(a)anthracene	2.11	3.00	70.3%
Chrysene	2.21	3.00	73.7%
Benzo(a)pyrene	1.96	3.00	65.3%
Indeno(1,2,3-cd)pyrene	2.30	3.00	76.7%
Dibenz(a,h)anthracene	2.26	3.00	75.3%
Benzo(g,h,i)perylene	2.20	3.00	73.3%
Dibenzofuran	1.80	3.00	60.0%
Total Benzofluoranthenes	6.66	9.00	74.0%

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	53.3%
d14-Dibenzo(a,h)anthracene	83.3%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02

Client ID	MNP	DBA	TOT OUT
MB-120512	54.0%	101%	0
LCS-120512	53.3%	83.3%	0
GP-10-W-7.5	45.7%	74.7%	0
GPDUP-W-7.5	46.3%	73.3%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(40-110)	(33-107)
(DBA) = d14-Dibenzo(a,h)anthracene	(33-140)	(10-142)

Prep Method: SW3520C
Log Number Range: 12-23878 to 12-23879

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082A
Extraction Method: SW3546
Page 1 of 1

Sample ID: GP10-S-2.0
SAMPLE

Lab Sample ID: VU76B
LIMS ID: 12-23871
Matrix: Soil
Data Release Authorized:
Reported: 12/14/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Date Extracted: 12/08/12
Date Analyzed: 12/11/12 19:56
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.3 g-dry-wt
Final Extract Volume: 4.00 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 28.0%

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	32	< 32 U
53469-21-9	Aroclor 1242	32	< 32 U
12672-29-6	Aroclor 1248	32	< 32 U
11097-69-1	Aroclor 1254	32	< 32 U
11096-82-5	Aroclor 1260	32	< 32 U
11104-28-2	Aroclor 1221	32	< 32 U
11141-16-5	Aroclor 1232	32	< 32 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	156%
Tetrachlorometaxylene	89.0%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082A
Extraction Method: SW3546

Sample ID: MB-120812
METHOD BLANK

Lab Sample ID: MB-120812
LIMS ID: 12-23871
Matrix: Soil
Data Release Authorized:
Reported: 12/14/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 12/08/12
Date Analyzed: 12/11/12 18:37
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.0 g
Final Extract Volume: 4.00 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: NA

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	33	< 33 U
53469-21-9	Aroclor 1242	33	< 33 U
12672-29-6	Aroclor 1248	33	< 33 U
11097-69-1	Aroclor 1254	33	< 33 U
11096-82-5	Aroclor 1260	33	< 33 U
11104-28-2	Aroclor 1221	33	< 33 U
11141-16-5	Aroclor 1232	33	< 33 U

Reported in µg/kg (ppb)

PCB Surrogate Recovery

Decachlorobiphenyl	88.0%
Tetrachlorometaxylene	90.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082A
Page 1 of 1

Sample ID: LCS-120812
LAB CONTROL

Lab Sample ID: LCS-120812
LIMS ID: 12-23871
Matrix: Soil
Data Release Authorized:
Reported: 12/14/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 12/08/12
Date Analyzed: 12/11/12 18:57
Instrument/Analyst: ECD5/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes
Acid Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 12.0 g-dry-wt
Final Extract Volume: 4.00 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
Aroclor 1016	149	167	89.2%
Aroclor 1260	152	167	91.0%

PCB Surrogate Recovery

Decachlorobiphenyl	90.2%
Tetrachlorometaxylene	86.2%

Results reported in µg/kg (ppb)

ANALYTICAL RESOURCES INCORPORATED

SW8082/PCB SOIL/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-120812	88.0%	49-126	90.8%	53-108	0
LCS-120812	90.2%	49-126	86.2%	53-108	0
GP10-S-2.0	156%*	31-140	89.0%	39-122	1

Microwave (MARS) Control Limits PCBSMI
Prep Method: SW3546
Log Number Range: 12-23871 to 12-23871

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS

NWTPHD by GC/FID
Extraction Method: SW3546
Page 1 of 1

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02

Matrix: Soil

Date Received: 12/04/12

Data Release Authorized:
Reported: 12/07/12

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range/Surrogate	RL	Result
MB-120512	Method Blank	12/05/12	12/06/12	1.00	Diesel Range	5.0	< 5.0 U
12-23870	HC ID: ---		FID4A	1.0	Motor Oil Range	10	< 10 U
					o-Terphenyl		98.5%
VU76A	GP17-S-9.5	12/05/12	12/06/12	1.00	**Diesel Range**	**7.2**	**13**
12-23870	HC ID: **DRO/MOTOR OIL**		FID4A	1.0	**Motor Oil Range**	**14**	**51**
					o-Terphenyl		82.8%
VU76B	GP10-S-2.0	12/05/12	12/06/12	1.00	**Diesel Range**	**6.9**	**58**
12-23871	HC ID: **DIESEL/MOTOR OIL**		FID4A	1.0	**Motor Oil Range**	**14**	**160**
					o-Terphenyl		81.2%

Reported in mg/kg (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: LCS-120512
LAB CONTROL

Lab Sample ID: LCS-120512
LIMS ID: 12-23870
Matrix: Soil
Data Release Authorized:
Reported: 12/07/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 12/05/12
Date Analyzed: 12/06/12 21:55
Instrument/Analyst: FID4A/JGR

Sample Amount: 10.0 g-dry-wt
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
Diesel	127	150	84.7%

TPHD Surrogate Recovery

o-Terphenyl	91.6%

Results reported in mg/kg

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

Matrix: Soil
Date Received: 12/04/12

ARI Job: VU76
Project: Sims - N Cascade Ford
0747.01.02

ARI ID	Client ID	Client Amt	Final Vol	Basis	Prep Date
12-23870-120512MB1	Method Blank	10.0 g	1.00 mL	-	12/05/12
12-23870-120512LCS1	Lab Control	10.0 g	1.00 mL	-	12/05/12
12-23870-VU76A	GP17-S-9.5	6.92 g	1.00 mL	D	12/05/12
12-23871-VU76B	GP10-S-2.0	7.26 g	1.00 mL	D	12/05/12

Basis: D=Dry Weight W=As Received

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02

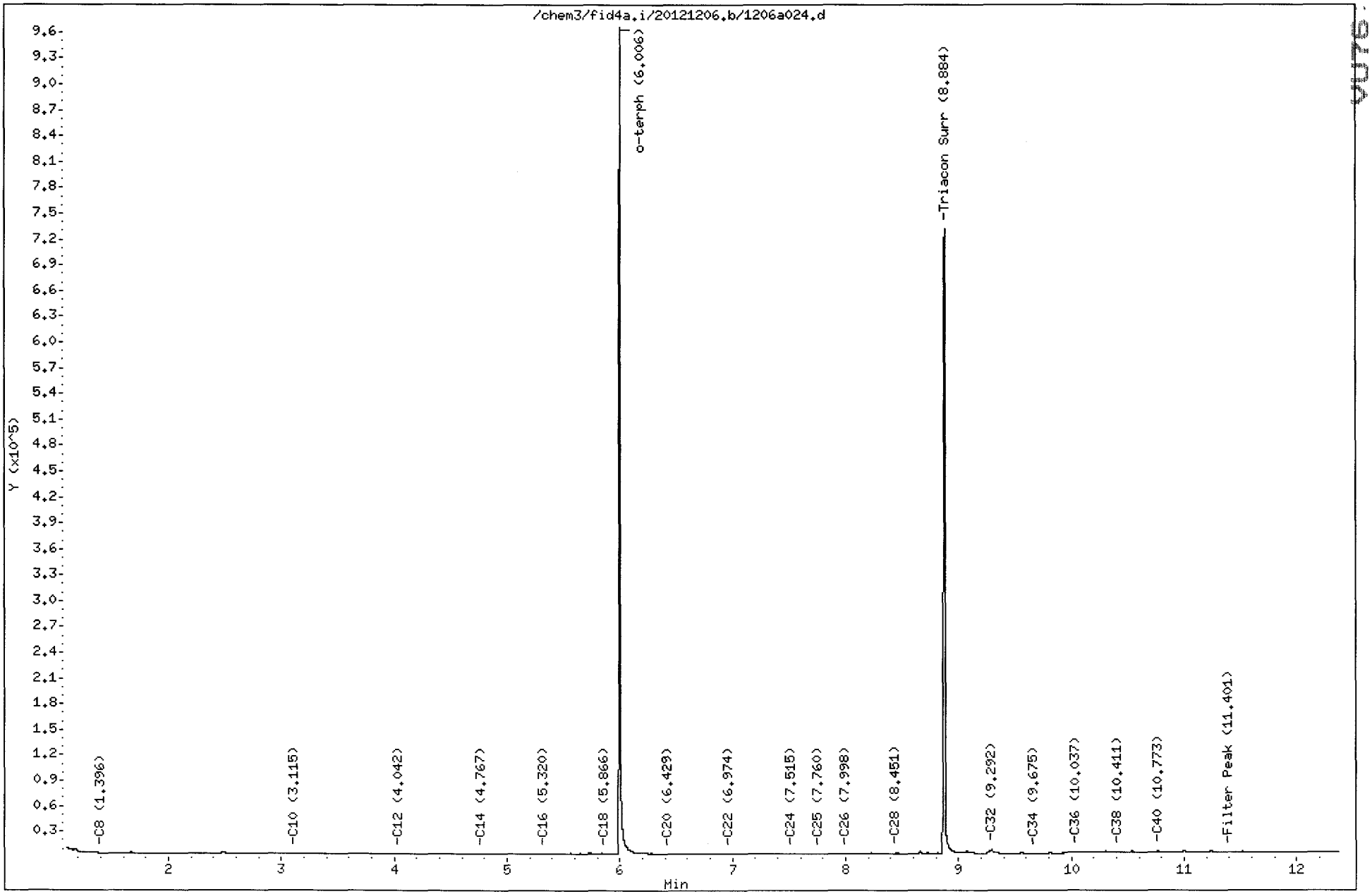
Client ID	OTER	TOT OUT
120512MBS	98.5%	0
120512LCS	91.6%	0
GP17-S-9.5	82.8%	0
GP10-S-2.0	81.2%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3546
Log Number Range: 12-23870 to 12-23871

Data File: /chem3/fid4a.i/20121206.b/1206a024.d
Date : 06-DEC-2012 21:35
Client ID:
Sample Info: VU67MBS1

Instrument: fid4a.i
Operator: JR/VTS
Column phase: RTX-1
Column diameter: 0.25



VU67 00241

Data File: /chem3/fid4a.i/20121206.b/1206a025.d

Date : 06-DEC-2012 21:55

Client ID:

Sample Info: VU67LCSS1

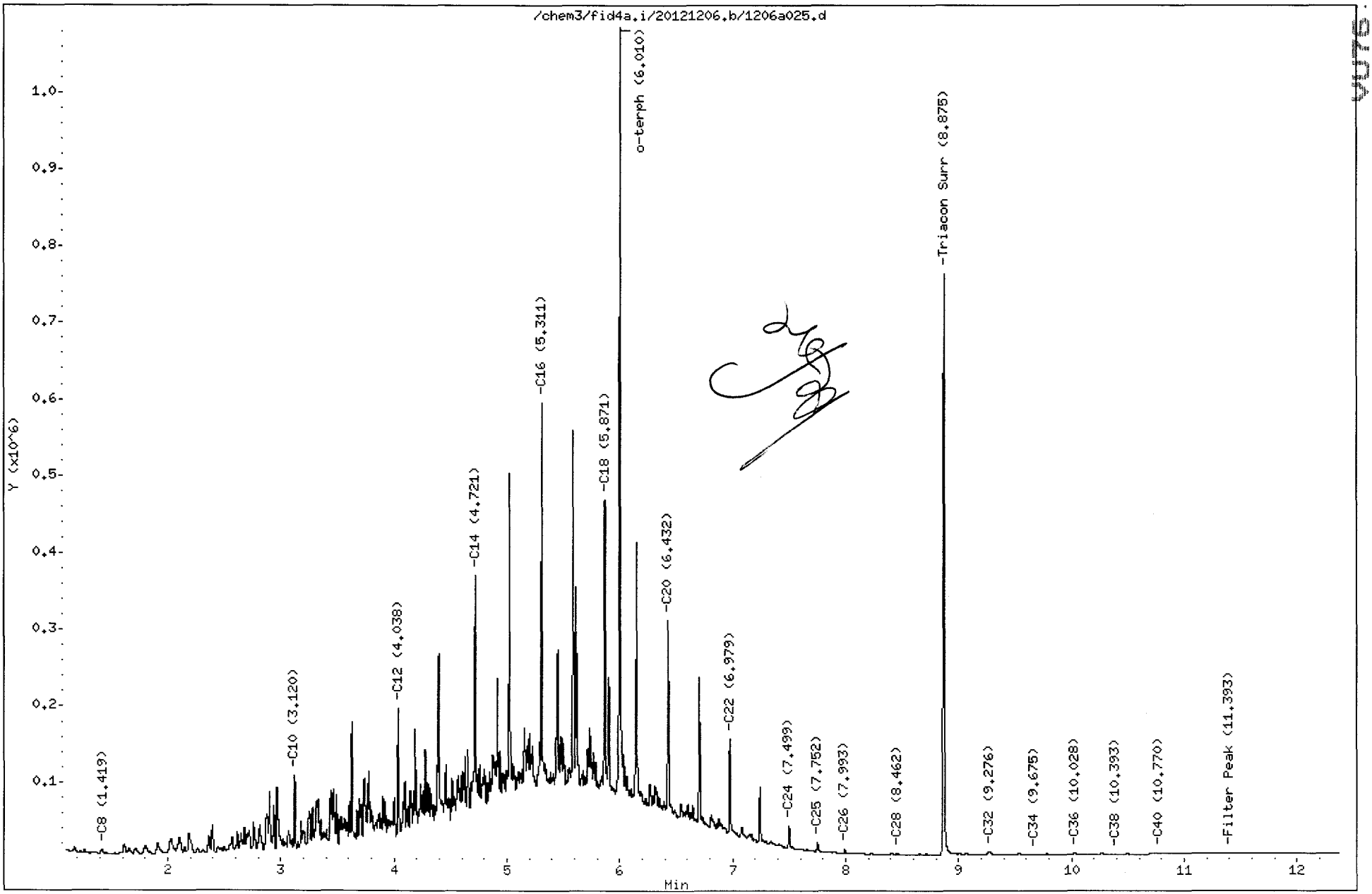
Column phase: RTX-1

Instrument: fid4a.i

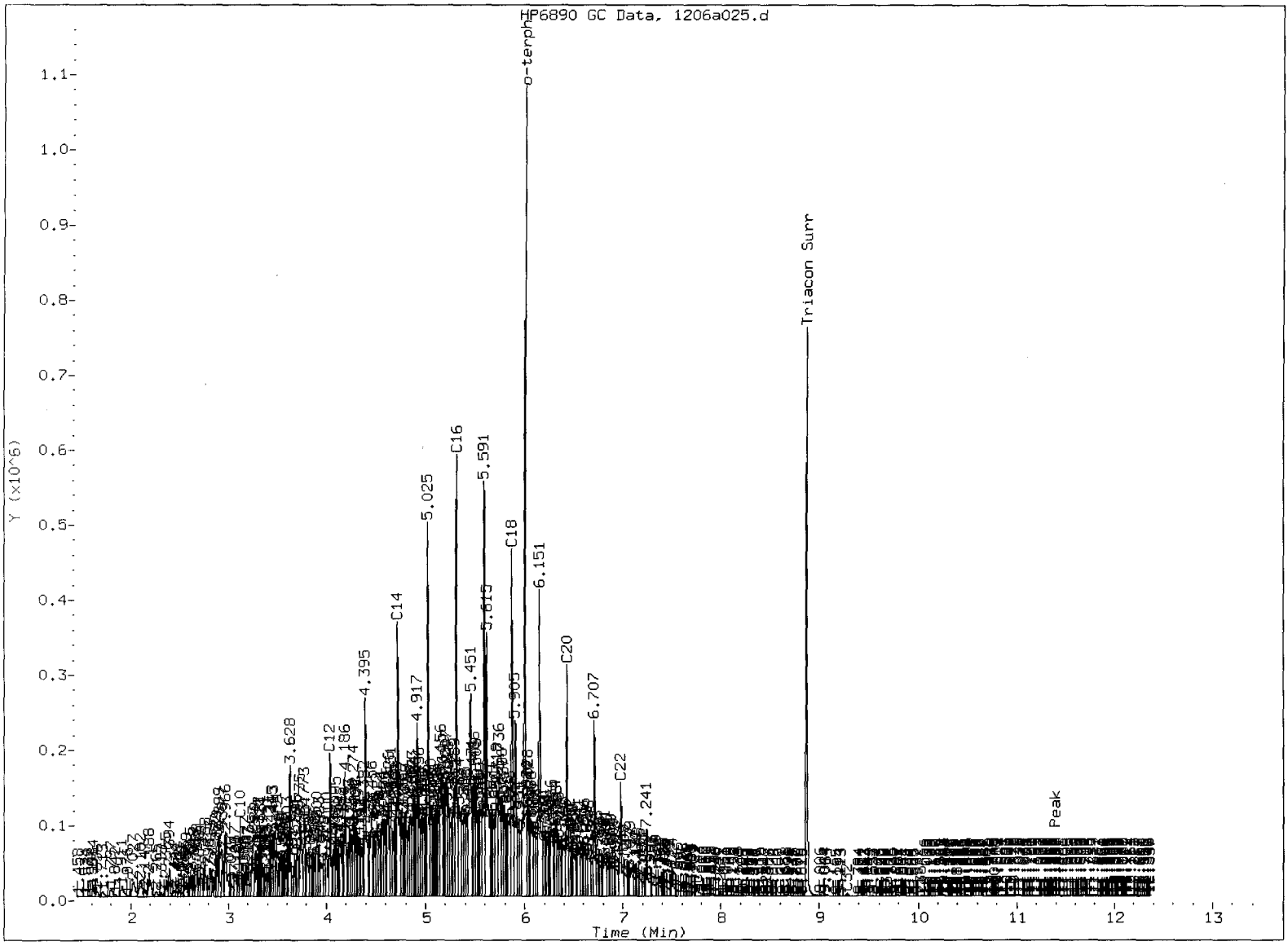
Operator: JR/VTS

Column diameter: 0.25

VU67-000012



FID:4A-2C/RTX-1 VU67LCSS1 FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: _____ Date: 12/07/11

Data File: /chem3/fid4a.i/20121206.b/1206a028.d

Date : 06-DEC-2012 22:58

Client ID:

Sample Info: VU76A

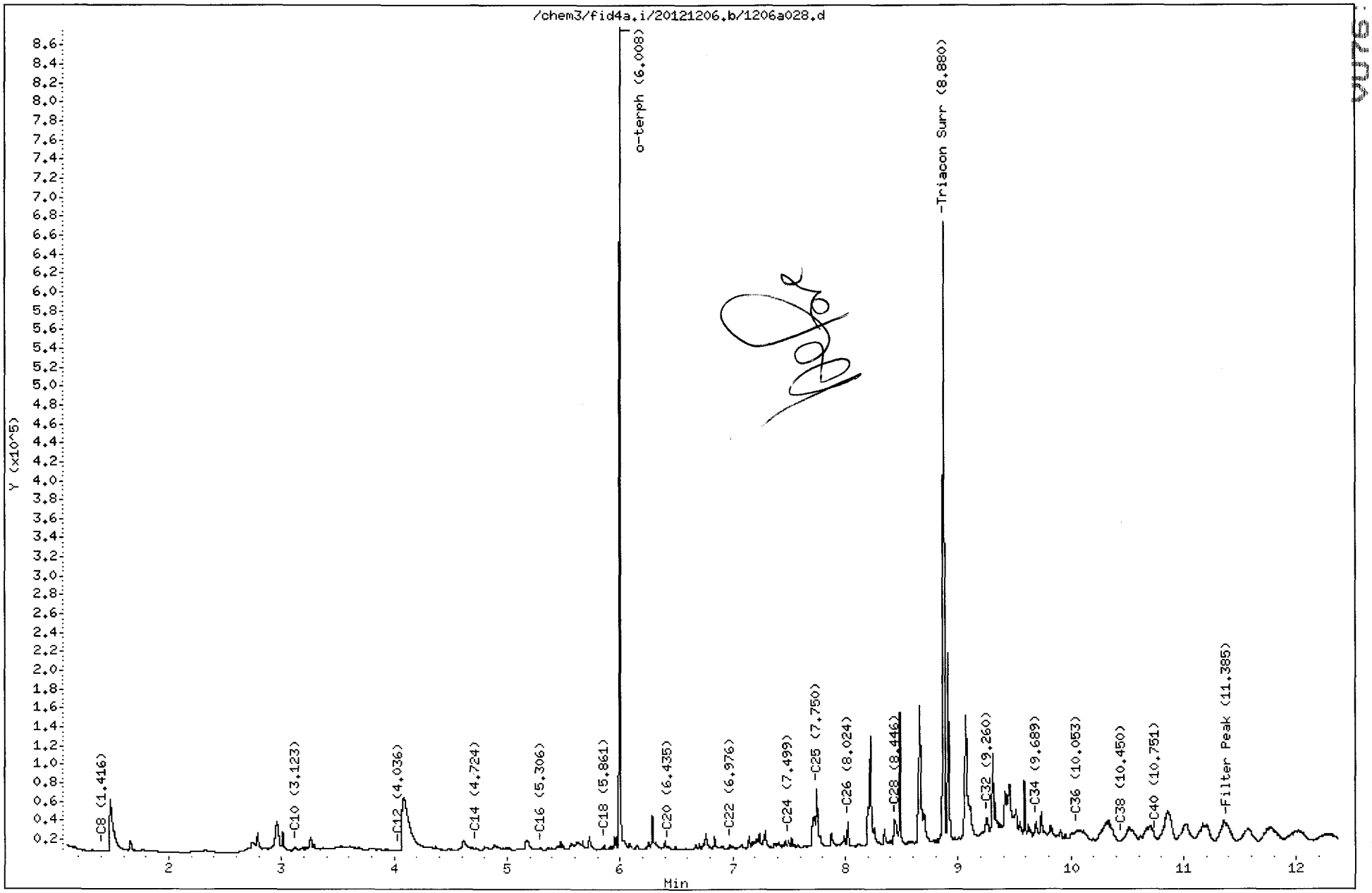
Column phase: RTX-1

Instrument: fid4a.i

Operator: JR/VTS

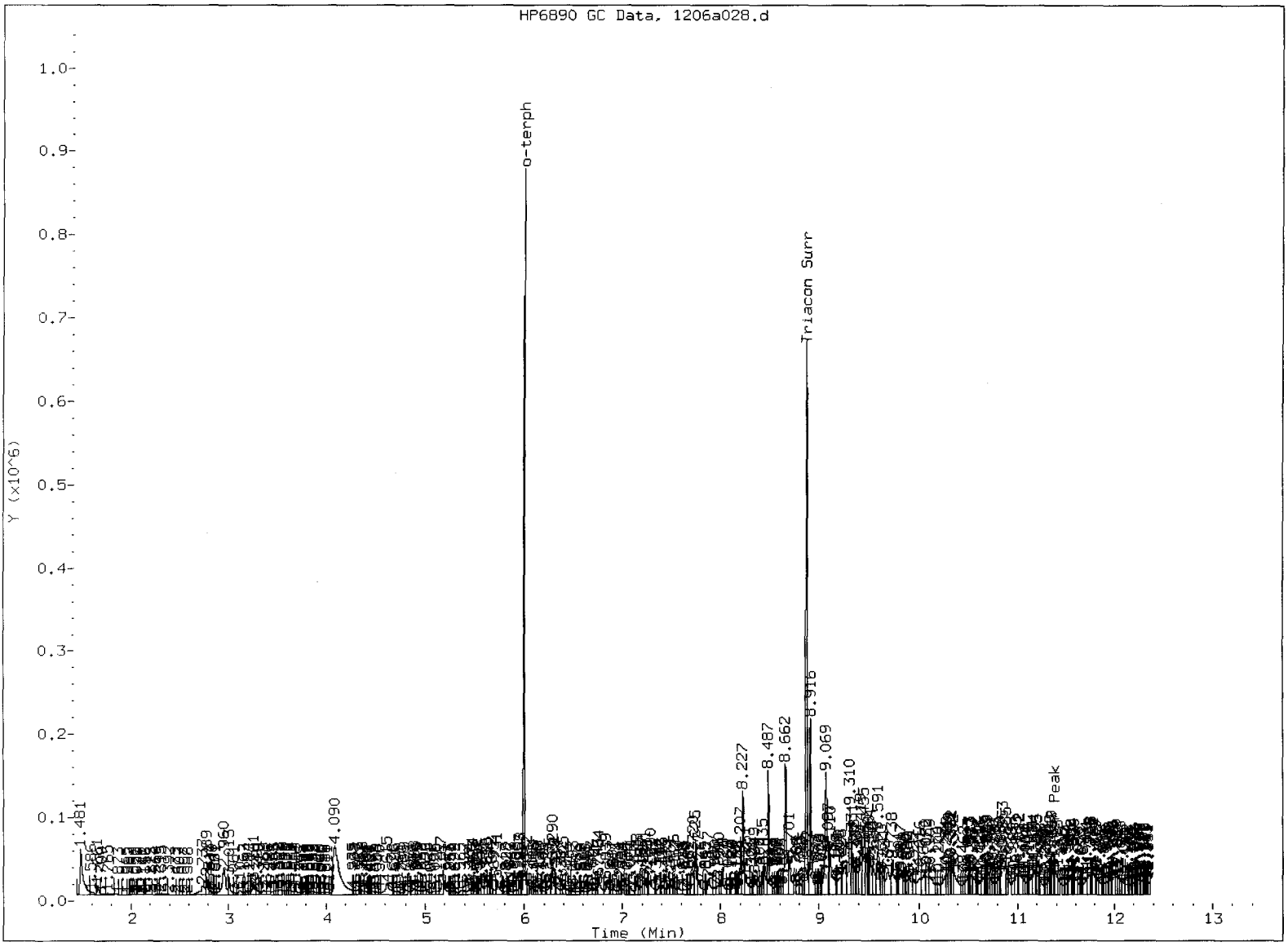
Column diameter: 0.25

VU76-060941



FID:4A-2C/RTX-1 VU76A

FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: _____ Date: 12/07/12

Data File: /chem3/fid4a.i/20121206.b/1206a029.d

Date : 06-DEC-2012 23:18

Client ID:

Sample Info: VU76B

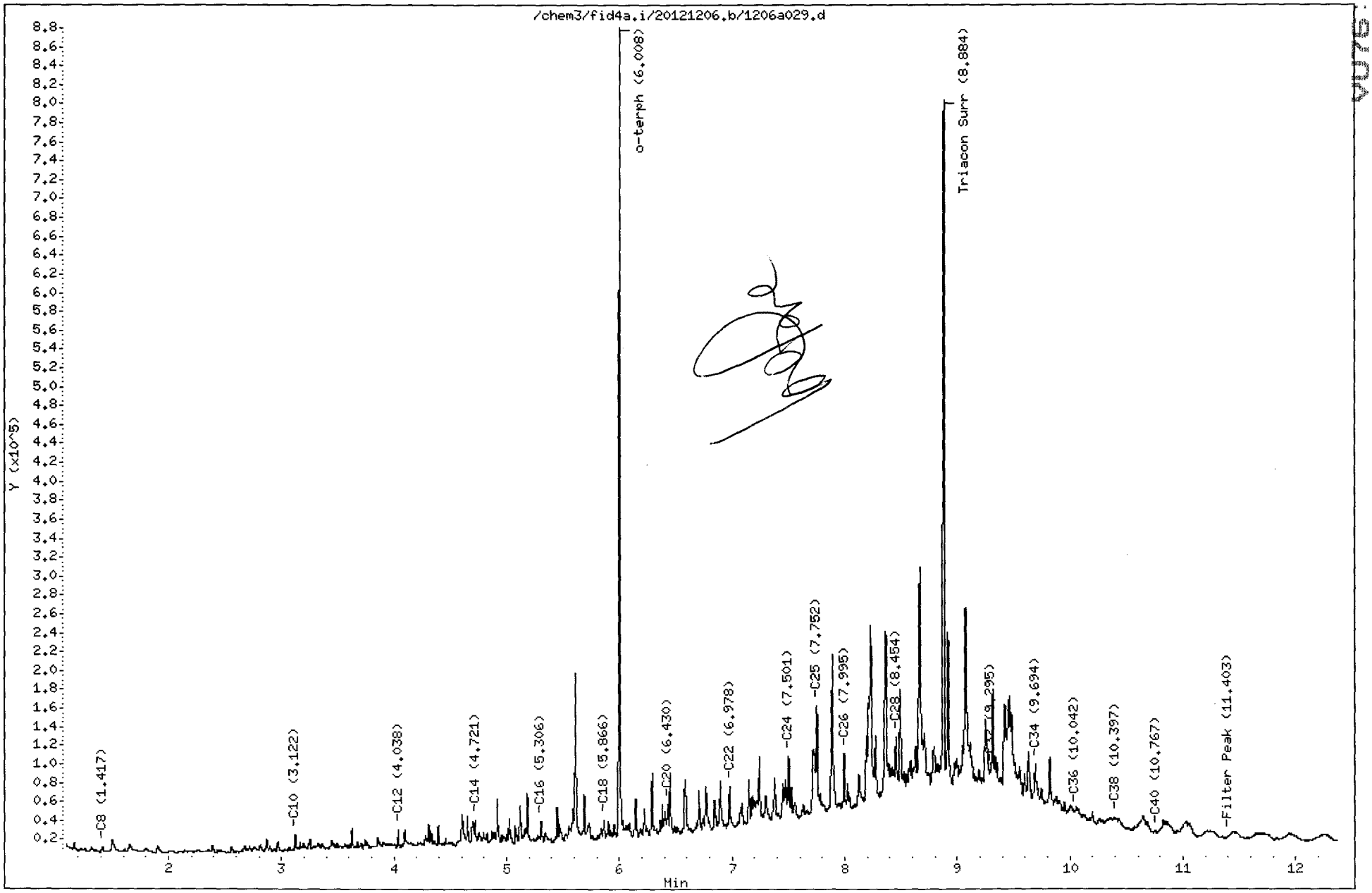
Column phase: RTX-1

Instrument: fid4a.i

Operator: JR/VTS

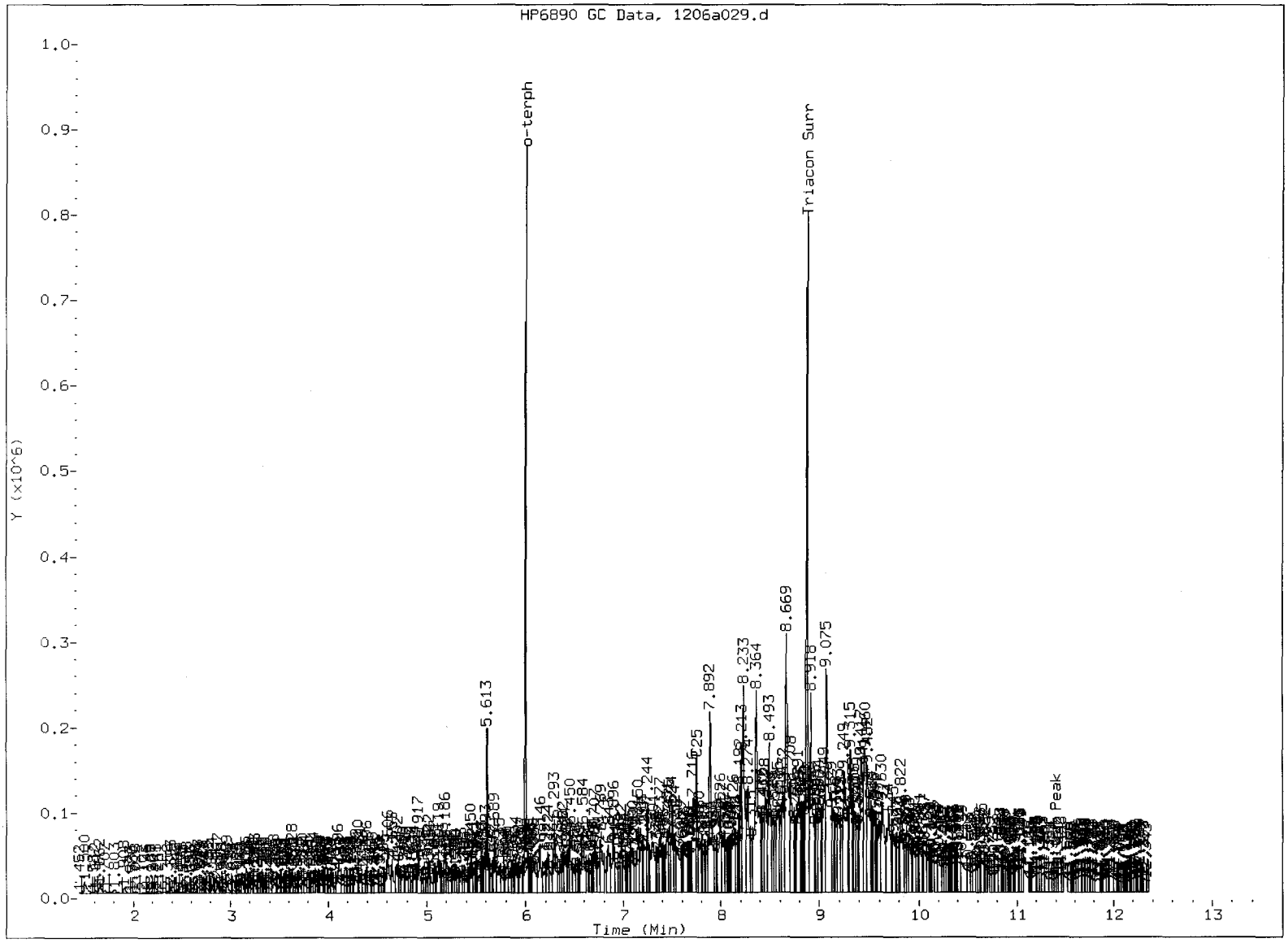
Column diameter: 0.25

VU76 00035



FID:4A-2C/RTX-1 VU76B

FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: _____ Date: 12/07/12

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Extraction Method: SW3510C

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02

Matrix: Water

Date Received: 12/04/12

Data Release Authorized:
Reported: 12/07/12

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range/Surrogate	RL	Result
MB-120512	Method Blank	12/05/12	12/06/12	1.00	Diesel Range	0.10	< 0.10 U
12-23877	HC ID: ---		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		86.8%
VU76H	GP17-W-12.5	12/05/12	12/06/12	1.00	Diesel Range	0.11	< 0.11 U
12-23877	HC ID: ---		FID4A	1.0	Motor Oil Range	0.22	< 0.22 U
					o-Terphenyl		97.7%
VU76I	GP-10-W-7.5	12/05/12	12/06/12	1.00	Diesel Range	0.10	< 0.10 U
12-23878	HC ID: ---		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		87.1%
VU76J	GPDUP-W-7.5	12/05/12	12/06/12	1.00	Diesel Range	0.10	< 0.10 U
12-23879	HC ID: ---		FID4A	1.0	Motor Oil Range	0.21	< 0.21 U
					o-Terphenyl		86.4%
VU76K	GP14-W-7.5	12/05/12	12/06/12	1.00	Diesel Range	0.11	< 0.11 U
12-23880	HC ID: ---		FID4A	1.0	Motor Oil Range	0.22	< 0.22 U
					o-Terphenyl		95.2%
VU76L	GP15-W-7.5	12/05/12	12/06/12	1.00	Diesel Range	0.11	< 0.11 U
12-23881	HC ID: ---		FID4A	1.0	Motor Oil Range	0.22	< 0.22 U
					o-Terphenyl		87.5%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: LCS-120512
LCS/LCSD

Lab Sample ID: LCS-120512
LIMS ID: 12-23877
Matrix: Water
Data Release Authorized:
Reported: 12/07/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 12/05/12

Date Analyzed LCS: 12/06/12 17:05
LCSD: 12/06/12 17:26
Instrument/Analyst LCS: FID4A/JGR
LCSD: FID4A/JGR

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 1.0 mL
LCSD: 1.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	2.42	3.00	80.7%	2.32	3.00	77.3%	4.2%

TPHD Surrogate Recovery

	LCS	LCSD
o-Terphenyl	88.4%	87.0%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: VU76
Matrix: Water Project: Sims - N Cascade Ford
Date Received: 12/04/12 0747.01.02

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
12-23877-120512MB1	Method Blank	500 mL	1.00 mL	12/05/12
12-23877-120512LCS1	Lab Control	500 mL	1.00 mL	12/05/12
12-23877-120512LCSD1	Lab Control Dup	500 mL	1.00 mL	12/05/12
12-23877-VU76H	GP17-W-12.5	455 mL	1.00 mL	12/05/12
12-23878-VU76I	GP-10-W-7.5	500 mL	1.00 mL	12/05/12
12-23879-VU76J	GPDUP-W-7.5	475 mL	1.00 mL	12/05/12
12-23880-VU76K	GP14-W-7.5	455 mL	1.00 mL	12/05/12
12-23881-VU76L	GP15-W-7.5	450 mL	1.00 mL	12/05/12

VU76 : 00090

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02

Client ID	OTER	TOT OUT
MB-120512	86.8%	0
LCS-120512	88.4%	0
LCSD-120512	87.0%	0
GP17-W-12.5	97.7%	0
GP-10-W-7.5	87.1%	0
GPDUP-W-7.5	86.4%	0
GP14-W-7.5	95.2%	0
GP15-W-7.5	87.5%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3510C
Log Number Range: 12-23877 to 12-23881

Data File: /chem3/fid4a.i/20121206.b/1206a010.d

Date : 06-DEC-2012 16:45

Client ID: VU80MBW1

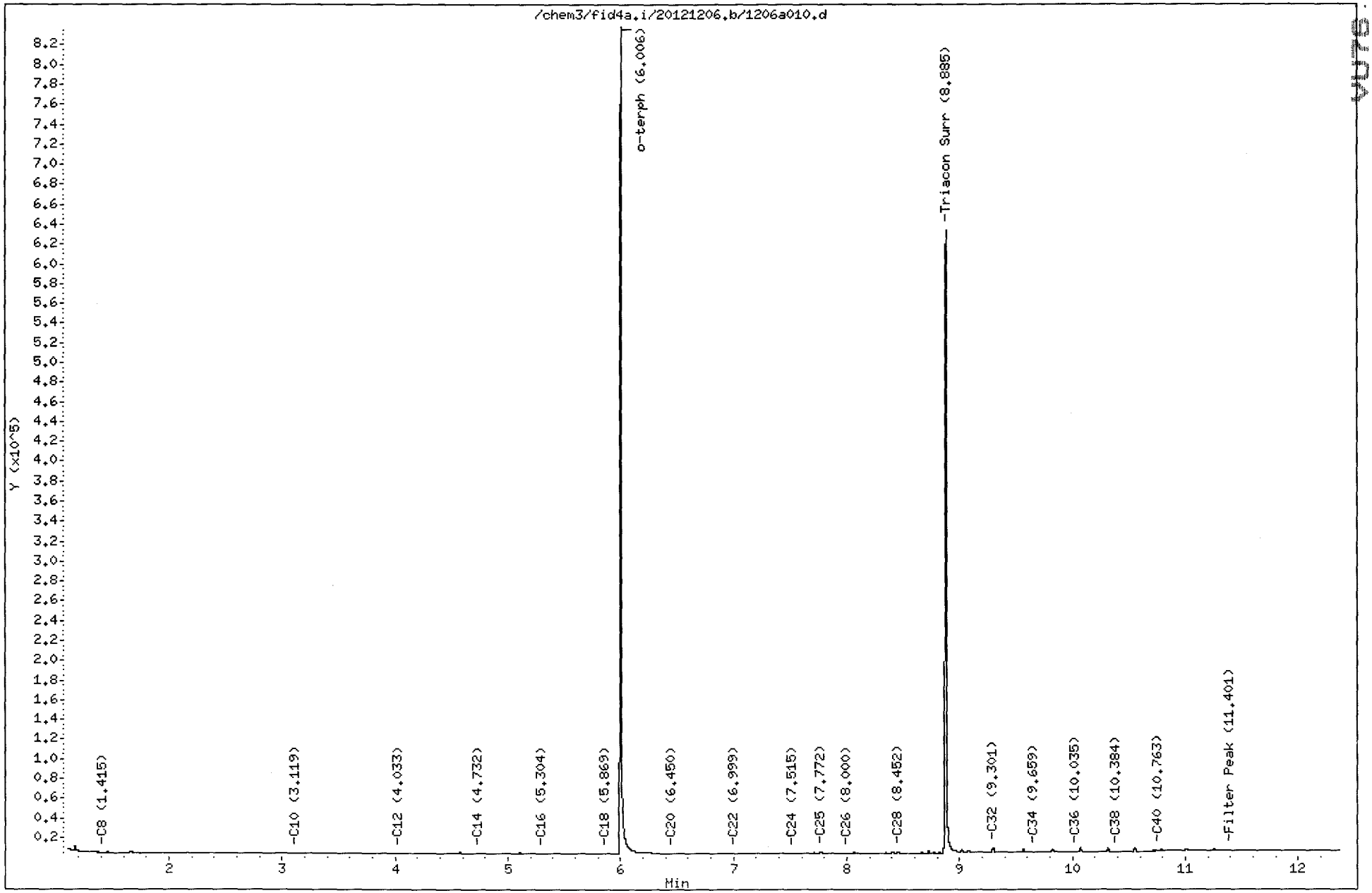
Sample Info: VU80MBW1

Column phase: RTX-1

Instrument: fid4a.i

Operator: JR/VTS

Column diameter: 0.25



VUTS 000052

Data File: /chem3/fid4a.i/20121206.b/1206a011.d

Date : 06-DEC-2012 17:05

Client ID: VU80LCSW1

Sample Info: VU80LCSW1

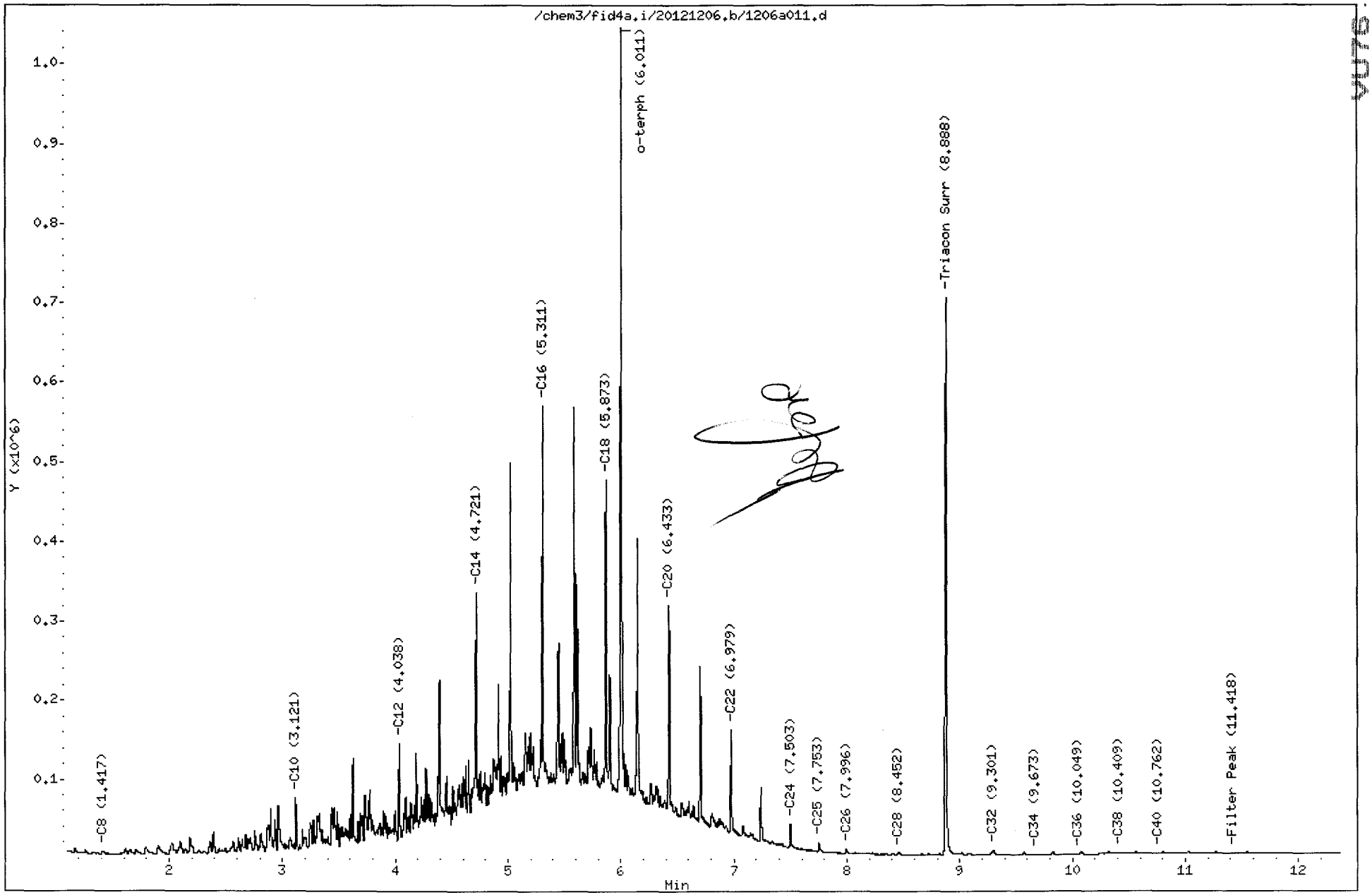
Column phase: RTX-1

Instrument: fid4a.i

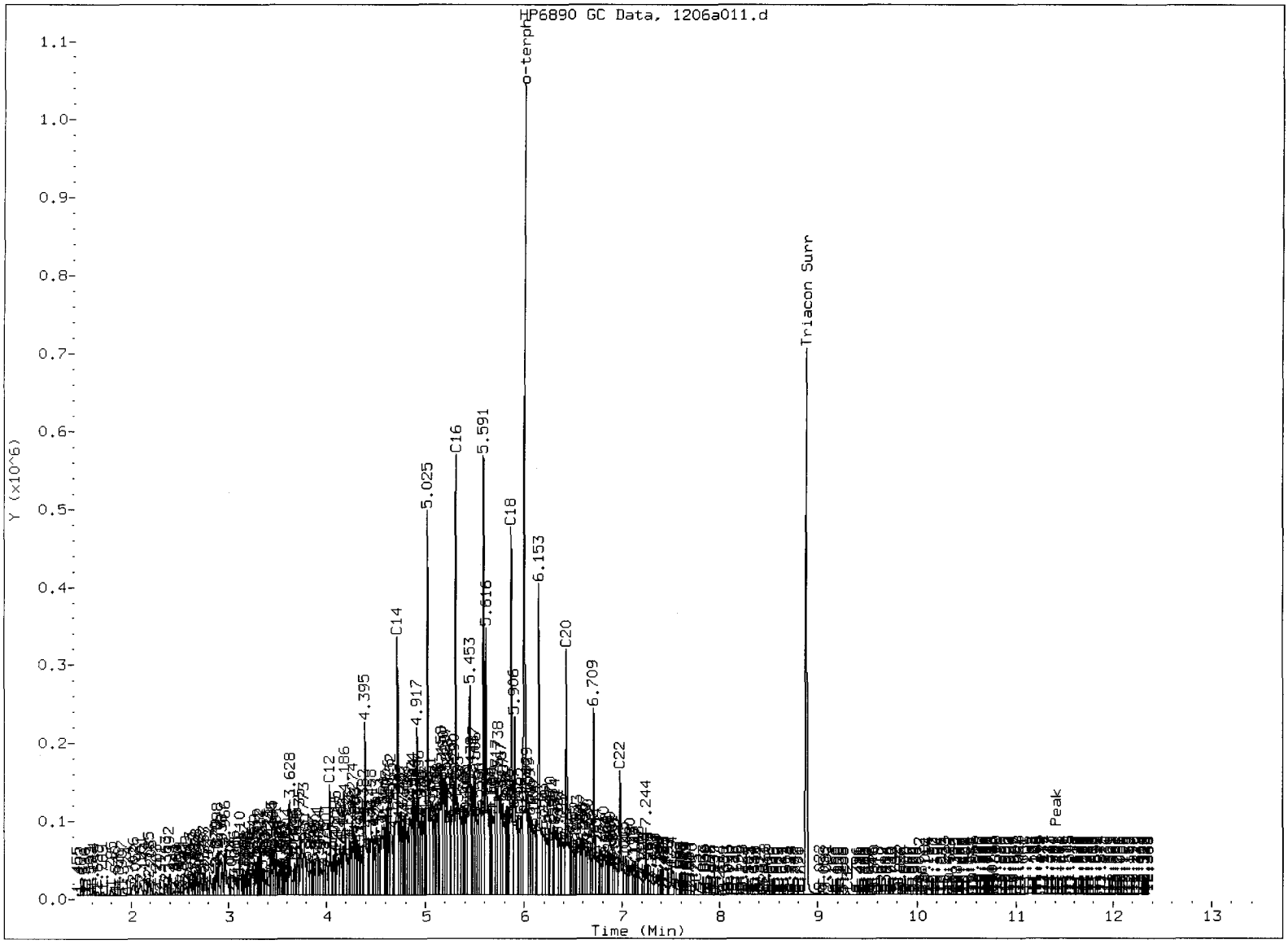
Operator: JR/VTS

Column diameter: 0.25

VU76.000053



FID:4A-2C/RTX-1 VU80LCSW1 FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: _____ Date: 12/07/12

Data File: /chem3/fid4a.i/20121206.b/1206a012.d

Date : 06-DEC-2012 17:26

Client ID: VU80LCSDW1

Sample Info: VU80LCSDW1

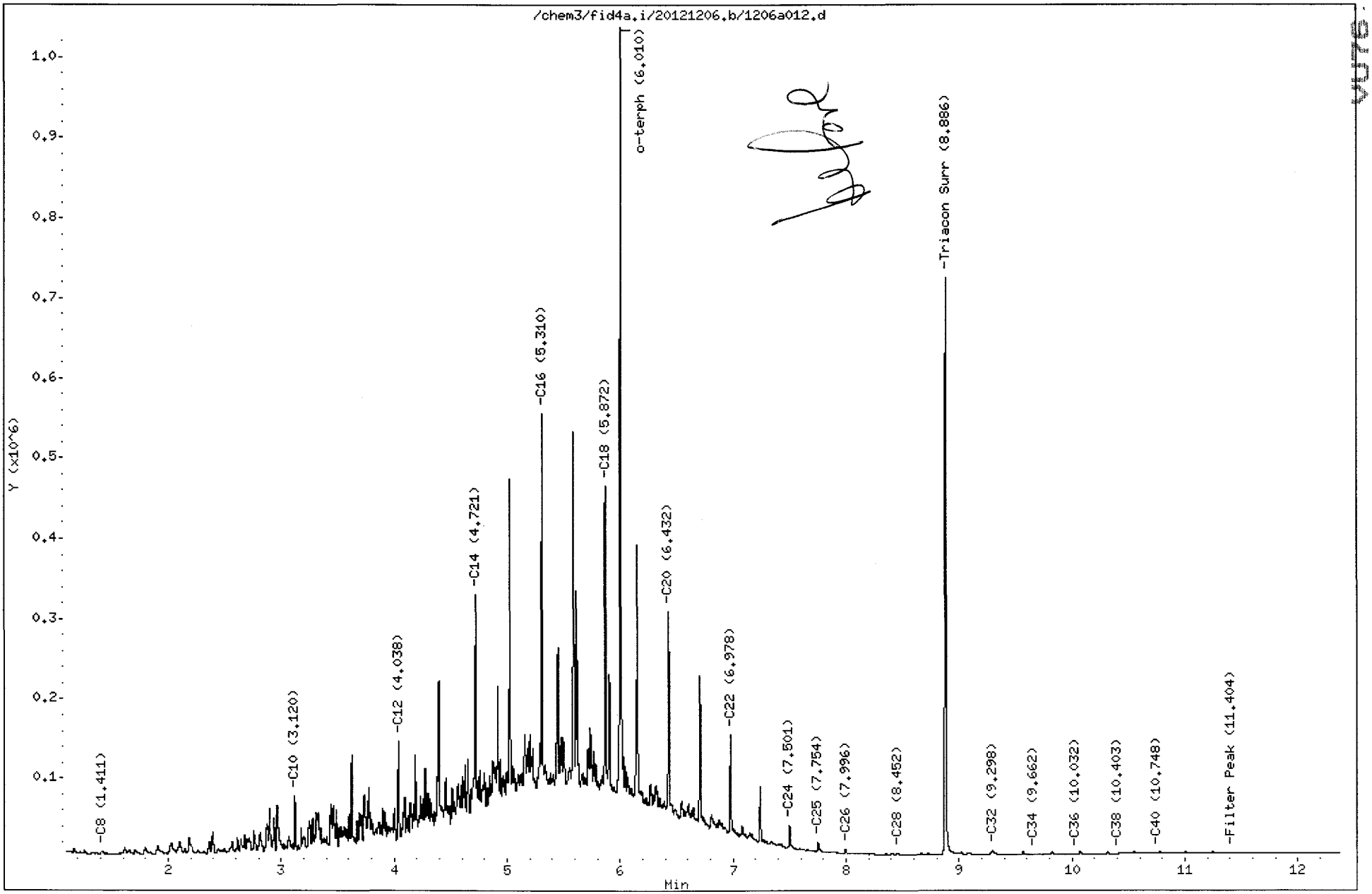
Column phase: RTX-1

Instrument: fid4a.i

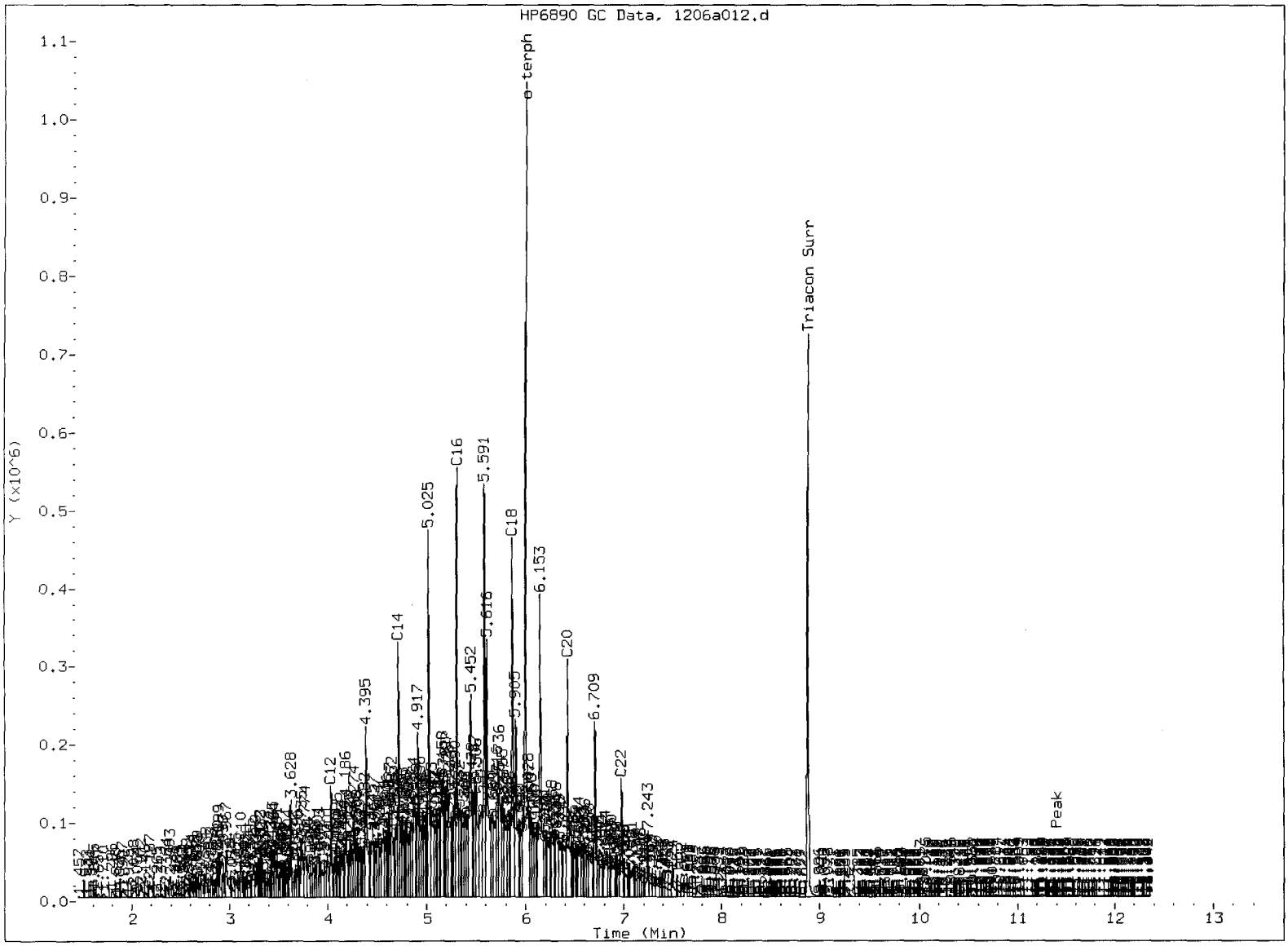
Operator: JR/VTS

Column diameter: 0.25

VUTS-00095



FID:4A-2C/RTX-1 VU80LCSDW1 FID:4A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: _____ Date: 12/07/12

Data File: /chem3/fid4a.i/20121206.b/1206a017.d

Date : 06-DEC-2012 19:09

Client ID:

Sample Info: VU76H

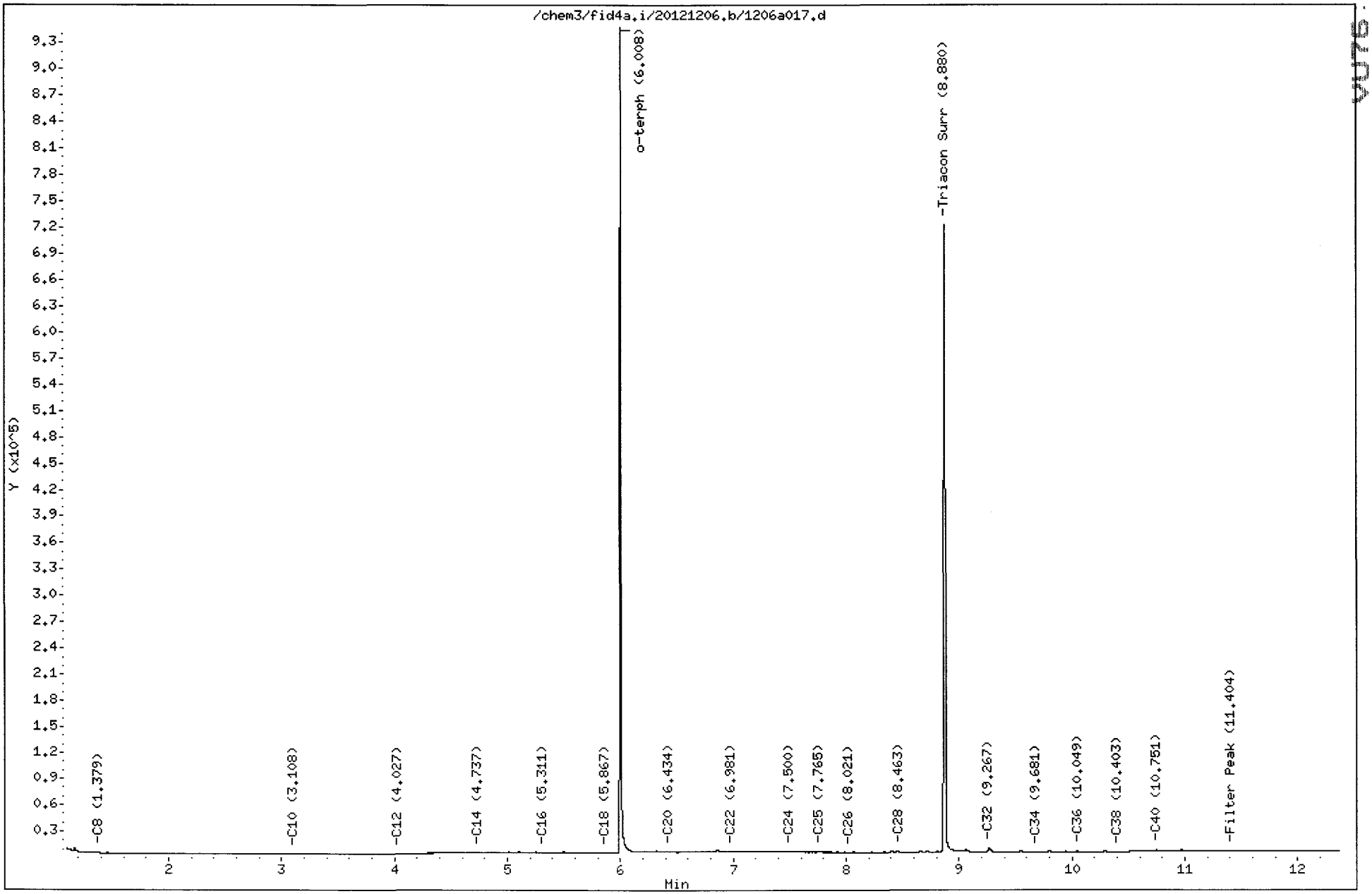
Column phase: RTX-1

Instrument: fid4a.i

Operator: JR/VTS

Column diameter: 0.25

VU76.00997



Data File: /chem3/fid4a.i/20121206.b/1206a018.d

Date : 06-DEC-2012 19:30

Client ID:

Sample Info: VU76I

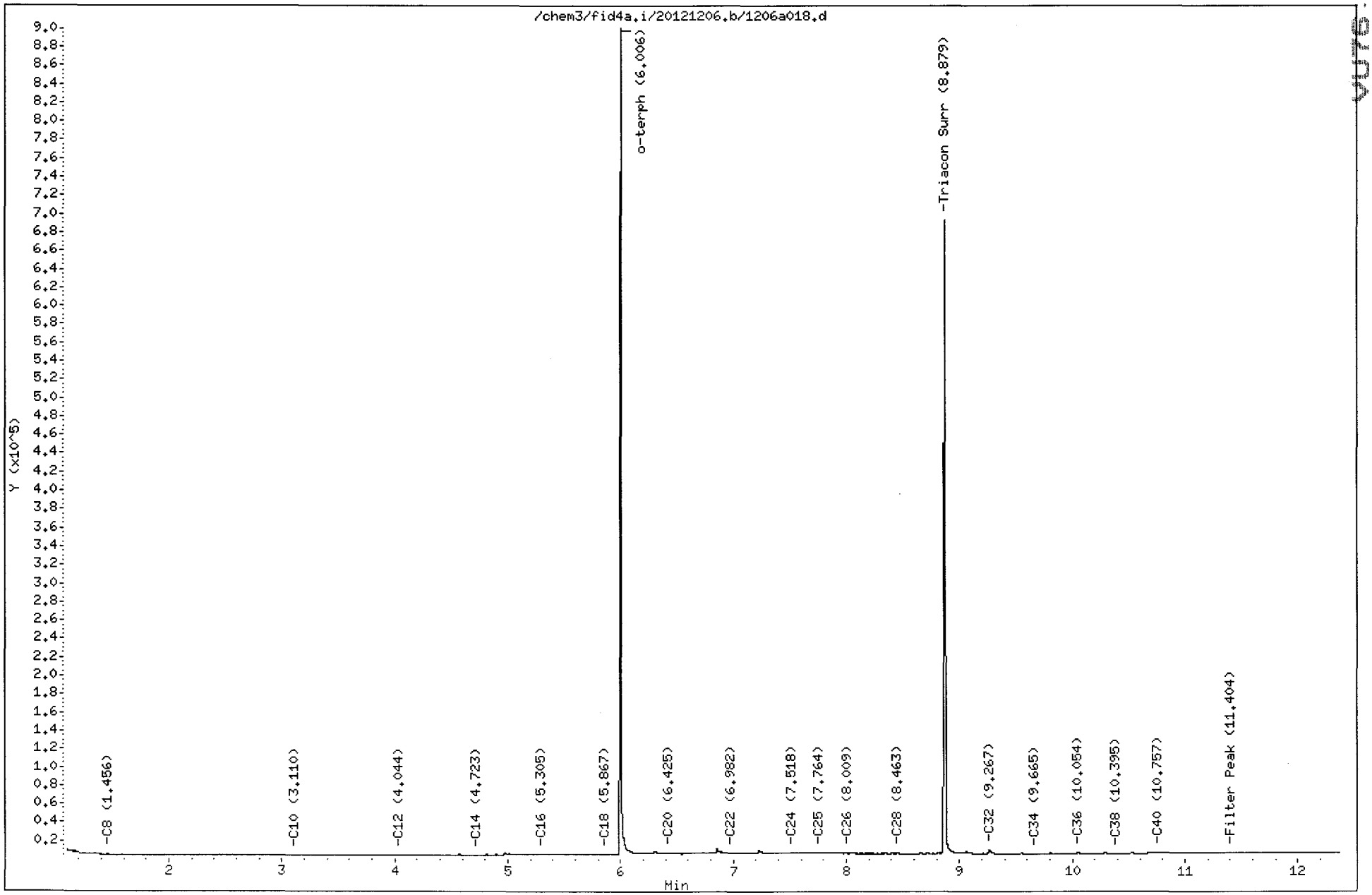
Column phase: RTX-1

Instrument: fid4a.i

Operator: JR/VTS

Column diameter: 0.25

VU76-00098



Data File: /chem3/fid4a.i/20121206.b/1206a019.d

Date : 06-DEC-2012 19:51

Client ID:

Sample Info: VU76J

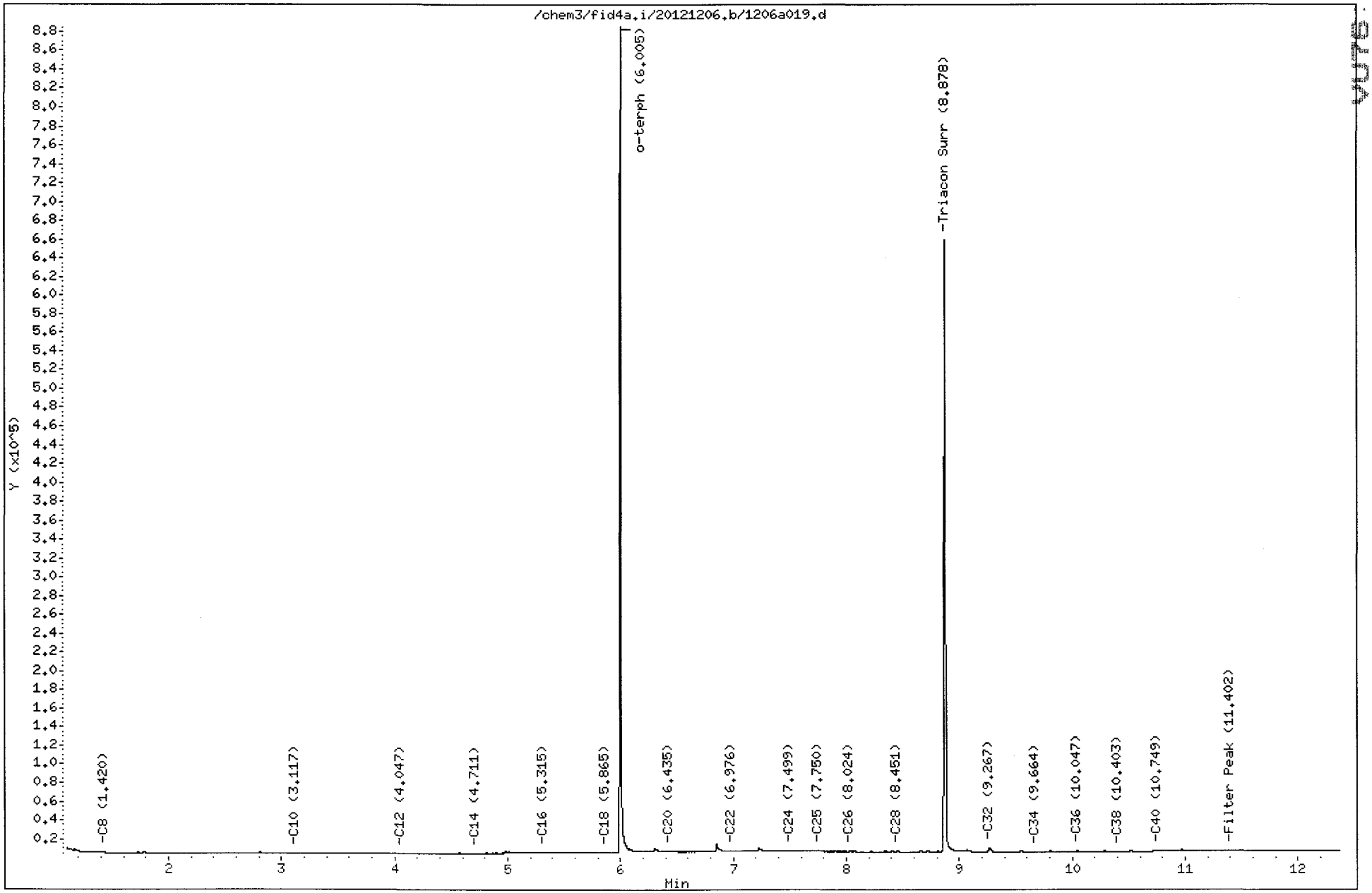
Column phase: RTX-1

Instrument: fid4a.i

Operator: JR/VTS

Column diameter: 0.25

VU76-080093



Data File: /chem3/fid4a.i/20121206.b/1206a020.d

Date : 06-DEC-2012 20:12

Client ID:

Sample Info: VU76K

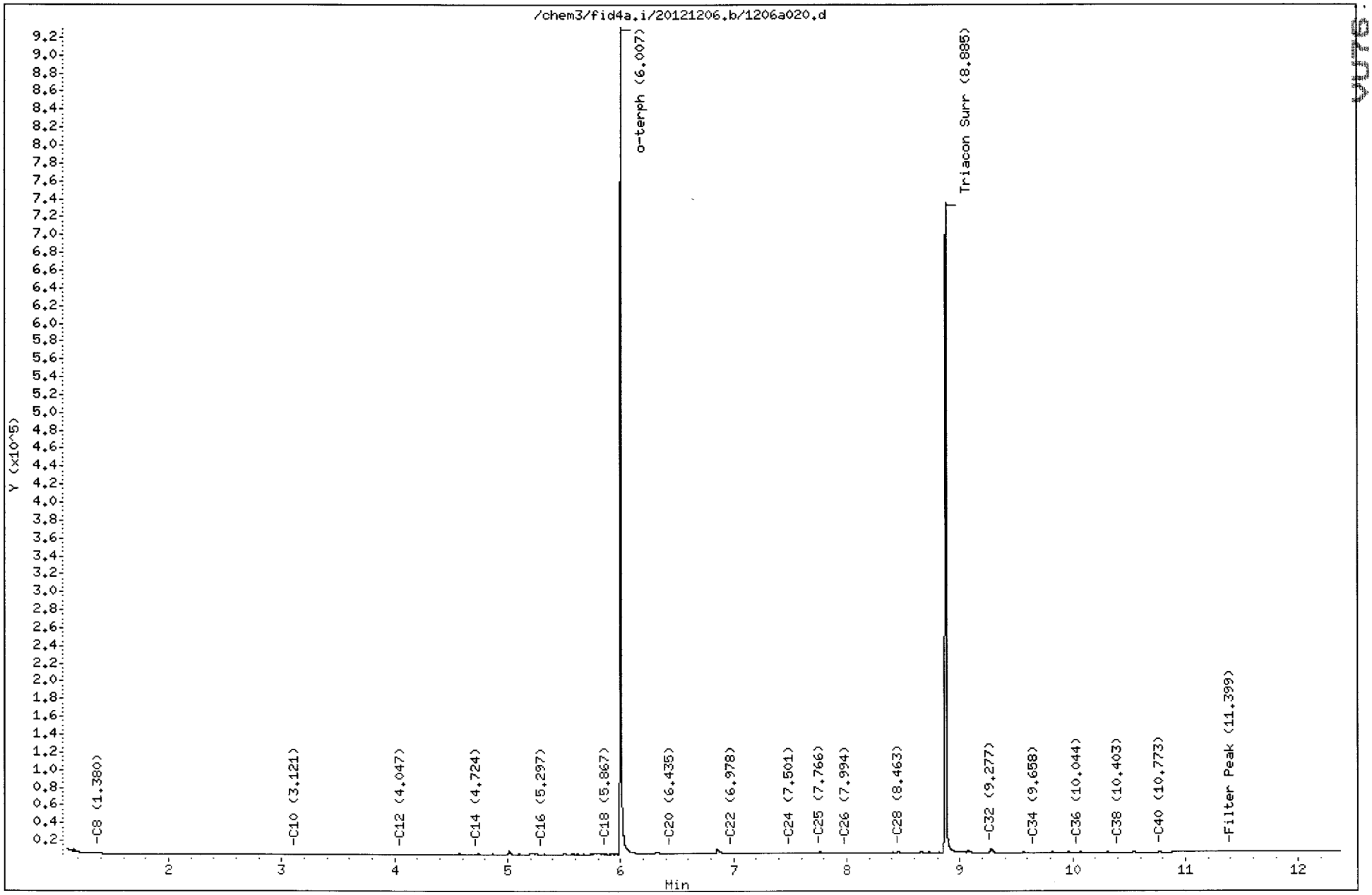
Column phase: RTX-1

Instrument: fid4a.i

Operator: JR/VTS

Column diameter: 0.25

VU76-001.00



Data File: /chem3/fid4a.i/20121206.b/1206a021.d

Date : 06-DEC-2012 20:32

Client ID:

Sample Info: VU76L

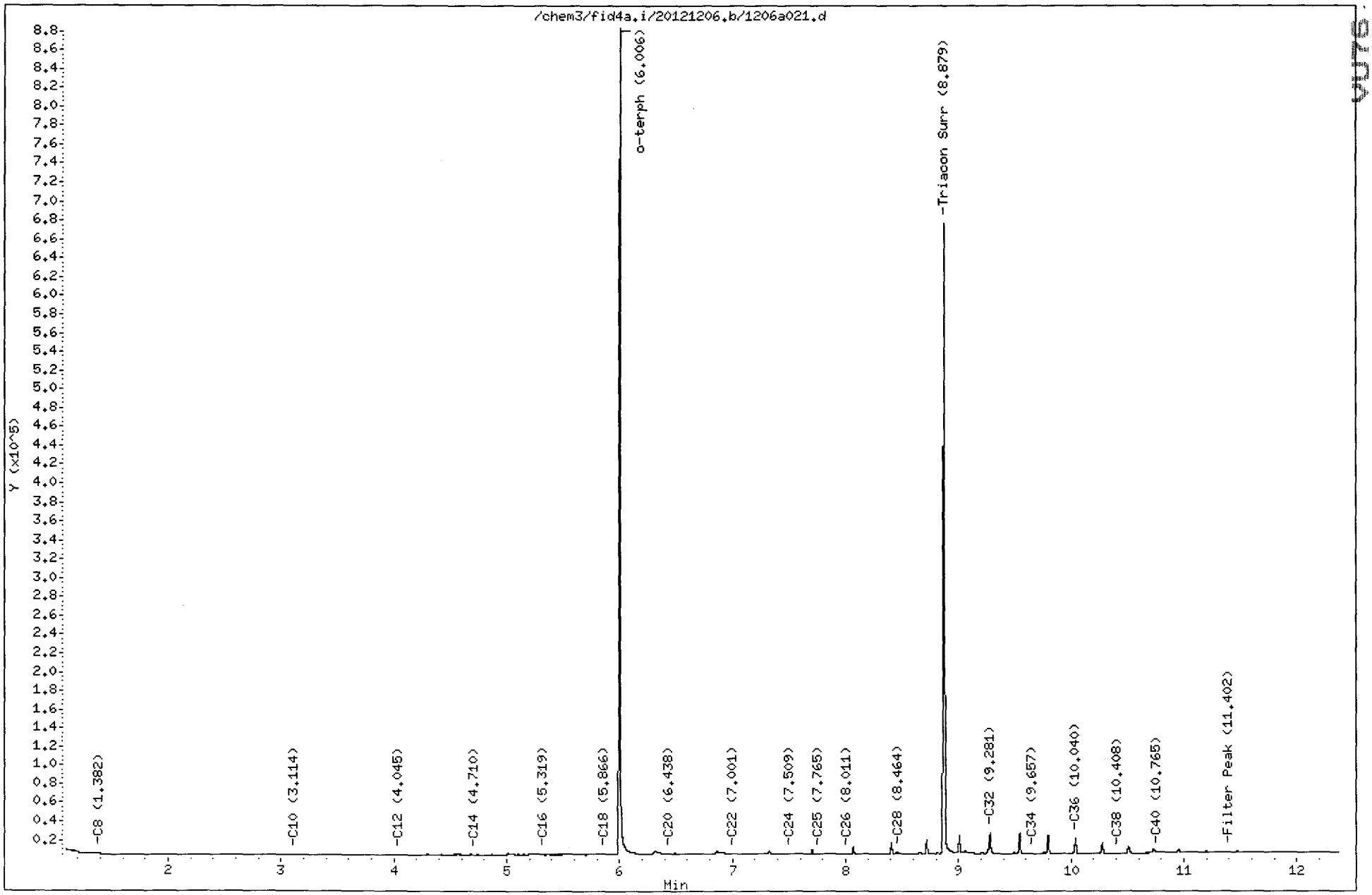
Column phase: RTX-1

Instrument: fid4a.i

Operator: JR/VTS

Column diameter: 0.25

VU76-20121206



SAMPLE RESULTS-CONVENTIONALS
VU76-Maul Foster & Alongi

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 12/11/12

Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Client ID: GP10-S-2.0
ARI ID: 12-23871 VU76B

Analyte	Date	Method	Units	RL	Sample
Total Solids	12/05/12 120512#1	SM2540B	Percent	0.01	70.00
Total Organic Carbon	12/10/12 121012#1	EPA 9060M	Percent	0.020	3.78

RL Analytical reporting limit
U Undetected at reported detection limit

VU76:00102

METHOD BLANK RESULTS-CONVENTIONALS
VU76-Maul Foster & Alongi

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 12/11/12

Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Analyte	Date	Units	Blank
Total Solids	12/05/12	Percent	< 0.01 U
Total Organic Carbon	12/10/12	Percent	< 0.020 U

VU76 : 001103

LAB CONTROL RESULTS-CONVENTIONALS
VU76-Maul Foster & Alongi

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 12/11/12

Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Total Organic Carbon EPA 9060M	ICVL	12/10/12	Percent	0.102	0.100	102.0%

VU76:00104

STANDARD REFERENCE RESULTS-CONVENTIONALS
VU76-Maul Foster & Alongi

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 12/11/12

Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Analyte/SRM ID	Date	Units	SRM	True Value	Recovery
Total Organic Carbon NIST 1941B	12/10/12	Percent	3.02	2.99	101.0%

VU76:00105

REPLICATE RESULTS-CONVENTIONALS
VU76-Maul Foster & Alongi

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 12/11/12

Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Analyte	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: VU76B Client ID: GP10-S-2.0					
Total Solids	12/05/12	Percent	70.00	72.80 71.60	2.0%
Total Organic Carbon	12/10/12	Percent	3.78	4.29 4.21	6.7%

VU76 : 00106

MS/MSD RESULTS-CONVENTIONALS
VU76-Maul Foster & Alongi

ANALYTICAL RESOURCES INCORPORATED

Matrix: Soil
Data Release Authorized:
Reported: 12/11/12

Project: Sims - N Cascade Ford
Event: 0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Analyte	Date	Units	Sample	Spike	Spike Added	Recovery
ARI ID: VU76B Client ID: GP10-S-2.0						
Total Organic Carbon	12/10/12	Percent	3.78	8.87	4.51	112.7%

VU76:00107

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP19-S-0.7
SAMPLE

Lab Sample ID: VU76C
LIMS ID: 12-23872
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Percent Total Solids: 65.5%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	12/05/12	200.8	12/11/12	**7440-38-2**	**Arsenic**	0.3	**2.1**	
3050B	12/05/12	6010C	12/07/12	7440-43-9	Cadmium	0.3	0.3	U
3050B	12/05/12	6010C	12/07/12	**7439-92-1**	**Lead**	3	**14**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP19-S-0.7
DUPLICATE

Lab Sample ID: VU76C
LIMS ID: 12-23872
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	2.1	2.0	4.9%	+/- 20%	
Cadmium	6010C	0.3 U	0.3 U	0.0%	+/- 0.3	L
Lead	6010C	14	17	19.4%	+/- 3	L

Reported in mg/kg-dry

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP19-S-0.7
MATRIX SPIKE

Lab Sample ID: VU76C
LIMS ID: 12-23872
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	2.1	32.5	37.3	81.5%	
Cadmium	6010C	0.3 U	75.6	73.9	102%	
Lead	6010C	14	295	295	95.3%	

Reported in mg/kg-dry

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP22-S-1.8
SAMPLE

Lab Sample ID: VU76D
LIMS ID: 12-23873
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Percent Total Solids: 74.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	12/05/12	200.8	12/11/12	**7440-38-2**	**Arsenic**	0.3	**6.9**	
3050B	12/05/12	6010C	12/06/12	**7440-43-9**	**Cadmium**	0.6	**2.1**	
3050B	12/05/12	6010C	12/06/12	**7439-92-1**	**Lead**	6	**172**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP23-S-0.9
SAMPLE

Lab Sample ID: VU76E
LIMS ID: 12-23874
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Percent Total Solids: 88.1%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	12/05/12	200.8	12/11/12	**7440-38-2**	**Arsenic**	0.2	**2.2**	
3050B	12/05/12	6010C	12/06/12	**7440-43-9**	**Cadmium**	0.5	**0.6**	
3050B	12/05/12	6010C	12/06/12	**7439-92-1**	**Lead**	5	**33**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP24-S-0.8
SAMPLE

Lab Sample ID: VU76F
LIMS ID: 12-23875
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Percent Total Solids: 75.6%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	12/05/12	200.8	12/11/12	**7440-38-2**	**Arsenic**	0.2	**9.2**	
3050B	12/05/12	6010C	12/06/12	**7440-43-9**	**Cadmium**	0.6	**3.3**	
3050B	12/05/12	6010C	12/06/12	**7439-92-1**	**Lead**	6	**111**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP25-S-1.1
SAMPLE

Lab Sample ID: VU76G
LIMS ID: 12-23876
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Percent Total Solids: 86.3%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	12/05/12	200.8	12/11/12	**7440-38-2**	**Arsenic**	0.2	**7.9**	
3050B	12/05/12	6010C	12/07/12	**7440-43-9**	**Cadmium**	0.2	**0.9**	
3050B	12/05/12	6010C	12/07/12	**7439-92-1**	**Lead**	2	**70**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: VU76LCS
LIMS ID: 12-23873
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	24.6	25.0	98.4%	
Cadmium	6010C	50.3	50.0	101%	
Lead	6010C	197	200	98.5%	

Reported in mg/kg-dry

N-Control limit not met
NA-Not Applicable, Analyte Not Spiked
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: VU76MB
LIMS ID: 12-23873
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VU76-Maul Foster & Alongi
Project: Sims - N Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	12/05/12	200.8	12/11/12	7440-38-2	Arsenic	0.2	0.2	U
3050B	12/05/12	6010C	12/06/12	7440-43-9	Cadmium	0.2	0.2	U
3050B	12/05/12	6010C	12/06/12	7439-92-1	Lead	2	2	U

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

Analytical Resources, Incorporated
Analytical Chemists and Consultants

14 December 2012

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: Sims-N Cascade Ford, 0747.01.02
ARI Job No.: VV00

Dear Heather:

Please find enclosed the original chain of custody record and the final results for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted seven soil samples on December 5, 2012.Two samples were placed on hold as specified. The remaining samples were analyzed for PAHs and total metals as requested.

These analyses proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file VV00

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 1100	Turn-around Requested: Std	Page: 1 of 1	
ARI Client Company: Maul Foster & Alongi	Phone: 360-927-1309	Date: 12/4/12	Ice Present?
Client Contact: Heather Hirsch		No. of Coolers:	Cooler Temps:
Client Project Name: Sims - N. Cascade Ford			
Client Project #: 0747.01.02	Samplers: Heather Hirsch		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: PAHs by 8270SIM	As by 6020	Cd, Pb by 6010	Notes/Comments
GP26-S-1.7	12/4/12	905	SOIL	2	X	X	X	
GP27-S-1.5		915		2	Hold	Hold	Hold	
GP28-S-1.5		928		1	Hold	Hold	Hold	
GP29-S-1.0		940		1	X	X	X	
GP30-S-0.8		945		1	X	X	X	
GP31-S-0.9		1015		1	X	X	X	
GP32-S-1.2	↓	1022	↓	1	X	X	X	

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
	Printed Name: Heather Hirsch	Printed Name: Tiffani Sledge	Printed Name:	Printed Name:
	Company: Maul Foster & Alongi	Company: Analytical Resources	Company:	Company:
	Date & Time: 12/5/12 0830	Date & Time: 12-5-12 08:40	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Maul Foster + Alongi Project Name: Sims N. Cascade Farm

COC No(s): _____ (NA) Delivered by: Fed-Ex UPS (Courier) Hand Delivered Other: _____

Assigned ARI Job No: VVOU Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry): 2.0

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90812241237X

Cooler Accepted by: TS (AV) Date: 12/5/12 Time: 840

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? ... Bubble Wrap (Wet Ice) Gel Packs Baggies Foam Block Paper Other: _____			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	(NA)	YES	NO
Were all VOC vials free of air bubbles?	(NA)	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

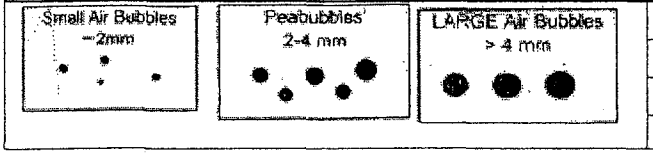
Samples Logged by: TS Date: 12-5-12 Time: 840

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: VV00
Client: Maul Foster & Alongi
Project Event: 0747.01.02
Project Name: Sims- N. Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	GP26-S-1.7	VV00A	12-23950	Soil	12/04/12 09:05	12/05/12 08:40
2.	GP29-S-1.0	VV00B	12-23951	Soil	12/04/12 09:40	12/05/12 08:40
3.	GP30-S-0.8	VV00C	12-23952	Soil	12/04/12 09:45	12/05/12 08:40
4.	GP31-S-0.9	VV00D	12-23953	Soil	12/04/12 10:15	12/05/12 08:40
5.	GP32-S-1.2	VV00E	12-23954	Soil	12/04/12 10:22	12/05/12 08:40
6.	GP27-S-1.5	VV00F	12-23955	Soil	12/04/12 09:15	12/05/12 08:40
7.	GP28-S-1.5	VV00G	12-23956	Soil	12/04/12 09:28	12/05/12 08:40

VV00 : 00004

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U — Indicates that the target analyte was not detected at the reported concentration

* — Duplicate RPD is not within established control limits

B — Reported value is less than the CRDL but ≥ the Reporting Limit

N — Matrix Spike recovery not within established control limits

NA — Not Applicable, analyte not spiked

H — The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible

L — Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U — Indicates that the target analyte was not detected at the reported concentration

* — Flagged value is not within established control limits

B — Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.

J — Estimated concentration when the value is less than ARI's established reporting limits

D — The spiked compound was not detected due to sample extract dilution

E — Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Q — Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

VV00 : 00005

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

VV00 : 00005

Geotechnical Data

A	The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
F	Samples were frozen prior to particle size determination
SM	Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
SS	Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
W	Weight of sample in some pipette aliquots was below the level required for accurate weighting

VV00 : 00007

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546
Page 1 of 1

Sample ID: GP26-S-1.7
SAMPLE

Lab Sample ID: VV00A
LIMS ID: 12-23950
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
Event: 0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

Date Extracted: 12/10/12
Date Analyzed: 12/12/12 16:40
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 4.93 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 3.00
Percent Moisture: 19.9%

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**30**	**4,200 E**
91-57-6	**2-Methylnaphthalene**	**30**	**8,300 ES**
90-12-0	**1-Methylnaphthalene**	**30**	**7,100 ES**
208-96-8	Acenaphthylene	30	< 30 U
83-32-9	**Acenaphthene**	**30**	**96**
86-73-7	**Fluorene**	**30**	**200**
85-01-8	**Phenanthrene**	**30**	**5,400 E**
120-12-7	**Anthracene**	**30**	**510**
206-44-0	**Fluoranthene**	**30**	**1,700**
129-00-0	**Pyrene**	**30**	**5,800 E**
56-55-3	**Benzo(a)anthracene**	**30**	**950**
218-01-9	**Chrysene**	**30**	**1,100**
50-32-8	**Benzo(a)pyrene**	**30**	**780**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**30**	**370**
53-70-3	**Dibenz(a,h)anthracene**	**30**	**170**
191-24-2	**Benzo(g,h,i)perylene**	**30**	**390**
132-64-9	**Dibenzofuran**	**30**	**1,900**
TOTBFA	**Total Benzofluoranthenes**	**30**	**1,200**

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	63.0%
d14-Dibenzo(a,h)anthracen	72.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP26-S-1.7
DILUTION

Lab Sample ID: VV00A
LIMS ID: 12-23950
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
Event: 0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

Date Extracted: 12/10/12
Date Analyzed: 12/12/12 17:43
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 4.93 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 15.0
Percent Moisture: 19.9%

CAS Number	Analyte	RL	Result	
91-20-3	**Naphthalene**	**150**	**4,700**	
91-57-6	**2-Methylnaphthalene**	**150**	**9,200**	
90-12-0	**1-Methylnaphthalene**	**150**	**7,800**	
208-96-8	Acenaphthylene	150	< 150	U
83-32-9	**Acenaphthene**	**150**	**120**	**J**
86-73-7	**Fluorene**	**150**	**240**	
85-01-8	**Phenanthrene**	**150**	**6,300**	
120-12-7	**Anthracene**	**150**	**560**	
206-44-0	**Fluoranthene**	**150**	**1,900**	
129-00-0	**Pyrene**	**150**	**6,100**	
56-55-3	**Benzo(a)anthracene**	**150**	**1,000**	
218-01-9	**Chrysene**	**150**	**1,200**	
50-32-8	**Benzo(a)pyrene**	**150**	**1,000**	
193-39-5	**Indeno(1,2,3-cd)pyrene**	**150**	**410**	
53-70-3	**Dibenz(a,h)anthracene**	**150**	**120**	**J**
191-24-2	**Benzo(g,h,i)perylene**	**150**	**480**	
132-64-9	**Dibenzofuran**	**150**	**2,300**	
TOTBFA	**Total Benzofluoranthenes**	**150**	**1,500**	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	80.0%
d14-Dibenzo(a,h)anthracen	90.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP29-S-1.0
SAMPLE

Lab Sample ID: VV00B
LIMS ID: 12-23951
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
Event: 0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

Date Extracted: 12/10/12
Date Analyzed: 12/11/12 20:54
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.63 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 12.6%

CAS Number	Analyte	RL	Result
91-20-3	**Naphthalene**	**4.7**	**70**
91-57-6	**2-Methylnaphthalene**	**4.7**	**120**
90-12-0	**1-Methylnaphthalene**	**4.7**	**130**
208-96-8	Acenaphthylene	4.7	< 4.7 U
83-32-9	**Acenaphthene**	**4.7**	**3.3 J**
86-73-7	**Fluorene**	**4.7**	**6.3**
85-01-8	**Phenanthrene**	**4.7**	**110**
120-12-7	**Anthracene**	**4.7**	**16**
206-44-0	**Fluoranthene**	**4.7**	**40**
129-00-0	**Pyrene**	**4.7**	**64**
56-55-3	**Benzo(a)anthracene**	**4.7**	**24**
218-01-9	**Chrysene**	**4.7**	**36**
50-32-8	**Benzo(a)pyrene**	**4.7**	**33**
193-39-5	**Indeno(1,2,3-cd)pyrene**	**4.7**	**11**
53-70-3	**Dibenz(a,h)anthracene**	**4.7**	**6.1**
191-24-2	**Benzo(g,h,i)perylene**	**4.7**	**15**
132-64-9	**Dibenzofuran**	**4.7**	**32**
TOTBFA	**Total Benzofluoranthenes**	**4.7**	**56**

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	56.3%
d14-Dibenzo(a,h)anthracen	99.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP30-S-0.8
SAMPLE

Lab Sample ID: VV00C
LIMS ID: 12-23952
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
Event: 0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

Date Extracted: 12/10/12
Date Analyzed: 12/11/12 21:25
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.76 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 23.9%

CAS Number	Analyte	RL	Result	
91-20-3	**Naphthalene**	**4.6**	**1,300**	**ES**
91-57-6	**2-Methylnaphthalene**	**4.6**	**2,300**	**ES**
90-12-0	**1-Methylnaphthalene**	**4.6**	**2,200**	**ES**
208-96-8	Acenaphthylene	4.6	< 4.6	U
83-32-9	**Acenaphthene**	**4.6**	**18**	
86-73-7	**Fluorene**	**4.6**	**35**	
85-01-8	**Phenanthrene**	**4.6**	**1,100**	**ES**
120-12-7	**Anthracene**	**4.6**	**190**	
206-44-0	**Fluoranthene**	**4.6**	**450**	
129-00-0	**Pyrene**	**4.6**	**2,400**	**ES**
56-55-3	**Benzo(a)anthracene**	**4.6**	**380**	
218-01-9	**Chrysene**	**4.6**	**410**	
50-32-8	**Benzo(a)pyrene**	**4.6**	**310**	
193-39-5	**Indeno(1,2,3-cd)pyrene**	**4.6**	**92**	
53-70-3	**Dibenz(a,h)anthracene**	**4.6**	**44**	
191-24-2	**Benzo(g,h,i)perylene**	**4.6**	**110**	
132-64-9	**Dibenzofuran**	**4.6**	**560**	**E**
TOTBFA	**Total Benzofluoranthenes**	**4.6**	**450**	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	60.0%
d14-Dibenzo(a,h)anthracen	53.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP30-S-0.8
DILUTION

Lab Sample ID: VV00C
LIMS ID: 12-23952
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
Event: 0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

Date Extracted: 12/10/12
Date Analyzed: 12/12/12 18:15
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.76 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 10.0
Percent Moisture: 23.9%

CAS Number	Analyte	RL	Result	
91-20-3	**Naphthalene**	**46**	**1,900**	
91-57-6	**2-Methylnaphthalene**	**46**	**3,300**	
90-12-0	**1-Methylnaphthalene**	**46**	**3,100**	
208-96-8	Acenaphthylene	46	< 46	U
83-32-9	**Acenaphthene**	**46**	**27**	***J***
86-73-7	**Fluorene**	**46**	**55**	
85-01-8	**Phenanthrene**	**46**	**1,800**	
120-12-7	**Anthracene**	**46**	**270**	
206-44-0	**Fluoranthene**	**46**	**680**	
129-00-0	**Pyrene**	**46**	**4,000**	
56-55-3	**Benzo(a)anthracene**	**46**	**500**	
218-01-9	**Chrysene**	**46**	**580**	
50-32-8	**Benzo(a)pyrene**	**46**	**590**	
193-39-5	**Indeno(1,2,3-cd)pyrene**	**46**	**220**	
53-70-3	**Dibenz(a,h)anthracene**	**46**	**110**	
191-24-2	**Benzo(g,h,i)perylene**	**46**	**240**	
132-64-9	**Dibenzofuran**	**46**	**960**	
TOTBFA	**Total Benzofluoranthenes**	**46**	**790**	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	80.0%
d14-Dibenzo(a,h)anthracen	90.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP31-S-0.9
SAMPLE

Lab Sample ID: VV00D
LIMS ID: 12-23953
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
Event: 0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

Date Extracted: 12/10/12
Date Analyzed: 12/12/12 15:36
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 4.31 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 17.1%

CAS Number	Analyte	RL	Result	
91-20-3	Naphthalene	12	1,200	
91-57-6	2-Methylnaphthalene	12	1,700	E
90-12-0	1-Methylnaphthalene	12	1,500	E
208-96-8	Acenaphthylene	12	150	
83-32-9	Acenaphthene	12	7.4	J
86-73-7	Fluorene	12	43	
85-01-8	Phenanthrene	12	1,600	E
120-12-7	Anthracene	12	240	
206-44-0	Fluoranthene	12	1,400	E
129-00-0	Pyrene	12	1,900	E
56-55-3	Benzo(a)anthracene	12	620	
218-01-9	Chrysene	12	970	
50-32-8	Benzo(a)pyrene	12	990	
193-39-5	Indeno(1,2,3-cd)pyrene	12	770	
53-70-3	Dibenz(a,h)anthracene	12	190	
191-24-2	Benzo(g,h,i)perylene	12	950	
132-64-9	Dibenzofuran	12	380	
TOTBFA	Total Benzofluoranthenes	12	1,400	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	57.3%
d14-Dibenzo(a,h)anthracen	68.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP31-S-0.9
DILUTION

Lab Sample ID: VV00D
LIMS ID: 12-23953
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
Event: 0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

Date Extracted: 12/10/12
Date Analyzed: 12/13/12 15:05
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 4.31 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 5.00
Percent Moisture: 17.1%

CAS Number	Analyte	RL	Result	
91-20-3	**Naphthalene**	**58**	**1,100**	
91-57-6	**2-Methylnaphthalene**	**58**	**1,700**	
90-12-0	**1-Methylnaphthalene**	**58**	**1,500**	
208-96-8	**Acenaphthylene**	**58**	**150**	
83-32-9	Acenaphthene	58	< 58	U
86-73-7	**Fluorene**	**58**	**45**	**J**
85-01-8	**Phenanthrene**	**58**	**1,400**	
120-12-7	**Anthracene**	**58**	**210**	
206-44-0	**Fluoranthene**	**58**	**1,200**	
129-00-0	**Pyrene**	**58**	**1,900**	
56-55-3	**Benzo(a)anthracene**	**58**	**570**	
218-01-9	**Chrysene**	**58**	**960**	
50-32-8	**Benzo(a)pyrene**	**58**	**1,000**	
193-39-5	**Indeno(1,2,3-cd)pyrene**	**58**	**800**	
53-70-3	**Dibenz(a,h)anthracene**	**58**	**160**	
191-24-2	**Benzo(g,h,i)perylene**	**58**	**1,100**	
132-64-9	**Dibenzofuran**	**58**	**390**	
TOTBFA	**Total Benzofluoranthenes**	**58**	**1,600**	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	55.0%
d14-Dibenzo(a,h)anthracen	71.7%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP32-S-1.2
SAMPLE

Lab Sample ID: VV00E
LIMS ID: 12-23954
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
Event: 0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

Date Extracted: 12/10/12
Date Analyzed: 12/12/12 16:08
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.43 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: 20.4%

CAS Number	Analyte	RL	Result	
91-20-3	Naphthalene	4.8	640	E
91-57-6	2-Methylnaphthalene	4.8	1,100	ES
90-12-0	1-Methylnaphthalene	4.8	960	ES
208-96-8	Acenaphthylene	4.8	15	
83-32-9	Acenaphthene	4.8	9.5	
86-73-7	Fluorene	4.8	19	
85-01-8	Phenanthrene	4.8	480	E
120-12-7	Anthracene	4.8	50	
206-44-0	Fluoranthene	4.8	220	
129-00-0	Pyrene	4.8	1,000	ES
56-55-3	Benzo(a)anthracene	4.8	110	
218-01-9	Chrysene	4.8	180	
50-32-8	Benzo(a)pyrene	4.8	110	
193-39-5	Indeno(1,2,3-cd)pyrene	4.8	110	
53-70-3	Dibenz(a,h)anthracene	4.8	33	
191-24-2	Benzo(g,h,i)perylene	4.8	66	
132-64-9	Dibenzofuran	4.8	260	
TOTBFA	Total Benzofluoranthenes	4.8	200	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	35.0%
d14-Dibenzo(a,h)anthracen	37.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: GP32-S-1.2
DILUTION

Lab Sample ID: VV00E
LIMS ID: 12-23954
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
Event: 0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

Date Extracted: 12/10/12
Date Analyzed: 12/12/12 19:18
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.43 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 5.00
Percent Moisture: 20.4%

CAS Number	Analyte	RL	Result	
91-20-3	Naphthalene	24	680	
91-57-6	2-Methylnaphthalene	24	1,200	
90-12-0	1-Methylnaphthalene	24	1,000	
208-96-8	Acenaphthylene	24	15	J
83-32-9	Acenaphthene	24	11	J
86-73-7	Fluorene	24	20	J
85-01-8	Phenanthrene	24	500	
120-12-7	Anthracene	24	55	
206-44-0	Fluoranthene	24	230	
129-00-0	Pyrene	24	950	
56-55-3	Benzo(a)anthracene	24	110	
218-01-9	Chrysene	24	180	
50-32-8	Benzo(a)pyrene	24	140	
193-39-5	Indeno(1,2,3-cd)pyrene	24	180	
53-70-3	Dibenz(a,h)anthracene	24	51	
191-24-2	Benzo(g,h,i)perylene	24	76	
132-64-9	Dibenzofuran	24	290	
TOTBFA	Total Benzofluoranthenes	24	260	

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	38.3%
d14-Dibenzo(a,h)anthracen	38.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SIM SW8270D-SIM GC/MS
Extraction Method: SW3546

Sample ID: MB-121012
METHOD BLANK

Lab Sample ID: MB-121012
LIMS ID: 12-23950
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 12/10/12
Date Analyzed: 12/11/12 13:29
Instrument/Analyst: NT4/JZ
GPC Cleanup: No
Silica Gel Cleanup: Yes
Alumina Cleanup: No

Sample Amount: 10.00 g-dry-wt
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00
Percent Moisture: NA

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	5.0	< 5.0 U
91-57-6	2-Methylnaphthalene	5.0	< 5.0 U
90-12-0	1-Methylnaphthalene	5.0	< 5.0 U
208-96-8	Acenaphthylene	5.0	< 5.0 U
83-32-9	Acenaphthene	5.0	< 5.0 U
86-73-7	Fluorene	5.0	< 5.0 U
85-01-8	Phenanthrene	5.0	< 5.0 U
120-12-7	Anthracene	5.0	< 5.0 U
206-44-0	Fluoranthene	5.0	< 5.0 U
129-00-0	Pyrene	5.0	< 5.0 U
56-55-3	Benzo(a)anthracene	5.0	< 5.0 U
218-01-9	Chrysene	5.0	< 5.0 U
50-32-8	Benzo(a)pyrene	5.0	< 5.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	5.0	< 5.0 U
53-70-3	Dibenz(a,h)anthracene	5.0	< 5.0 U
191-24-2	Benzo(g,h,i)perylene	5.0	< 5.0 U
132-64-9	Dibenzofuran	5.0	< 5.0 U
TOTBFA	Total Benzofluoranthenes	5.0	< 5.0 U

Reported in µg/kg (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	57.0%
d14-Dibenzo(a,h)anthracen	95.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: LCS-121012
LAB CONTROL SAMPLE

Lab Sample ID: LCS-121012
LIMS ID: 12-23950
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 12/10/12

Sample Amount LCS: 10.00 g-dry-wt
LCSD: 10.00 g-dry-wt

Date Analyzed LCS: 12/11/12 14:01
LCSD: 12/11/12 14:33

Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL

Instrument/Analyst LCS: NT4/JZ
LCSD: NT4/JZ

Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Naphthalene	85.8	150	57.2%	80.8	150	53.9%	6.0%
2-Methylnaphthalene	79.8	150	53.2%	77.2	150	51.5%	3.3%
1-Methylnaphthalene	89.7	150	59.8%	84.1	150	56.1%	6.4%
Acenaphthylene	90.0	150	60.0%	86.6	150	57.7%	3.9%
Acenaphthene	90.2	150	60.1%	88.6	150	59.1%	1.8%
Fluorene	94.5	150	63.0%	89.3	150	59.5%	5.7%
Phenanthrene	97.6	150	65.1%	97.2	150	64.8%	0.4%
Anthracene	101	150	67.3%	101	150	67.3%	0.0%
Fluoranthene	102	150	68.0%	104	150	69.3%	1.9%
Pyrene	105	150	70.0%	110	150	73.3%	4.7%
Benzo(a)anthracene	108	150	72.0%	112	150	74.7%	3.6%
Chrysene	111	150	74.0%	114	150	76.0%	2.7%
Benzo(a)pyrene	97.2	150	64.8%	96.2	150	64.1%	1.0%
Indeno(1,2,3-cd)pyrene	115	150	76.7%	115	150	76.7%	0.0%
Dibenz(a,h)anthracene	118	150	78.7%	120	150	80.0%	1.7%
Benzo(g,h,i)perylene	105	150	70.0%	110	150	73.3%	4.7%
Dibenzofuran	89.8	150	59.9%	86.6	150	57.7%	3.6%
Total Benzofluoranthenes	304	450	67.6%	307	450	68.2%	1.0%

Reported in µg/kg (ppb)

RPD calculated using sample concentrations per SW846.

SIM Semivolatile Surrogate Recovery

	LCS	LCSD
d10-2-Methylnaphthalene	54.7%	48.3%
d14-Dibenzo(a,h)anthracen	95.0%	90.3%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
0747.01.02

Client ID	MNP	DBA	TOT OUT
MB-121012	57.0%	95.3%	0
LCS-121012	54.7%	95.0%	0
LCSD-121012	48.3%	90.3%	0
GP26-S-1.7	63.0%	72.0%	0
GP26-S-1.7 DL	80.0%	90.0%	0
GP29-S-1.0	56.3%	99.7%	0
GP30-S-0.8	60.0%	53.3%	0
GP30-S-0.8 DL	80.0%	90.0%	0
GP31-S-0.9	57.3%	68.0%	0
GP31-S-0.9 DL	55.0%	71.7%	0
GP32-S-1.2	35.0%	37.3%	0
GP32-S-1.2 DL	38.3%	38.3%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(35-100)	(34-100)
(DBA) = d14-Dibenzo(a,h)anthracene	(37-120)	(10-117)

Prep Method: SW3546
Log Number Range: 12-23950 to 12-23954

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP26-S-1.7
SAMPLE

Lab Sample ID: VV00A
LIMS ID: 12-23950
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

Percent Total Solids: 78.0%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	12/06/12	200.8	12/11/12	**7440-38-2**	**Arsenic**	0.2	**9.9**	
3050B	12/07/12	6010C	12/10/12	**7440-43-9**	**Cadmium**	0.2	**1.3**	
3050B	12/07/12	6010C	12/10/12	**7439-92-1**	**Lead**	2	**126**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP26-S-1.7
DUPLICATE

Lab Sample ID: VV00A
LIMS ID: 12-23950
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Arsenic	200.8	9.9	10.4	4.9%	+/- 20%	
Cadmium	6010C	1.3	1.4	7.4%	+/- 20%	
Lead	6010C	126	126	0.0%	+/- 20%	

Reported in mg/kg-dry

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP26-S-1.7
MATRIX SPIKE

Lab Sample ID: VV00A
LIMS ID: 12-23950
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Arsenic	200.8	9.9	37.8	30.4	91.8%	
Cadmium	6010C	1.3	63.4	62.0	100%	
Lead	6010C	126	356	248	92.7%	

Reported in mg/kg-dry

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP29-S-1.0
SAMPLE

Lab Sample ID: VV00B
LIMS ID: 12-23951
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

Percent Total Solids: 84.2%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	12/06/12	200.8	12/11/12	**7440-38-2**	**Arsenic**	0.2	**4.7**	
3050B	12/07/12	6010C	12/10/12	**7440-43-9**	**Cadmium**	0.2	**0.4**	
3050B	12/07/12	6010C	12/10/12	**7439-92-1**	**Lead**	2	**8**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP30-S-0.8
SAMPLE

Lab Sample ID: VV00C
LIMS ID: 12-23952
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

Percent Total Solids: 77.0%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	12/06/12	200.8	12/11/12	**7440-38-2**	**Arsenic**	0.2	**7.1**	
3050B	12/07/12	6010C	12/10/12	**7440-43-9**	**Cadmium**	0.2	**0.4**	
3050B	12/07/12	6010C	12/10/12	**7439-92-1**	**Lead**	2	**54**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP31-S-0.9
SAMPLE

Lab Sample ID: VV00D
LIMS ID: 12-23953
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

Percent Total Solids: 82.5%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	12/06/12	200.8	12/11/12	**7440-38-2**	**Arsenic**	0.2	**6.5**	
3050B	12/07/12	6010C	12/10/12	**7440-43-9**	**Cadmium**	0.2	**3.1**	
3050B	12/07/12	6010C	12/10/12	**7439-92-1**	**Lead**	2	**334**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: GP32-S-1.2
SAMPLE

Lab Sample ID: VV00E
LIMS ID: 12-23954
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
0747.01.02
Date Sampled: 12/04/12
Date Received: 12/05/12

Percent Total Solids: 79.8%

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	12/06/12	200.8	12/11/12	**7440-38-2**	**Arsenic**	0.2	**6.3**	
3050B	12/07/12	6010C	12/10/12	**7440-43-9**	**Cadmium**	0.6	**0.7**	
3050B	12/07/12	6010C	12/10/12	**7439-92-1**	**Lead**	6	**96**	

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: LAB CONTROL**

Lab Sample ID: VV00LCS
LIMS ID: 12-23951
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Arsenic	200.8	26.2	25.0	105%	
Cadmium	6010C	52.3	50.0	105%	
Lead	6010C	200	200	100%	

Reported in mg/kg-dry

N-Control limit not met
NA-Not Applicable, Analyte Not Spiked
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: METHOD BLANK**

Lab Sample ID: VV00MB
LIMS ID: 12-23951
Matrix: Soil
Data Release Authorized:
Reported: 12/13/12

QC Report No: VV00-Maul Foster & Alongi
Project: Sims- N. Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Percent Total Solids: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	LOQ	mg/kg-dry	Q
3050B	12/06/12	200.8	12/11/12	7440-38-2	Arsenic	0.2	0.2	U
3050B	12/07/12	6010C	12/10/12	7440-43-9	Cadmium	0.2	0.2	U
3050B	12/07/12	6010C	12/10/12	7439-92-1	Lead	2	2	U

U-Analyte undetected at given LOQ
LOQ-Limit of Quantitation

Analytical Resources, Incorporated
Analytical Chemists and Consultants

14 December 2012

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: Sims-N Cascade Ford, 0747.01.02
ARI Job No.: VV24

Dear Heather:

Please find enclosed the final results for the samples from the project referenced above. These samples were originally received on December 3-4, 2012. The analysis for dissolved lead was added as instructed on December 6, 2012. Since properly filtered and preserved volume was not received, extra volume was taken from a 500mL AG bottle for each sample. All samples were filtered and preserved on 12/06/12.

These analyses proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file VV24

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Subject: RE: Sims Question
From: "Heather Hirsch" <hhirsch@maulfoster.com>
Date: 12/6/2012 10:25 AM
To: "Mark Harris" <markh@arilabs.com>

Ok, thanks Mark. I'd like to move forward w/ the analysis. It may result in qualified/flagged results, but that would be ok for this constituent. Please include a note in the case narrative regarding the delayed filtering.

There should be unpreserved ambers for all the samples indicated.

Please filter and prep all of the following samples, but only analyze those indicated.

GP10-W-7.5 - analyze
GP10-W-16.5- hold
GPDUP-W-7.5- analyze
GP11-W-17.5- analyze
GP12-W-7.5- analyze
GP12-W-25.5- hold

Thank you!

HEATHER HIRSCH LHG | MAUL FOSTER & ALONGI, INC.
d. 360 594 6257| c. 360 927 1309 | p. 360 594 6262 | f. 360 594 6270

-----Original Message-----
From: Mark Harris [mailto:markh@arilabs.com]
Sent: Thursday, December 06, 2012 10:08 AM
To: Heather Hirsch
Subject: Re: Sims Question

Heather:

The method suggests that samples should be filtered as soon as possible after collection. While vague, some clients infer this to mean 24 hours, 12 hours, or even upon receipt. We used to take it literally and we filtered as soon as we could. Usually this was within a day or so, sometimes longer, particularly for samples received on a Friday.

We now try do filter within 24 hours. This is not required by the method but it is showing up more frequently in Work Plans.

All of that being said, we can filter them. 'Normally' I would say it should affect samples minimally. But, there was a sample or two that had a fine layer of sediment in the bottom of the bottle. That was for extractions but I'm assuming that all of the bottles for those samples would have been similar. The longer amount of time that elapses, metals in the sample can either go into solution or precipitate out, thus raising or lowering the dissolved metals concentration. The more unusual the sample is, the higher the likelihood of something like that happening.

I haven't checked bottles but we'd need about 100mL of un-preserved sample which we can get from one of the ambers if available. If only VOA/TPH-G vials would be available, those couldn't be used.

Mark H.

On 12/6/2012 9:42 AM, Heather Hirsch wrote:

Mark-

Is it possible to get accurate dissolved Fe results for groundwater samples that were not field filtered or preserved? If the answer is yes, then the next question is, is it still possible (i.e., there is sample volume still available) to analyze the following samples for dissolved Fe?

GP10-W-7.5
GP10-W-16.5
GPDUP-W-7.5
GP11-W-17.5
GP12-W-7.5
GP12-W-25.5

Let me know. Thanks,

HEATHER HIRSCH LHG | MAUL FOSTER & ALONGI, INC.
d. 360 594 6257| c. 360 927 1309 | p. 360 594 6262 | f. 360 594 6270

-----Original Message-----
From: Mark Harris [mailto:markh@arilabs.com]
Sent: Wednesday, December 05, 2012 8:54 AM
To: Heather Hirsch
Subject: Re: Sims Question

Will do. Both.

On 12/5/2012 8:37 AM, Heather Hirsch wrote:

Ignore it please. Can you please add a note to the report documenting this? Thanks!

Sent from my iPhone

On Dec 5, 2012, at 8:35 AM, "Mark Harris"<markh@arilabs.com> wrote:

Heather:

A couple of the TPH bottles from yesterday had a layer of sediment in the bottom of the bottles that was noticed after the samples had been poured. Would you like us to do a bottles rinse, essentially including this? Or ignore it?

Mark H.

--

Mark Harris
Project Manager
Analytical Resources, Inc.
206/695-6210
markh@arilabs.com

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are not the intended recipient, any copying, distribution, disclosure, or use of the text and/or attached document(s) is strictly prohibited.

If you have received this correspondence in error, please notify sender immediately. Thank you.

--

Mark Harris
Project Manager
Analytical Resources, Inc.
206/695-6210
markh@arilabs.com

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PRESERVATION VERIFICATION 12/06/12
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: **VV24**

Inquiry Number: NONE
Analysis Requested: 12/06/12
Contact: Hirsch, Heather
Client: Maul Foster & Alongi
Logged by: AV
Sample Set Used: Yes-481
Validatable Package: No
Deliverables:

PC: Mark
VTSR: 12/04/12

Project #: 0747.01.02
Project: Sims-N. Cascade Ford
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	TPHD <2	Fe2+ <2	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
12-24158 **VV24A**	GP11-W-17.5						DIS Fail									N						
12-24159 **VV24B**	GP12-W-7.5						DIS Fail									N						
12-24160 **VV24C**	GP12-W-25.5						DIS Fail									N						
12-24161 **VV24D**	GP-10-W-7.5						DIS Fail									N						
12-24162 **VV24E**	GPDUP-W-7.5						DIS Fail									N						
12-24163 **VV24F**	GP10-W-16.5						DIS Fail									N						

Metals unfiltered/unpreserved

SG000121

Checked By AV Date 12/6/12

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: VV24
Client: Maul Foster & Alongi
Project Event: 0747.01.02
Project Name: Sims-N. Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	GP11-W-17.5	VV24A	12-24158	Water	12/02/12 14:45	12/04/12 08:45
2.	GP12-W-7.5	VV24B	12-24159	Water	12/02/12 12:30	12/04/12 08:45
3.	GP12-W-25.5	VV24C	12-24160	Water	12/02/12 11:10	12/04/12 08:45
4.	GP-10-W-7.5	VV24D	12-24161	Water	12/03/12 10:30	12/04/12 08:45
5.	GPDUP-W-7.5	VV24E	12-24162	Water	12/03/12 10:30	12/04/12 08:45
6.	GP10-W-16.5	VV24F	12-24163	Water	12/03/12 11:20	12/04/12 08:45

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Duplicate RPD is not within established control limits
B	Reported value is less than the CRDL but ≥ the Reporting Limit
N	Matrix Spike recovery not within established control limits
NA	Not Applicable, analyte not spiked
H	The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
L	Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Flagged value is not within established control limits
B	Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
J	Estimated concentration when the value is less than ARI's established reporting limits
D	The spiked compound was not detected due to sample extract dilution
E	Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

VV24 : 00007

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

VV24 : 00008

Geotechnical Data

A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F Samples were frozen prior to particle size determination

SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots was below the level required for accurate weighting

VV24 : 00009

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: GP11-W-17.5
SAMPLE

Lab Sample ID: VV24A
LIMS ID: 12-24158
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VV24-Maul Foster & Alongi
Project: Sims-N. Cascade Ford
0747.01.02
Date Sampled: 12/02/12
Date Received: 12/04/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L	Q
6010C	12/07/12	6010C	12/10/12	**7439-89-6**	**Iron**	0.05	**22.8**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: GP12-W-7.5
SAMPLE

Lab Sample ID: VV24B
LIMS ID: 12-24159
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VV24-Maul Foster & Alongi
Project: Sims-N. Cascade Ford
0747.01.02
Date Sampled: 12/02/12
Date Received: 12/04/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L	Q
6010C	12/07/12	6010C	12/10/12	**7439-89-6**	**Iron**	0.05	**1.11**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: GP12-W-25.5
SAMPLE

Lab Sample ID: VV24C
LIMS ID: 12-24160
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VV24-Maul Foster & Alongi
Project: Sims-N. Cascade Ford
0747.01.02
Date Sampled: 12/02/12
Date Received: 12/04/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L	Q
6010C	12/07/12	6010C	12/10/12	**7439-89-6**	**Iron**	0.05	**11.1**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: GP-10-W-7.5
SAMPLE

Lab Sample ID: VV24D
LIMS ID: 12-24161
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VV24-Maul Foster & Alongi
Project: Sims-N. Cascade Ford
0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L	Q
6010C	12/07/12	6010C	12/10/12	**7439-89-6**	**Iron**	0.05	**3.40**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: GPDUP-W-7.5
SAMPLE

Lab Sample ID: VV24E
LIMS ID: 12-24162
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VV24-Maul Foster & Alongi
Project: Sims-N. Cascade Ford
0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L	Q
6010C	12/07/12	6010C	12/10/12	**7439-89-6**	**Iron**	0.05	**3.49**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: GP10-W-16.5
SAMPLE

Lab Sample ID: VV24F
LIMS ID: 12-24163
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VV24-Maul Foster & Alongi
Project: Sims-N. Cascade Ford
0747.01.02
Date Sampled: 12/03/12
Date Received: 12/04/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L	Q
6010C	12/07/12	6010C	12/10/12	**7439-89-6**	**Iron**	0.05	**13.8**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: METHOD BLANK

Lab Sample ID: VV24MB
LIMS ID: 12-24158
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VV24-Maul Foster & Alongi
Project: Sims-N. Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	RL	mg/L	Q
6010C	12/07/12	6010C	12/10/12	7439-89-6	Iron	0.05	0.05	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: LAB CONTROL

Lab Sample ID: VV24LCS
LIMS ID: 12-24158
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VV24-Maul Foster & Alongi
Project: Sims-N. Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Iron	6010C	2.06	2.00	103%	

Reported in mg/L

N-Control limit not met
Control Limits: 80-120%

Analytical Resources, Incorporated
Analytical Chemists and Consultants
26 December 2012

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: Sims-N. Cascade Ford, 0747.01.02
ARI Job No.: VW96

Dear Heather:

Please find enclosed the final results for the sample from the project referenced above. This sample was originally received on December 3, 2012 under ARI job VU67. VOCs, SIM PAHs, and NWTPH-Dx analyses were requested on December 18, 2012 and the sample was re-logged under the ARI job number referenced above.

The sample was analyzed outside the recommended holding times for VOCs, SIM PAHs, and NWTPH-Dx.

The VOC continuing calibration was outside the 20% control limit high for 2-Hexanone, and fell out low for Trichlorofluoromethane, Acrolein, Carbon Tetrachloride, and 1,2-Dichloroethane. All detected results for these compounds have been flagged with a "Q" qualifier. No further corrective action was taken.

Several VOC LCS and LCSD percent recoveries were outside the control limits for **LCS-121812A**. The associated sample was undetected for affected compounds. No corrective action was taken.

Hexachlorobutadiene was present in the VOC method blank at a level that was greater than the reporting limit. All detected results for this compound have been flagged with a "B" qualifier. No further corrective action was taken.

There were no other incident of note for these analyses.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,
ANALYTICAL RESOURCES, INC.

Cheronne Oreiro
Project Manager
-For-
Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

cc: file VW96
Enclosures

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Subject: RE: VU67-Sims
From: "Heather Hirsch" <hhirsch@maulfoster.com>
Date: 12/18/2012 10:32 AM
To: "Mark Harris" <markh@arilabs.com>

Thanks, Mark. Based on these results, I would also like to analyze sample GP12-W-25.5 for NWTPH-Dx, PAHs, and VOCs.

HEATHER HIRSCH LHG | MAUL FOSTER & ALONGI, INC.
d. 360 594 6257| c. 360 927 1309 | p. 360 594 6262 | f. 360 594 6270

-----Original Message-----
From: Mark Harris [mailto:markh@arilabs.com]
Sent: Tuesday, December 18, 2012 9:30 AM
To: Heather Hirsch
Subject: VU67-Sims

Final report.

--

Mark Harris
Project Manager
Analytical Resources, Inc.
206/695-6210
markh@arilabs.com

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If you have received this correspondence in error, please notify sender immediately. Thank you.

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: vu17	Turn-around Requested: Standard	Page: 1 of 1	
ARI Client Company: Maul Foster & Alongi	Phone: 360-927-1309	Date: 12/02/12	Ice Present? Y
Client Contact: Heather Hirsch		No. of Coolers: 2	Cooler Temps: 3,4,5.0
Client Project Name: Sims - N. Cascade Ford			
Client Project #: 0747.01.02	Samplers: Hirsch / Gallagher		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: TOC by 9060A	VOCs by 8260B	NWTPH-Gx	NWTPH-Dx	PAHs by 8270 SIM	PCBs by 8082	Lead by 6010		Notes/Comments
GP11-S-1.25	12/2/12	1300	Soil	8		X	X	X	X	X			
GP11-S-7.5		1310		1	X								
GP12-S-12.0		0910		1	X								
GP13-S-1.6		1520		8		X	X	X	X	X			
GP11-W-17.5		1445	Water	9		X	X	X	X				
GP12-W-7.5		1230		9		X	X	X	X				
GP12-W-25.5		1110		9	←	Hold				→			
GP16-W-17.5		1620		10		Hold	X	X	Hold		Hold		
TRIP BLANK													

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by: (Signature)
No trip blanks were provided.	Printed Name: Heather Hirsch	Printed Name: Jennifer Milbrath	Printed Name:	Printed Name:
	Company: Maul Foster & Alongi	Company: ARI	Company:	Company:
	Date & Time: 12/3/12 0830	Date & Time: 12/3/12 1320	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Maul, Foster + Alongi Project Name: SIMS - N Cascade Ford

COC No(s): _____ NA Delivered by: Fed-Ex UPS Courier ARI Hand Delivered Other: _____

Assigned ARI Job No: VUG7 Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry)..... 3.4 5.0 ___ ___ ___ ___

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90877852

Cooler Accepted by: JM Date: 12/3/12 Time: 1320

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used? ... Bubble Wrap (Wet Ice) Gel Packs Baggies Foam Block Paper Other: _____			
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	(NA)	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	(NA)		

Was Sample Split by ARI : (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

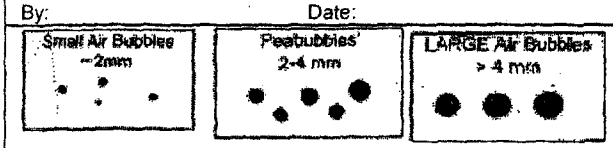
Samples Logged by: TS Date: 12-3-12 Time: 1605

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm"
Peabubbles → "pb"
Large → "lg"
Headspace → "hs"

VUG7 : 00003
12/6/12
VUG7 : 00004

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: VW96
Client: Maul Foster & Alongi
Project Event: 0747.01.02
Project Name: Sims-N.Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	GP12-W-25.5	VW96A	12-25124	Water	12/02/12 11:10	12/03/12 13:20

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP12-W-25.5**
Page 1 of 2 **SAMPLE**

Lab Sample ID: VW96A
LIMS ID: 12-25124
Matrix: Water
Data Release Authorized:
Reported: 12/20/12

QC Report No: VW96-Maul Foster & Alongi
Project: Sims-N.Cascade Ford 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Instrument/Analyst: NT2/PAB
Date Analyzed: 12/18/12 15:09

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	**Benzene**	**0.20**	**0.92**	
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	**Ethylbenzene**	**0.20**	**0.28**	
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	**m,p-Xylene**	**0.40**	**0.82**	
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: GP12-W-25.5**
 SAMPLE

Lab Sample ID: VW96A
LIMS ID: 12-25124
Matrix: Water
Date Analyzed: 12/18/12 15:09

QC Report No: VW96-Maul Foster & Alongi
Project: Sims-N.Cascade Ford
0747.01.02

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	**1,2,4-Trimethylbenzene**	**0.20**	**0.25**	
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	89.2%
d8-Toluene	103%
Bromofluorobenzene	92.6%
d4-1,2-Dichlorobenzene	106%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

VOA SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VW96-Maul Foster & Alongi
Project: Sims-N.Cascade Ford
0747.01.02

ARI ID	Client ID	PV	DCE	TOL	BFB	DCB	TOT OUT
MB-121812A	Method Blank	10	89.4%	104%	96.0%	106%	0
LCS-121812A	Lab Control	10	87.3%	103%	91.7%	99.7%	0
LCSD-121812A	Lab Control Dup	10	87.8%	104%	92.4%	98.8%	0
VW96A	GP12-W-25.5	10	89.2%	103%	92.6%	106%	0

	LCS/MB LIMITS	QC LIMITS
SW8260C		
(DCE) = d4-1,2-Dichloroethane	(80-120)	(80-130)
(TOL) = d8-Toluene	(80-120)	(80-120)
(BFB) = Bromofluorobenzene	(80-120)	(80-120)
(DCB) = d4-1,2-Dichlorobenzene	(80-120)	(80-120)

Prep Method: SW5030B
Log Number Range: 12-25124 to 12-25124

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-121812A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-121812A
LIMS ID: 12-25124
Matrix: Water
Data Release Authorized:
Reported: 12/20/12

QC Report No: VW96-Maul Foster & Alongi
Project: Sims-N.Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT2/PAB
LCSD: NT2/PAB
Date Analyzed LCS: 12/18/12 13:09
LCSD: 12/18/12 13:36

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS		Spike Added-LCS	LCS Recovery	LCSD		Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	9.23		10.0	92.3%	9.58		10.0	95.8%	3.7%
Bromomethane	8.91		10.0	89.1%	9.01		10.0	90.1%	1.1%
Vinyl Chloride	9.81		10.0	98.1%	10.1		10.0	101%	2.9%
Chloroethane	9.43		10.0	94.3%	9.94		10.0	99.4%	5.3%
Methylene Chloride	8.67		10.0	86.7%	9.11		10.0	91.1%	4.9%
Acetone	45.4		50.0	90.8%	45.8		50.0	91.6%	0.9%
Carbon Disulfide	10.3		10.0	103%	10.6		10.0	106%	2.9%
1,1-Dichloroethene	10.2		10.0	102%	10.4		10.0	104%	1.9%
1,1-Dichloroethane	9.50		10.0	95.0%	10.0		10.0	100%	5.1%
trans-1,2-Dichloroethene	9.34		10.0	93.4%	9.80		10.0	98.0%	4.8%
cis-1,2-Dichloroethene	9.43		10.0	94.3%	9.89		10.0	98.9%	4.8%
Chloroform	8.65		10.0	86.5%	9.16		10.0	91.6%	5.7%
1,2-Dichloroethane	7.41	Q	10.0	74.1%	8.01	Q	10.0	80.1%	7.8%
2-Butanone	56.1		50.0	112%	60.2		50.0	120%	7.1%
1,1,1-Trichloroethane	7.79		10.0	77.9%	8.19		10.0	81.9%	5.0%
Carbon Tetrachloride	7.27	Q	10.0	72.7%	7.58	Q	10.0	75.8%	4.2%
Vinyl Acetate	9.78		10.0	97.8%	10.8		10.0	108%	9.9%
Bromodichloromethane	8.83		10.0	88.3%	9.50		10.0	95.0%	7.3%
1,2-Dichloropropane	10.2		10.0	102%	11.0		10.0	110%	7.5%
cis-1,3-Dichloropropene	10.6		10.0	106%	11.3		10.0	113%	6.4%
Trichloroethene	8.81		10.0	88.1%	9.37		10.0	93.7%	6.2%
Dibromochloromethane	9.24		10.0	92.4%	9.87		10.0	98.7%	6.6%
1,1,2-Trichloroethane	9.50		10.0	95.0%	10.7		10.0	107%	11.9%
Benzene	9.57		10.0	95.7%	10.2		10.0	102%	6.4%
trans-1,3-Dichloropropene	9.85		10.0	98.5%	10.7		10.0	107%	8.3%
2-Chloroethylvinylether	11.5		10.0	115%	12.6		10.0	126%	9.1%
Bromoform	8.45		10.0	84.5%	9.16		10.0	91.6%	8.1%
4-Methyl-2-Pentanone (MIBK)	57.3		50.0	115%	62.6		50.0	125%	8.8%
2-Hexanone	59.2	Q	50.0	118%	65.2	Q	50.0	130%	9.6%
Tetrachloroethene	8.84		10.0	88.4%	9.36		10.0	93.6%	5.7%
1,1,2,2-Tetrachloroethane	10.6		10.0	106%	11.4		10.0	114%	7.3%
Toluene	9.55		10.0	95.5%	10.2		10.0	102%	6.6%
Chlorobenzene	9.18		10.0	91.8%	9.87		10.0	98.7%	7.2%
Ethylbenzene	9.56		10.0	95.6%	10.3		10.0	103%	7.5%
Styrene	10.4		10.0	104%	11.0		10.0	110%	5.6%
Trichlorofluoromethane	6.81	Q	10.0	68.1%	7.15	Q	10.0	71.5%	4.9%
1,1,2-Trichloro-1,2,2-trifluoroetha	9.11		10.0	91.1%	9.34		10.0	93.4%	2.5%
m,p-Xylene	19.5		20.0	97.5%	20.9		20.0	104%	6.9%

Lab Sample ID: LCS-121812A
LIMS ID: 12-25124
Matrix: Water

QC Report No: VW96-Maul Foster & Alongi
Project: Sims-N.Cascade Ford
0747.01.02

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	9.43	10.0	94.3%	10.1	10.0	101%	6.9%
1,2-Dichlorobenzene	9.13	10.0	91.3%	9.71	10.0	97.1%	6.2%
1,3-Dichlorobenzene	9.51	10.0	95.1%	10.1	10.0	101%	6.0%
1,4-Dichlorobenzene	9.46	10.0	94.6%	9.98	10.0	99.8%	5.3%
Acrolein	27.2 Q	50.0	54.4%	32.8 Q	50.0	65.6%	18.7%
Iodomethane	8.65	10.0	86.5%	9.12	10.0	91.2%	5.3%
Bromoethane	9.12	10.0	91.2%	9.60	10.0	96.0%	5.1%
Acrylonitrile	10.7	10.0	107%	10.7	10.0	107%	0.0%
1,1-Dichloropropene	9.09	10.0	90.9%	9.58	10.0	95.8%	5.2%
Dibromomethane	8.83	10.0	88.3%	9.41	10.0	94.1%	6.4%
1,1,1,2-Tetrachloroethane	8.27	10.0	82.7%	8.81	10.0	88.1%	6.3%
1,2-Dibromo-3-chloropropane	10.2	10.0	102%	10.2	10.0	102%	0.0%
1,2,3-Trichloropropane	9.98	10.0	99.8%	10.3	10.0	103%	3.2%
trans-1,4-Dichloro-2-butene	10.9	10.0	109%	11.5	10.0	115%	5.4%
1,3,5-Trimethylbenzene	10.5	10.0	105%	11.2	10.0	112%	6.5%
1,2,4-Trimethylbenzene	10.3	10.0	103%	10.9	10.0	109%	5.7%
Hexachlorobutadiene	10.4 B	10.0	104%	10.9 B	10.0	109%	4.7%
1,2-Dibromoethane	8.97	10.0	89.7%	9.86	10.0	98.6%	9.5%
Bromochloromethane	8.62	10.0	86.2%	9.16	10.0	91.6%	6.1%
2,2-Dichloropropane	8.11	10.0	81.1%	8.23	10.0	82.3%	1.5%
1,3-Dichloropropane	10.0	10.0	100%	10.9	10.0	109%	8.6%
Isopropylbenzene	10.7	10.0	107%	11.4	10.0	114%	6.3%
n-Propylbenzene	10.7	10.0	107%	11.5	10.0	115%	7.2%
Bromobenzene	9.51	10.0	95.1%	10.3	10.0	103%	8.0%
2-Chlorotoluene	10.1	10.0	101%	10.8	10.0	108%	6.7%
4-Chlorotoluene	10.3	10.0	103%	11.0	10.0	110%	6.6%
tert-Butylbenzene	10.4	10.0	104%	11.1	10.0	111%	6.5%
sec-Butylbenzene	10.5	10.0	105%	11.2	10.0	112%	6.5%
4-Isopropyltoluene	10.4	10.0	104%	11.0	10.0	110%	5.6%
n-Butylbenzene	10.6	10.0	106%	11.0	10.0	110%	3.7%
1,2,4-Trichlorobenzene	9.19	10.0	91.9%	9.41	10.0	94.1%	2.4%
Naphthalene	10.5	10.0	105%	10.6	10.0	106%	0.9%
1,2,3-Trichlorobenzene	9.74	10.0	97.4%	9.55	10.0	95.5%	2.0%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	87.3%	87.8%
d8-Toluene	103%	104%
Bromofluorobenzene	91.7%	92.4%
d4-1,2-Dichlorobenzene	99.7%	98.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-121812A**
 METHOD BLANK

Lab Sample ID: MB-121812A
LIMS ID: 12-25124
Matrix: Water
Data Release Authorized:
Reported: 12/20/12

QC Report No: VW96-Maul Foster & Alongi
Project: Sims-N.Cascade Ford 0747.01.02
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT2/PAB
Date Analyzed: 12/18/12 14:38

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-121812A**
 METHOD BLANK

Lab Sample ID: MB-121812A
LIMS ID: 12-25124
Matrix: Water
Date Analyzed: 12/18/12 14:38

QC Report No: VW96-Maul Foster & Alongi
Project: Sims-N.Cascade Ford
0747.01.02

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	**Hexachlorobutadiene**	**0.50**	**0.59**	
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	89.4%
d8-Toluene	104%
Bromofluorobenzene	96.0%
d4-1,2-Dichlorobenzene	106%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Extraction Method: SW3520C
Page 1 of 1

Sample ID: GP12-W-25.5
SAMPLE

Lab Sample ID: VW96A
LIMS ID: 12-25124
Matrix: Water
Data Release Authorized: MW
Reported: 12/26/12

QC Report No: VW96-Maul Foster & Alongi
Project: Sims-N.Cascade Ford
Event: 0747.01.02
Date Sampled: 12/02/12
Date Received: 12/03/12

Date Extracted: 12/19/12
Date Analyzed: 12/22/12 01:31
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	**1-Methylnaphthalene**	**0.10**	**0.18**
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	65.0%
d14-Dibenzo(a,h)anthracene	78.0%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VW96-Maul Foster & Alongi
Project: Sims-N.Cascade Ford
0747.01.02

Client ID	MNP	DBA	TOT OUT
MB-121912	65.0%	105%	0
LCS-121912	53.0%	106%	0
LCSD-121912	56.0%	108%	0
GP12-W-25.5	65.0%	78.0%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(40-110)	(33-107)
(DBA) = d14-Dibenzo(a,h)anthracene	(33-140)	(10-142)

Prep Method: SW3520C
Log Number Range: 12-25124 to 12-25124

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Page 1 of 1

Sample ID: LCS-121912
LAB CONTROL SAMPLE

Lab Sample ID: LCS-121912
LIMS ID: 12-25124
Matrix: Water
Data Release Authorized: MW
Reported: 12/26/12

QC Report No: VW96-Maul Foster & Alongi
Project: Sims-N.Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 12/19/12

Date Analyzed LCS: 12/22/12 09:36
LCSD: 12/21/12 22:53
Instrument/Analyst LCS: NT4/JZ
LCSD: NT4/JZ

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Naphthalene	1.56	3.00	52.0%	1.70	3.00	56.7%	8.6%
2-Methylnaphthalene	1.54	3.00	51.3%	1.64	3.00	54.7%	6.3%
1-Methylnaphthalene	1.71	3.00	57.0%	1.88	3.00	62.7%	9.5%
Acenaphthylene	1.64	3.00	54.7%	1.79	3.00	59.7%	8.7%
Acenaphthene	1.78	3.00	59.3%	1.92	3.00	64.0%	7.6%
Fluorene	1.93	3.00	64.3%	2.10	3.00	70.0%	8.4%
Phenanthrene	2.23	3.00	74.3%	2.39	3.00	79.7%	6.9%
Anthracene	2.16	3.00	72.0%	2.17	3.00	72.3%	0.5%
Fluoranthene	2.41	3.00	80.3%	2.62	3.00	87.3%	8.3%
Pyrene	2.19	3.00	73.0%	2.44	3.00	81.3%	10.8%
Benzo(a)anthracene	2.18	3.00	72.7%	2.41	3.00	80.3%	10.0%
Chrysene	2.44	3.00	81.3%	2.64	3.00	88.0%	7.9%
Benzo(a)pyrene	1.82	3.00	60.7%	2.20	3.00	73.3%	18.9%
Indeno(1,2,3-cd)pyrene	2.70	3.00	90.0%	3.00	3.00	100%	10.5%
Dibenz(a,h)anthracene	2.77	3.00	92.3%	2.79	3.00	93.0%	0.7%
Benzo(g,h,i)perylene	2.59	3.00	86.3%	2.96	3.00	98.7%	13.3%
Dibenzofuran	1.88	3.00	62.7%	2.02	3.00	67.3%	7.2%
Total Benzofluoranthenes	6.60	9.00	73.3%	7.76	9.00	86.2%	16.2%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

SIM Semivolatile Surrogate Recovery

	LCS	LCSD
d10-2-Methylnaphthalene	53.0%	56.0%
d14-Dibenzo(a,h)anthracene	106%	108%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS
Extraction Method: SW3520C

Sample ID: MB-121912
METHOD BLANK

Lab Sample ID: MB-121912
LIMS ID: 12-25124
Matrix: Water
Data Release Authorized: MW
Reported: 12/26/12

QC Report No: VW96-Maul Foster & Alongi
Project: Sims-N.Cascade Ford
Event: 0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted: 12/19/12
Date Analyzed: 12/21/12 21:49
Instrument/Analyst: NT4/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.5 mL
Dilution Factor: 1.00

CAS Number	Analyte	RL	Result
91-20-3	Naphthalene	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.10	< 0.10 U
83-32-9	Acenaphthene	0.10	< 0.10 U
86-73-7	Fluorene	0.10	< 0.10 U
85-01-8	Phenanthrene	0.10	< 0.10 U
120-12-7	Anthracene	0.10	< 0.10 U
206-44-0	Fluoranthene	0.10	< 0.10 U
129-00-0	Pyrene	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.10	< 0.10 U
218-01-9	Chrysene	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	< 0.20 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	65.0%
d14-Dibenzo(a,h)anthracene	105%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Extraction Method: SW3510C
Page 1 of 1

QC Report No: VW96-Maul Foster & Alongi
Project: Sims-N.Cascade Ford
0747.01.02

Matrix: Water

Date Received: 12/03/12

Data Release Authorized: MW
Reported: 12/26/12

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DL	Range/Surrogate	RL	Result
MB-121912	Method Blank	12/19/12	12/21/12	1.00	Diesel Range	0.10	< 0.10 U
12-25124	HC ID: ---		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		94.0%
VW96A	GP12-W-25.5	12/19/12	12/21/12	1.00	Diesel Range	0.10	< 0.10 U
12-25124	HC ID: ---		FID4A	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		66.6%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VW96-Maul Foster & Alongi
Project: Sims-N.Cascade Ford
0747.01.02

Client ID	OTER	TOT OUT
MB-121912	94.0%	0
LCS-121912	86.0%	0
LCSD-121912	82.5%	0
GP12-W-25.5	66.6%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3510C
Log Number Range: 12-25124 to 12-25124

FORM-II TPHD

VW96:00018

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: LCS-121912
LCS/LCSD

Lab Sample ID: LCS-121912
LIMS ID: 12-25124
Matrix: Water
Data Release Authorized:
Reported: 12/26/12

QC Report No: VW96-Maul Foster & Alongi
Project: Sims-N.Cascade Ford
0747.01.02
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 12/19/12

Date Analyzed LCS: 12/21/12 17:49
LCSD: 12/21/12 18:10
Instrument/Analyst LCS: FID4A/VTS
LCSD: FID4A/VTS

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 1.0 mL
LCSD: 1.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	2.51	3.00	83.7%	2.40	3.00	80.0%	4.5%

TPHD Surrogate Recovery

	LCS	LCSD
o-Terphenyl	86.0%	82.5%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

FORM III

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: VW96
Matrix: Water Project: Sims-N.Cascade Ford
Date Received: 12/03/12 0747.01.02

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
12-25124-121912MB1	Method Blank	500 mL	1.00 mL	12/19/12
12-25124-121912LCS1	Lab Control	500 mL	1.00 mL	12/19/12
12-25124-121912LCSD1	Lab Control Dup	500 mL	1.00 mL	12/19/12
12-25124-VW96A	GP12-W-25.5	500 mL	1.00 mL	12/19/12

VW96:00020

Analytical Resources, Incorporated
Analytical Chemists and Consultants

24 April 2014

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: Sims-N Cascade Ford, 0747.01.03
ARI Job No.: YG35

Dear Heather:

Please find enclosed the original chain of custody record and the final results for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted four water samples and one trip blank on April 11, 2014. The samples were analyzed for VOCs, NWTPH-G, NWTPH-Dx, PCBs and EPH as requested.

The percent differences (%Ds) for several compounds were not within control limits for the CCAL the bracketed the initial VOC analyses of these samples. All positive results for these compounds have been flagged with a Q qualifier to denote the high %Ds.

All samples were initially analyzed for EPH on 4/21/14. The %Ds were high for several aliphatic ranges for the CCAL that bracketed the analyses of these samples. All samples were re-analyzed on 4/22/14. The %Ds for all aliphatic ranges were within acceptable QC limits for the re-analyses. The results for the re-analyses only have been submitted.

The remaining analyses proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file YG35

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: YG35	Turn-around Requested: STD	Page: 1 of 1	
ARI Client Company: Maul Foster & Alongi	Phone: 360-594-6257	Date: 4/10/14	Ice Present? Y
Client Contact: Heather Hirsch		No. of Coolers: 2	Cooler Temps: 7.4, 7.3
Client Project Name: Sims - North Cascade Ford			
Client Project #: 0747.01.03	Samplers: H. Hirsch		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested: NWTPH-Gx	VOCs 8260	NWTPH-Dx	NWTPH-EPH	PCBs by 8082	TCLP-Pb & Hg			Notes/Comments
MW01	4/10/14	1145	water	9	X	X	X	X					
MWDUP		1200		7	X	X	X						
MW02		1420		4			X	X					
MW03		1600		6			X	X	X				
DRUM 1		1645		5		X			X				
DRUM 2	↓	1750	↓	5		X			X				
Trip Blank													
DRUM 3	4/10/14	1715	SOIL	6		X				X			
DRUM 4		1730		6		X				X			
DRUM 5	↓	1810	↓	6		X				X			

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by (Signature)	Received by (Signature)
	Printed Name: Heather Hirsch	Printed Name: Rich Hudson	Printed Name	Printed Name:
	Company: Maul Foster Alongi	Company: ARI	Company	Company:
	Date & Time: 4/11/14 1020	Date & Time: 4/11/14 1020	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: MFA

Project Name: Sims. North Cascade Fact

COC No(s): _____ (NA)

Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No. YG35

Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	(YES)	NO
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2 0-6 0 °C for chemistry) 7.4 7.3

Time: 1345

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID#: 12241222 4

Cooler Accepted by: _____ Date: 4/11/14 Time: 1020

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used?	(Bubble Wrap) (Wet Ice) Gel Packs Baggies (Foam Block) Paper Other: _____		
Was sufficient ice used (if appropriate)?	NA	YES	(NO)
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs).	(NA)	YES	NO
Were all VOC vials free of air bubbles?	NA	YES	(NO)
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI.	NA	4/4/14	

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

Samples Logged by: JM Date: 4/11/14 Time: 1432

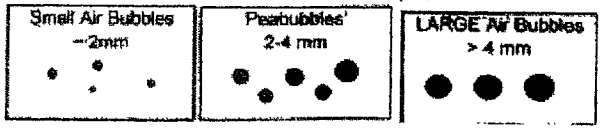
*** Notify Project Manager of discrepancies or concerns ***

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

Trip Blank = sm in 4 of 4

By: JM Date: 4/11/14



Small → "sm"	(< 2 mm)
Peabubbles → "pb"	(2 to < 4 mm)
Large → "lg"	(4 to < 6 mm)
Headspace → "hs"	(> 6 mm)

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Temperature Compliance Form

YG35

Cooler#: 1 & 2	Temperature(°C): 7.4, 7.3	
Sample ID	**Bottle Count**	**Bottle Type**
All samples associated with this job were received at a temp greater than 6°C		

Cooler#:	Temperature(°C):	
Sample ID	**Bottle Count**	**Bottle Type**

Cooler#:	Temperature(°C):	
Sample ID	**Bottle Count**	**Bottle Type**

Cooler#:	Temperature(°C):	
Sample ID	**Bottle Count**	**Bottle Type**

Completed by: JM Date: 4/11/14 Time: 1431

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YG35
Client: Maul Foster & Alongi
Project Event: 0747.01.03
Project Name: Sims - North Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	MW01	YG35A	14-6830	Water	04/10/14 11:45	04/11/14 10:20
2.	MWDUP	YG35B	14-6831	Water	04/10/14 12:00	04/11/14 10:20
3.	MW02	YG35C	14-6832	Water	04/10/14 14:20	04/11/14 10:20
4.	MW03	YG35D	14-6833	Water	04/10/14 16:00	04/11/14 10:20
5.	DRUM 1	YG35E	14-6834	Water	04/10/14 16:45	04/11/14 10:20
6.	DRUM 2	YG35F	14-6835	Water	04/10/14 17:50	04/11/14 10:20
7.	TRIP BLANK	YG35G	14-6836	Water	04/10/14	04/11/14 10:20
8.	MW01	YG35H	14-6837	Water	04/10/14 11:45	04/11/14 10:20
9.	MW02	YG35I	14-6838	Water	04/10/14 14:20	04/11/14 10:20
10.	MW03	YG35J	14-6839	Water	04/10/14 16:00	04/11/14 10:20
11.	DRUM 3	YG35K	14-6840	Soil	04/10/14 17:15	04/11/14 10:20
12.	DRUM 4	YG35L	14-6841	Soil	04/10/14 17:30	04/11/14 10:20
13.	DRUM 5	YG35M	14-6842	Soil	04/10/14 18:10	04/11/14 10:20

YG35:00065

DL[1] LOD[1], LOQ[1] and Control Limits Summary for VOA Analysis of Water 10 mL Purge Volume (EPA Method 8260C)

Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	LCS Recovery[2,4]	Replicate RPD[3]
Chloromethane	0.0948	0.250	**0.500**	77 – 122	≤ 30
Vinyl Chloride	0.0572	0.100	**0.200**	74 – 123	≤ 30
Bromomethane	0.252	0.500	**1.00**	68 – 130	≤ 30
Chloroethane	0.0861	0.100	**0.200**	68 – 133	≤ 30
Trichlorofluoromethane	0.0375	0.100	**0.200**	74 – 135	≤ 30
Acrolein	2.48	2.50	**5.00**	60 – 124	≤ 30
1,1,2-Trichloro-1,2,2-Trifluoroethane	0.0429	0.100	**0.200**	76 – 124	≤ 30
Acetone	2.06	2.50	**5.00**	64 – 125	≤ 30
1,1-Dichloroethene	0.0540	0.100	**0.200**	74 – 120	≤ 30
Bromoethane	0.0412	0.100	**0.200**	77 – 122	≤ 30
Iodomethane (Methyl Iodide)	0.227	0.500	**1.00**	76 – 123	≤ 30
Methylene Chloride	0.485	0.500	**1.00**	71 – 125	≤ 30
Acrylonitrile	0.604	1.00	**1.00**	76 – 123	≤ 30
Carbon Disulfide	0.0370	0.100	**0.200**	77 – 124	≤ 30
trans-1,2-Dichloroethene	0.0485	0.100	**0.200**	75 – 120	≤ 30
Vinyl Acetate	0.0688	0.100	**0.200**	74 – **120**	≤ 30
1,1-Dichloroethane	0.0533	0.100	**0.200**	80 – 120	≤ 30
2-Butanone	0.814	2.50	**5.00**	73 – 123	≤ 30
2,2-Dichloropropane	0.0518	0.100	**0.200**	72 – 133	≤ 30
cis-1,2-Dichloroethene	0.0427	0.100	**0.200**	78 – 120	≤ 30
Chloroform	0.0273	0.100	**0.200**	**80 – 120**	≤ 30
Bromochloromethane	0.0607	0.100	**0.200**	**80 – 120**	≤ 30
1,1,1-Trichloroethane	0.0408	0.100	**0.200**	79 – 124	≤ 30
1,1-Dichloropropene	0.0340	0.100	**0.200**	**80 – 120**	≤ 30
Carbon Tetrachloride	0.0439	0.100	**0.200**	71 – 139	≤ 30
1,2-Dichloroethane	0.0717	0.100	**0.200**	**80** – 121	≤ 30
Benzene	0.0266	0.100	**0.200**	**80 – 120**	≤ 30
Trichloroethene	0.0489	0.100	**0.200**	**80 – 120**	≤ 30
1,2-Dichloropropane	0.0352	0.100	**0.200**	**80 – 120**	≤ 30
Bromodichloromethane	0.0506	0.100	**0.200**	**80** – 122	≤ 30
Dibromomethane	0.145	0.200	**0.200**	**80 – 120**	≤ 30
2-Chloroethylvinyl Ether	0.250	0.500	**1.00**	62 – 130	≤ 30
4-Methyl-2-Pentanone	0.974	2.50	**5.00**	**80** – 125	≤ 30

2 SF, 30% RPD, USE ELEMENT

YG35 : 66666

DL[1] LOD[1], LOQ[1] and Control Limits Summary for VOA Analysis of Water 10 mL Purge Volume (EPA Method 8260C)

Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	LCS Recovery[2,4]	Replicate RPD[3]
cis 1,3-dichloropropene	0.0610	0.100	**0.200**	**80** – 127	≤ 30
Toluene	0.0399	0.100	**0.200**	**80 – 120**	≤ 30
trans 1,3-Dichloropropene	0.0815	0.100	**0.200**	79 – 132	≤ 30
2-Hexanone	0.902	2.50	**5.00**	80 – 129	≤ 30
1,1,2-Trichloroethane	0.129	0.200	**0.200**	**80 – 120**	≤ 30
1,3-Dichloropropane	0.0622	0.100	**0.200**	**80 – 120**	≤ 30
Tetrachloroethene	0.0474	0.100	**0.200**	**80 – 120**	≤ 30
Dibromochloromethane	0.0481	0.100	**0.200**	**80 – 120**	≤ 30
1,2-Dibromoethane (Ethylene Dibromide)	0.0745	0.100	**0.200**	**80 – 120**	≤ 30
Chlorobenzene	0.0230	0.100	**0.200**	**80 – 120**	≤ 30
Ethyl Benzene	0.0371	0.100	**0.200**	**80 – 120**	≤ 30
1,1,1,2-Tetrachloroethane	0.0396	0.100	**0.200**	**80** – 128	≤ 30
m,p-xylene	0.0522	0.200	**0.400**	**80 – 120**	≤ 30
o-Xylene	0.0349	0.100	**0.200**	**80** – 120	≤ 30
Styrene	0.0454	0.100	**0.200**	**80** – 121	≤ 30
Bromoform	0.0818	0.100	**0.200**	62 – 149	≤ 30
1,1,2,2-Tetrachloroethane	0.0598	0.100	**0.200**	**80 – 120**	≤ 30
1,2,3-Trichloropropane	0.131	0.250	**0.500**	**80 – 120**	≤ 30
trans-1,4-Dichloro 2-Butene	0.324	0.500	**1.00**	47 – 147	≤ 30
n-Propyl Benzene	0.0235	0.100	**0.200**	**80 – 120**	≤ 30
Bromobenzene	0.0605	0.100	**0.200**	**80 – 120**	≤ 30
iso-propyl Benzene	0.0212	0.100	**0.200**	**80 – 120**	≤ 30
2-Chloro Toluene	0.0236	0.100	**0.200**	**80 – 120**	≤ 30
4-Chloro Toluene	0.0159	0.100	**0.200**	**80 – 120**	≤ 30
tert-Butyl Benzene	0.0256	0.100	**0.200**	**80** – 121	≤ 30
1,3,5-Trimethyl Benzene	0.0150	0.100	**0.200**	**80 – 120**	≤ 30
1,2,4-Trimethylbenzene	0.0243	0.100	**0.200**	**80** – 122	≤ 30
sec-Butyl Benzene	0.0237	0.100	**0.200**	**80** – 121	≤ 30
4-Isopropyl Toluene	0.0263	0.100	**0.200**	**80** – 124	≤ 30
1,3-Dichlorobenzene	0.0362	0.100	**0.200**	**80 – 120**	≤ 30
1,4-Dichlorobenzene	0.0397	0.100	**0.200**	**80 – 120**	≤ 30
n-Butyl Benzene	0.0248	0.100	**0.200**	**80** – 125	≤ 30
1,2-Dichlorobenzene	0.0365	0.100	**0.200**	**80 – 120**	≤ 30

3SF, 30% RPD, USE ELEMENT

YG35 : 00667

DL[1] LOD[1], LOQ[1] and Control Limits Summary for VOA Analysis of Water 10 mL Purge Volume (EPA Method 8260C)

Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	LCS Recovery[2,4]	Replicate RPD[3]
1,2-Dibromo 3-Chloropropane	0.366	0.500	**0.500**	79 – 129	≤ 30
1,2,4-Trichlorobenzene	0.107	0.250	**0.500**	77 – 127	≤ 30
Hexachloro-1,3-Butadiene	0.0734	0.250	**0.500**	80 – 135	≤ 30
Naphthalene	0.118	0.250	**0.500**	**80** – 128	≤ 30
1,2,3-Trichlorobenzene	0.110	0.250	**0.500**	**80** - 125	≤ 30
Dichlorodifluoromethane	0.0521	0.100	**0.200**	68 – 123	≤ 30
Methyl-*tert*-butyl ether	0.0729	0.250	**0.500**	73 – 121	≤ 30
Surrogate Standards			**MB / LCS**	**Samples**	
1,2-Dichloroethane-d_4			**80** – 130	**80** – 130	
1,2-Dichlorobenzene-d_4			**80** – 120	**80 – 120**	
Toluene-d_8			**80** – 120	**80 – 120**	
4-Bromofluorobenzene			**80 – 120**	**80 – 120**	

(1) Detection Limit (DL), Limit of Detection (LOD) and Limit of Quantitation (LOQ) are defined in ARI SOP 1018S
(2) Control limits calculated using all data from 1/1/12 through 5/31/12
(3) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

(4) Highlighted control limits (**bold font**) are adjusted from the calculated values to reflect that:
a. ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit or
b. Control limits for analyzes with no separate preparation procedure are adjusted to reflect the minimum uncertainty in the calibration of the instrument allowed by the referenced analytical method.

3 SF, 30% RPD, USE ELEMENT

YG35 : 66006

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Quality Control Criteria for Analysis of Aqueous and Tissue Samples for Aroclors (Polychlorinated Biphenyls – PCB) EPA Method 8082A

ARI Bench Sheet	Extraction	DL[1]	LOD[1]	LOQ[1]	Analyte	Spike Recovery Control Limits (%)[2,3]			RPD[4]
						LCS	MB/LCS Surrogate	Sample Surrogate	
Aqueous Samples (Separatory Funnel Extraction – EPA Method 3510C)									
01-3018F	500 to 5 mL	0.130 µg/L	0.5 µg/L	1 µg/L	Aroclor 1016	45 – 121	--	--	≤ 40
		0.147 µg/L	0.5 µg/L	1 µg/L	Aroclor 1260	54 – 129	--	--	
		--	--	--	TCMX	--	40 – 118	38 – 118	
		--	--	--	DCBP	--	41 – 111	29 – 118	
02-3021F	500 to 1 mL	0.0175 µg/L	0.05 µg/L	0.1 µg/L	Aroclor 1016	36 – **100**	--	--	≤ 40
		0.0174 µg/L	0.05 µg/L	0.1 µg/L	Aroclor 1260	41 – 113	--	--	
		--	--	--	TCMX	--	29 – **100**	25 – **100**	
		--	--	--	DCBP	--	39 – 116	**10** – 128	
03-3022F	1000 to 0.5 mL[5]	0.00248 µg/L	0.005 µg/L	0.01 µg/L	Aroclor 1016	44 – 117	--	--	≤ 40
		0.00276 µg/L	0.005 µg/L	0.01 µg/L	Aroclor 1260	46 – 131	--	--	
		--	--	--	TCMX	--	31 – **100**	21 – **100**	
		--	--	--	DCBP	--	32 – 108	19 – 111	
TCLP Extract (Separatory Funnel Extraction – EPA Method 3510C)									
04-3023F	100 to 10 mL	1.30 µg/L[8]	5 µg/L	10 µg/L	Aroclor 1016	30 – 160	--	--	≤ 40
		1.47 µg/L[8]	5 µg/L	10 µg/L	Aroclor 1260	30 – 160	--	--	
		--	--	--	TCMX	--	30 – 160	30 – 160	
		--	--	--	DCBP	--	30 – 160	30 – 160	
Tissue Samples (Tissuemizer / Blender Extraction – EPA Method 3550C Modified) – Concentrations in µg/kg as received (wet weight)									
09-3029F	10 g to 5 mL	2.92 µg/kg[6]	25 µg/kg	50 µg/kg	Aroclor 1016	30 – 160			≤ 40
		3.91 µg/kg[6]	25 µg/kg	50 µg/kg	Aroclor 1260	30 – 160			
		--	--	--	TCMX		30 – 160	30 – 160	
		--	--	--	DCBP		30 – 160	30 – 160	
10-3027F	25 g to 5 mL	2.37 µg/kg[7]	10 µg/kg	20 µg/kg	Aroclor 1016	30 – 160			≤ 40
		1.06 µg/kg[7]	10 µg/kg	20 µg/kg	Aroclor 1260	30 – 160			
		--	--	--	TCMX		30 – 160	30 – 160	
		--	--	--	DCBP		30 – 160	30 – 160	
11-3030F	25 g to 1 mL	2.37[7] µg/kg	4 µg/kg	4 µg/kg	Aroclor 1016	30 – 160			≤ 40
		1.06[7] µg/kg	2 µg/kg	4 µg/kg	Aroclor 1260	30 – 160			
		--	--	--	TCMX		30 – 160	30 – 160	
		--	--	--	DCBP		30 – 160	30 – 160	

(1) Detection Limit (DL), Limit of Detection (LOD) & Limit of Quantitation (LOQ) are defined in ARI SOP 1018S.
(2) Highlighted control limits (**bold font**) are adjusted from the calculated values to reflect that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
(3) 30 – 160 are default limits used when there is insufficient data to calculate historic control limits
(4) Acceptance criteria for the relative percent difference (RPD) between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then

$$RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$$

(5) Low level extraction solvent is hexane instead of Methylene Chloride.
(6) LOD Study SM10
(7) MDL Study QZ25
(8) Based on 500 to 5 mL water extraction until sufficient TCLP data is collected to calculate LOD.

YG55 : 88889

Data Reporting Qualifiers

Effective 12/31/13

Inorganic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Duplicate RPD is not within established control limits
B	Reported value is less than the CRDL but ≥ the Reporting Limit
N	Matrix Spike recovery not within established control limits
NA	Not Applicable, analyte not spiked
H	The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
L	Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Flagged value is not within established control limits
B	Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
J	Estimated concentration when the value is less than ARI's established reporting limits
D	The spiked compound was not detected due to sample extract dilution
E	Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

YG35:60010

Q Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

YG35:00011

Geotechnical Data

A	The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
F	Samples were frozen prior to particle size determination
SM	Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
SS	Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
W	Weight of sample in some pipette aliquots was below the level required for accurate weighting

YG35:00612

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW01**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YG35A
LIMS ID: 14-6830
Matrix: Water
Data Release Authorized:
Reported: 04/22/14

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford 0747.01.03
Date Sampled: 04/10/14
Date Received: 04/11/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/18/14 14:11

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	**Chlorobenzene**	**0.20**	**0.50**	
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MW01**
Page 2 of 2 **SAMPLE**

Lab Sample ID: YG35A QC Report No: YG35-Maul Foster & Alongi
LIMS ID: 14-6830 Project: Sims - North Cascade Ford
Matrix: Water 0747.01.03
Date Analyzed: 04/18/14 14:11

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	**Isopropylbenzene**	**0.20**	**0.76**	
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	**sec-Butylbenzene**	**0.20**	**1.2**	
99-87-6	**4-Isopropyltoluene**	**0.20**	**0.21**	
104-51-8	**n-Butylbenzene**	**0.20**	**0.31**	**Q**
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	103%
d8-Toluene	97.9%
Bromofluorobenzene	95.5%
d4-1,2-Dichlorobenzene	97.7%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MWDUP**
Page 1 of 2 **SAMPLE**

Lab Sample ID: YG35B
LIMS ID: 14-6831
Matrix: Water
Data Release Authorized:
Reported: 04/22/14

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford
0747.01.03
Date Sampled: 04/10/14
Date Received: 04/11/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/18/14 14:39

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	**Chlorobenzene**	**0.20**	**0.53**	
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MWDUP**
Page 2 of 2 **SAMPLE**

Lab Sample ID: YG35B QC Report No: YG35-Maul Foster & Alongi
LIMS ID: 14-6831 Project: Sims - North Cascade Ford
Matrix: Water 0747.01.03
Date Analyzed: 04/18/14 14:39

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	**Isopropylbenzene**	**0.20**	**0.81**	
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	**sec-Butylbenzene**	**0.20**	**1.3**	
99-87-6	**4-Isopropyltoluene**	**0.20**	**0.22**	
104-51-8	**n-Butylbenzene**	**0.20**	**0.33**	**Q**
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	104%
d8-Toluene	99.9%
Bromofluorobenzene	97.8%
d4-1,2-Dichlorobenzene	98.6%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: TRIP BLANK SAMPLE**

Lab Sample ID: YG35G
LIMS ID: 14-6836
Matrix: Water
Data Release Authorized: MW
Reported: 04/22/14

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford 0747.01.03
Date Sampled: 04/10/14
Date Received: 04/11/14

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/18/14 13:14

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: TRIP BLANK SAMPLE**

Lab Sample ID: YG35G
LIMS ID: 14-6836
Matrix: Water
Date Analyzed: 04/18/14 13:14

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford 0747.01.03

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	106%
d8-Toluene	98.1%
Bromofluorobenzene	95.7%
d4-1,2-Dichlorobenzene	99.3%

2-Chloroethylvinylether is an acid labile compound and may not be recovered from an acid preserved sample.

EPA SW-846 indicates that vinyl chloride and styrene may degrade in the presence of acid preservative.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-041814A**
 METHOD BLANK

Lab Sample ID: MB-041814A
LIMS ID: 14-6830
Matrix: Water
Data Release Authorized:
Reported: 04/22/14

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford 0747.01.03
Date Sampled: NA
Date Received: NA

Instrument/Analyst: NT3/PAB
Date Analyzed: 04/18/14 10:22

Sample Amount: 10.0 mL
Purge Volume: 10.0 mL

CAS Number	Analyte	LOQ	Result	Q
74-87-3	Chloromethane	0.50	< 0.50	U
74-83-9	Bromomethane	1.0	< 1.0	U
75-01-4	Vinyl Chloride	0.20	< 0.20	U
75-00-3	Chloroethane	0.20	< 0.20	U
75-09-2	Methylene Chloride	1.0	< 1.0	U
67-64-1	Acetone	5.0	< 5.0	U
75-15-0	Carbon Disulfide	0.20	< 0.20	U
75-35-4	1,1-Dichloroethene	0.20	< 0.20	U
75-34-3	1,1-Dichloroethane	0.20	< 0.20	U
156-60-5	trans-1,2-Dichloroethene	0.20	< 0.20	U
156-59-2	cis-1,2-Dichloroethene	0.20	< 0.20	U
67-66-3	Chloroform	0.20	< 0.20	U
107-06-2	1,2-Dichloroethane	0.20	< 0.20	U
78-93-3	2-Butanone	5.0	< 5.0	U
71-55-6	1,1,1-Trichloroethane	0.20	< 0.20	U
56-23-5	Carbon Tetrachloride	0.20	< 0.20	U
108-05-4	Vinyl Acetate	0.20	< 0.20	U
75-27-4	Bromodichloromethane	0.20	< 0.20	U
78-87-5	1,2-Dichloropropane	0.20	< 0.20	U
10061-01-5	cis-1,3-Dichloropropene	0.20	< 0.20	U
79-01-6	Trichloroethene	0.20	< 0.20	U
124-48-1	Dibromochloromethane	0.20	< 0.20	U
79-00-5	1,1,2-Trichloroethane	0.20	< 0.20	U
71-43-2	Benzene	0.20	< 0.20	U
10061-02-6	trans-1,3-Dichloropropene	0.20	< 0.20	U
110-75-8	2-Chloroethylvinylether	1.0	< 1.0	U
75-25-2	Bromoform	0.20	< 0.20	U
108-10-1	4-Methyl-2-Pentanone (MIBK)	5.0	< 5.0	U
591-78-6	2-Hexanone	5.0	< 5.0	U
127-18-4	Tetrachloroethene	0.20	< 0.20	U
79-34-5	1,1,2,2-Tetrachloroethane	0.20	< 0.20	U
108-88-3	Toluene	0.20	< 0.20	U
108-90-7	Chlorobenzene	0.20	< 0.20	U
100-41-4	Ethylbenzene	0.20	< 0.20	U
100-42-5	Styrene	0.20	< 0.20	U
75-69-4	Trichlorofluoromethane	0.20	< 0.20	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	< 0.20	U
179601-23-1	m,p-Xylene	0.40	< 0.40	U
95-47-6	o-Xylene	0.20	< 0.20	U
95-50-1	1,2-Dichlorobenzene	0.20	< 0.20	U
541-73-1	1,3-Dichlorobenzene	0.20	< 0.20	U
106-46-7	1,4-Dichlorobenzene	0.20	< 0.20	U

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: MB-041814A**
 METHOD BLANK

Lab Sample ID: MB-041814A QC Report No: YG35-Maul Foster & Alongi
LIMS ID: 14-6830 Project: Sims - North Cascade Ford
Matrix: Water 0747.01.03
Date Analyzed: 04/18/14 10:22

CAS Number	Analyte	LOQ	Result	Q
107-02-8	Acrolein	5.0	< 5.0	U
74-88-4	Iodomethane	1.0	< 1.0	U
74-96-4	Bromoethane	0.20	< 0.20	U
107-13-1	Acrylonitrile	1.0	< 1.0	U
563-58-6	1,1-Dichloropropene	0.20	< 0.20	U
74-95-3	Dibromomethane	0.20	< 0.20	U
630-20-6	1,1,1,2-Tetrachloroethane	0.20	< 0.20	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	< 0.50	U
96-18-4	1,2,3-Trichloropropane	0.50	< 0.50	U
110-57-6	trans-1,4-Dichloro-2-butene	1.0	< 1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.20	< 0.20	U
95-63-6	1,2,4-Trimethylbenzene	0.20	< 0.20	U
87-68-3	Hexachlorobutadiene	0.50	< 0.50	U
106-93-4	1,2-Dibromoethane	0.20	< 0.20	U
74-97-5	Bromochloromethane	0.20	< 0.20	U
594-20-7	2,2-Dichloropropane	0.20	< 0.20	U
142-28-9	1,3-Dichloropropane	0.20	< 0.20	U
98-82-8	Isopropylbenzene	0.20	< 0.20	U
103-65-1	n-Propylbenzene	0.20	< 0.20	U
108-86-1	Bromobenzene	0.20	< 0.20	U
95-49-8	2-Chlorotoluene	0.20	< 0.20	U
106-43-4	4-Chlorotoluene	0.20	< 0.20	U
98-06-6	tert-Butylbenzene	0.20	< 0.20	U
135-98-8	sec-Butylbenzene	0.20	< 0.20	U
99-87-6	4-Isopropyltoluene	0.20	< 0.20	U
104-51-8	n-Butylbenzene	0.20	< 0.20	U
120-82-1	1,2,4-Trichlorobenzene	0.50	< 0.50	U
91-20-3	Naphthalene	0.50	< 0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	< 0.50	U

Reported in µg/L (ppb)

Volatile Surrogate Recovery

d4-1,2-Dichloroethane	105%
d8-Toluene	98.9%
Bromofluorobenzene	96.3%
d4-1,2-Dichlorobenzene	102%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-041814A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-041814A
LIMS ID: 14-6830
Matrix: Water
Data Release Authorized:
Reported: 04/22/14

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford
0747.01.03
Date Sampled: NA
Date Received: NA

Instrument/Analyst LCS: NT3/PAB
LCSD: NT3/PAB
Date Analyzed LCS: 04/18/14 09:25
LCSD: 04/18/14 09:54

Sample Amount LCS: 10.0 mL
LCSD: 10.0 mL
Purge Volume LCS: 10.0 mL
LCSD: 10.0 mL

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Chloromethane	8.07	10.0	80.7%	8.71	10.0	87.1%	7.6%
Bromomethane	10.1	10.0	101%	9.71	10.0	97.1%	3.9%
Vinyl Chloride	9.54	10.0	95.4%	8.99	10.0	89.9%	5.9%
Chloroethane	8.95	10.0	89.5%	9.28	10.0	92.8%	3.6%
Methylene Chloride	9.96	10.0	99.6%	9.71	10.0	97.1%	2.5%
Acetone	53.0	50.0	106%	50.1	50.0	100%	5.6%
Carbon Disulfide	9.96	10.0	99.6%	9.14	10.0	91.4%	8.6%
1,1-Dichloroethene	10.1	10.0	101%	9.14	10.0	91.4%	10.0%
1,1-Dichloroethane	10.1	10.0	101%	9.33	10.0	93.3%	7.9%
trans-1,2-Dichloroethene	9.60	10.0	96.0%	9.20	10.0	92.0%	4.3%
cis-1,2-Dichloroethene	10.2	10.0	102%	9.64	10.0	96.4%	5.6%
Chloroform	9.51	10.0	95.1%	8.97	10.0	89.7%	5.8%
1,2-Dichloroethane	9.92	10.0	99.2%	9.37	10.0	93.7%	5.7%
2-Butanone	44.3	50.0	88.6%	43.3	50.0	86.6%	2.3%
1,1,1-Trichloroethane	10.2	10.0	102%	9.60	10.0	96.0%	6.1%
Carbon Tetrachloride	10.2	10.0	102%	9.72	10.0	97.2%	4.8%
Vinyl Acetate	9.60	10.0	96.0%	9.23	10.0	92.3%	3.9%
Bromodichloromethane	10.2	10.0	102%	9.65	10.0	96.5%	5.5%
1,2-Dichloropropane	9.81	10.0	98.1%	9.15	10.0	91.5%	7.0%
cis-1,3-Dichloropropene	10.4	10.0	104%	9.78	10.0	97.8%	6.1%
Trichloroethene	10.4	10.0	104%	9.71	10.0	97.1%	6.9%
Dibromochloromethane	10.5	10.0	105%	9.66	10.0	96.6%	8.3%
1,1,2-Trichloroethane	9.72	10.0	97.2%	9.37	10.0	93.7%	3.7%
Benzene	10.2	10.0	102%	9.45	10.0	94.5%	7.6%
trans-1,3-Dichloropropene	10.5	10.0	105%	9.80	10.0	98.0%	6.9%
2-Chloroethylvinylether	10.5	10.0	105%	9.95	10.0	99.5%	5.4%
Bromoform	11.0	10.0	110%	10.0	10.0	100%	9.5%
4-Methyl-2-Pentanone (MIBK)	52.7	50.0	105%	51.8	50.0	104%	1.7%
2-Hexanone	40.7	50.0	81.4%	38.7	50.0	77.4%	5.0%
Tetrachloroethene	10.1	10.0	101%	9.21	10.0	92.1%	9.2%
1,1,2,2-Tetrachloroethane	9.27	10.0	92.7%	8.66	10.0	86.6%	6.8%
Toluene	9.86	10.0	98.6%	9.41	10.0	94.1%	4.7%
Chlorobenzene	10.3	10.0	103%	9.56	10.0	95.6%	7.5%
Ethylbenzene	10.5	10.0	105%	9.88	10.0	98.8%	6.1%
Styrene	10.5	10.0	105%	10.0	10.0	100%	4.9%
Trichlorofluoromethane	10.2	10.0	102%	9.68	10.0	96.8%	5.2%
1,1,2-Trichloro-1,2,2-trifluoroetha	10.5	10.0	105%	9.56	10.0	95.6%	9.4%
m,p-Xylene	21.0	20.0	105%	19.5	20.0	97.5%	7.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Volatiles by Purge & Trap GC/MS-Method SW8260C **Sample ID: LCS-041814A**
 LAB CONTROL SAMPLE

Lab Sample ID: LCS-041814A QC Report No: YG35-Maul Foster & Alongi
LIMS ID: 14-6830 Project: Sims - North Cascade Ford
Matrix: Water 0747.01.03

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
o-Xylene	10.2	10.0	102%	9.56	10.0	95.6%	6.5%
1,2-Dichlorobenzene	10.2	10.0	102%	9.58	10.0	95.8%	6.3%
1,3-Dichlorobenzene	10.3	10.0	103%	9.65	10.0	96.5%	6.5%
1,4-Dichlorobenzene	10.1	10.0	101%	9.78	10.0	97.8%	3.2%
Acrolein	52.0	50.0	104%	48.5	50.0	97.0%	7.0%
Iodomethane	9.50	10.0	95.0%	9.10	10.0	91.0%	4.3%
Bromoethane	9.92	10.0	99.2%	8.41	10.0	84.1%	16.5%
Acrylonitrile	9.10	10.0	91.0%	8.76	10.0	87.6%	3.8%
1,1-Dichloropropene	9.84	10.0	98.4%	9.36	10.0	93.6%	5.0%
Dibromomethane	9.97	10.0	99.7%	9.56	10.0	95.6%	4.2%
1,1,1,2-Tetrachloroethane	10.0	10.0	100%	9.71	10.0	97.1%	2.9%
1,2-Dibromo-3-chloropropane	10.6	10.0	106%	10.8	10.0	108%	1.9%
1,2,3-Trichloropropane	10.2	10.0	102%	9.65	10.0	96.5%	5.5%
trans-1,4-Dichloro-2-butene	11.3	10.0	113%	10.7	10.0	107%	5.5%
1,3,5-Trimethylbenzene	10.9	10.0	109%	10.2	10.0	102%	6.6%
1,2,4-Trimethylbenzene	12.2	10.0	122%	11.0	10.0	110%	10.3%
Hexachlorobutadiene	10.7	10.0	107%	9.64	10.0	96.4%	10.4%
1,2-Dibromoethane	9.88	10.0	98.8%	9.22	10.0	92.2%	6.9%
Bromochloromethane	9.80	10.0	98.0%	8.88	10.0	88.8%	9.9%
2,2-Dichloropropane	10.7	10.0	107%	10.1	10.0	101%	5.8%
1,3-Dichloropropane	9.74	10.0	97.4%	9.33	10.0	93.3%	4.3%
Isopropylbenzene	10.6	10.0	106%	10.0	10.0	100%	5.8%
n-Propylbenzene	11.0	10.0	110%	10.3	10.0	103%	6.6%
Bromobenzene	9.99	10.0	99.9%	9.49	10.0	94.9%	5.1%
2-Chlorotoluene	10.6	10.0	106%	9.99	10.0	99.9%	5.9%
4-Chlorotoluene	10.5	10.0	105%	10.1	10.0	101%	3.9%
tert-Butylbenzene	10.7	10.0	107%	10.2	10.0	102%	4.8%
sec-Butylbenzene	10.8	10.0	108%	10.1	10.0	101%	6.7%
4-Isopropyltoluene	11.5	10.0	115%	10.9	10.0	109%	5.4%
n-Butylbenzene	13.7 Q	10.0	137%	12.3 Q	10.0	123%	10.8%
1,2,4-Trichlorobenzene	16.1 Q	10.0	161%	13.9 Q	10.0	139%	14.7%
Naphthalene	16.4 Q	10.0	164%	14.7 Q	10.0	147%	10.9%
1,2,3-Trichlorobenzene	13.1 Q	10.0	131%	11.8 Q	10.0	118%	10.4%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

Volatile Surrogate Recovery

	LCS	LCSD
d4-1,2-Dichloroethane	102%	104%
d8-Toluene	99.3%	101%
Bromofluorobenzene	96.5%	95.5%
d4-1,2-Dichlorobenzene	97.3%	98.7%

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt3.i
Lab File ID: cc0418.d
Analysis Type: WATER
Lab Sample ID: CC0418
Method: /chem3/nt3.i/04182014.b/8260C040214L.m

Injection Date: 18-APR-2014 08:57
Init. Cal. Date(s): 02-APR-2014 02-APR-2014
Init. Cal. Times: 15:09 18:28
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
1 Dichlorodifluoromethane	0.44580	0.36829	0.36829	0.010	-17.38531	20.00000	Averaged
2 Chloromethane	1.17597	1.09521	1.09521	0.100	-6.86777	20.00000	Averaged
3 Vinyl Chloride	0.89926	0.86257	0.86257	0.010	-4.08010	20.00000	Averaged
4 Bromomethane	0.34902	0.34021	0.34021	0.010	-2.52283	20.00000	Averaged
5 Chloroethane	0.50351	0.47178	0.47178	0.010	-6.30132	20.00000	Averaged
6 Trichlorofluoromethane	0.72134	0.75453	0.75453	0.010	4.60128	20.00000	Averaged
7 1,1-Dichloroethene	0.46986	0.45156	0.45156	0.010	-3.89382	20.00000	Averaged
8 Carbon Disulfide	1.50374	1.49667	1.49667	0.010	-0.47024	20.00000	Averaged
9 112Trichloro122Trifluoroeth	0.43165	0.43255	0.43255	0.010	0.20833	20.00000	Averaged
10 Iodomethane	0.54902	0.52017	0.52017	0.010	-5.25525	20.00000	Averaged
11 Bromoethane	0.34039	0.32380	0.32380	0.010	-4.87408	20.00000	Averaged
12 Acrolein	0.13900	0.13609	0.13609	0.010	-2.09509	20.00000	Averaged
13 Methylene Chloride	0.51686	0.51638	0.51638	0.010	-0.09174	20.00000	Averaged
14 Acetone	0.20998	0.21411	0.21411	0.010	1.96909	20.00000	Averaged
15 Trans-1,2-Dichloroethene	0.54232	0.52105	0.52105	0.010	-3.92153	20.00000	Averaged
16 Methyl tert butyl ether	1.59031	1.49560	1.49560	0.010	-5.95547	20.00000	Averaged
17 1,1-Dichloroethane	1.24408	1.23673	1.23673	0.100	-0.59073	20.00000	Averaged
18 Acrylonitrile	0.33905	0.31903	0.31903	0.010	-5.90676	20.00000	Averaged
19 Vinyl Acetate	1.79401	1.69153	1.69153	0.010	-5.71243	20.00000	Averaged
20 Cis-1,2-Dichloroethene	0.55949	0.54812	0.54812	0.010	-2.03107	20.00000	Averaged
22 2,2-Dichloropropane	0.69888	0.76405	0.76405	0.010	9.32378	20.00000	Averaged
23 Bromochloromethane	0.26552	0.26389	0.26389	0.010	-0.61550	20.00000	Averaged
24 Chloroform	0.90345	0.84523	0.84523	0.010	-6.44463	20.00000	Averaged
25 Carbon Tetrachloride	0.42412	0.43297	0.43297	0.010	2.08700	20.00000	Averaged
$ 26 Dibromofluoromethane	0.45349	0.45758	0.45758	0.010	0.90155	20.00000	Averaged
27 1,1,1-Trichloroethane	0.77876	0.80745	0.80745	0.010	3.68390	20.00000	Averaged
28 2-Butanone	0.47121	0.40924	0.40924	0.010	-13.15057	20.00000	Averaged
29 1,1-Dichloropropene	0.46283	0.45704	0.45704	0.010	-1.25230	20.00000	Averaged
30 Benzene	1.33495	1.35323	1.35323	0.010	1.36915	20.00000	Averaged
$ 32 d4-1,2-Dichloroethane	0.61397	0.63138	0.63138	0.010	2.83626	20.00000	Averaged
33 1,2-Dichloroethane	0.53558	0.54700	0.54700	0.010	2.13263	20.00000	Averaged
34 Trichloroethene	0.34102	0.34293	0.34293	0.010	0.55878	20.00000	Averaged
37 Dibromomethane	0.18848	0.19204	0.19204	0.010	1.88936	20.00000	Averaged
38 1,2-Dichloropropane	0.47953	0.47216	0.47216	0.010	-1.53832	20.00000	Averaged
39 Bromodichloromethane	0.41417	0.42706	0.42706	0.010	3.11332	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt3.i
Lab File ID: cc0418.d
Analysis Type: WATER
Lab Sample ID: CC0418
Method: /chem3/nt3.i/04182014.b/8260C040214L.m

Injection Date: 18-APR-2014 08:57
Init. Cal. Date(s): 02-APR-2014 02-APR-2014
Init. Cal. Times: 15:09 18:28
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
41 2-Chloroethyl Vinyl Ether	0.26555	0.27540	0.27540	0.010	3.70881	20.00000	Averaged
42 Cis 1,3-dichloropropene	0.52142	0.55481	0.55481	0.010	6.40241	20.00000	Averaged
$ 43 d8-Toluene	1.21287	1.23764	1.23764	0.010	2.04205	20.00000	Averaged
44 Toluene	0.86315	0.88256	0.88256	0.010	2.24902	20.00000	Averaged
45 Tetrachloroethene	0.36412	0.37241	0.37241	0.010	2.27582	20.00000	Averaged
46 4-Methyl-2-Pentanone	0.54015	0.58075	0.58075	0.010	7.51558	20.00000	Averaged
47 Trans 1,3-Dichloropropene	0.47251	0.49318	0.49318	0.010	4.37427	20.00000	Averaged
48 1,1,2-Trichloroethane	0.28725	0.28356	0.28356	0.010	-1.28342	20.00000	Averaged
49 Chlorodibromomethane	0.34148	0.36215	0.36215	0.010	6.05370	20.00000	Averaged
50 1,3-Dichloropropane	0.56548	0.55711	0.55711	0.010	-1.47959	20.00000	Averaged
51 1,2-Dibromoethane	0.28808	0.27921	0.27921	0.010	-3.07691	20.00000	Averaged
52 2-Hexanone	40.60812	50.00000	0.45014	0.010	-18.78376	20.00000	Quadratic
54 Chlorobenzene	0.99797	1.03064	1.03064	0.300	3.27320	20.00000	Averaged
55 Ethyl Benzene	1.74866	1.84938	1.84938	0.010	5.75961	20.00000	Averaged
56 1,1,1,2-Tetrachloroethane	0.33767	0.34903	0.34903	0.010	3.36372	20.00000	Averaged
57 m,p-xylene	0.70587	0.73791	0.73791	0.010	4.53966	20.00000	Averaged
58 o-Xylene	0.69968	0.72872	0.72872	0.010	4.15021	20.00000	Averaged
59 Styrene	1.14263	1.20352	1.20352	0.010	5.32899	20.00000	Averaged
60 Bromoform	0.38806	0.42673	0.42673	0.100	9.96274	20.00000	Averaged
61 Isopropyl Benzene	3.11309	3.38041	3.38041	0.010	8.58676	20.00000	Averaged
$ 62 4-Bromofluorobenzene	0.55695	0.54533	0.54533	0.010	-2.08610	20.00000	Averaged
63 Bromobenzene	0.75617	0.77565	0.77565	0.010	2.57604	20.00000	Averaged
64 N-Propyl Benzene	3.58788	4.01295	4.01295	0.010	11.84718	20.00000	Averaged
65 1,1,2,2-Tetrachloroethane	0.76237	0.70501	0.70501	0.010	-7.52393	20.00000	Averaged
66 2-Chloro Toluene	2.56833	2.75074	2.75074	0.010	7.10230	20.00000	Averaged
67 1,3,5-Trimethyl Benzene	2.57341	2.86914	2.86914	0.010	11.49166	20.00000	Averaged
68 1,2,3-Trichloropropane	0.22485	0.23571	0.23571	0.010	4.83097	20.00000	Averaged
70 Trans-1,4-Dichloro 2-Butene	0.37302	0.40585	0.40585	0.010	8.80050	20.00000	Averaged
71 4-Chloro Toluene	2.38076	2.57693	2.57693	0.010	8.23985	20.00000	Averaged
72 T-Butyl Benzene	2.24019	2.42084	2.42084	0.010	8.06389	20.00000	Averaged
73 1,2,4-Trimethylbenzene	2.29477	2.74897	2.74897	0.010	19.79281	20.00000	Averaged
74 S-Butyl Benzene	3.15041	3.42768	3.42768	0.010	8.80108	20.00000	Averaged
75 4-Isopropyl Toluene	2.46015	2.88235	2.88235	0.010	17.16147	20.00000	Averaged
76 1,3-Dichlorobenzene	1.46198	1.53977	1.53977	0.010	5.32108	20.00000	Averaged
78 1,4-Dichlorobenzene	1.50983	1.55369	1.55369	0.010	2.90521	20.00000	Averaged

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt3.i
Lab File ID: cc0418.d
Analysis Type: WATER
Lab Sample ID: CC0418
Method: /chem3/nt3.i/04182014.b/8260C040214L.m

Injection Date: 18-APR-2014 08:57
Init. Cal. Date(s): 02-APR-2014 02-APR-2014
Init. Cal. Times: 15:09 18:28
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF10	CCAL RRF10	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
79 N-Butyl Benzene	1.74315	2.41086	2.41086	0.010	38.30501	20.00000	Averaged	<-
$ 80 d4-1,2-Dichlorobenzene	0.93281	0.93542	0.93542	0.010	0.27926	20.00000	Averaged	
81 1,2-Dichlorobenzene	1.42771	1.47707	1.47707	0.010	3.45694	20.00000	Averaged	
82 1,2-Dibromo 3-Chloropropane	0.14808	0.16125	0.16125	0.010	8.89963	20.00000	Averaged	
83 Hexachloro 1,3-Butadiene	0.31410	0.33955	0.33955	0.010	8.10372	20.00000	Averaged	
84 1,2,4-Trichlorobenzene	0.46626	0.71281	0.71281	0.010	52.88007	20.00000	Averaged	<-
85 Naphthalene	15.15671	10.00000	1.41343	0.010	51.56715	20.00000	Linear	<-
86 1,2,3-Trichlorobenzene	12.48211	10.00000	0.61180	0.010	24.82114	20.00000	Linear	<-

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG
Matrix: Water

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford
Event: 0747.01.03

Data Release Authorized:
Reported: 04/15/14

ARI ID	Client ID	Analysis Date	DL	Range	Result
MB-041414	Method Blank	04/14/14	1.0	Gasoline	< 0.25 U
14-6830		PID1		HC ID	---
				Trifluorotoluene	92.6%
				Bromobenzene	89.0%
YG35A	MW01	04/14/14	1.0	Gasoline	< 0.25 U
14-6830		PID1		HC ID	---
				Trifluorotoluene	95.9%
				Bromobenzene	90.9%
YG35B	MWDUP	04/14/14	1.0	Gasoline	< 0.25 U
14-6831		PID1		HC ID	---
				Trifluorotoluene	94.5%
				Bromobenzene	90.0%
YG35G	TRIP BLANK	04/14/14	1.0	Gasoline	< 0.25 U
14-6836		PID1		HC ID	---
				Trifluorotoluene	96.5%
				Bromobenzene	91.5%

Gasoline values reported in mg/L (ppm)

Quantitation on total peaks in the gasoline range from Toluene to Naphthalene.

GAS: Indicates the presence of gasoline or weathered gasoline.
GRO: Positive result that does not match an identifiable gasoline pattern.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TPHG by Method NWTPHG

Sample ID: LCS-041414
LAB CONTROL SAMPLE

Lab Sample ID: LCS-041414
LIMS ID: 14-6830
Matrix: Water
Data Release Authorized:
Reported: 04/15/14

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford
Event: 0747.01.03
Date Sampled: NA
Date Received: NA

Date Analyzed LCS: 04/14/14 16:55
LCSD: 04/14/14 17:24
Instrument/Analyst LCS: PID1/PKC
LCSD: PID1/PKC

Purge Volume: 5.0 mL

Dilution Factor LCS: 1.0
LCSD: 1.0

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Gasoline Range Hydrocarbons	0.92	1.00	92.0%	0.91	1.00	91.0%	1.1%

Reported in mg/L (ppm)

RPD calculated using sample concentrations per SW846.

TPHG Surrogate Recovery

	LCS	LCSD
Trifluorotoluene	95.8%	96.4%
Bromobenzene	89.5%	91.6%

ANALYTICAL RESOURCES INCORPORATED

TPHG WATER SURROGATE RECOVERY SUMMARY

ARI Job: YG35
Matrix: Water

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford
Event: 0747.01.03

Client ID	TFT	BBZ	TOT OUT
MB-041414	92.6%	89.0%	0
LCS-041414	95.8%	89.5%	0
LCSD-041414	96.4%	91.6%	0
MW01	95.9%	90.9%	0
MWDUP	94.5%	90.0%	0
TRIP BLANK	96.5%	91.5%	0

	LCS/MB LIMITS	QC LIMITS
(TFT) = Trifluorotoluene	(80-120)	(80-120)
(BBZ) = Bromobenzene	(80-120)	(80-120)

Log Number Range: 14-6830 to 14-6836

FORM II TPHG

YG35 : 00028

Data File: /chem3/pid1.i/20140414-1.b/0414a008.d

Date : 14-APR-2014 16:55

Client ID:

Sample Info: LCS0414

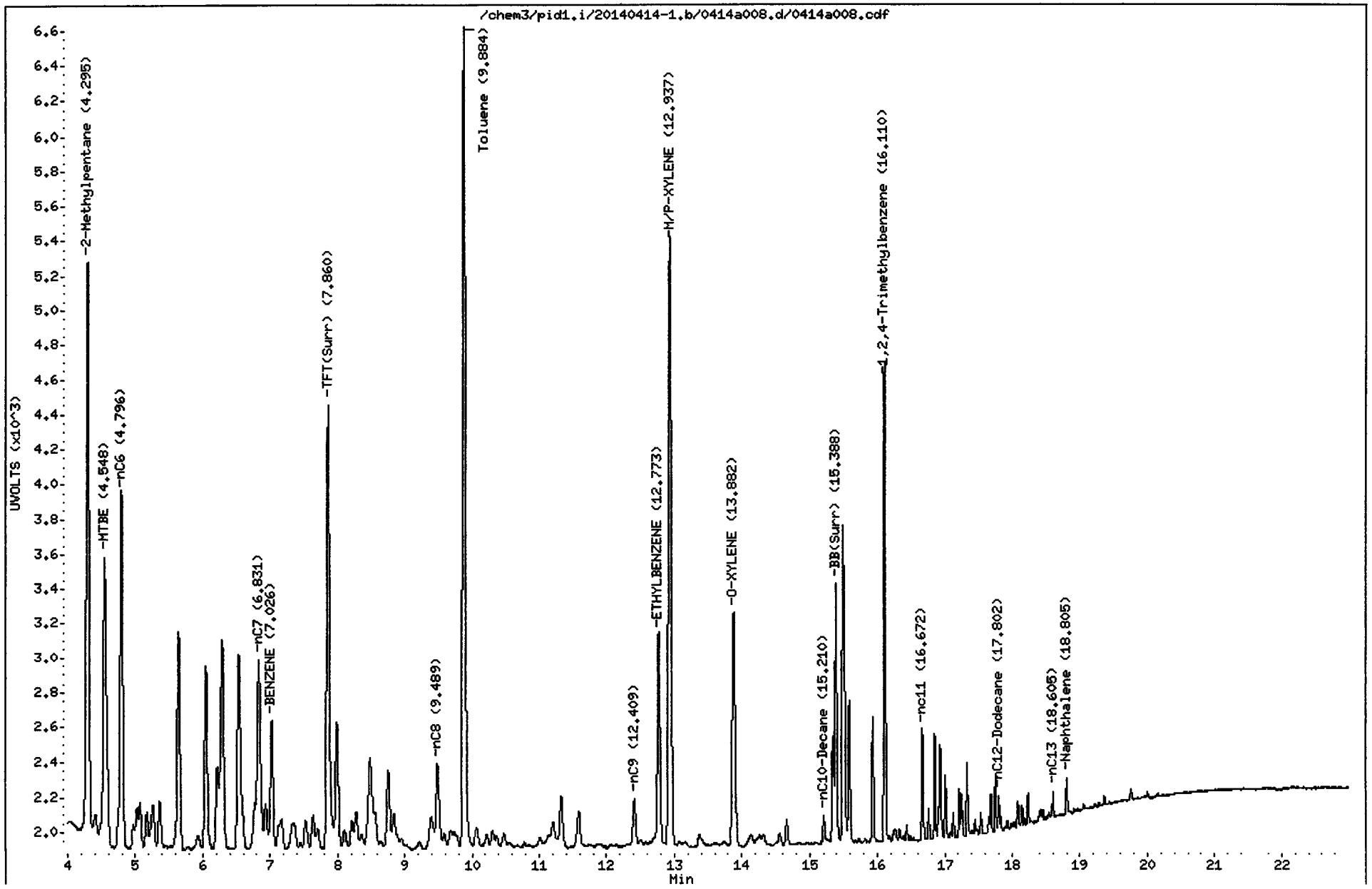
Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: PC

Column diameter: 0.18

Y9559 : 999529



Data File: /chem3/pid1.i/20140414-2.b/0414a008.d

Date : 14-APR-2014 16:55

Client ID:

Sample Info: LCS0414

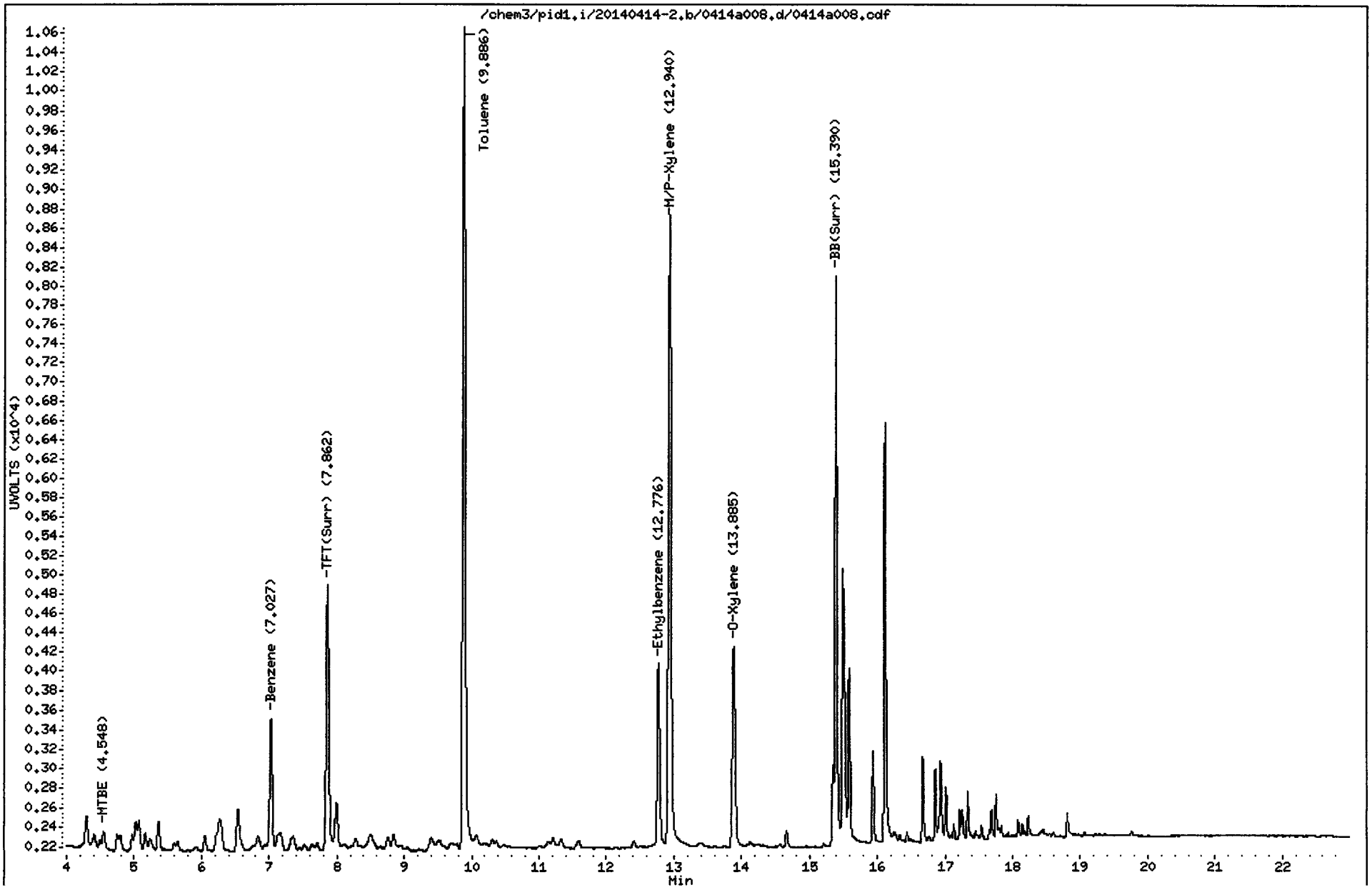
Column phase: RTX 502-2 PID

Instrument: pid1.i

Operator: PC

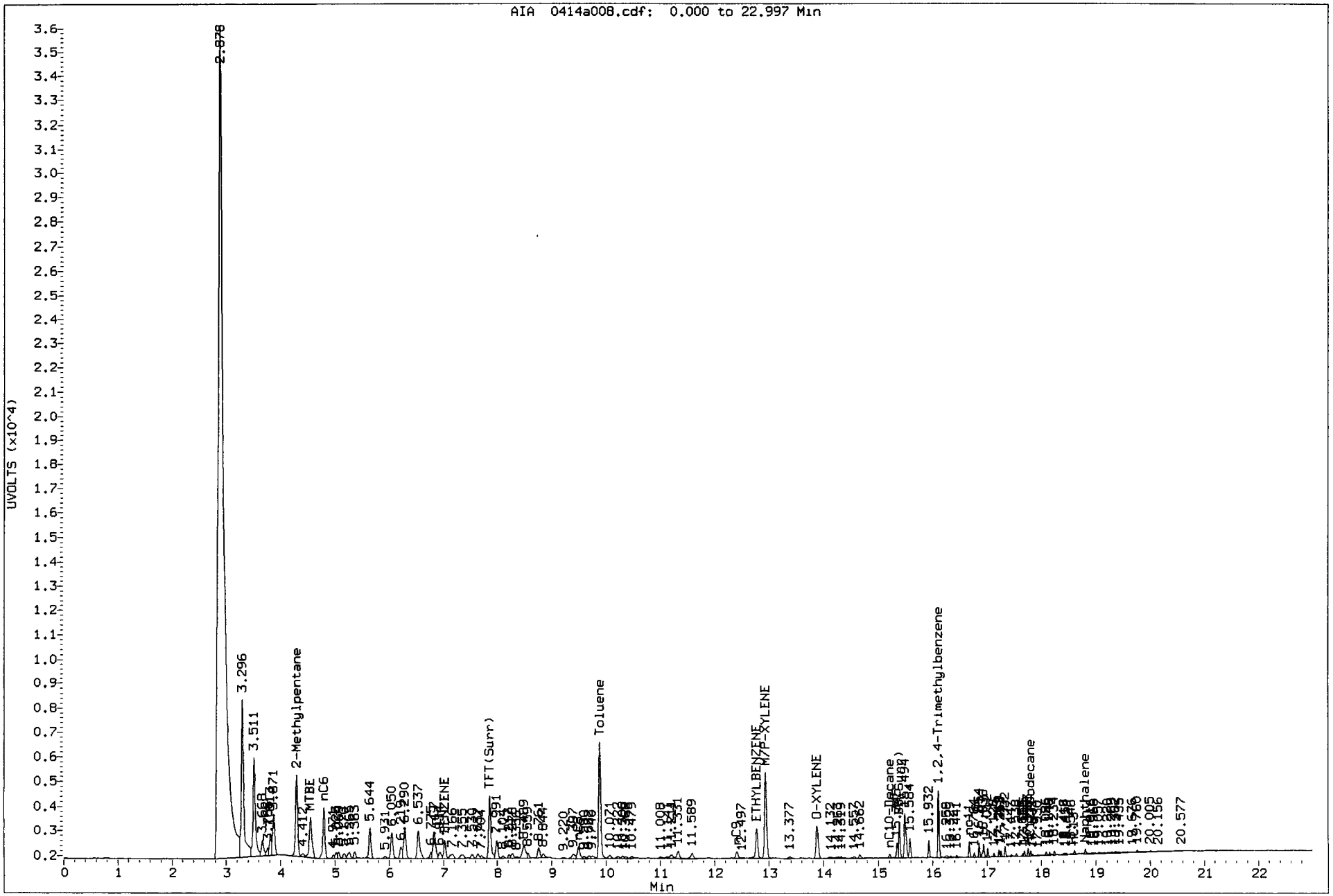
Column diameter: 0.18

Y6556.000556

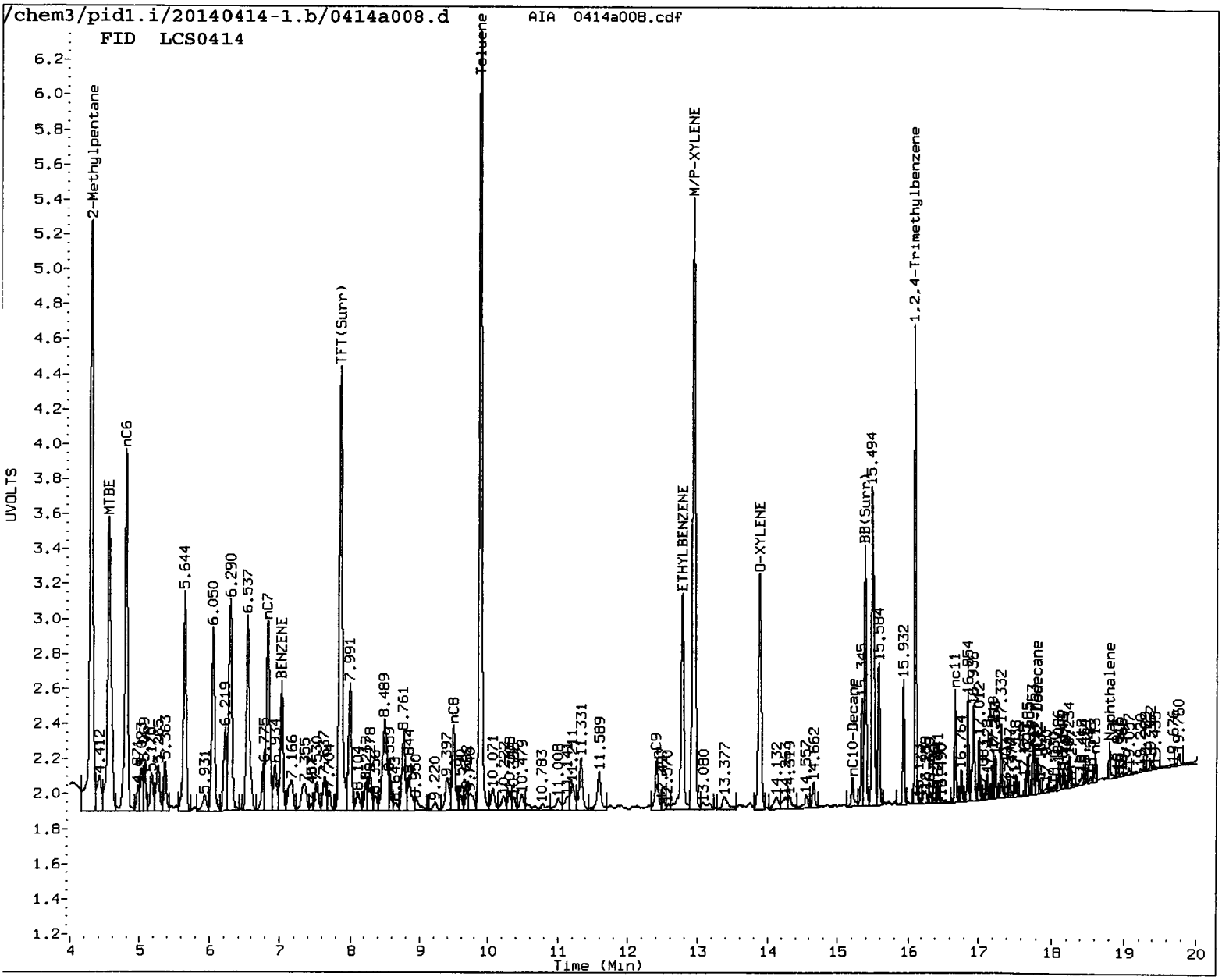


RC 4/15/14

Data File: /chem3/pid1.i/20140414-1.b/0414a008.d/0414a008.cdf
Injection Date: 14-APR-2014 16:55
Instrument: pid1.i
Client Sample ID:



YG35 : 000631



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 4/15/14

YG35.00032

Data File: /chem3/pid1.i/20140414-1.b/0414a009.d

Date : 14-APR-2014 17:24

Client ID:

Sample Info: LCSD0414

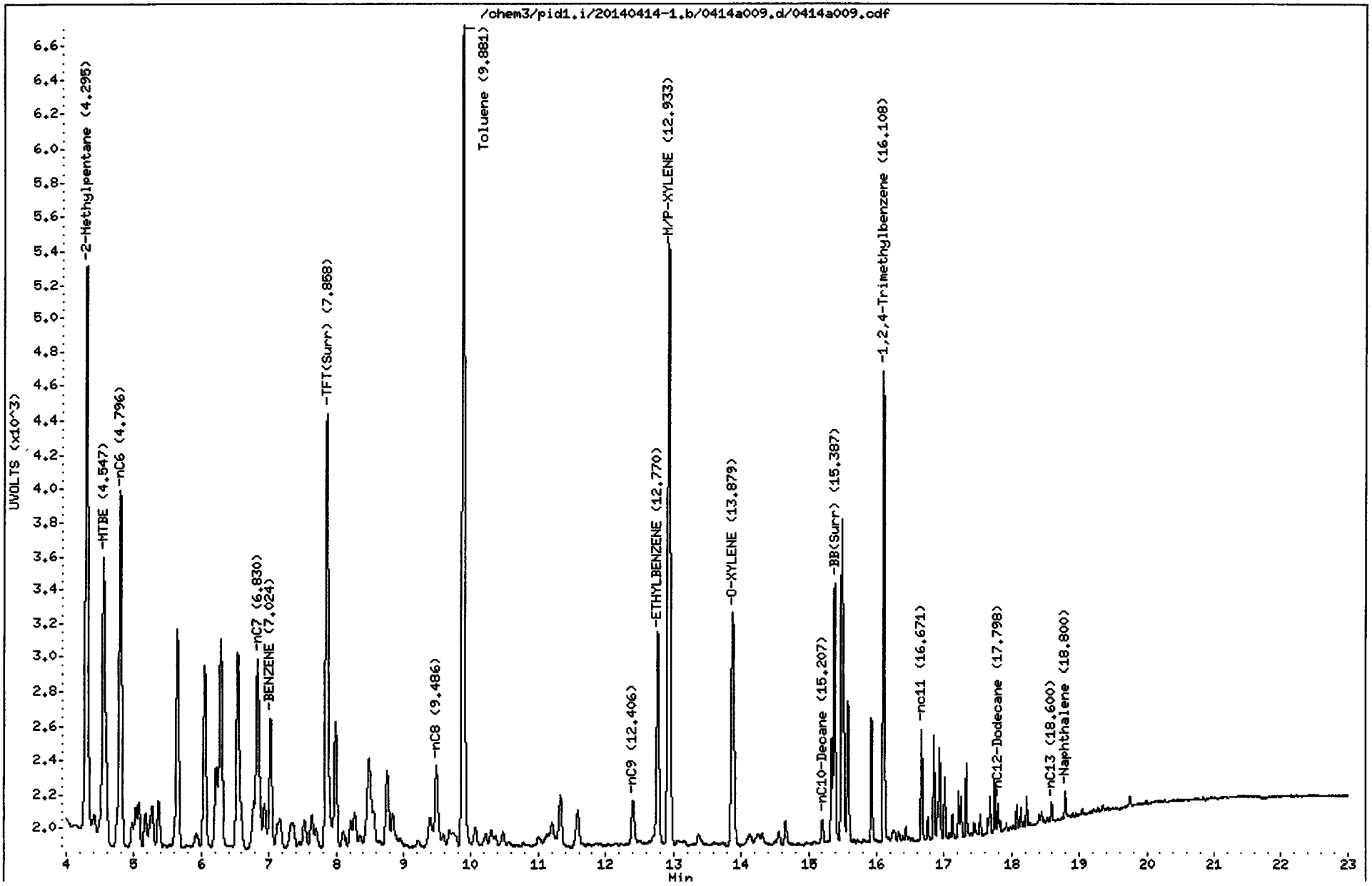
Instrument: pid1.i

Operator: PC

Column phase: RTX 502-2 FID

Column diameter: 0.18

YGSE 066633



Data File: /chem3/pid1.i/20140414-2.b/0414a009.d

Date : 14-APR-2014 17:24

Client ID:

Sample Info: LCSD0414

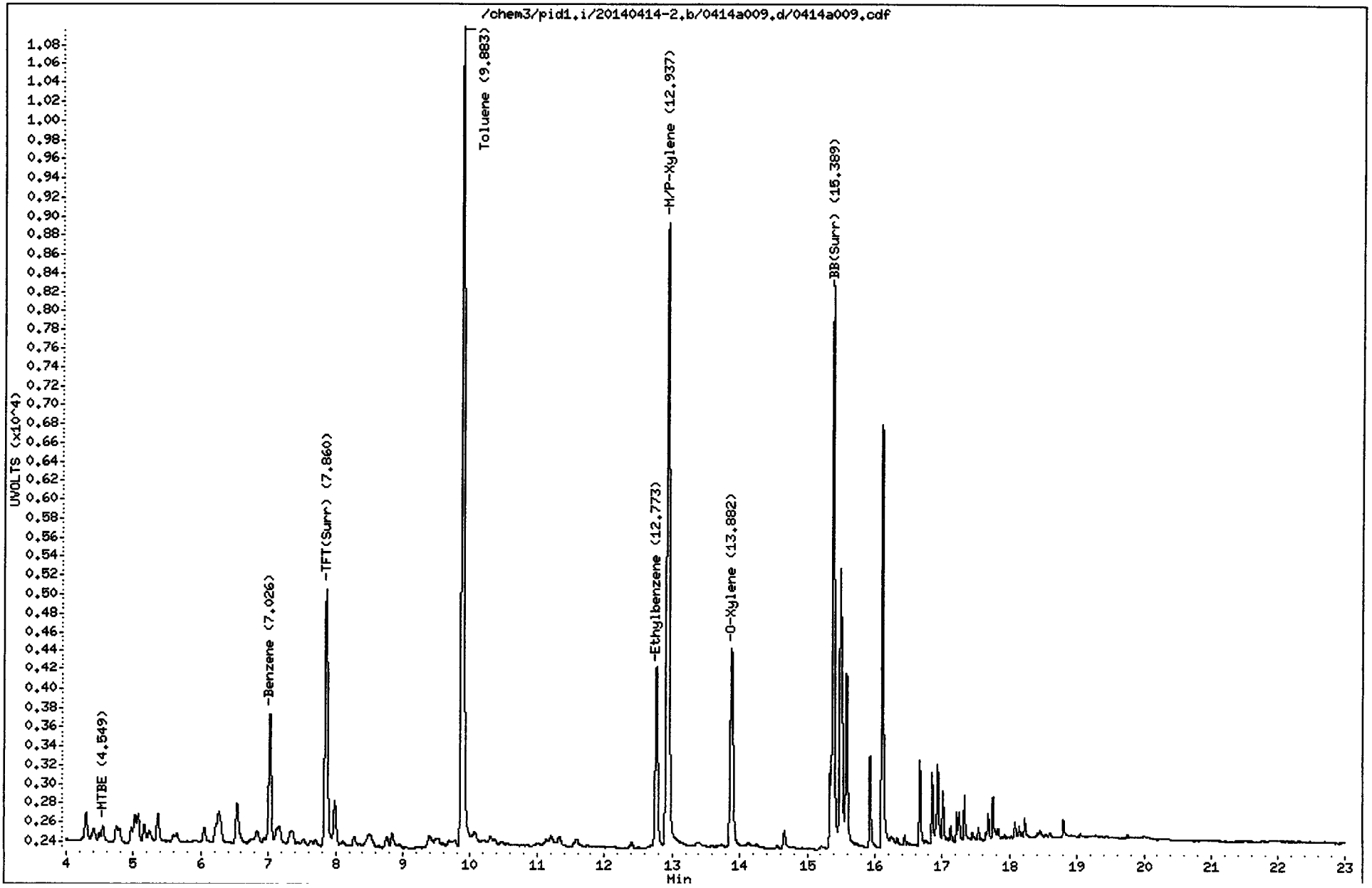
Column phase: RTX 502-2 PID

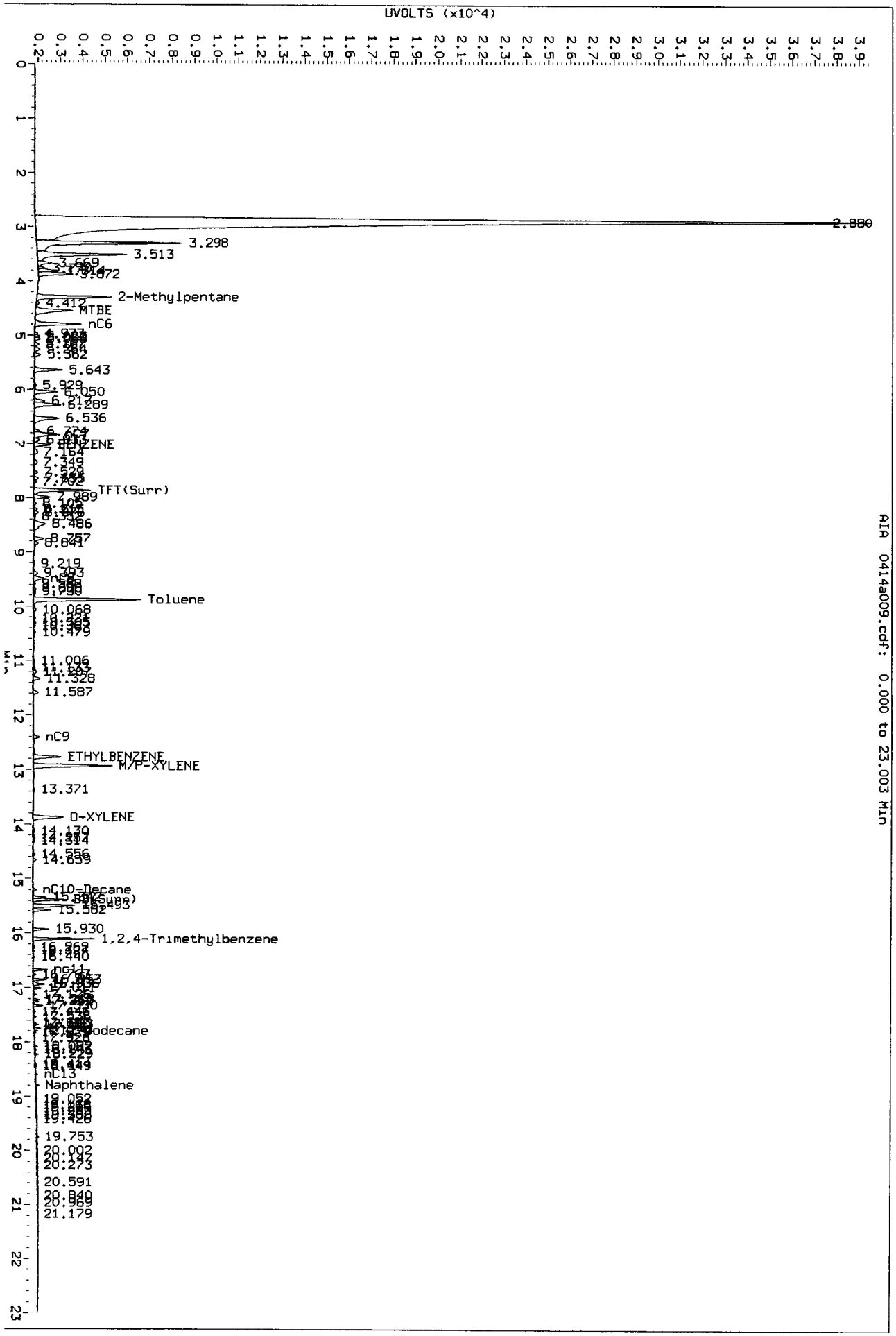
Instrument: pid1.i

Operator: PC

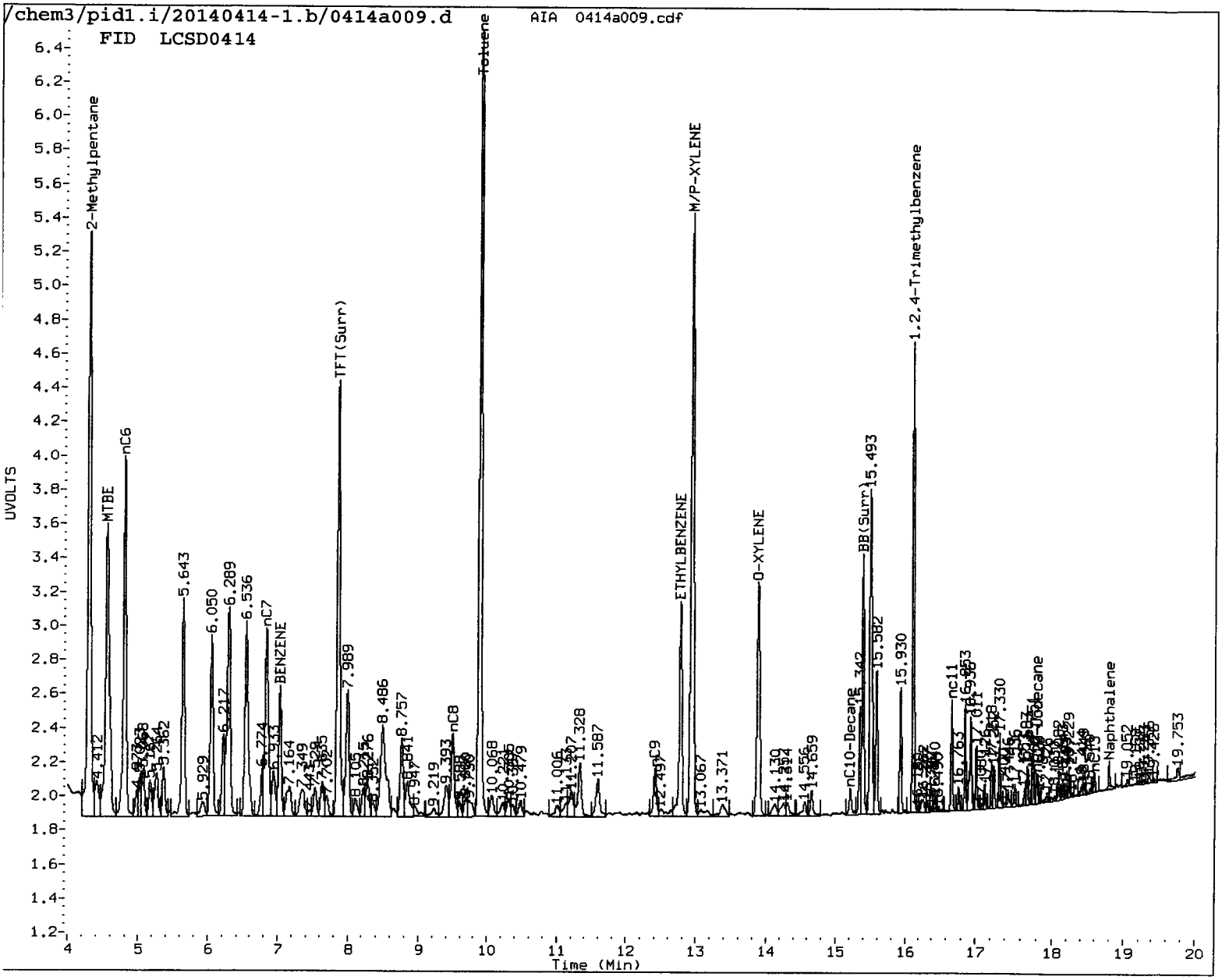
Column diameter: 0.18

YGS-090514




UVOLTS (x10^4)
Data File: /chem3/pid1.i/20140414-1.b/0414a009.d/0414a009.cdf
Injection Date: 14-APR-2014 17:24
Instrument: pid1.i
Client Sample ID:
AIA 0414a009.cdf: 0.000 to 23.003 Min
Min
2.880
3.298
3.513
2-Methylpentane
MTBE
nC6
5.643
TFT(Surr)
Toluene
nC9
ETHYLBENZENE
M/P-XYLENE
O-XYLENE
nC10-Decane
1,2,4-Trimethylbenzene
nC13
Naphthalene

IPC
4/15/14



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: VI Date: 4/15/14

Data File: /chem3/pid1.i/20140414-1.b/0414a010.d

Date : 14-APR-2014 17:53

Client ID:

Sample Info: MB0414

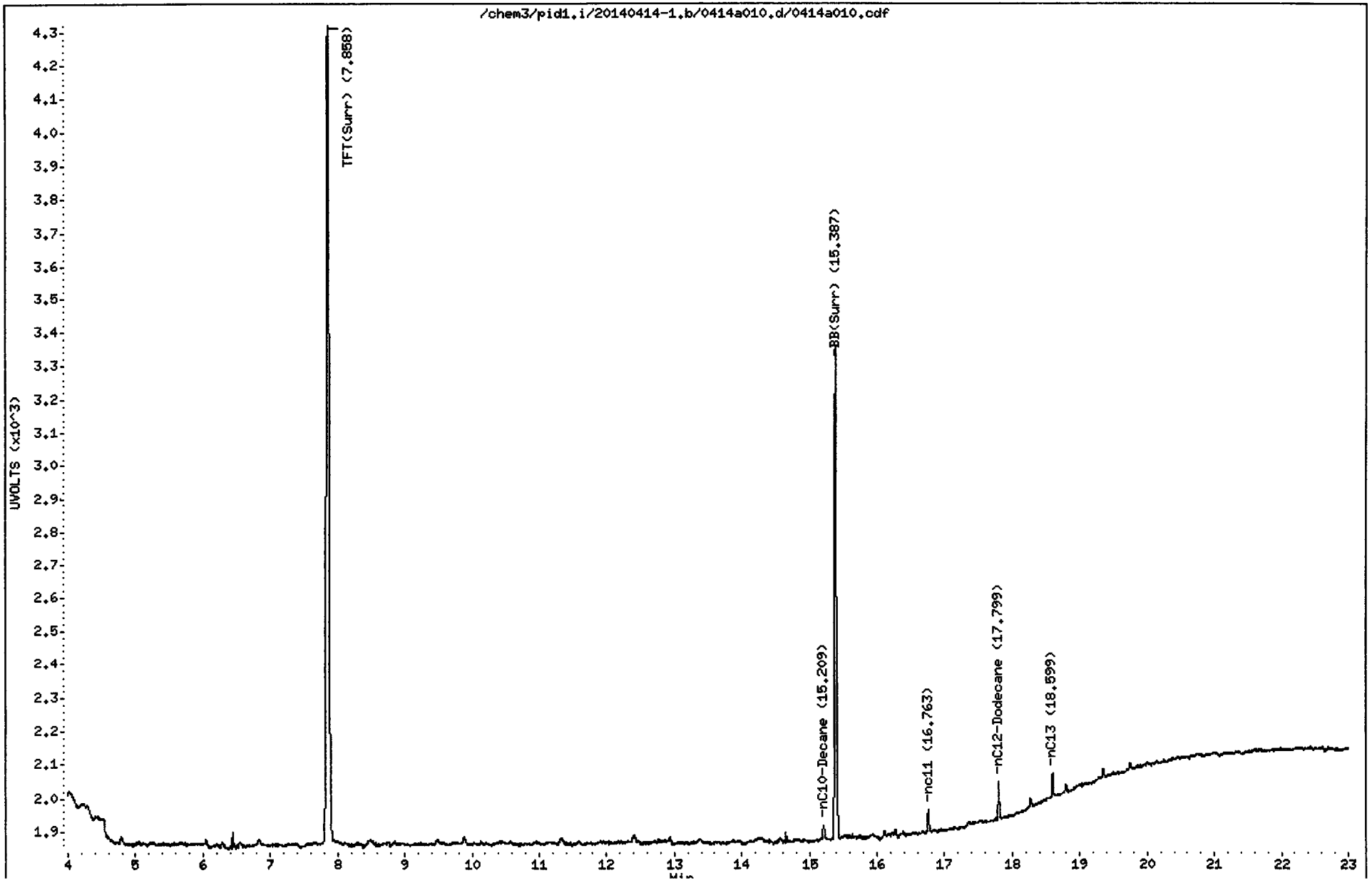
Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: PC

Column diameter: 0.18

T9999 99999



Data File: /chem3/pid1.i/20140414-2.b/0414a010.d

Date : 14-APR-2014 17:53

Client ID:

Sample Info: MB0414

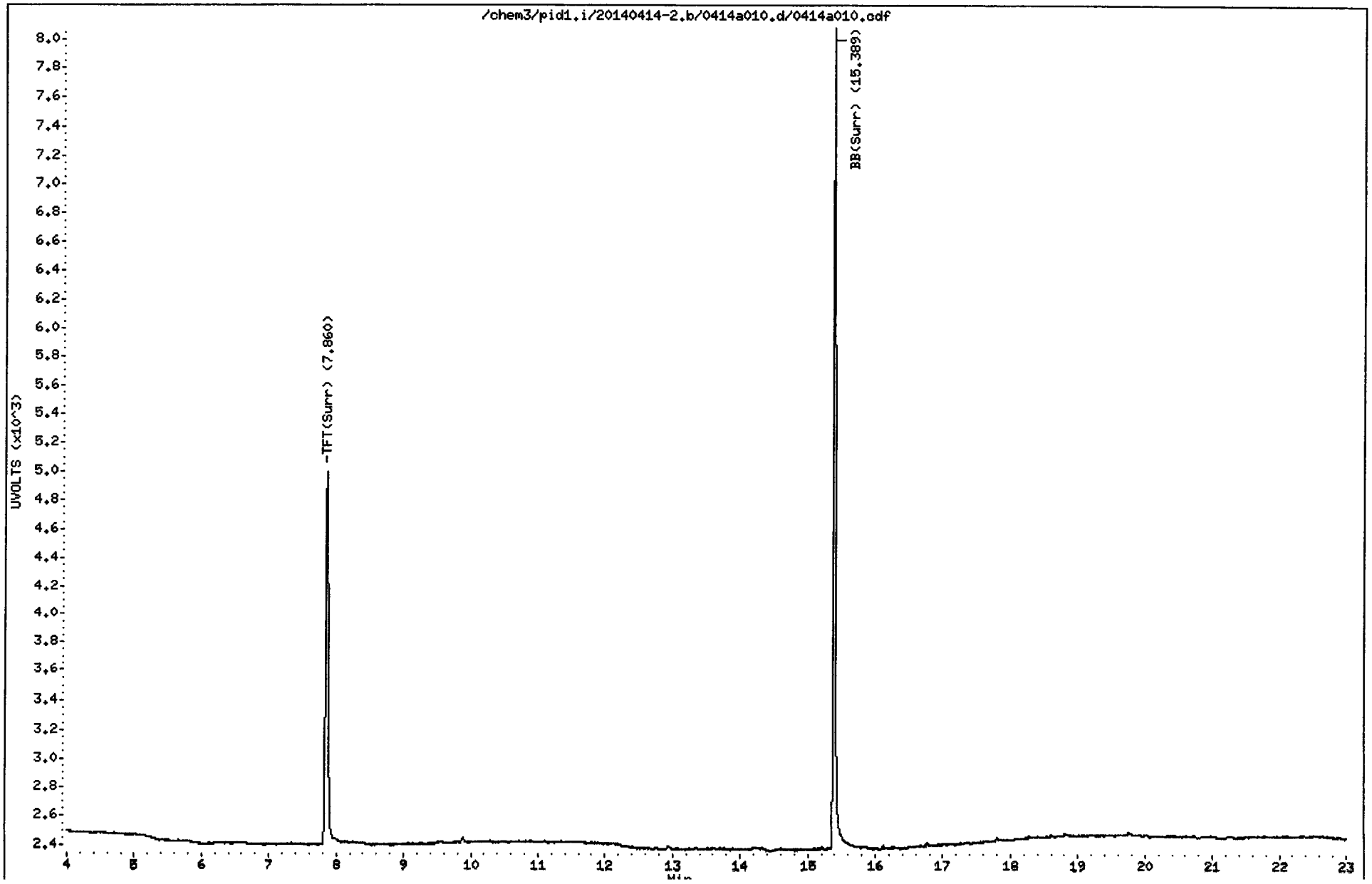
Column phase: RTX 502-2 PID

Instrument: pid1.i

Operator: PC

Column diameter: 0.18

YGGG 66666



Data File: /chem3/pid1.i/20140414-1.b/0414a012.d

Page 1

Date : 14-APR-2014 18:52

Client ID: MW01

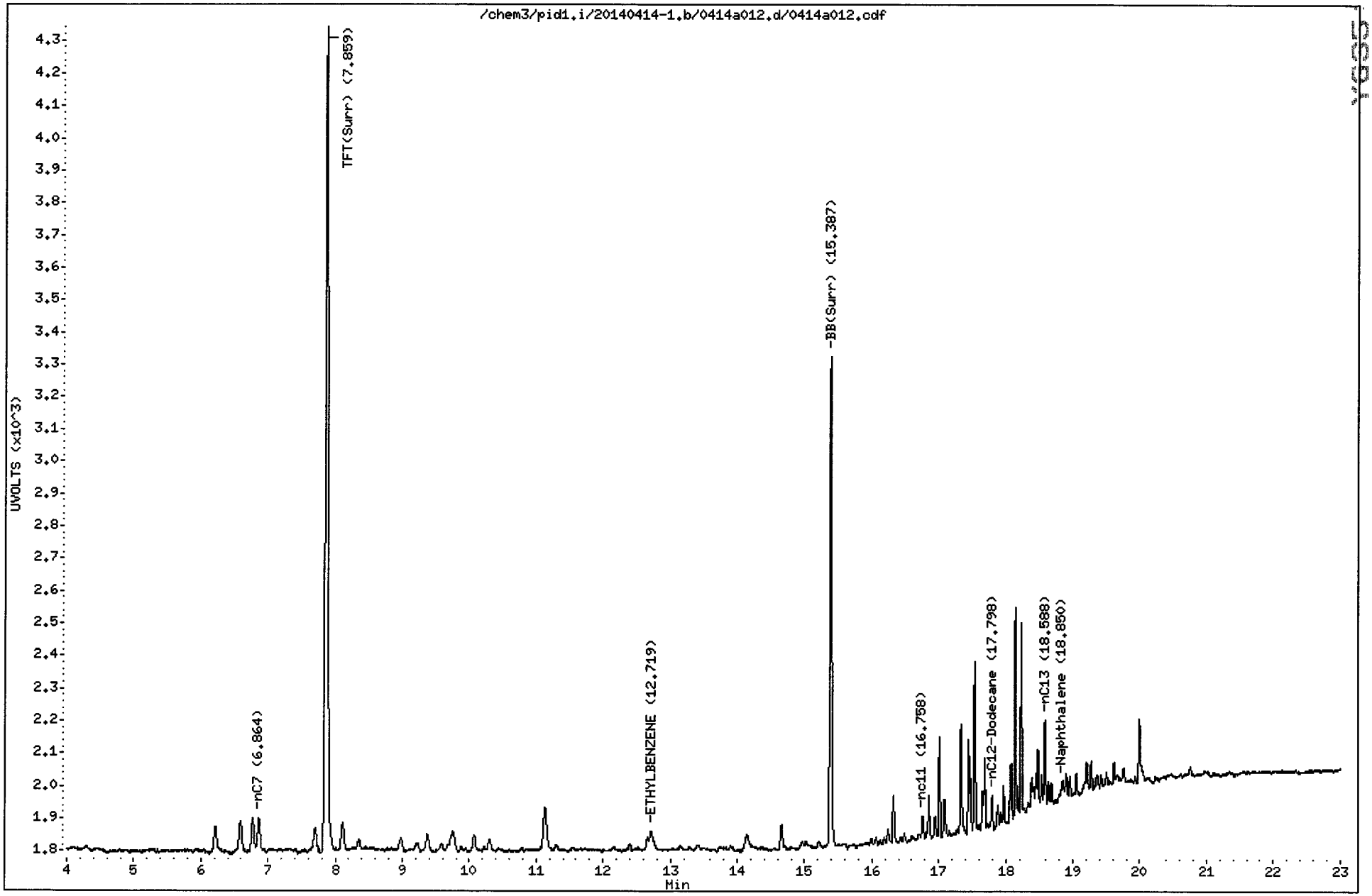
Instrument: pid1.i

Sample Info: YG35A

Operator: PC

Column phase: RTX 502-2 FID

Column diameter: 0.18



Data File: /chem3/pid1.i/20140414-1.b/0414a013.d

Date : 14-APR-2014 19:21

Client ID: MWDUP

Sample Info: YG35B

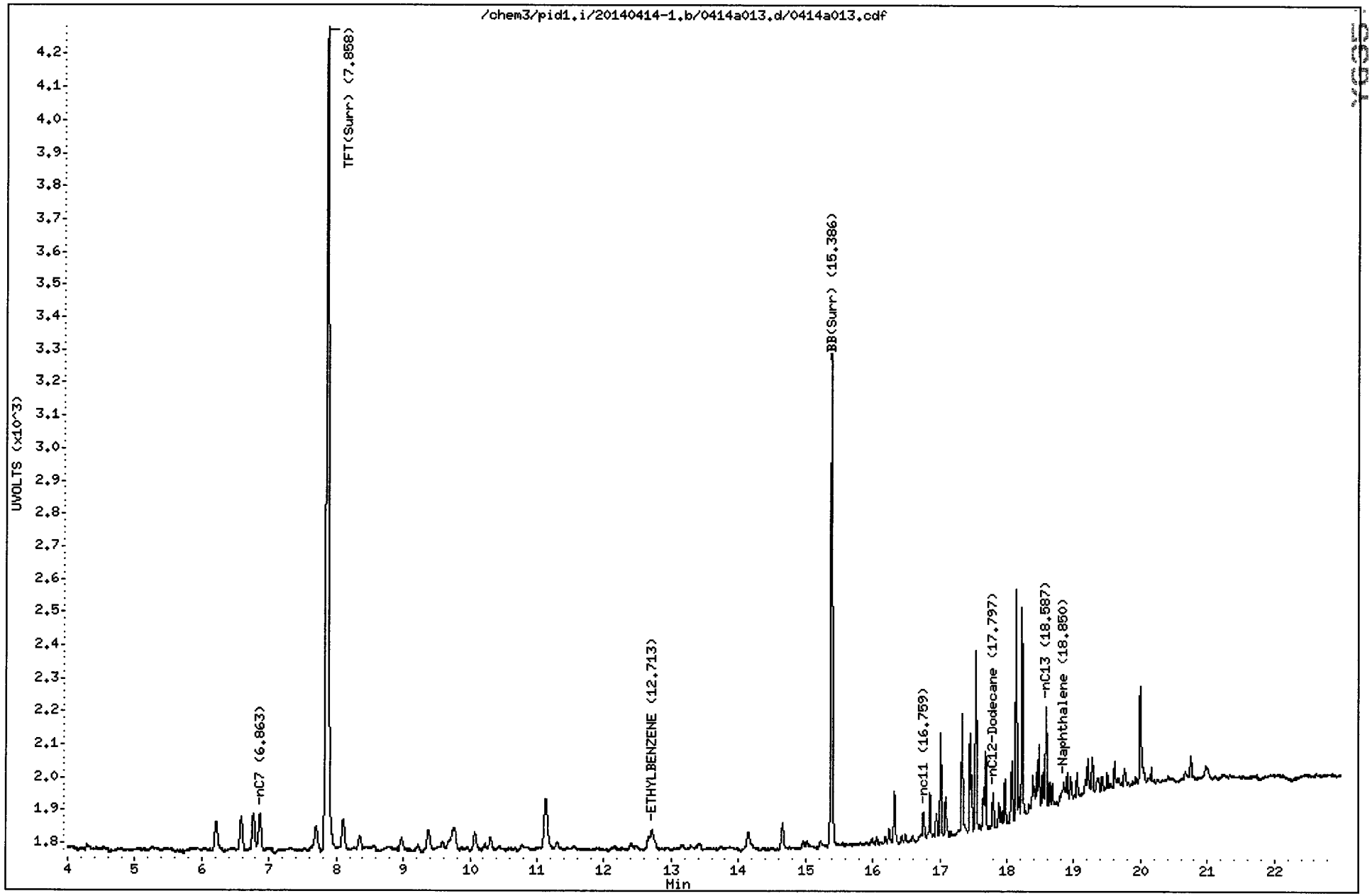
Column phase: RTX 502-2 FID

Instrument: pid1.i

Operator: PC

Column diameter: 0.18

G1599



Data File: /chem3/pid1.i/20140414-1.b/0414a011.d

Page 1

Date : 14-APR-2014 18:22

Client ID: TRIP BLANK

Instrument: pid1.i

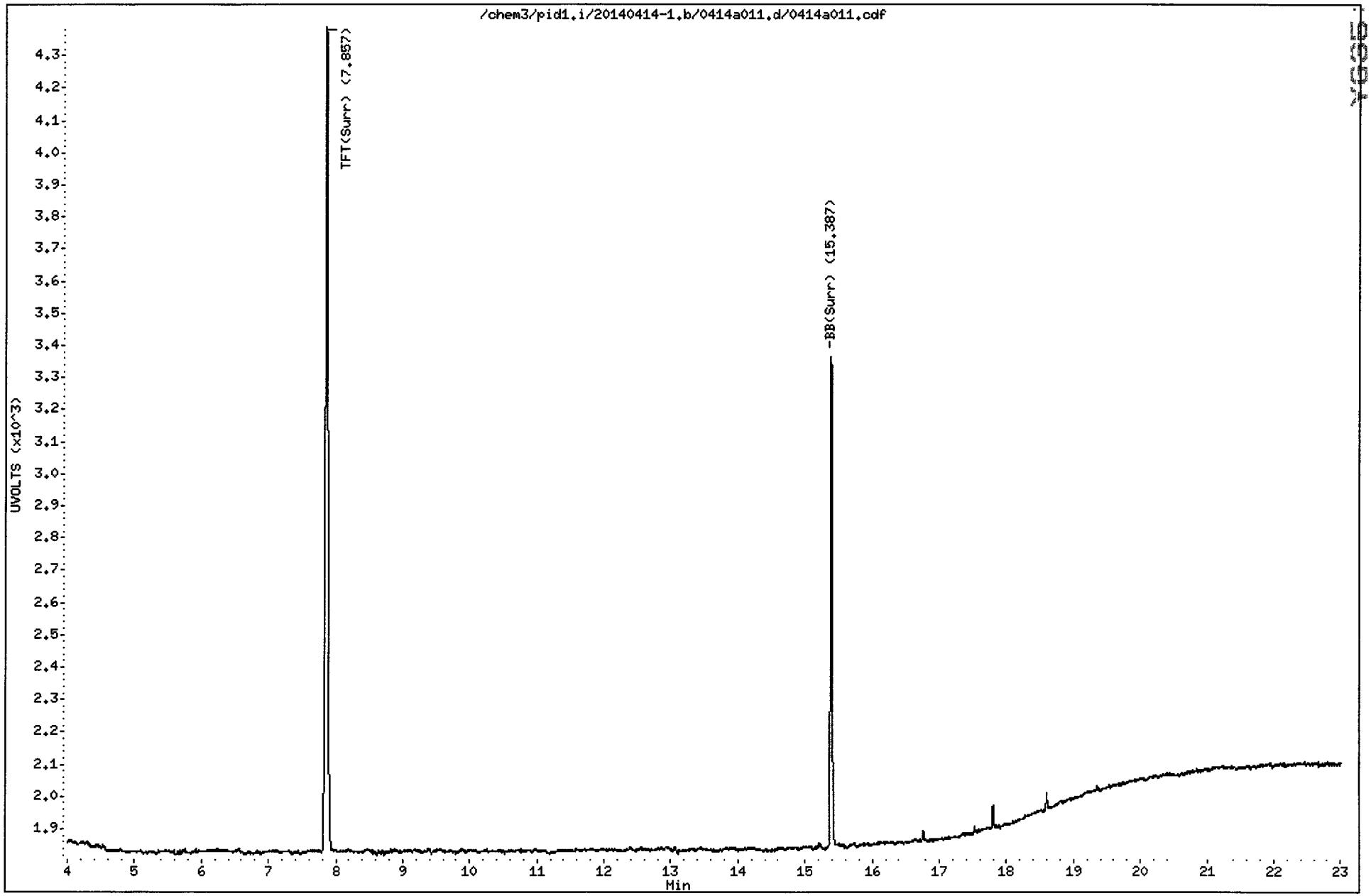
Sample Info: YG35G

Operator: PC

Column phase: RTX 502-2 FID

Column diameter: 0.18

YG35 660411



ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082A
Extraction Method: SW3510C
Page 1 of 1

Sample ID: MW03
SAMPLE

Lab Sample ID: YG35D
LIMS ID: 14-6833
Matrix: Water
Data Release Authorized: MW
Reported: 04/22/14

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford 0747.01.03
Date Sampled: 04/10/14
Date Received: 04/11/14

Date Extracted: 04/16/14
Date Analyzed: 04/18/14 16:38
Instrument/Analyst: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes

Sample Amount: 500 mL
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Silica Gel: No
Acid Cleanup: Yes

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.10	< 0.10 U
53469-21-9	Aroclor 1242	0.10	< 0.10 U
12672-29-6	Aroclor 1248	0.10	< 0.10 U
11097-69-1	Aroclor 1254	0.10	< 0.10 U
11096-82-5	Aroclor 1260	0.10	< 0.10 U
11104-28-2	Aroclor 1221	0.10	< 0.10 U
11141-16-5	Aroclor 1232	0.10	< 0.10 U

Reported in µg/L (ppb)

PCB Surrogate Recovery	
Decachlorobiphenyl	74.0%
Tetrachlorometaxylene	61.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082A
Extraction Method: SW3510C
Page 1 of 1

Sample ID: MB-041614
METHOD BLANK

Lab Sample ID: MB-041614
LIMS ID: 14-6833
Matrix: Water
Data Release Authorized: MW
Reported: 04/22/14

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford 0747.01.03
Date Sampled: NA
Date Received: NA

Date Extracted: 04/16/14
Date Analyzed: 04/18/14 15:33
Instrument/Analyst: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes

Sample Amount: 500 mL
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00
Silica Gel: No
Acid Cleanup: Yes

CAS Number	Analyte	RL	Result
12674-11-2	Aroclor 1016	0.10	< 0.10 U
53469-21-9	Aroclor 1242	0.10	< 0.10 U
12672-29-6	Aroclor 1248	0.10	< 0.10 U
11097-69-1	Aroclor 1254	0.10	< 0.10 U
11096-82-5	Aroclor 1260	0.10	< 0.10 U
11104-28-2	Aroclor 1221	0.10	< 0.10 U
11141-16-5	Aroclor 1232	0.10	< 0.10 U

Reported in µg/L (ppb)

PCB Surrogate Recovery	
Decachlorobiphenyl	82.0%
Tetrachlorometaxylene	62.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCB by GC/ECD Method SW8082A
Page 1 of 1

Sample ID: LCS-041614
LCS/LCSD

Lab Sample ID: LCS-041614
LIMS ID: 14-6833
Matrix: Water
Data Release Authorized: MW
Reported: 04/22/14

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford
0747.01.03
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 04/16/14

Date Analyzed LCS: 04/18/14 15:55
LCSD: 04/18/14 16:17
Instrument/Analyst LCS: ECD7/JGR
LCSD: ECD7/JGR
GPC Cleanup: No
Sulfur Cleanup: Yes

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 1.0 mL
LCSD: 1.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00
Silica Gel: No
Acid Cleanup: Yes

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Aroclor 1016	0.822	1.00	82.2%	0.795	1.00	79.5%	3.3%
Aroclor 1260	0.955	1.00	95.5%	0.926	1.00	92.6%	3.1%

PCB Surrogate Recovery

	LCS	LCSD
Decachlorobiphenyl	83.5%	76.8%
Tetrachlorometaxylene	67.5%	63.2%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Extraction Method: SW3510C
Page 1 of 1

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford
0747.01.03

Matrix: Water

Date Received: 04/11/14

Data Release Authorized: MW
Reported: 04/21/14

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DF	Range/Surrogate	RL	Result
MB-041614	Method Blank	04/16/14	04/17/14	1.00	Diesel Range	0.10	< 0.10 U
14-6830	HC ID: ---		FID3B	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		85.9%
YG35A	MW01	04/16/14	04/17/14	1.00	**Diesel Range**	**0.10**	**1.7**
14-6830	HC ID: **DRO/MOTOR OIL**		FID3B	1.0	**Motor Oil Range**	**0.20**	**0.87**
					o-Terphenyl		67.2%
YG35B	MWDUP	04/16/14	04/17/14	1.00	**Diesel Range**	**0.10**	**1.6**
14-6831	HC ID: **DRO/MOTOR OIL**		FID3B	1.0	**Motor Oil Range**	**0.20**	**0.93**
					o-Terphenyl		69.0%
YG35C	MW02	04/16/14	04/17/14	1.00	**Diesel Range**	**0.10**	**12 E**
14-6832	HC ID: **DIESEL/RRO**		FID3B	1.0	**Motor Oil Range**	**0.20**	**1.3**
					o-Terphenyl		65.0%
YG35C DL	MW02	04/16/14	04/18/14	1.00	**Diesel Range**	**1.0**	**11**
14-6832	HC ID: **DIESEL**		FID3B	10	Motor Oil Range	2.0	< 2.0 U
					o-Terphenyl		60.4%
YG35D	MW03	04/16/14	04/17/14	1.00	**Diesel Range**	**0.10**	**0.34**
14-6833	HC ID: **DRO/MOTOR OIL**		FID3B	1.0	**Motor Oil Range**	**0.20**	**0.37**
					o-Terphenyl		78.0%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford
0747.01.03

Client ID	OTER	TOT OUT
MB-041614	85.9%	0
LCS-041614	75.9%	0
LCSD-041614	76.3%	0
MW01	67.2%	0
MWDUP	69.0%	0
MW02	65.0%	0
MW02 DL	60.4%	0
MW03	78.0%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3510C
Log Number Range: 14-6830 to 14-6833

FORM-II TPHD

YG35:00046

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID **Sample ID: LCS-041614**
Page 1 of 1 **LCS/LCSD**

Lab Sample ID: LCS-041614 QC Report No: YG35-Maul Foster & Alongi
LIMS ID: 14-6830 Project: Sims - North Cascade Ford
Matrix: Water 0747.01.03
Data Release Authorized: MW Date Sampled: NA
Reported: 04/21/14 Date Received: NA

Date Extracted LCS/LCSD: 04/16/14 Sample Amount LCS: 500 mL
LCSD: 500 mL
Date Analyzed LCS: 04/17/14 16:55 Final Extract Volume LCS: 1.0 mL
LCSD: 04/17/14 17:20 LCSD: 1.0 mL
Instrument/Analyst LCS: FID3B/JLW Dilution Factor LCS: 1.00
LCSD: FID3B/JLW LCSD: 1.00

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	2.56	3.00	85.3%	2.30	3.00	76.7%	10.7%

TPHD Surrogate Recovery

	LCS	LCSD
o-Terphenyl	75.9%	76.3%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

FORM III

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

Matrix: Water
Date Received: 04/11/14

ARI Job: YG35
Project: Sims - North Cascade Ford
0747.01.03

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
14-6830-041614MB1	Method Blank	500 mL	1.00 mL	04/16/14
14-6830-041614LCS1	Lab Control	500 mL	1.00 mL	04/16/14
14-6830-041614LCSD1	Lab Control Dup	500 mL	1.00 mL	04/16/14
14-6830-YG35A	MW01	500 mL	1.00 mL	04/16/14
14-6831-YG35B	MWDUP	500 mL	1.00 mL	04/16/14
14-6832-YG35C	MW02	500 mL	1.00 mL	04/16/14
14-6833-YG35D	MW03	500 mL	1.00 mL	04/16/14

Data File: /chem3/fid3b.i/20140417.b/0417b007.d

Date : 17-APR-2014 16:30

Client ID: YG35MBW1

Sample Info: YG35MBW1

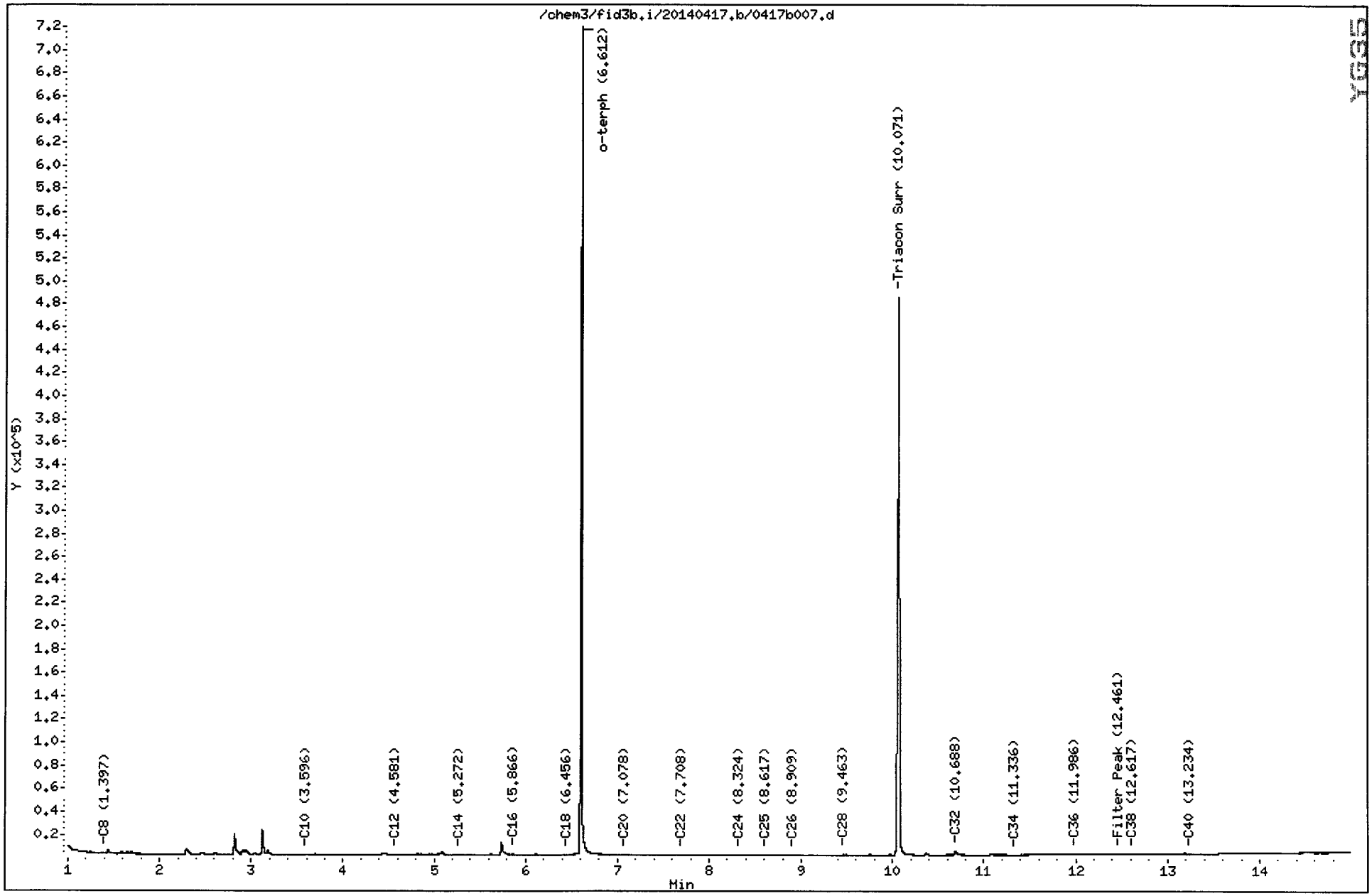
Column phase: RTX-1

Instrument: fid3b.i

Operator: JW

Column diameter: 0.25

YG35 68619



Data File: /chem3/fid3b.i/20140417.b/0417b008.d

Date : 17-APR-2014 16:55

Client ID: YG35LCSW1

Sample Info: YG35LCSW1

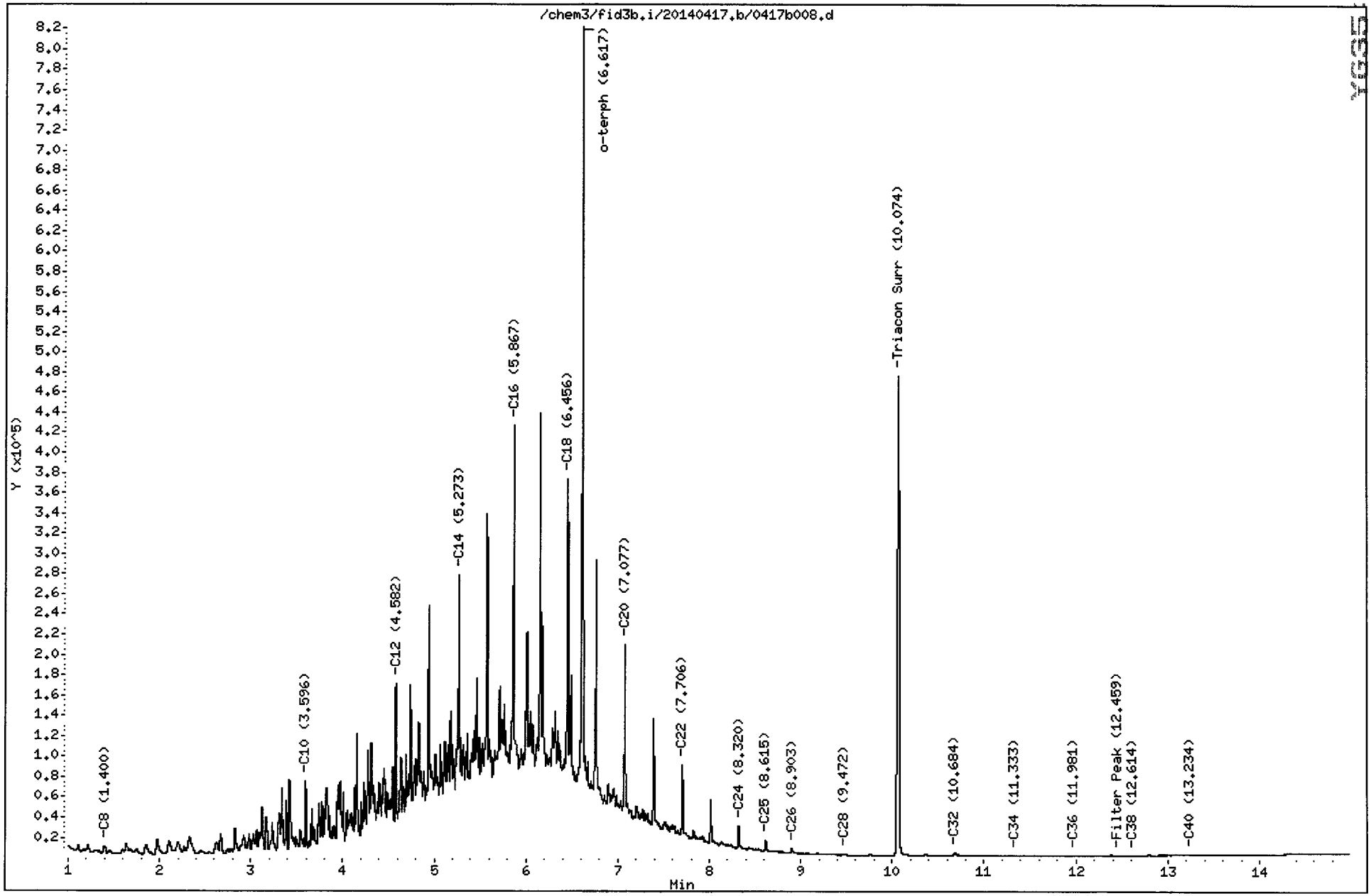
Column phase: RTX-1

Instrument: fid3b.i

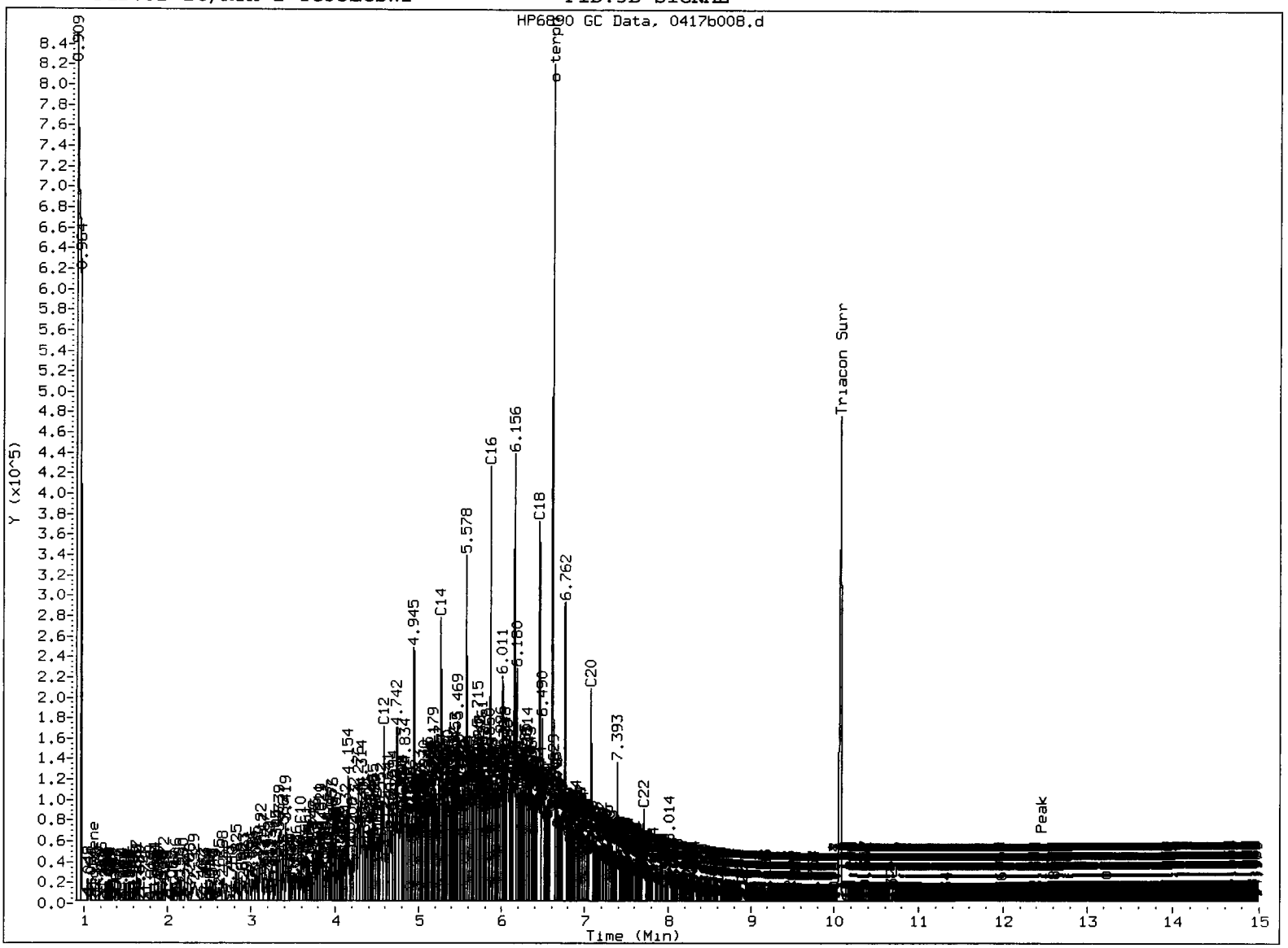
Operator: JW

Column diameter: 0.25

YG35 00059



FID:3B-2C/RTX-1 YG35LCSW1 FID:3B SIGNAL



MANUAL INTEGRATION

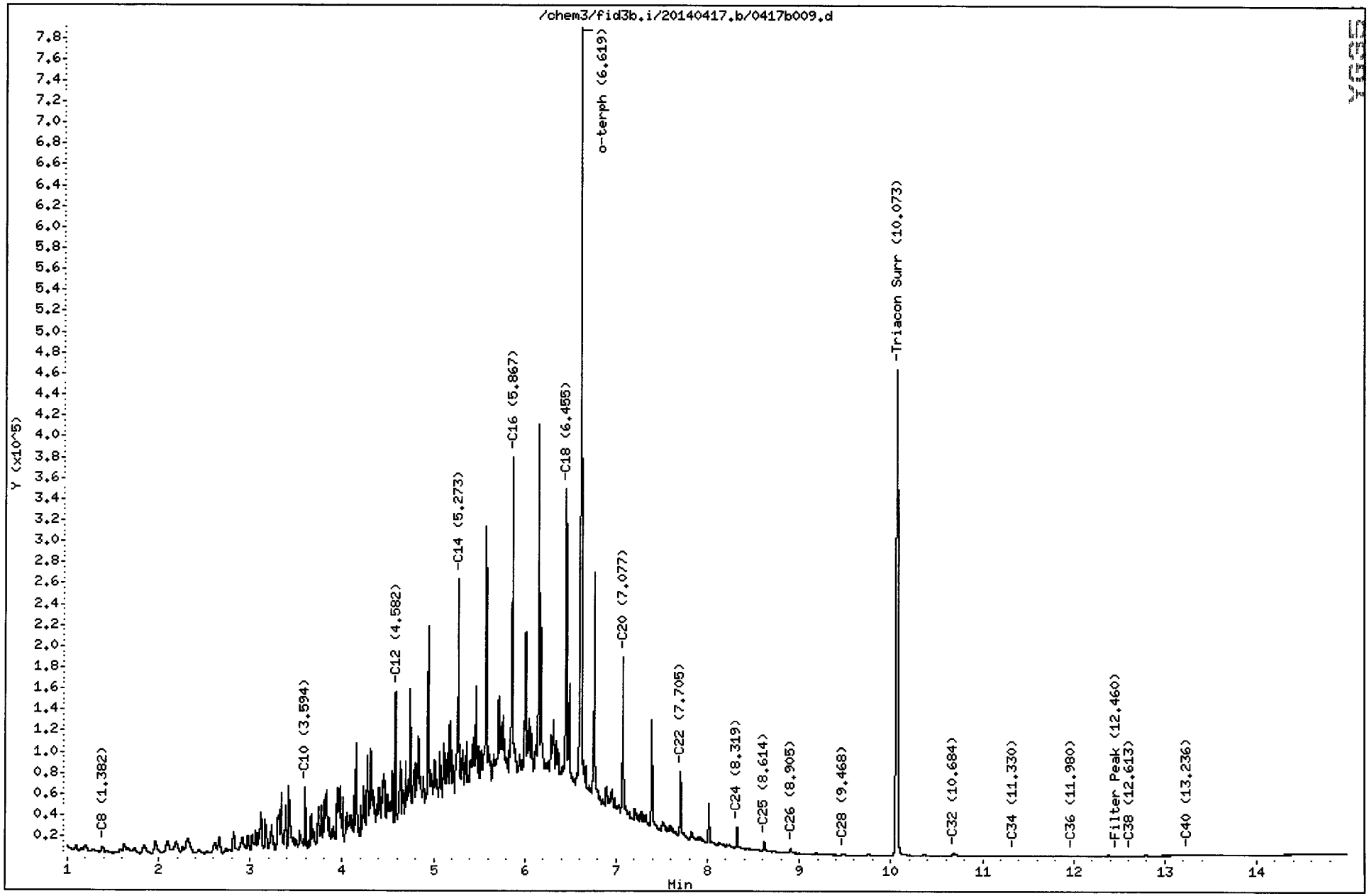
1. Baseline correction
3. Peak not found
(5.) Skimmed surrogate

Analyst: JW Date: 4/18/14

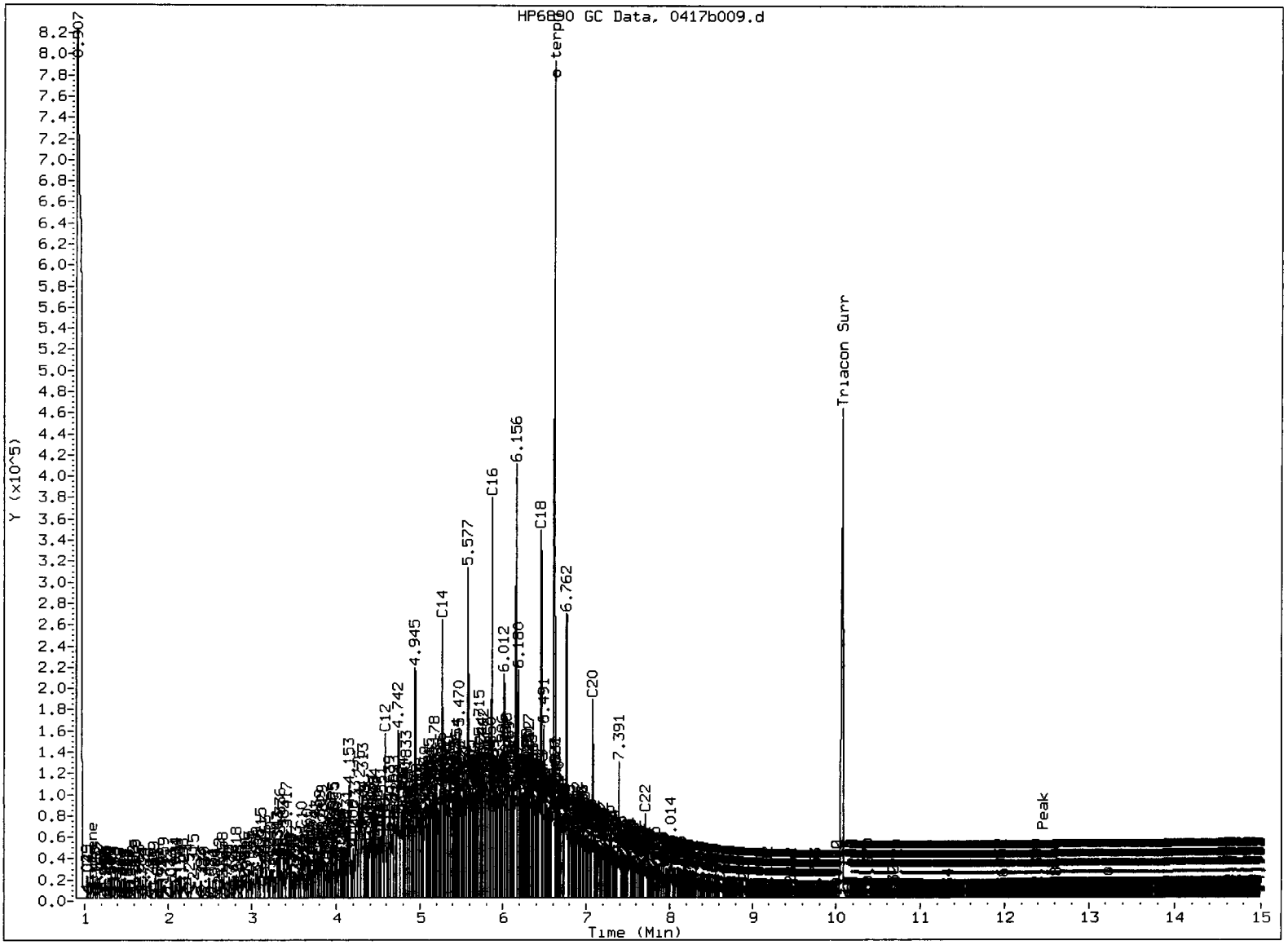
Data File: /chem3/fid3b.i/20140417.b/0417b009.d
Date : 17-APR-2014 17:20
Client ID: YG35LCSDW1
Sample Info: YG35LCSDW1

Instrument: fid3b.i
Operator: JW
Column phase: RTX-1
Column diameter: 0.25

YG35 060552



FID:3B-2C/RTX-1 YG35LCSDW1 FID:3B SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: JC Date: 4/18/14

Data File: /chem3/fid3b.i/20140417.b/0417b010.d

Date : 17-APR-2014 17:46

Client ID: MW01

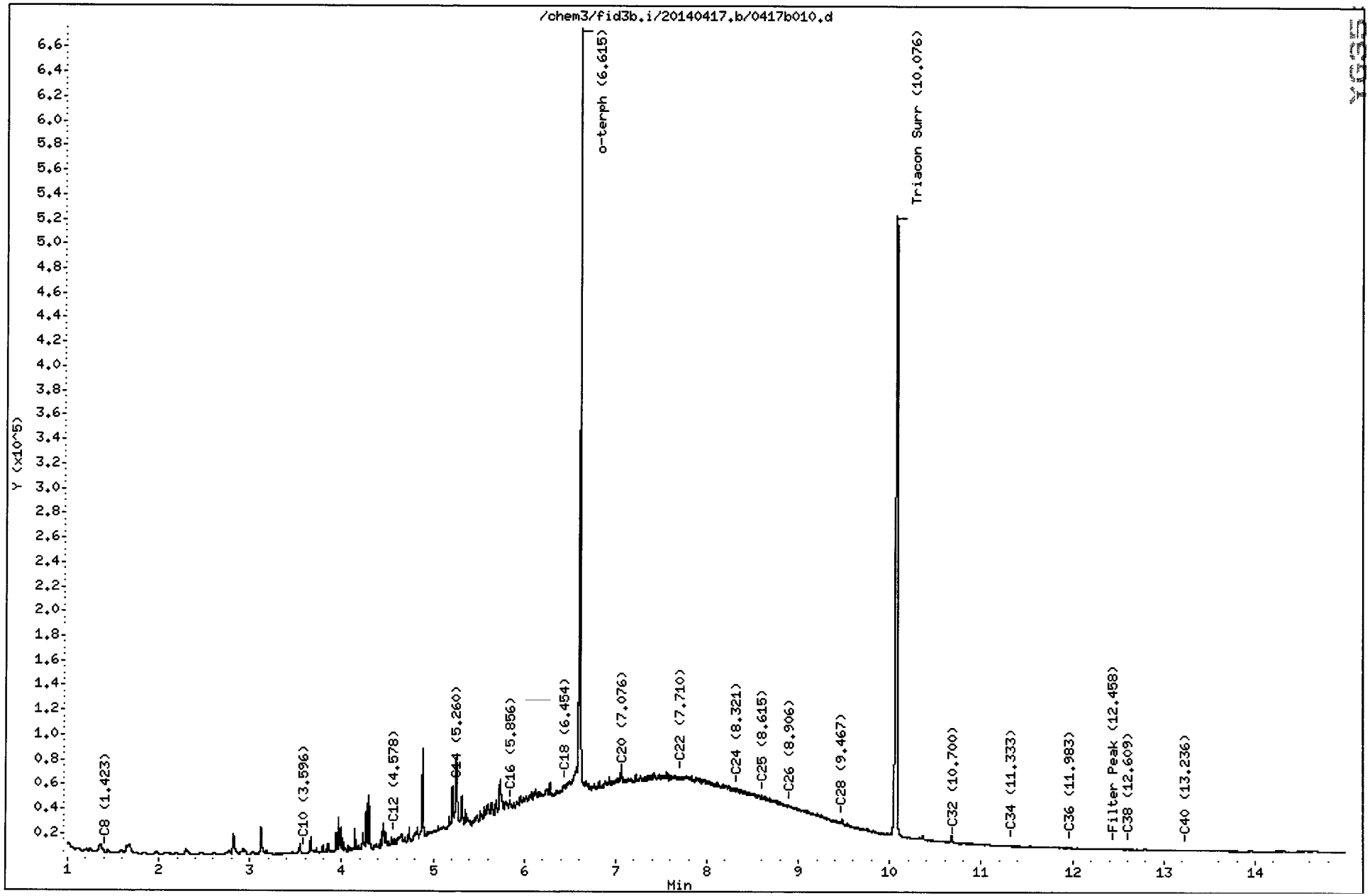
Sample Info: YG35A

Column phase: RTX-1

Instrument: fid3b.i

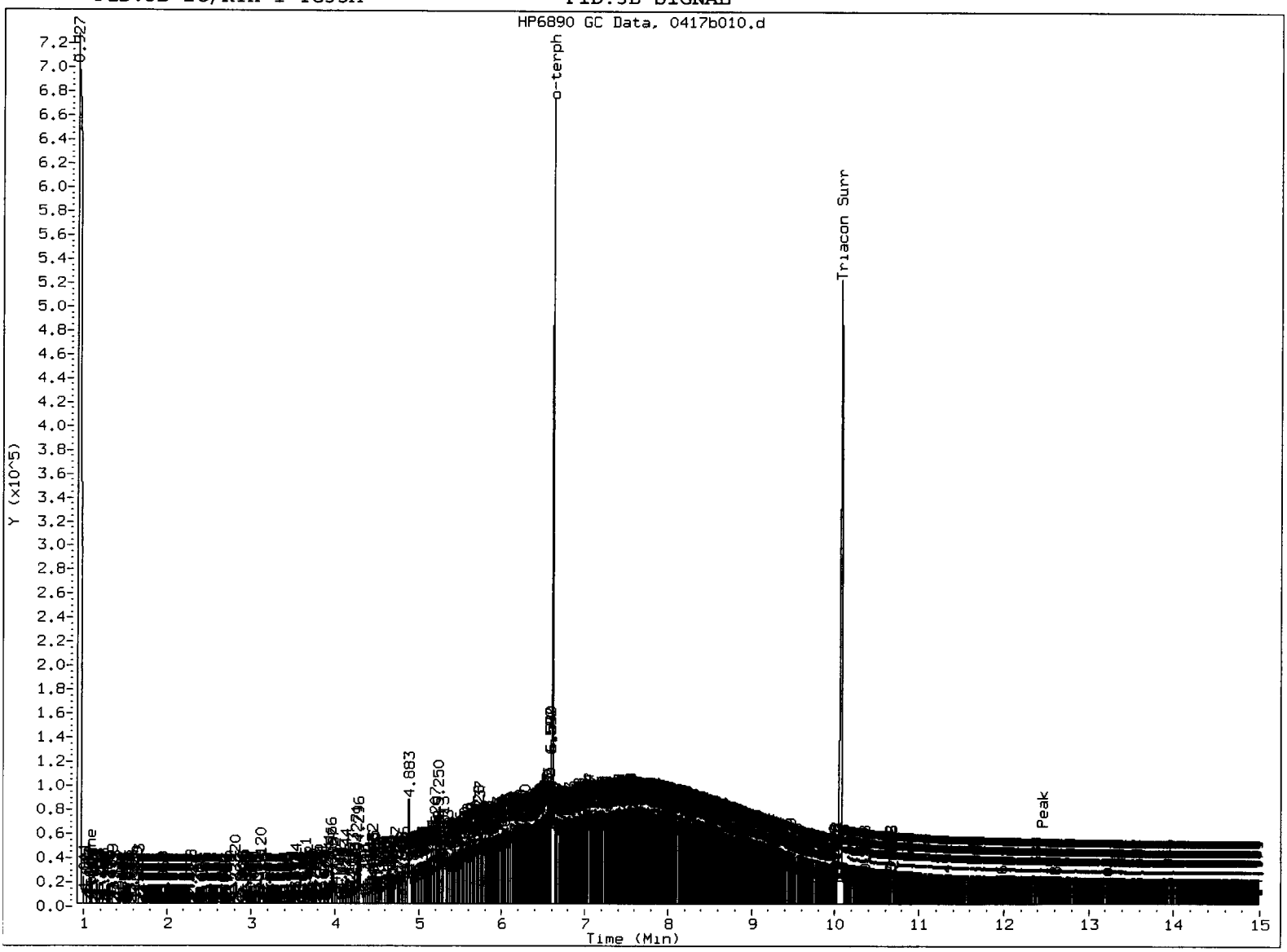
Operator: JW

Column diameter: 0.25



FID:3B-2C/RTX-1 YG35A

FID:3B SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
(5) Skimmed surrogate

Analyst: JW Date: 4/18/14

Data File: /chem3/fid3b.i/20140417.b/0417b011.d

Date : 17-APR-2014 18:11

Client ID: MWDUP

Sample Info: YG35B

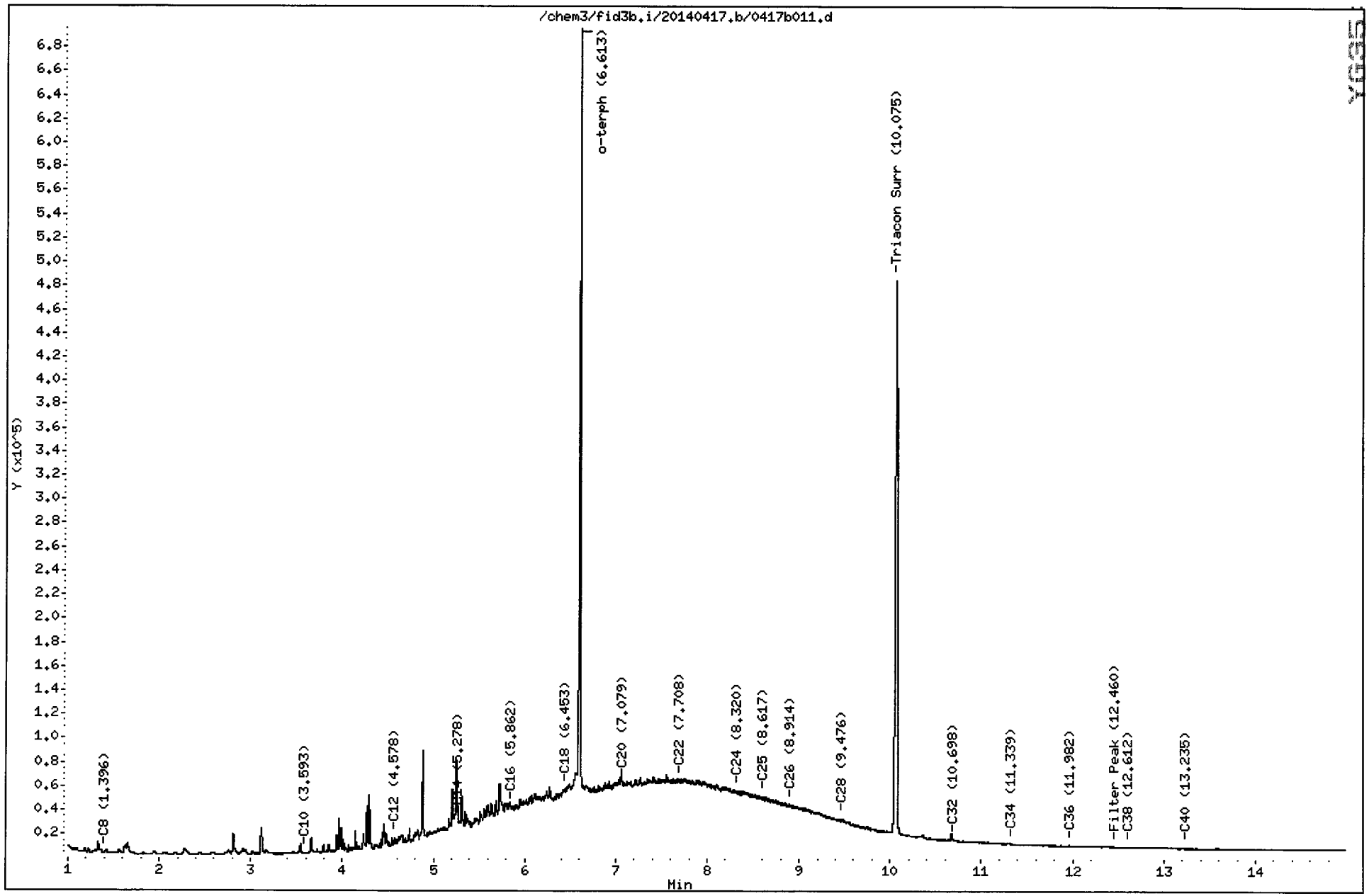
Column phase: RTX-1

Instrument: fid3b.i

Operator: JW

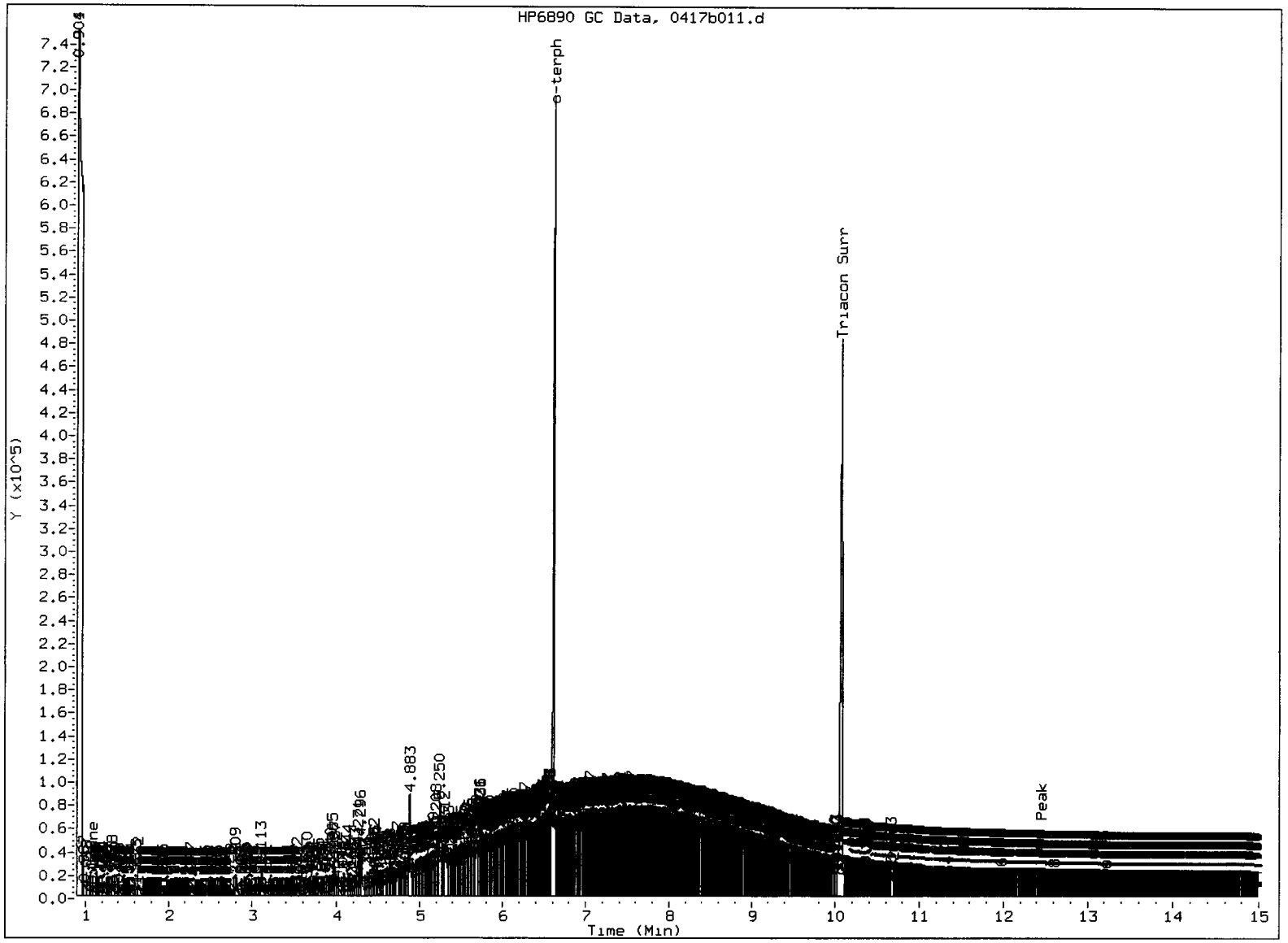
Column diameter: 0.25

YG35B 66656



FID:3B-2C/RTX-1 YG35B

FID:3B SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: JW Date: 4/18/14

Data File: /chem3/fid3b.i/20140417.b/0417b012.d

Date : 17-APR-2014 18:36

Client ID: MW02

Sample Info: YG35C

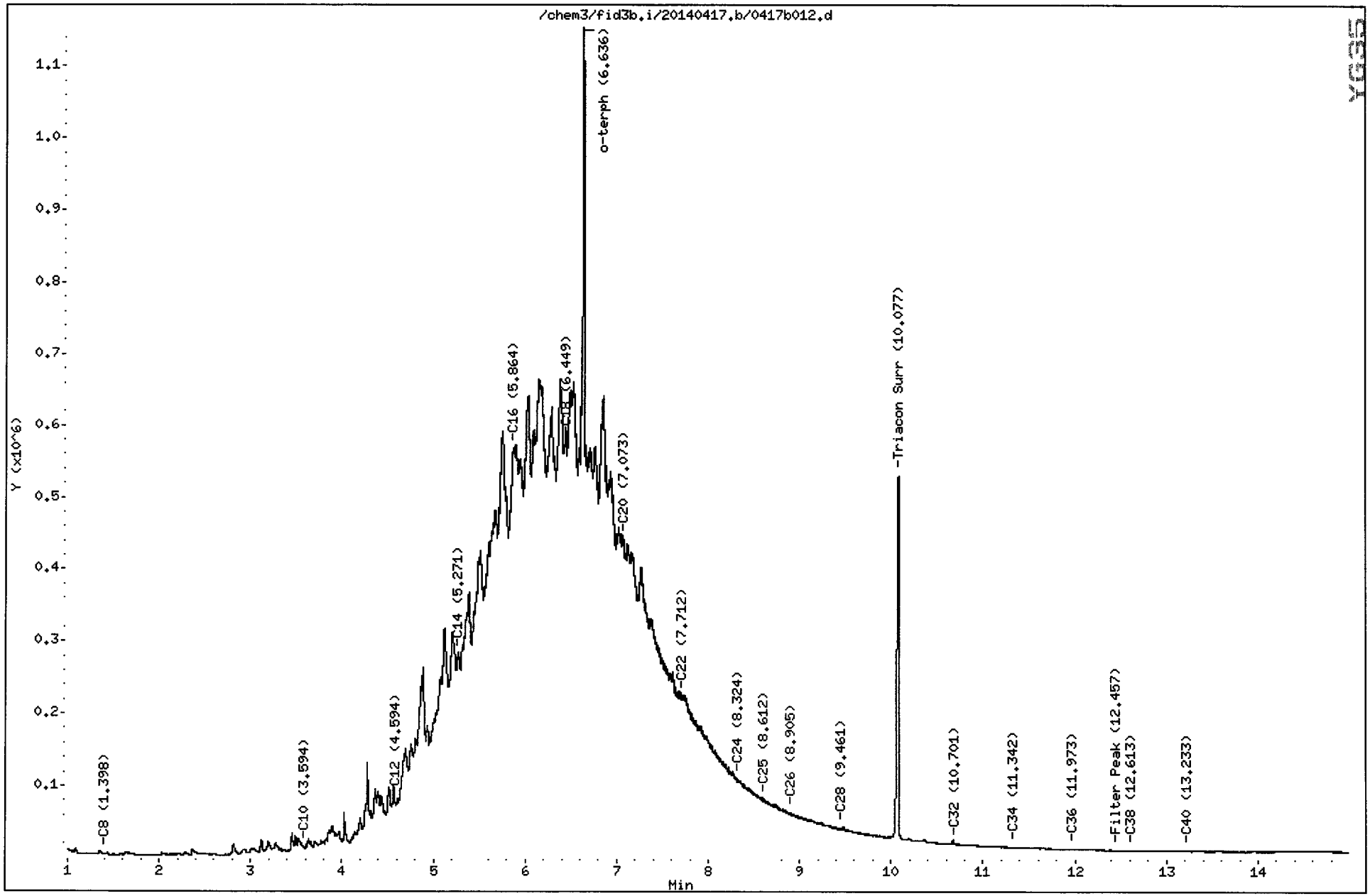
Column phase: RTX-1

Instrument: fid3b.i

Operator: JW

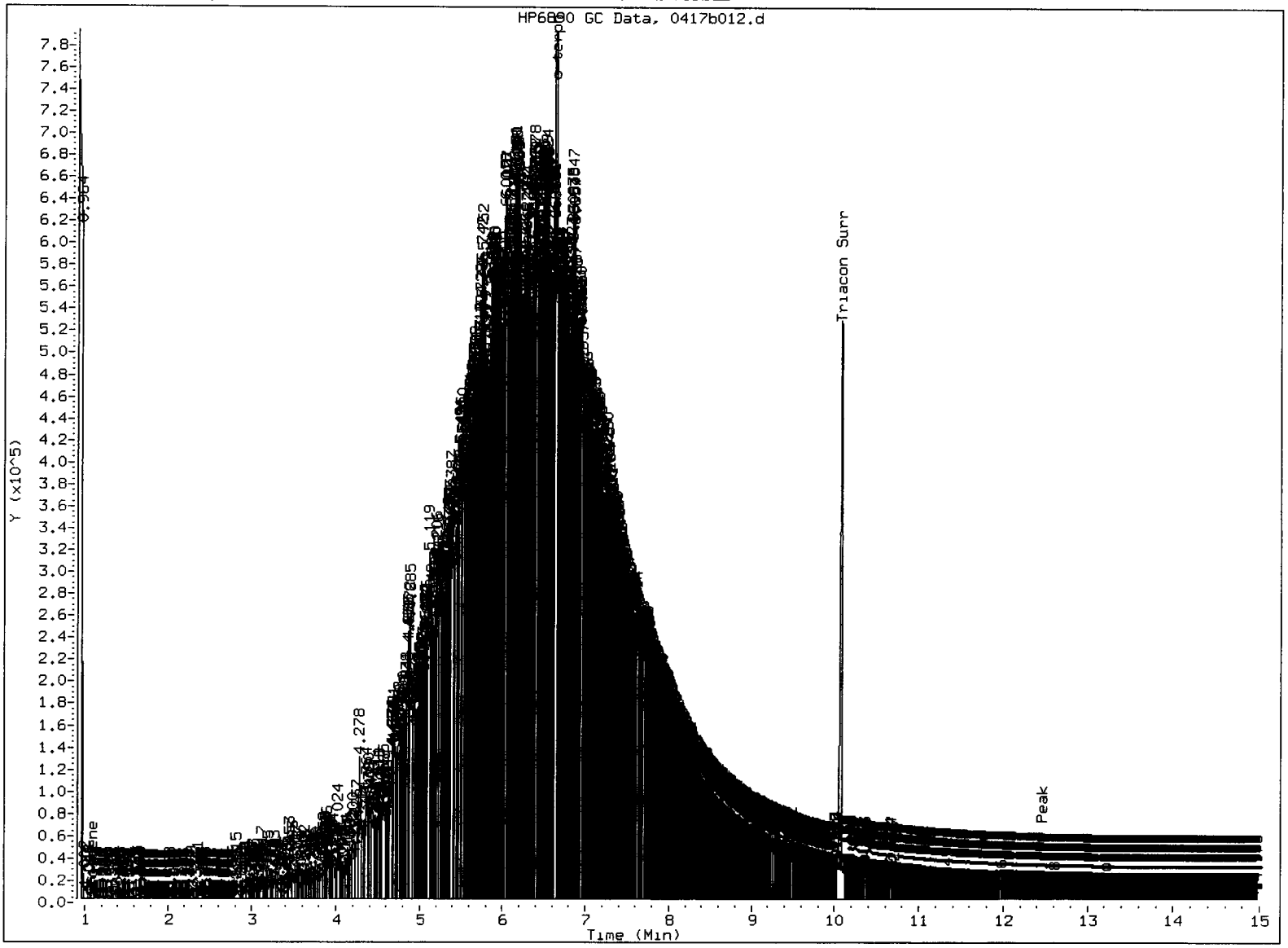
Column diameter: 0.25

YG35C 66650



FID:3B-2C/RTX-1 YG35C

FID:3B SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
(5.) Skimmed surrogate

Analyst: JW Date: 4/18/14

Data File: /chem3/fid3b.i/20140417.b/0417b013.d

Date : 17-APR-2014 19:02

Client ID: MW03

Sample Info: YG35D

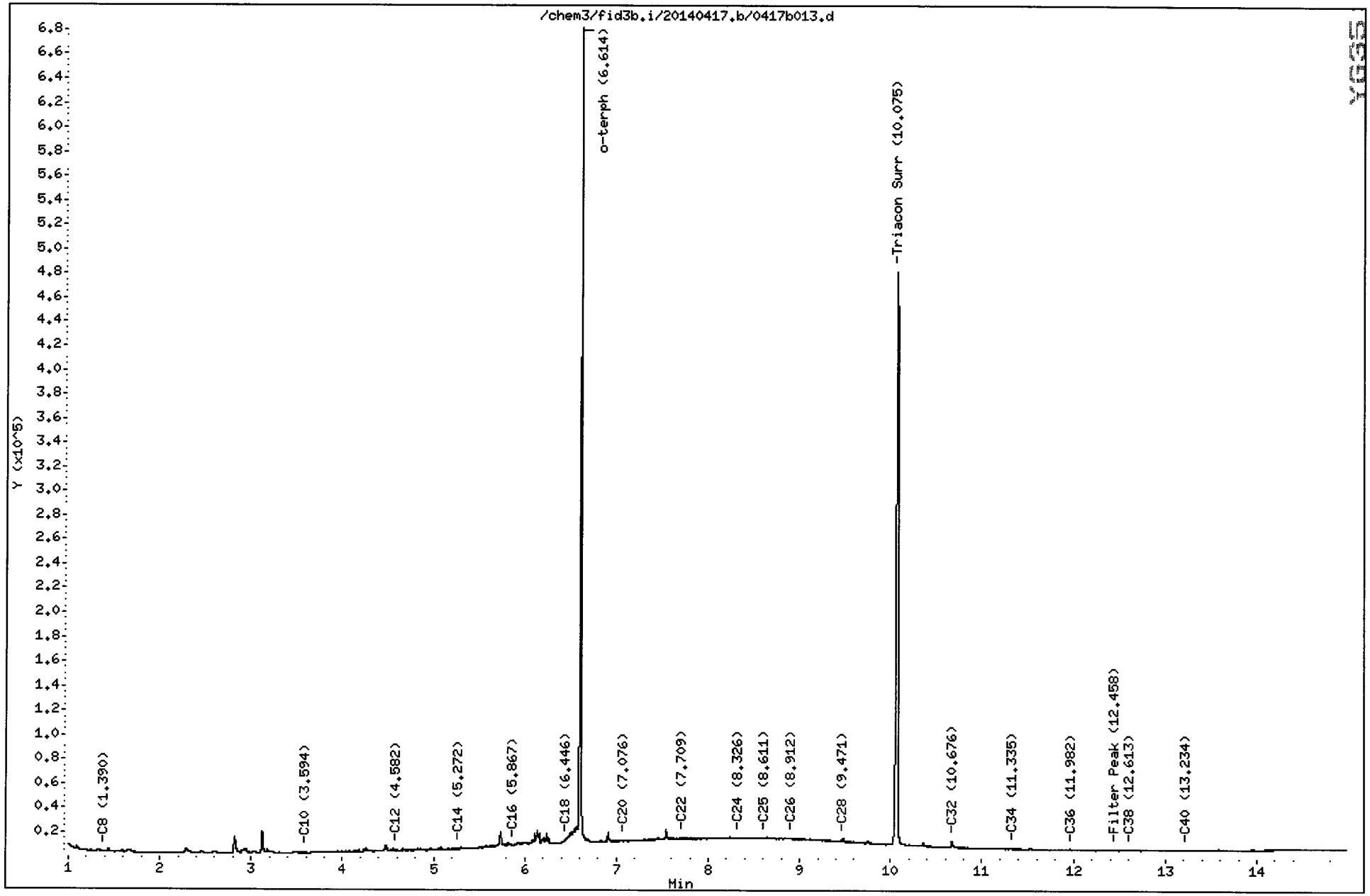
Column phase: RTX-1

Instrument: fid3b.i

Operator: JW

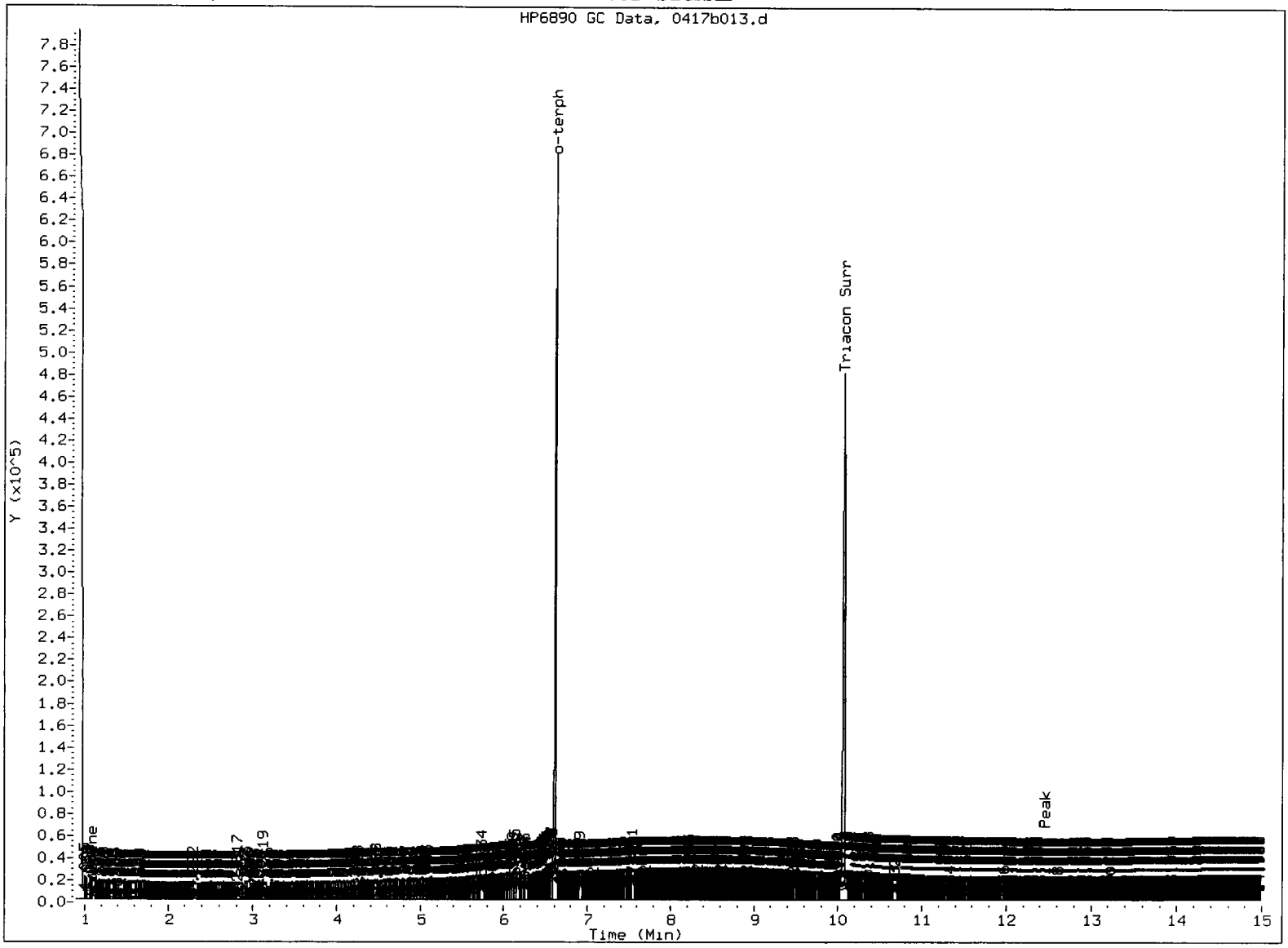
Column diameter: 0.25

66665



FID:3B-2C/RTX-1 YG35D

FID:3B SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: JR Date: 4/18/14

Data File: /chem3/fid3b.i/20140418.b/0418b007.d

Date : 18-APR-2014 13:07

Client ID: MW02

Sample Info: YG35C,10

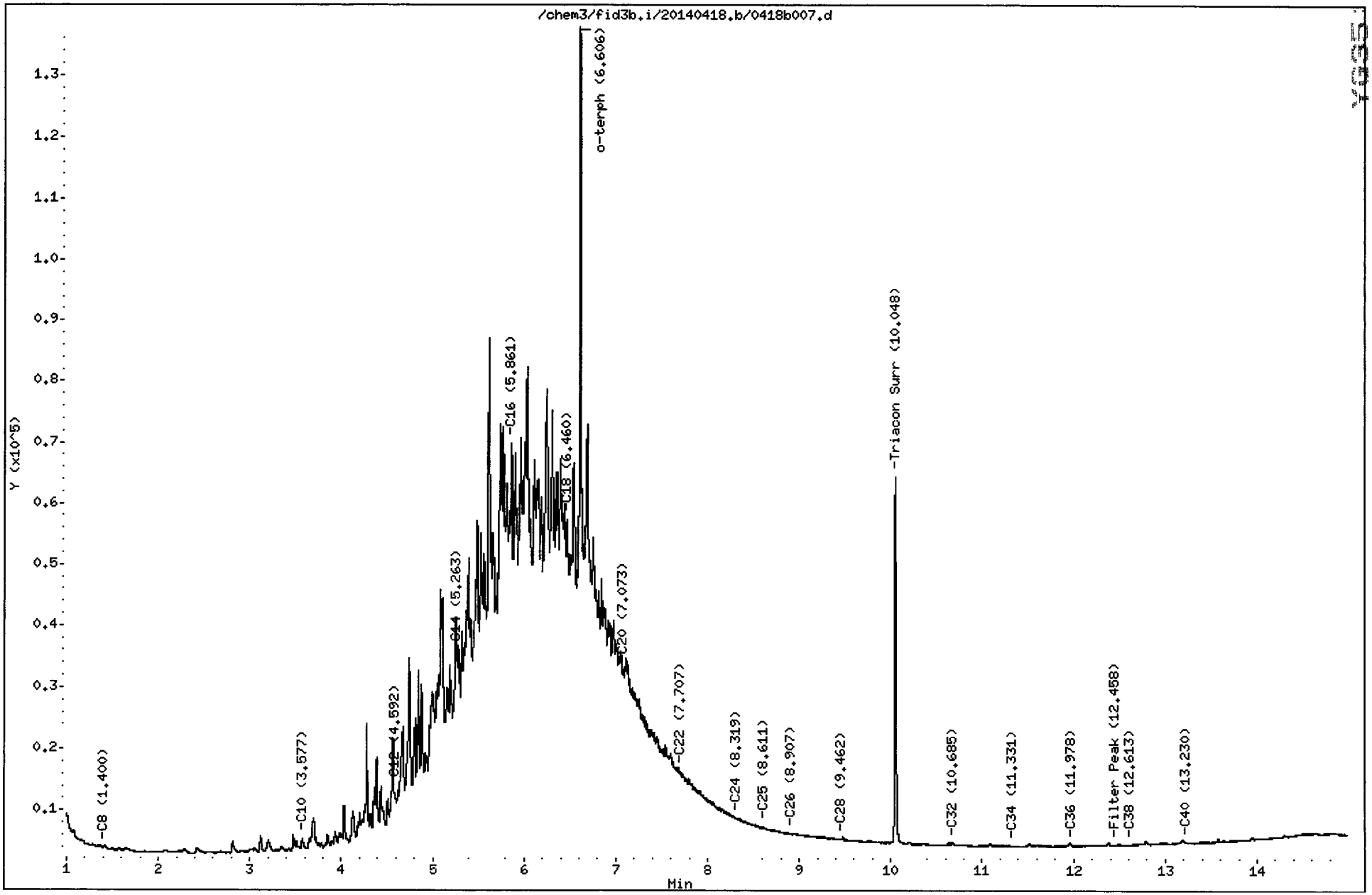
Column phase: RTX-1

Instrument: fid3b.i

Operator: JW

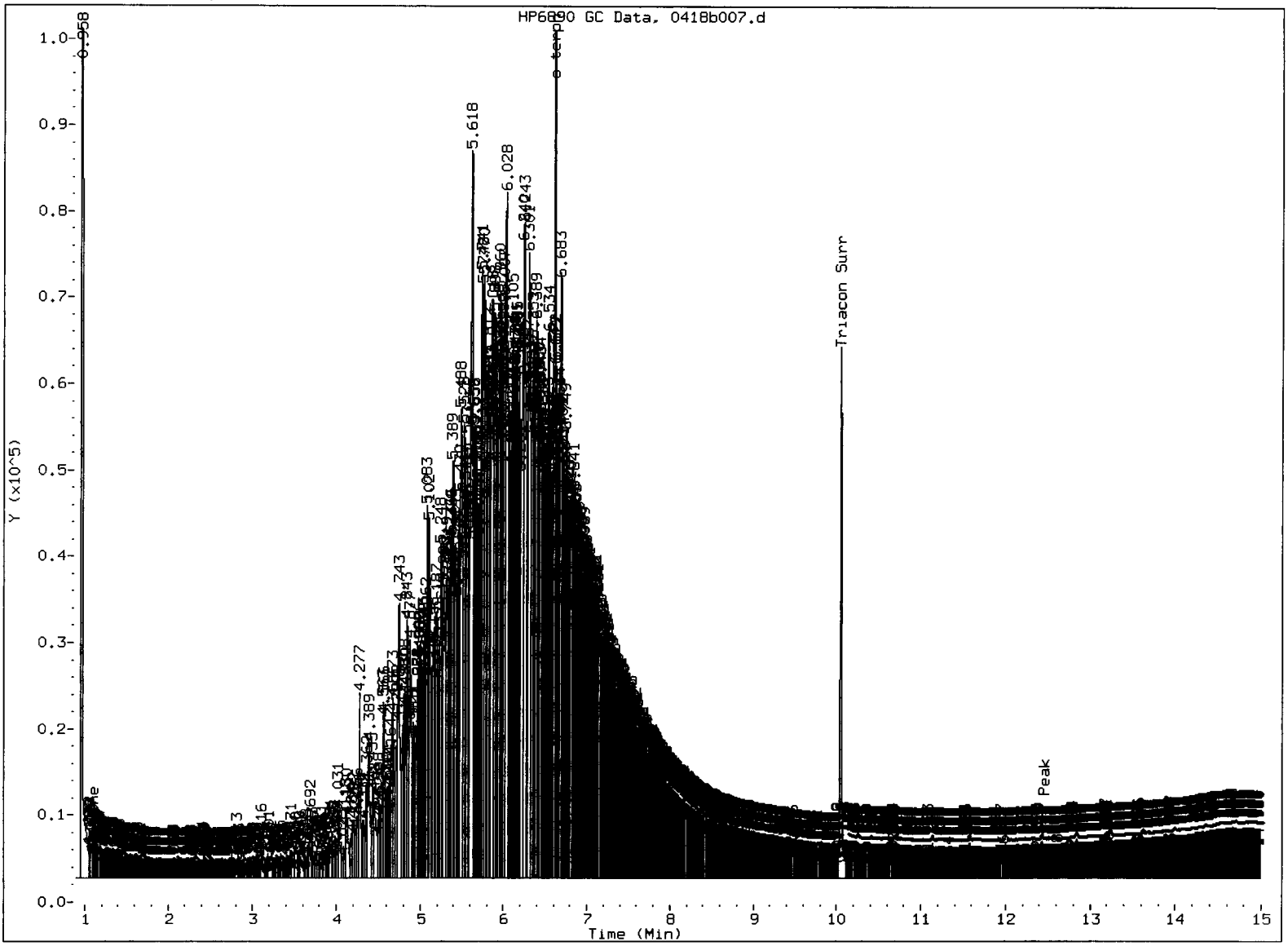
Column diameter: 0.25

YG35C 69662



FID:3B-2C/RTX-1 YG35C

FID:3B SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: JN Date: 4/18/14

YG35:00663

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH
Extraction Method: SW3510C

Sample ID: MW01
SAMPLE

Lab Sample ID: YG35H
LIMS ID: 14-6837
Matrix: Water
Data Release Authorized:
Reported: 04/22/14

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford 0747.01.03
Date Sampled: 04/10/14
Date Received: 04/11/14

Date Extracted: 04/16/14

Sample Amount: 500 mL
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 04/22/14 13:38
Instrument/Analyst: FID8/JLW

Dilution Factor: 1.00

Aromatic
Date Analyzed: 04/21/14 14:46
Instrument/Analyst: FID8/JLW

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	40	< 40 U
C10-C12 Aliphatics	40	< 40 U
C12-C16 Aliphatics	40	< 40 U
C16-C21 Aliphatics	40	< 40 U
C21-C34 Aliphatics	40	< 40 U
C8-C10 Aromatics	40	< 40 U
C10-C12 Aromatics	40	< 40 U
C12-C16 Aromatics	40	< 40 U
C16-C21 Aromatics	40	< 40 U
C21-C34 Aromatics	40	< 40 U

Reported in µg/L (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	42.0%
Aromatic	o-Terphenyl	49.4%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH
Extraction Method: SW3510C
Page 1 of 1

Sample ID: MW02
SAMPLE

Lab Sample ID: YG35I
LIMS ID: 14-6838
Matrix: Water
Data Release Authorized:
Reported: 04/22/14

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford 0747.01.03
Date Sampled: 04/10/14
Date Received: 04/11/14

Date Extracted: 04/16/14

Sample Amount: 500 mL
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 04/22/14 14:05
Instrument/Analyst: FID8/JLW

Dilution Factor: 1.00

Aromatic
Date Analyzed: 04/21/14 15:13
Instrument/Analyst: FID8/JLW

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	40	< 40 U
C10-C12 Aliphatics	40	< 40 U
C12-C16 Aliphatics	**40**	**48**
C16-C21 Aliphatics	**40**	**58**
C21-C34 Aliphatics	40	< 40 U
C8-C10 Aromatics	40	< 40 U
C10-C12 Aromatics	40	< 40 U
C12-C16 Aromatics	40	< 40 U
C16-C21 Aromatics	40	< 40 U
C21-C34 Aromatics	40	< 40 U

Reported in µg/L (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	54.7%
Aromatic	o-Terphenyl	61.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH
Extraction Method: SW3510C
Page 1 of 1

Sample ID: MW03
SAMPLE

Lab Sample ID: YG35J
LIMS ID: 14-6839
Matrix: Water
Data Release Authorized:
Reported: 04/22/14

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford 0747.01.03
Date Sampled: 04/10/14
Date Received: 04/11/14

Date Extracted: 04/16/14

Sample Amount: 500 mL
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 04/22/14 14:33
Instrument/Analyst: FID8/JLW

Dilution Factor: 1.00

Aromatic
Date Analyzed: 04/21/14 15:40
Instrument/Analyst: FID8/JLW

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	40	< 40 U
C10-C12 Aliphatics	40	< 40 U
C12-C16 Aliphatics	40	< 40 U
C16-C21 Aliphatics	40	< 40 U
C21-C34 Aliphatics	40	< 40 U
C8-C10 Aromatics	40	< 40 U
C10-C12 Aromatics	40	< 40 U
C12-C16 Aromatics	40	< 40 U
C16-C21 Aromatics	40	< 40 U
C21-C34 Aromatics	40	< 40 U

Reported in µg/L (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	53.6%
Aromatic	o-Terphenyl	67.9%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH **Sample ID: MB-041614**
Extraction Method: SW3510C **METHOD BLANK**

Lab Sample ID: MB-041614
LIMS ID: 14-6837
Matrix: Water
Data Release Authorized:
Reported: 04/22/14

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford 0747.01.03
Date Sampled: 04/10/14
Date Received: 04/11/14

Date Extracted: 04/16/14

Sample Amount: 500 mL
Final Extract Volume: 1.0 mL

Aliphatic
Date Analyzed: 04/22/14 12:15
Instrument/Analyst: FID8/JLW

Dilution Factor: 1.00

Aromatic
Date Analyzed: 04/21/14 13:23
Instrument/Analyst: FID8/JLW

Dilution Factor: 1.00

Range	RL	Result
C8-C10 Aliphatics	40	< 40 U
C10-C12 Aliphatics	40	< 40 U
C12-C16 Aliphatics	40	< 40 U
C16-C21 Aliphatics	40	< 40 U
C21-C34 Aliphatics	40	< 40 U
C8-C10 Aromatics	40	< 40 U
C10-C12 Aromatics	40	< 40 U
C12-C16 Aromatics	40	< 40 U
C16-C21 Aromatics	40	< 40 U
C21-C34 Aromatics	40	< 40 U

Reported in µg/L (ppb)

EPH Surrogate Recovery

Aliphatic	1-Chlorooctadecane	51.2%
Aromatic	o-Terphenyl	60.3%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Aliphatic/Aromatic GC-EPH
Page 1 of 1

Sample ID: LCS-041614
LCS/LCSD

Lab Sample ID: LCS-041614
LIMS ID: 14-6837
Matrix: Water
Data Release Authorized:
Reported: 04/22/14

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford
0747.01.03
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 04/16/14

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 1.0 mL
LCSD: 1.0 mL

Aliphatic
Date Analyzed LCS: 04/22/14 12:42
LCSD: 04/22/14 13:10
Instrument/Analyst LCS: FID8/JLW
LCSD: FID8/JLW

Dilution Factor LCS: 1.00
LCSD: 1.00

Aromatic
Date Analyzed LCS: 04/21/14 13:51
LCSD: 04/21/14 14:19
Instrument/Analyst LCS: FID8/JLW
LCSD: FID8/JLW

Dilution Factor LCS: 1.00
LCSD: 1.00

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
C8-C10 Aliphatics	56.0	150	37.3%	84.0	150	56.0%	40.0%
C10-C12 Aliphatics	36.0	150	24.0%	64.0	150	42.7%	56.0%
C12-C16 Aliphatics	76.0	150	50.7%	108	150	72.0%	34.8%
C16-C21 Aliphatics	94.0	150	62.7%	124	150	82.7%	27.5%
C21-C34 Aliphatics	78.0	150	52.0%	104	150	69.3%	28.6%
C10-C12 Aromatics	54.0	150	36.0%	86.0	150	57.3%	45.7%
C12-C16 Aromatics	70.0	150	46.7%	104	150	69.3%	39.1%
C16-C21 Aromatics	172	300	57.3%	232	300	77.3%	29.7%
C21-C34 Aromatics	166	300	55.3%	224	300	74.7%	29.7%

EPH Surrogate Recovery

		LCS	LCSD
Aliphatic	1-Chlorooctadecane	45.5%	59.2%
Aromatic	o-Terphenyl	52.1%	69.7%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

ANALYTICAL RESOURCES INCORPORATED

AROMATIC EPH WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford
0747.01.03

ARI ID	Client ID	OTER	TOT OUT
MB-041614	Method Blank	60.3%	0
LCS-041614	Lab Control	52.1%	0
LCSD-041614	Lab Control Du	69.7%	0
YG35H	MW01	49.4%	0
YG35I	MW02	61.3%	0
YG35J	MW03	67.9%	0

	QC LIMITS
(OTER) = o-Terphenyl	(27-120)

Prep Method: SW3510C
Log Number Range: 14-6837 to 14-6839

ANALYTICAL RESOURCES INCORPORATED

ALIPHATIC EPH WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YG35-Maul Foster & Alongi
Project: Sims - North Cascade Ford
0747.01.03

ARI ID	Client ID	COD	TOT OUT
MB-041614	Method Blank	51.2%	0
LCS-041614	Lab Control	45.5%	0
LCSD-041614	Lab Control Du	59.2%	0
YG35H	MW01	42.0%	0
YG35I	MW02	54.7%	0
YG35J	MW03	53.6%	0

	QC LIMITS
(COD) = 1-Chlorooctadecane	(31-120)

Prep Method: SW3510C
Log Number Range: 14-6837 to 14-6839

FORM-II ALEPH

YG35:00078

Analytical Resources, Incorporated
Analytical Chemists and Consultants

24 June 2014

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: North Cascade Ford, 0747.01.01
ARI Job No.: YO61

Dear Heather:

Please find enclosed the original chain of custody record and the final results for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted four water samples on June 19, 2014. The samples were analyzed for NWTPH-Dx as requested.

These analyses proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file YO61

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 1661	Turn-around Requested: Standard
ARI Client Company: MFA	Phone: (360) 694-2691
Client Contact: Heather Hirsch	
Client Project Name: ~~0747.01.01~~ North Cascade Ford	
Client Project #: 0747.01.01	Samplers: R. Degens

Page: 1 of 1

Date: 6/18/14 | Ice Present? yes

No. of Coolers: 1 | Cooler Temps: 6.4

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No. Containers	Analysis Requested: NWTPH-Dx	Notes/Comments
MW01-GW-140618	6/18/14	1136	GW	2	X	
MW02-GW-140618	6/18/14	1340	GW	2	X	
MW03-GW-140618	6/18/14	1455	GW	2	X	
FD-GW-140618	6/18/14	1140	GW	2	X	

Comments/Special Instructions	Relinquished by: (Signature)	Received by: (Signature)	Relinquished by: (Signature)	Received by (Signature)
	Printed Name: Roxanne Degens	Printed Name: Taylor Stroud	Printed Name	Printed Name
	Company: MFA	Company: ARI	Company:	Company:
	Date & Time: 6/19/14 0738	Date & Time: 6-19-14 738	Date & Time	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

V051 : 130A
20068

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client MFA

Project Name: North Cascade Fed

COC No(s): _____ NA

Delivered by. Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: YO61

Tracking No: _____ NA

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES (NO)

Were custody papers included with the cooler? (YES) NO

Were custody papers properly filled out (ink, signed, etc) (YES) NO

Temperature of Cooler(s) (°C) (recommended 2 0-6.0 °C for chemistry) 6.4

Time: _____

If cooler temperature is out of compliance fill out form 00070F

Temp Gun ID# 168-7952

Cooler Accepted by: JS Date: 6.19.14 Time: 738

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? ... Bubble Wrap Wet Ice Gel Packs Baggies Foam Block Paper Other: _____

Was sufficient ice used (if appropriate)? ... NA (YES) NO

Were all bottles sealed in individual plastic bags? (YES) (NO)

Did all bottles arrive in good condition (unbroken)? (YES) NO

Were all bottle labels complete and legible? (YES) NO

Did the number of containers listed on COC match with the number of containers received? (YES) NO

Did all bottle labels and tags agree with custody papers? (YES) NO

Were all bottles used correct for the requested analyses? (YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)... (NA) YES NO

Were all VOC vials free of air bubbles? (NA) YES NO

Was sufficient amount of sample sent in each bottle? (YES) NO

Date VOC Trip Blank was made at ARI... (NA) _____

Was Sample Split by ARI (NA) YES Date/Time._____ Equipment._____ Split by:_____

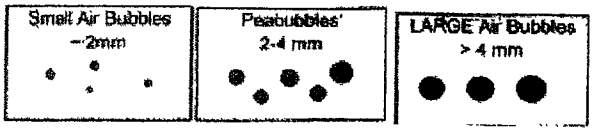
Samples Logged by: JS Date: 6-19-14 Time: 938

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm" (< 2 mm)
Peabubbles → "pb" (2 to < 4 mm)
Large → "lg" (4 to < 6 mm)
Headspace → "hs" (> 6 mm)

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YO61
Client: Maul Foster & Alongi
Project Event: 0747.01.01
Project Name: North Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	MW01-GW-140618	YO61A	14-12019	Water	06/18/14 11:36	06/19/14 07:38
2.	MW02-GW-140618	YO61B	14-12020	Water	06/18/14 13:40	06/19/14 07:38
3.	MW03-GW-140618	YO61C	14-12021	Water	06/18/14 14:55	06/19/14 07:38
4.	FD-GW-140618	YO61D	14-12022	Water	06/18/14 11:40	06/19/14 07:38

Data Reporting Qualifiers

Effective 7/10/2009

Inorganic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Duplicate RPD is not within established control limits
B	Reported value is less than the CRDL but ≥ the Reporting Limit
N	Matrix Spike recovery not within established control limits
NA	Not Applicable, analyte not spiked
H	The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
L	Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Flagged value is not within established control limits
B	Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
J	Estimated concentration when the value is less than ARI's established reporting limits
D	The spiked compound was not detected due to sample extract dilution
E	Estimated concentration calculated for an analyte response above the valid instrument calibration range. Dilution of the sample or extract is required to obtain valid quantification of the analyte.
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20% RSD, <20% Drift or minimum RRF).
S	Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; Dilution of the sample or extract is required to obtain valid quantification of the analyte.

NA The flagged analyte was not analyzed for

NR Spiked compound recovery is not reported due to chromatographic interference

NS The flagged analyte was not spiked into the sample

M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses

N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"

Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.

EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**

C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column

P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference

X Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**

Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

Geotechnical Data

A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F Samples were frozen prior to particle size determination

SM Sample matrix is not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS Sample does not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W Weight of sample in some pipette aliquots is below the level required for accurate weighing

YQS1 : 00097

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Extraction Method: SW3510C
Page 1 of 1

QC Report No: YO61-Maul Foster & Alongi
Project: North Cascade Ford
0747.01.01

Matrix: Water

Date Received: 06/19/14

Data Release Authorized:
Reported: 06/23/14

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DF	Range/Surrogate	RL	Result
MB-062014	Method Blank	06/20/14	06/20/14	1.00	Diesel Range	0.10	< 0.10 U
14-12019	HC ID: ---		FID3B	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		109%
YO61A	MW01-GW-140618	06/20/14	06/20/14	1.00	**Diesel Range**	**0.10**	**1.4**
14-12019	HC ID: **DRO/RRO**		FID3B	1.0	**Motor Oil Range**	**0.20**	**0.31**
					o-Terphenyl		74.0%
YO61B	MW02-GW-140618	06/20/14	06/20/14	1.00	**Diesel Range**	**0.10**	**3.8**
14-12020	HC ID: **DIESEL/RRO**		FID3B	1.0	**Motor Oil Range**	**0.20**	**0.41**
					o-Terphenyl		79.4%
YO61C	MW03-GW-140618	06/20/14	06/20/14	1.00	**Diesel Range**	**0.10**	**0.32**
14-12021	HC ID: **DIESEL**		FID3B	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		101%
YO61D	FD-GW-140618	06/20/14	06/20/14	1.00	**Diesel Range**	**0.10**	**1.7**
14-12022	HC ID: **DRO/RRO**		FID3B	1.0	**Motor Oil Range**	**0.20**	**0.35**
					o-Terphenyl		87.4%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YO61-Maul Foster & Alongi
Project: North Cascade Ford
0747.01.01

Client ID	OTER	TOT OUT
MB-062014	109%	0
LCS-062014	81.9%	0
MW01-GW-140618	74.0%	0
MW02-GW-140618	79.4%	0
MW03-GW-140618	101%	0
FD-GW-140618	87.4%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3510C
Log Number Range: 14-12019 to 14-12022

FORM-II TPHD

YO61 : 00009

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: LCS-062014
LAB CONTROL

Lab Sample ID: LCS-062014
LIMS ID: 14-12019
Matrix: Water
Data Release Authorized: MW
Reported: 06/23/14

QC Report No: YO61-Maul Foster & Alongi
Project: North Cascade Ford
0747.01.01
Date Sampled: NA
Date Received: NA

Date Extracted: 06/20/14
Date Analyzed: 06/20/14 17:54
Instrument/Analyst: FID3B/JLW

Sample Amount: 500 mL
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
Diesel	2.69	3.00	89.7%

TPHD Surrogate Recovery

o-Terphenyl	81.9%

Results reported in mg/L

FORM III

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

Matrix: Water
Date Received: 06/19/14

ARI Job: YO61
Project: North Cascade Ford
0747.01.01

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
14-12019-062014MB1	Method Blank	500 mL	1.00 mL	06/20/14
14-12019-062014LCS1	Lab Control	500 mL	1.00 mL	06/20/14
14-12019-YO61A	MW01-GW-140618	500 mL	1.00 mL	06/20/14
14-12020-YO61B	MW02-GW-140618	500 mL	1.00 mL	06/20/14
14-12021-YO61C	MW03-GW-140618	500 mL	1.00 mL	06/20/14
14-12022-YO61D	FD-GW-140618	500 mL	1.00 mL	06/20/14

Data File: /chem3/fid3b.i/20140620.b/0620b017.d

Date : 20-JUN-2014 17:28

Client ID: YO61MBW1

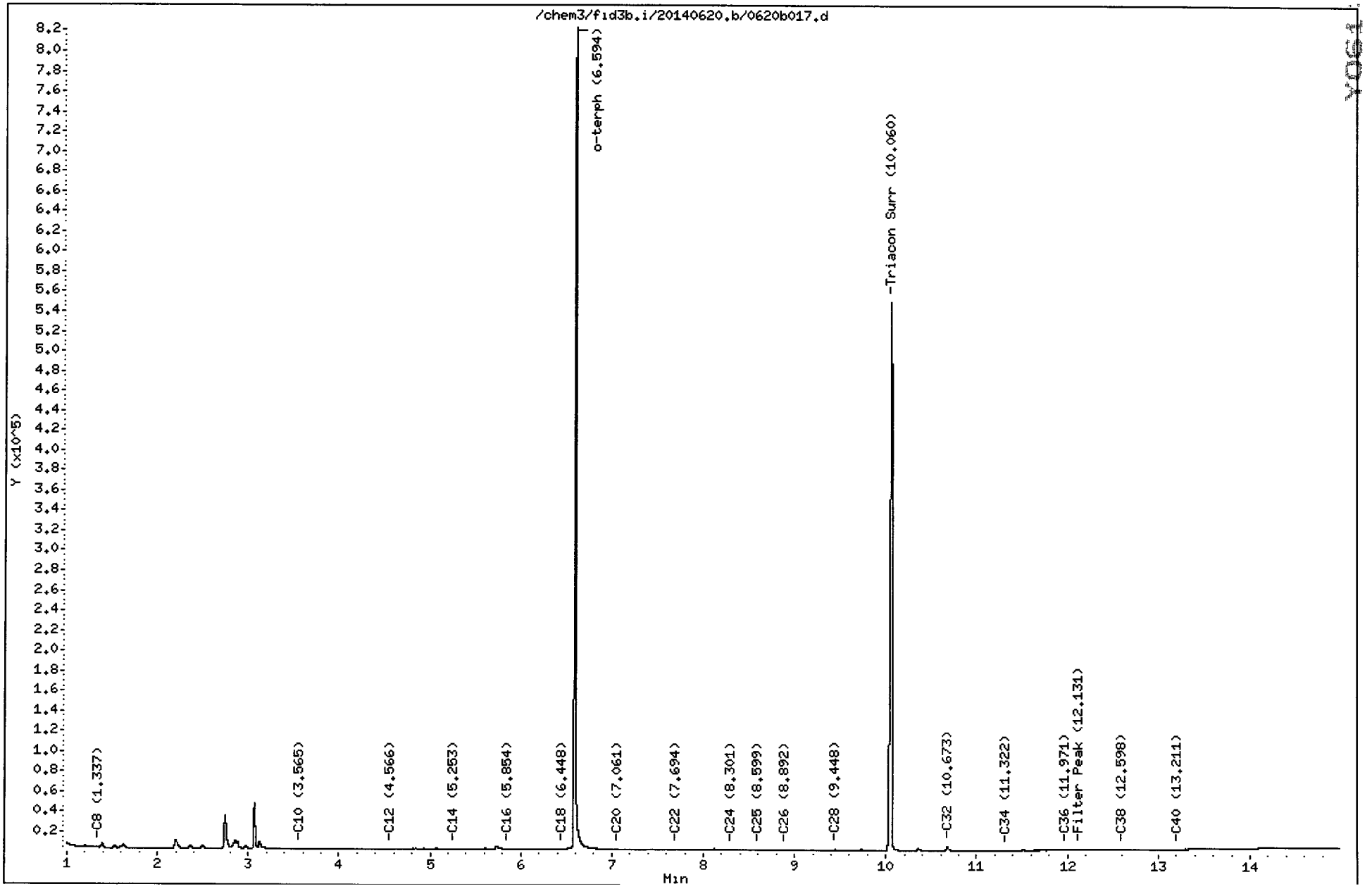
Sample Info: YO61MBW1

Instrument: fid3b.i

Operator: JW

Column phase: RTX-1

Column diameter: 0.25



Data File: /chem3/fid3b.i/20140620.b/0620b018.d

Date : 20-JUN-2014 17:54

Client ID: YO61LCSW1

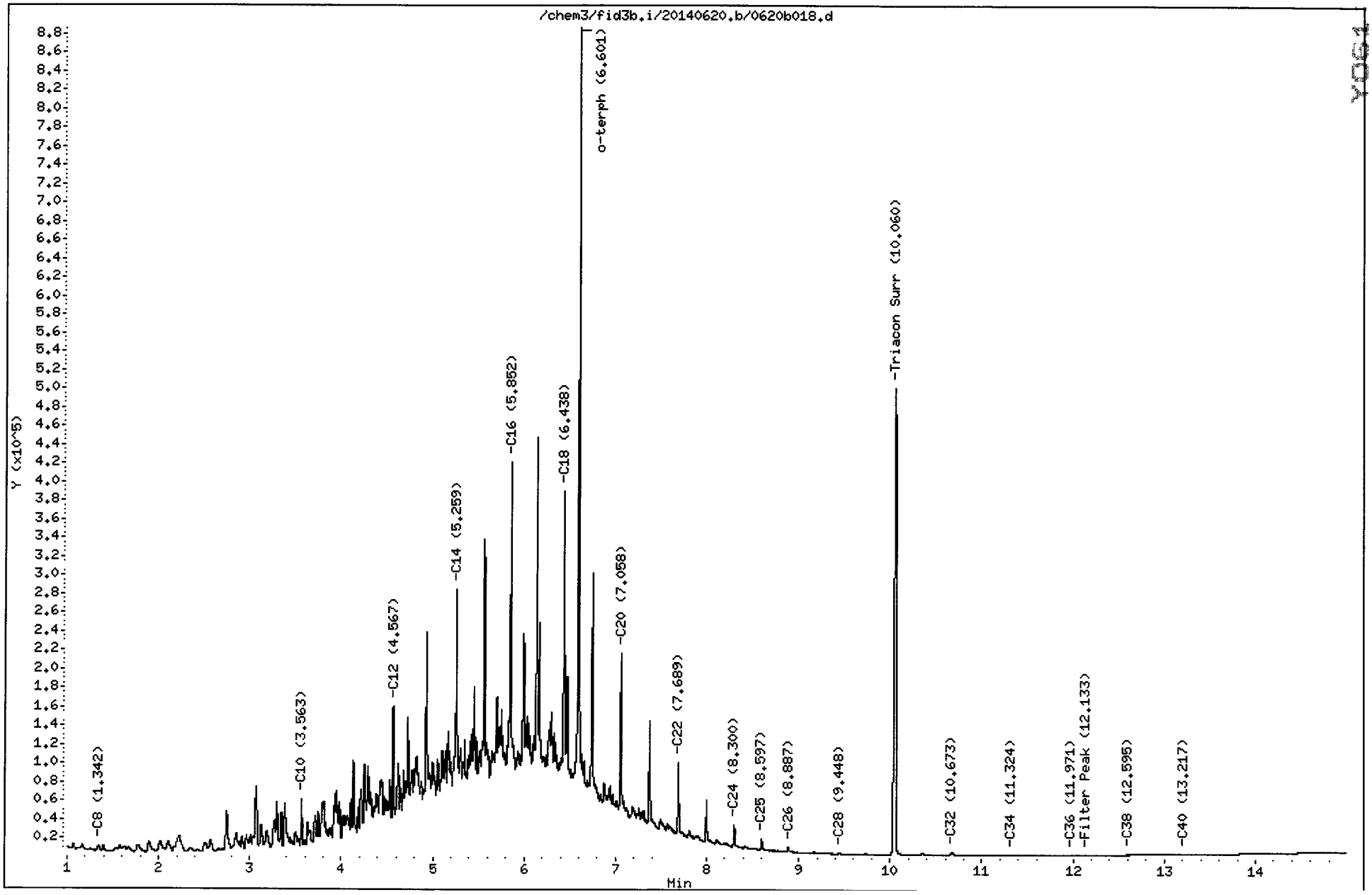
Sample Info: YO61LCSW1

Column phase: RTX-1

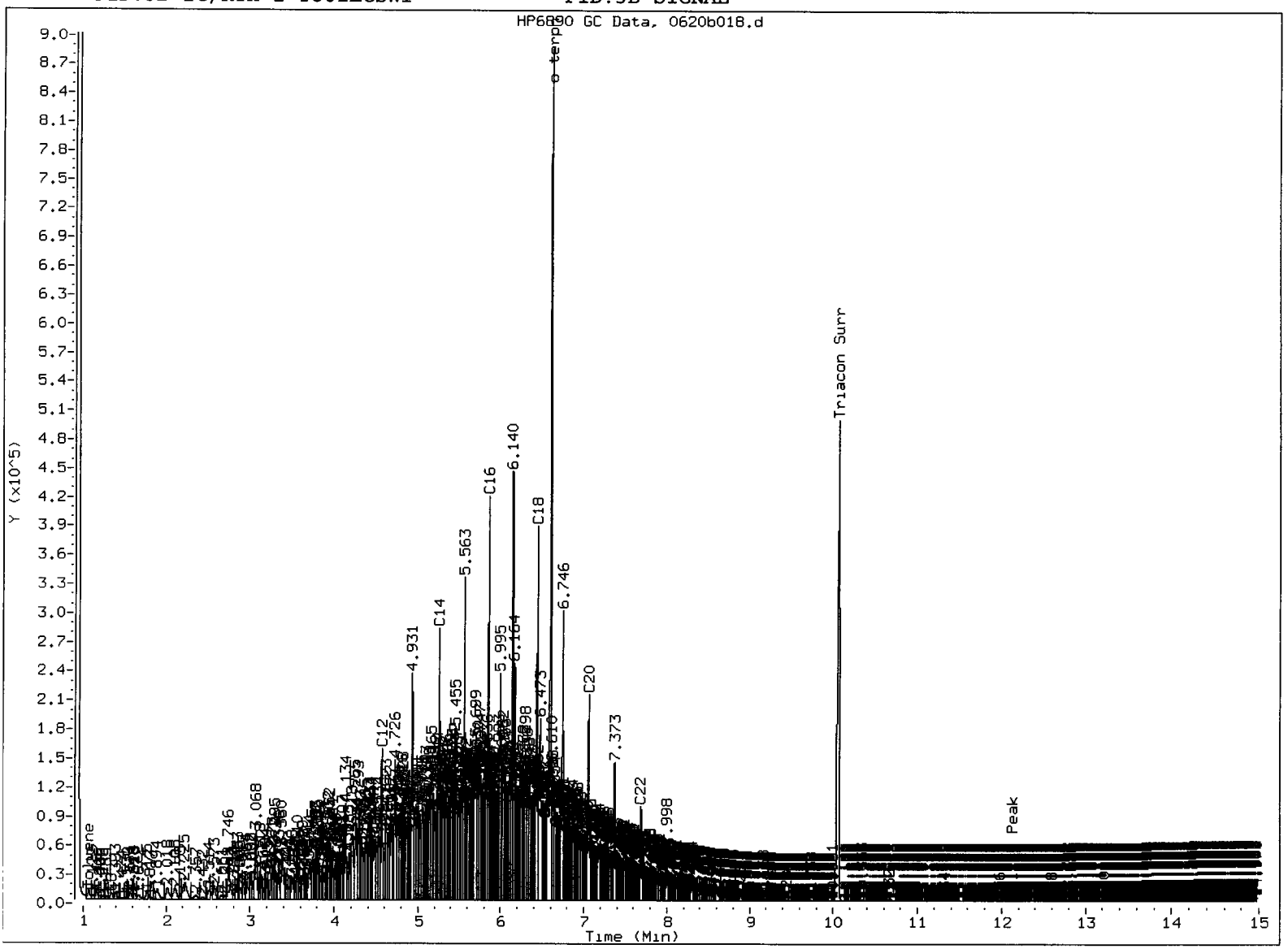
Instrument: fid3b.i

Operator: JW

Column diameter: 0.25



FID:3B-2C/RTX-1 YO61LCSW1 FID:3B SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
(5) Skimmed surrogate

Analyst: JD Date: 6/23/11

Data File: /chem3/fid3b.i/20140620.b/0620b019.d

Date : 20-JUN-2014 18:19

Client ID: MW01-GW-140618

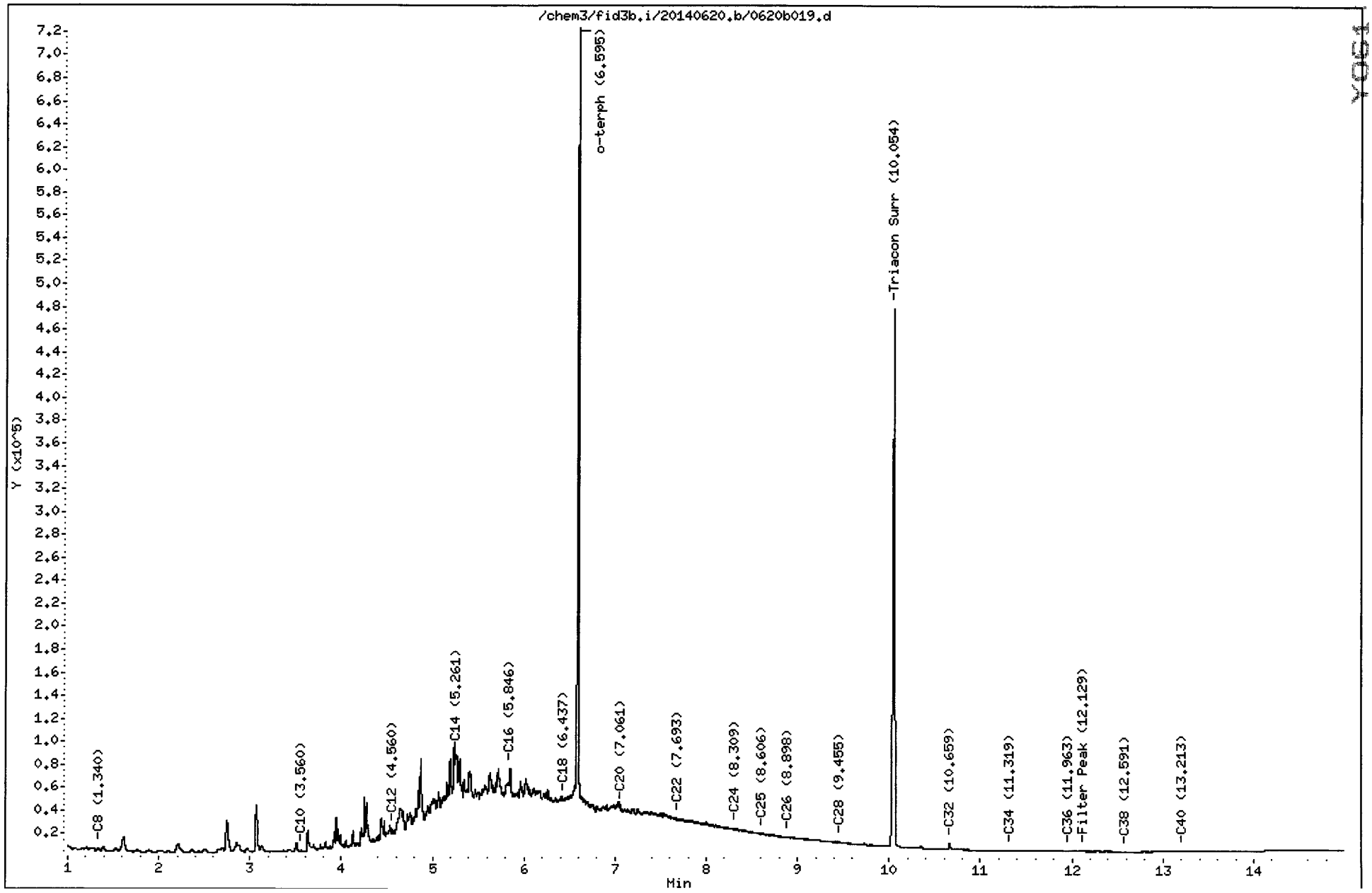
Sample Info: YO61A

Column phase: RTX-1

Instrument: fid3b.i

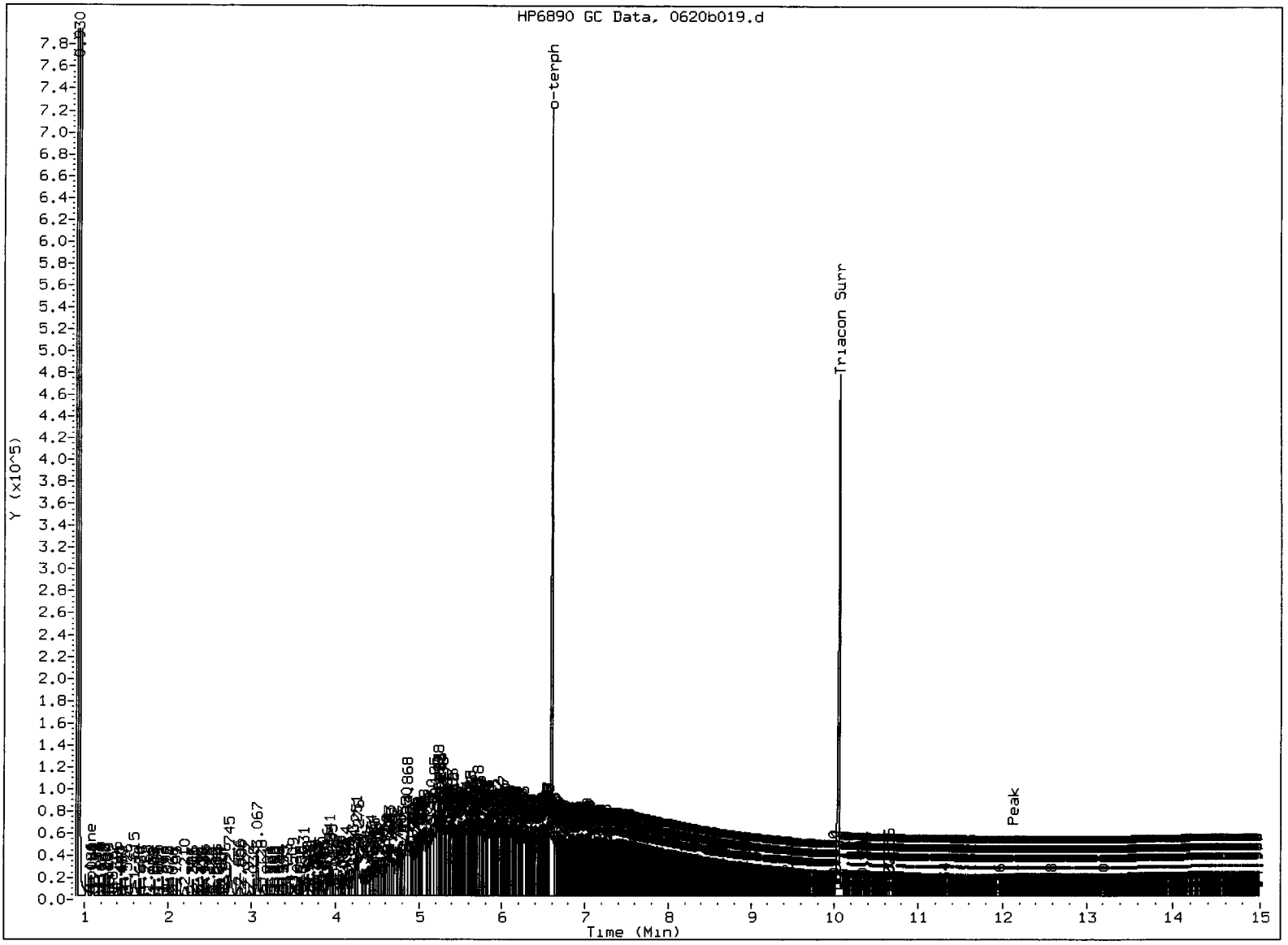
Operator: JW

Column diameter: 0.25



FID:3B-2C/RTX-1 YO61A

FID:3B SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: JW Date: 6/23/14

Data File: /chem3/fid3b.i/20140620.b/0620b020.d

Date : 20-JUN-2014 18:44

Client ID: MW02-GW-140618

Sample Info: Y061B

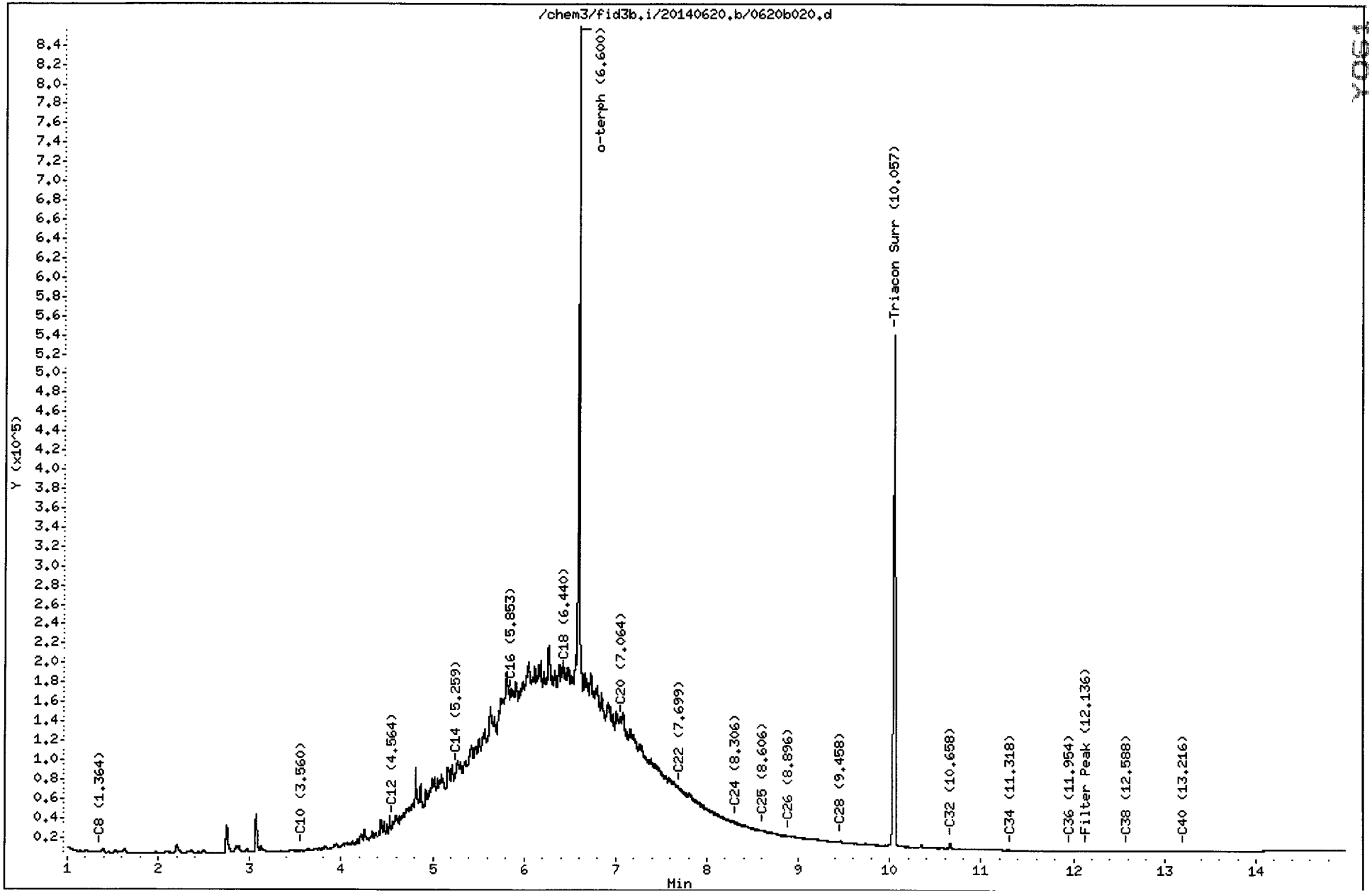
Column phase: RTX-1

Instrument: fid3b.i

Operator: JW

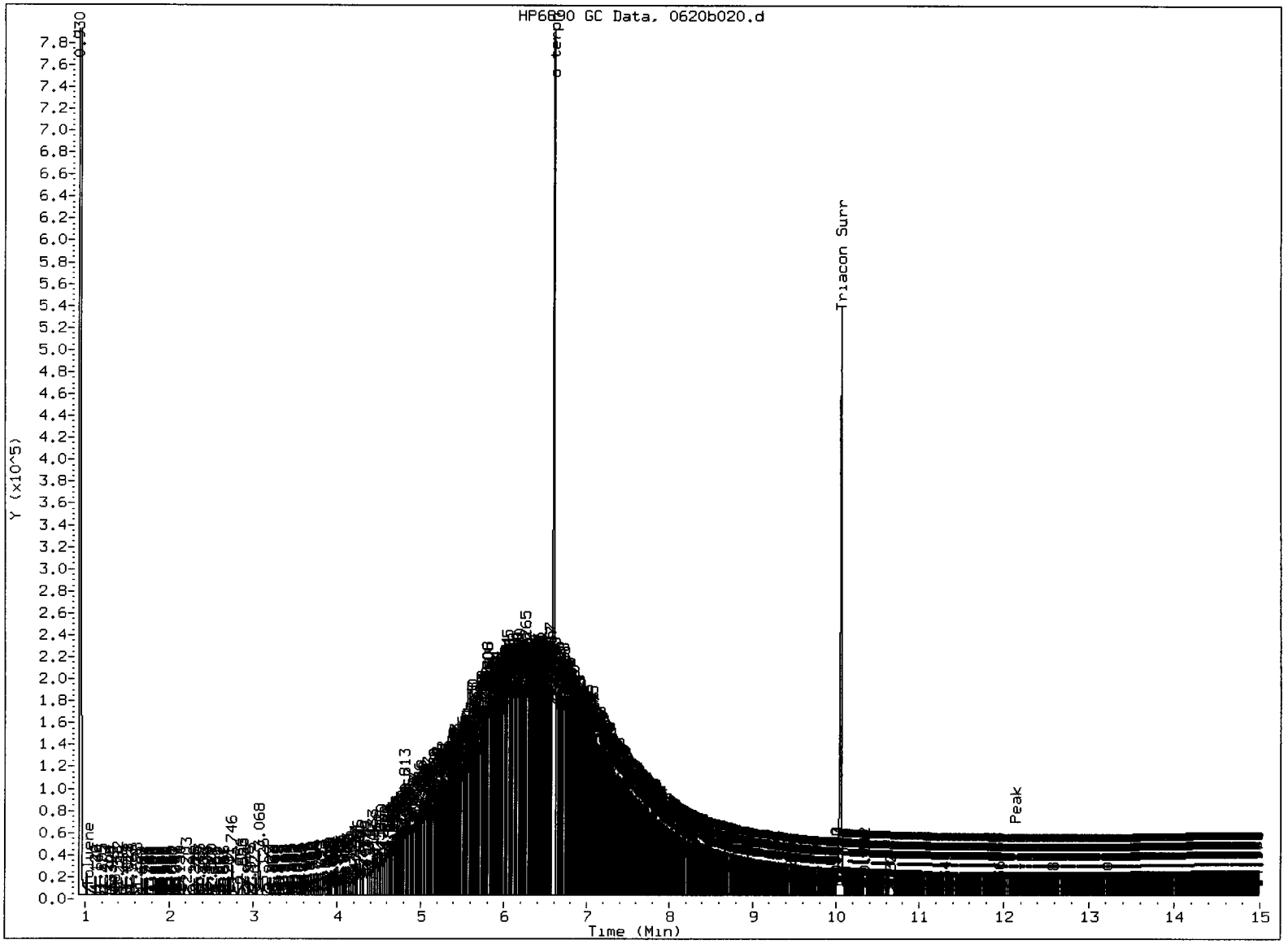
Column diameter: 0.25

Y061B 060917



FID:3B-2C/RTX-1 YO61B

FID:3B SIGNAL



MANUAL INTEGRATION

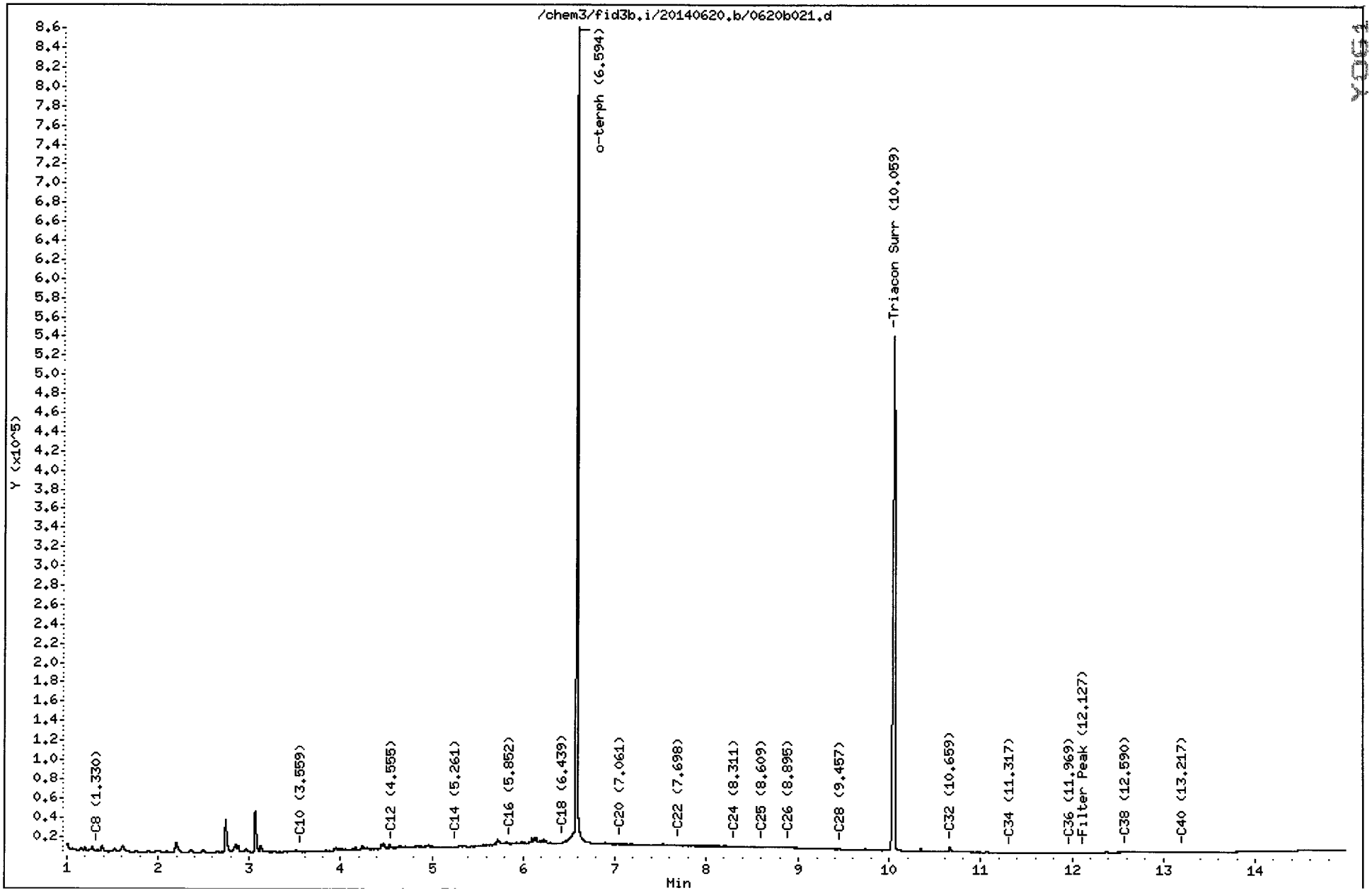
1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: JW Date: 6/23/14

Data File: /chem3/fid3b.i/20140620.b/0620b021.d
Date : 20-JUN-2014 19:09
Client ID: MW03-GW-140618
Sample Info: Y061C

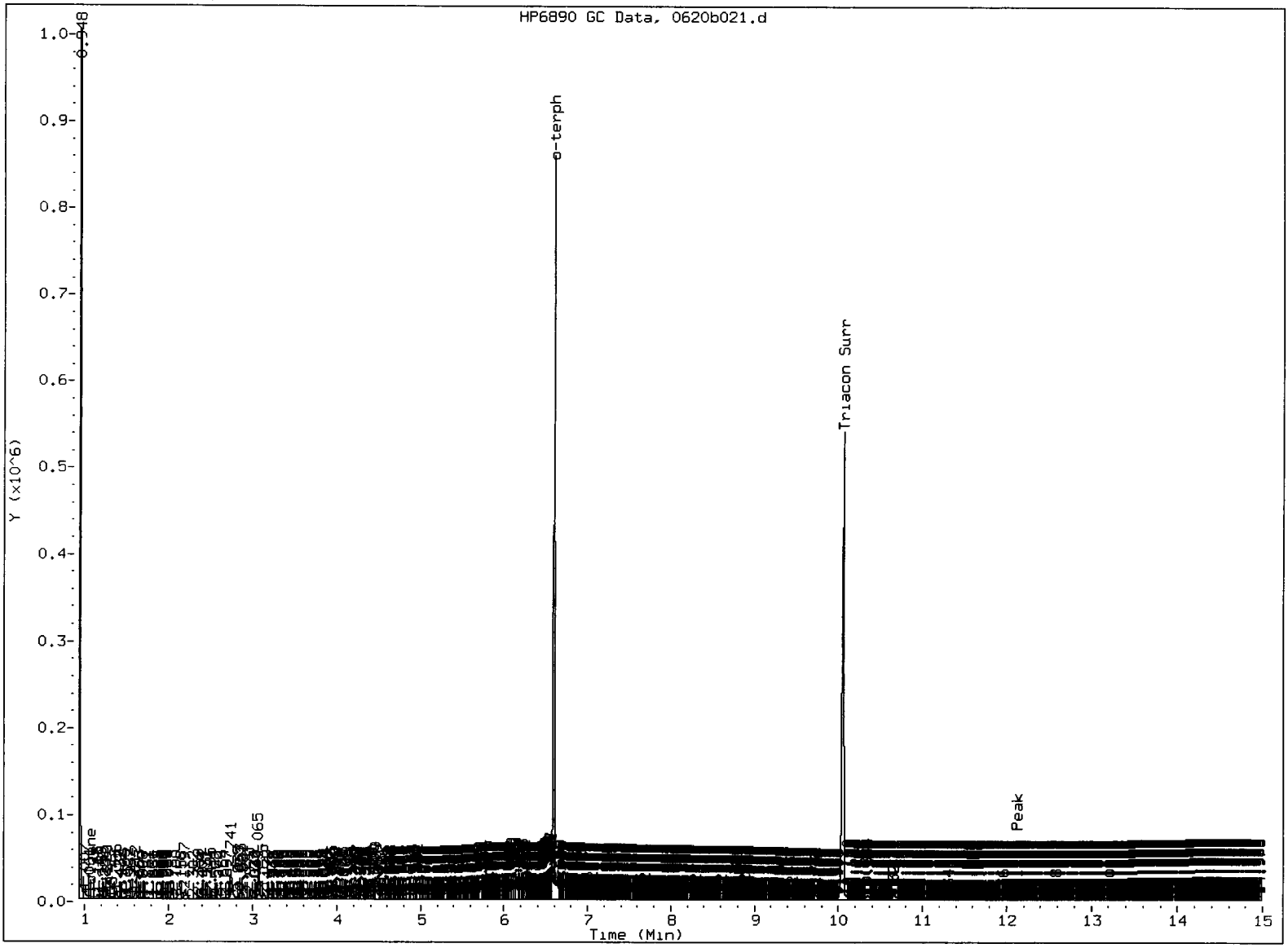
Instrument: fid3b.i
Operator: JW
Column diameter: 0.25

Column phase: RTX-1



FID:3B-2C/RTX-1 YO61C

FID:3B SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
5. Skimmed surrogate

Analyst: JU Date: 6/23/14

Data File: /chem3/fid3b.i/20140620.b/0620b022.d

Date : 20-JUN-2014 19:34

Client ID: FD-GW-140618

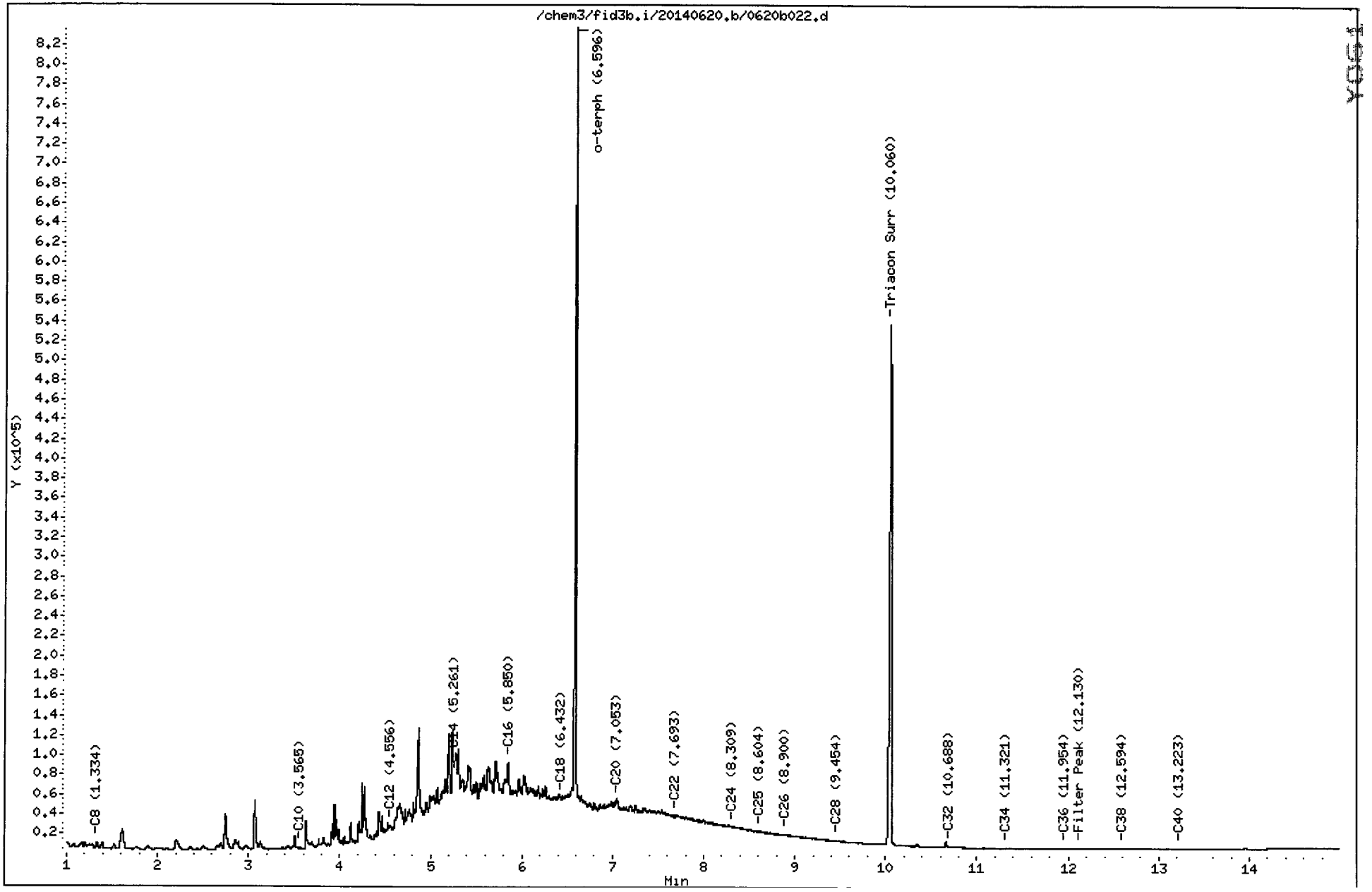
Sample Info: Y061D

Instrument: fid3b.i

Operator: JW

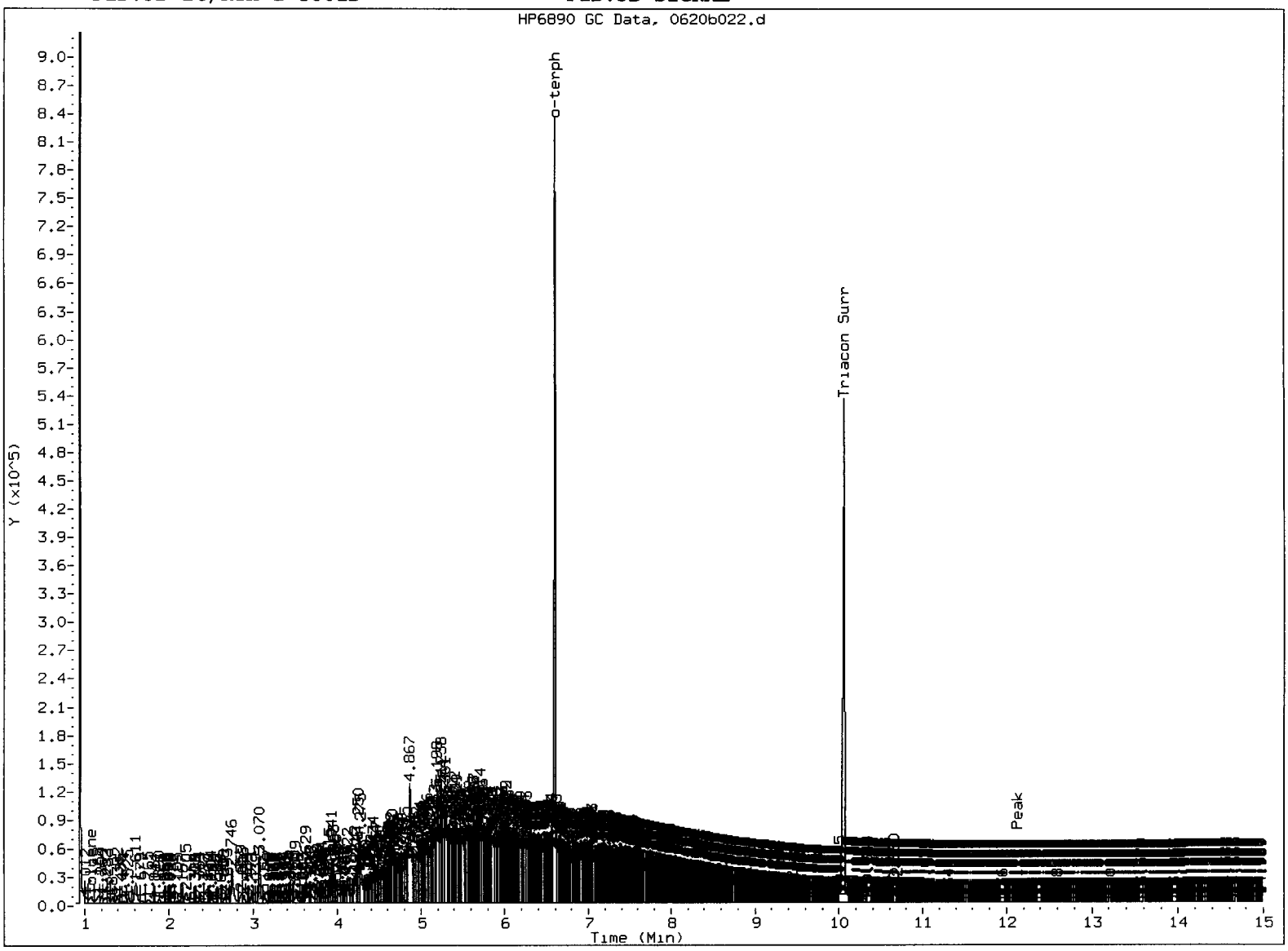
Column phase: RTX-1

Column diameter: 0.25



FID:3B-2C/RTX-1 YO61D

FID:3B SIGNAL



MANUAL INTEGRATION

1. Baseline correction
3. Peak not found
(5) Skimmed surrogate

Analyst: JD Date: 6/23/14

Analytical Resources, Incorporated
Analytical Chemists and Consultants

16 September 2014

Heather Hirsch
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: North Cascade Ford, 0747.01.03
ARI Job No.: YZ73

Dear Heather:

Please find enclosed the original chain of custody record and the final results for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted four water samples on September 11, 2014. The samples were analyzed for NWTPH-Dx as requested.

These analyses proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file YZ73

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: YZ73	Turn-around Requested: Standard	Page: 1 of 1	
ARI Client Company: MFA	Phone: (360) 594-6257	Date: 9/10/14	Ice Present?
Client Contact: Heather Hirsch		No. of Coolers:	Cooler Temps:
Client Project Name: North Cascade Ford			
Client Project #: 0747.01.03	Samplers: H. Hirsch, C. Wise		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested: NWTPH-Dx	Notes/Comments
MW01-GW-091014	9/10/14	1057	GW	2	X	
MW02-GW-091014	9/10/14	1232	GW	2	X	
MW03-GW-091014	9/10/14	1445	GW	2	X	
FD-091014	9/10/14	1057	GW	2	X	

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by: (Signature)	Received by (Signature)
	Carolyn Wise	[illegible]		[illegible]
	Printed Name: Carolyn Wise	Printed Name: Robert Turpaud	Printed Name.	Printed Name: A. Vodgardsen
	Company: MFA	Company: MC Delivery	Company	Company: ARI
	Date & Time: 9/11/14 9:00 am	Date & Time: 9-11-14 9:00 AM	Date & Time	Date & Time: 9/11/14 1120

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client MFA Project Name: North Cascade Ford

COC No(s): _____ (NA) Delivered by: Fed-Ex UPS (Courier) Hand Delivered Other: MC Delivery

Assigned ARI Job No: YZ73 Tracking No: 534306 (NA) R

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 3.3
Time: 1120

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 90877952

Cooler Accepted by: AV Date: 9/11/14 Time: 1120

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used?	Bubble Wrap (Wet Ice) Gel Packs Baggies Foam Block Paper Other:		
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)...	(NA)	YES	NO
Were all VOC vials free of air bubbles?	(NA)	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI.	(NA)		

Was Sample Split by ARI: (NA) YES Date/Time:_____ Equipment:_____ Split by:_____

Samples Logged by AV Date: 9/11/14 Time: 1630

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Small Air Bubbles ~2mm	Peabubbles 2-4 mm	LARGE Air Bubbles > 4 mm
• • •	• • • •	● ● ●

Small → "sm" (	
Peabubbles → "pb" (2 to < 4 mm)	
Large → "lg" (4 to < 6 mm)	
Headspace → "hs" (> 6 mm)	

YZ73 : 8868

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: YZ73
Client: Maul Foster & Alongi
Project Event: 0747.01.03
Project Name: North Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	MW01-GW-091014	YZ73A	14-18507	Water	09/10/14 10:57	09/11/14 11:20
2.	MW02-GW-091014	YZ73B	14-18508	Water	09/10/14 12:32	09/11/14 11:20
3.	MW03-GW-091014	YZ73C	14-18509	Water	09/10/14 14:45	09/11/14 11:20
4.	FD-091014	YZ73D	14-18510	Water	09/10/14 10:57	09/11/14 11:20

YZ73 : 00004

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 12/31/13

Inorganic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Duplicate RPD is not within established control limits
B	Reported value is less than the CRDL but ≥ the Reporting Limit
N	Matrix Spike recovery not within established control limits
NA	Not Applicable, analyte not spiked
H	The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
L	Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Flagged value is not within established control limits
B	Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
J	Estimated concentration when the value is less than ARI's established reporting limits
D	The spiked compound was not detected due to sample extract dilution
E	Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).
S	Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte
NA	The flagged analyte was not analyzed for
NR	Spiked compound recovery is not reported due to chromatographic interference
NS	The flagged analyte was not spiked into the sample
M	Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"
Y	The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.
EMPC	Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**
C	The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column
P	The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference
X	Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**
Z	Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

YZ73:00086

Geotechnical Data

A	The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
F	Samples were frozen prior to particle size determination
SM	Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
SS	Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
W	Weight of sample in some pipette aliquots was below the level required for accurate weighting

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Extraction Method: SW3510C

QC Report No: YZ73-Maul Foster & Alongi
Project: North Cascade Ford
0747.01.03

Matrix: Water

Date Received: 09/11/14

Data Release Authorized:
Reported: 09/16/14

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DF	Range/Surrogate	RL	Result
MB-091214	Method Blank	09/12/14	09/15/14	1.00	Diesel Range	0.10	< 0.10 U
14-18507	HC ID: ---		FID9	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		88.3%
YZ73A	MW01-GW-091014	09/12/14	09/15/14	1.00	**Diesel Range**	**0.10**	**1.3**
14-18507	HC ID: **DIESEL/RRO**		FID9	1.0	**Motor Oil Range**	**0.20**	**0.30**
					o-Terphenyl		80.0%
YZ73B	MW02-GW-091014	09/12/14	09/15/14	1.00	**Diesel Range**	**0.10**	**0.77**
14-18508	HC ID: **DIESEL**		FID9	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		91.2%
YZ73C	MW03-GW-091014	09/12/14	09/15/14	1.00	**Diesel Range**	**0.10**	**0.21**
14-18509	HC ID: **DIESEL**		FID9	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		88.8%
YZ73D	FD-091014	09/12/14	09/15/14	1.00	**Diesel Range**	**0.10**	**1.4**
14-18510	HC ID: **DIESEL/RRO**		FID9	1.0	**Motor Oil Range**	**0.20**	**0.39**
					o-Terphenyl		88.0%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

YZ73 000026

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: LCS-091214
LCS/LCSD

Lab Sample ID: LCS-091214
LIMS ID: 14-18507
Matrix: Water
Data Release Authorized:
Reported: 09/16/14

QC Report No: YZ73-Maul Foster & Alongi
Project: North Cascade Ford
0747.01.03
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 09/12/14
Date Analyzed LCS: 09/15/14 14:04
LCSD: 09/15/14 14:25
Instrument/Analyst LCS: FID9/JLW
LCSD: FID9/JLW

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 1.0 mL
LCSD: 1.0 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Range	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Diesel	2.87	3.00	95.7%	2.92	3.00	97.3%	1.7%

TPHD Surrogate Recovery

	LCS	LCSD
o-Terphenyl	92.0%	91.6%

Results reported in mg/L
RPD calculated using sample concentrations per SW846.

FORM III

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: YZ73
Matrix: Water — Project: North Cascade Ford
Date Received: 09/11/14 — 0747.01.03

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
14-18507-091214MB1	Method Blank	500 mL	1.00 mL	09/12/14
14-18507-091214LCS1	Lab Control	500 mL	1.00 mL	09/12/14
14-18507-091201LCSD1	Lab Control Dup	500 mL	1.00 mL	09/12/01
14-18507-YZ73A	MW01-GW-091014	500 mL	1.00 mL	09/12/14
14-18508-YZ73B	MW02-GW-091014	500 mL	1.00 mL	09/12/14
14-18509-YZ73C	MW03-GW-091014	500 mL	1.00 mL	09/12/14
14-18510-YZ73D	FD-091014	500 mL	1.00 mL	09/12/14

YZ73 00016

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: YZ73-Maul Foster & Alongi
Project: North Cascade Ford
0747.01.03

Client ID	OTER	TOT OUT
MB-091214	88.3%	0
LCS-091214	92.0%	0
LCSD-091214	91.6%	0
MW01-GW-091014	80.0%	0
MW02-GW-091014	91.2%	0
MW03-GW-091014	88.8%	0
FD-091014	88.0%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

Prep Method: SW3510C
Log Number Range: 14-18507 to 14-18510

FORM-II TPHD

YZ73:0001A

Data File: /chem2/fid9.i/20140915.b/0915a007.d

Date : 15-SEP-2014 13:42

Client ID: YZ73MBW1

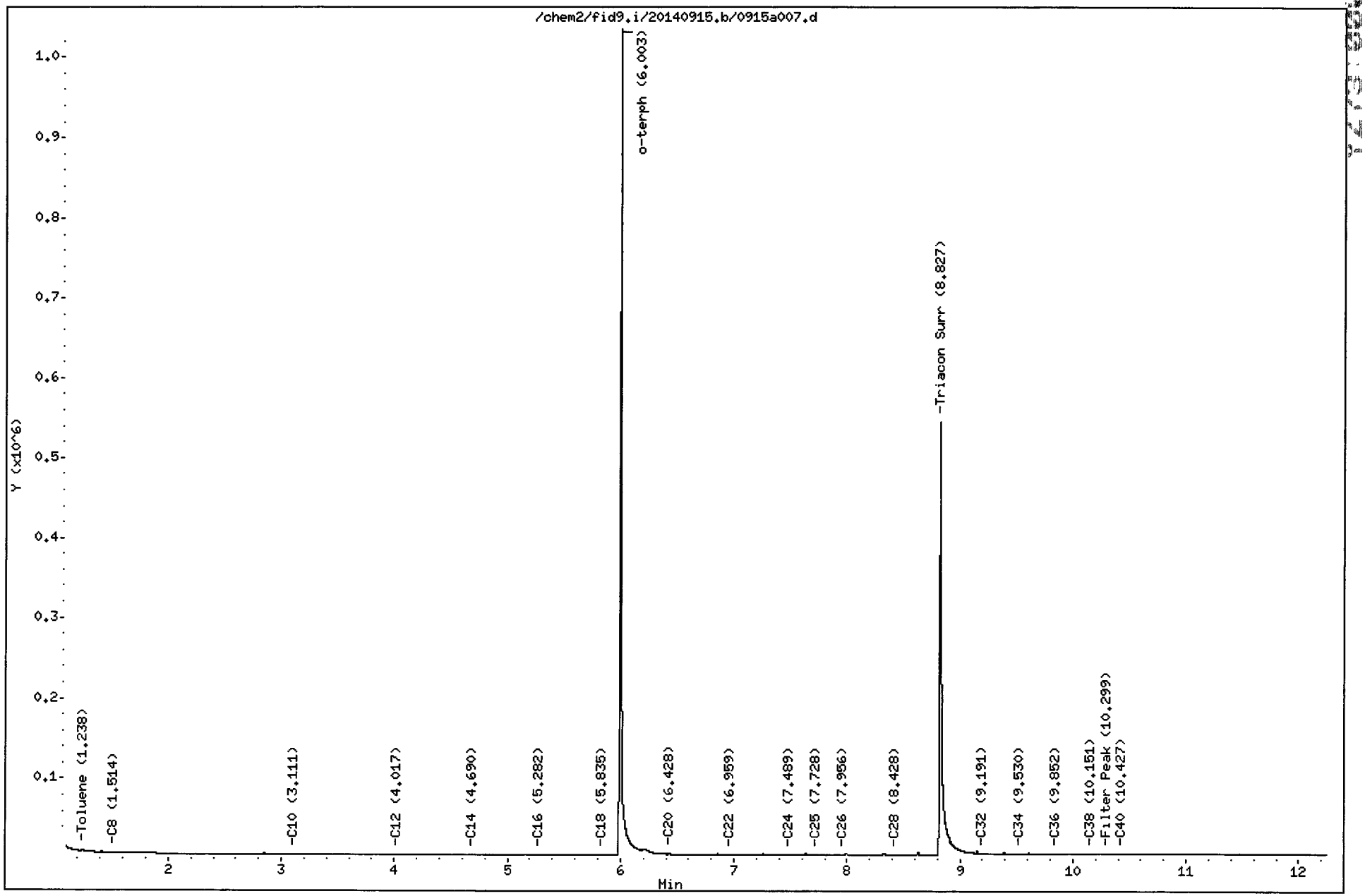
Sample Info: YZ73MBW1

Column phase: RTX-1

Instrument: fid9.i

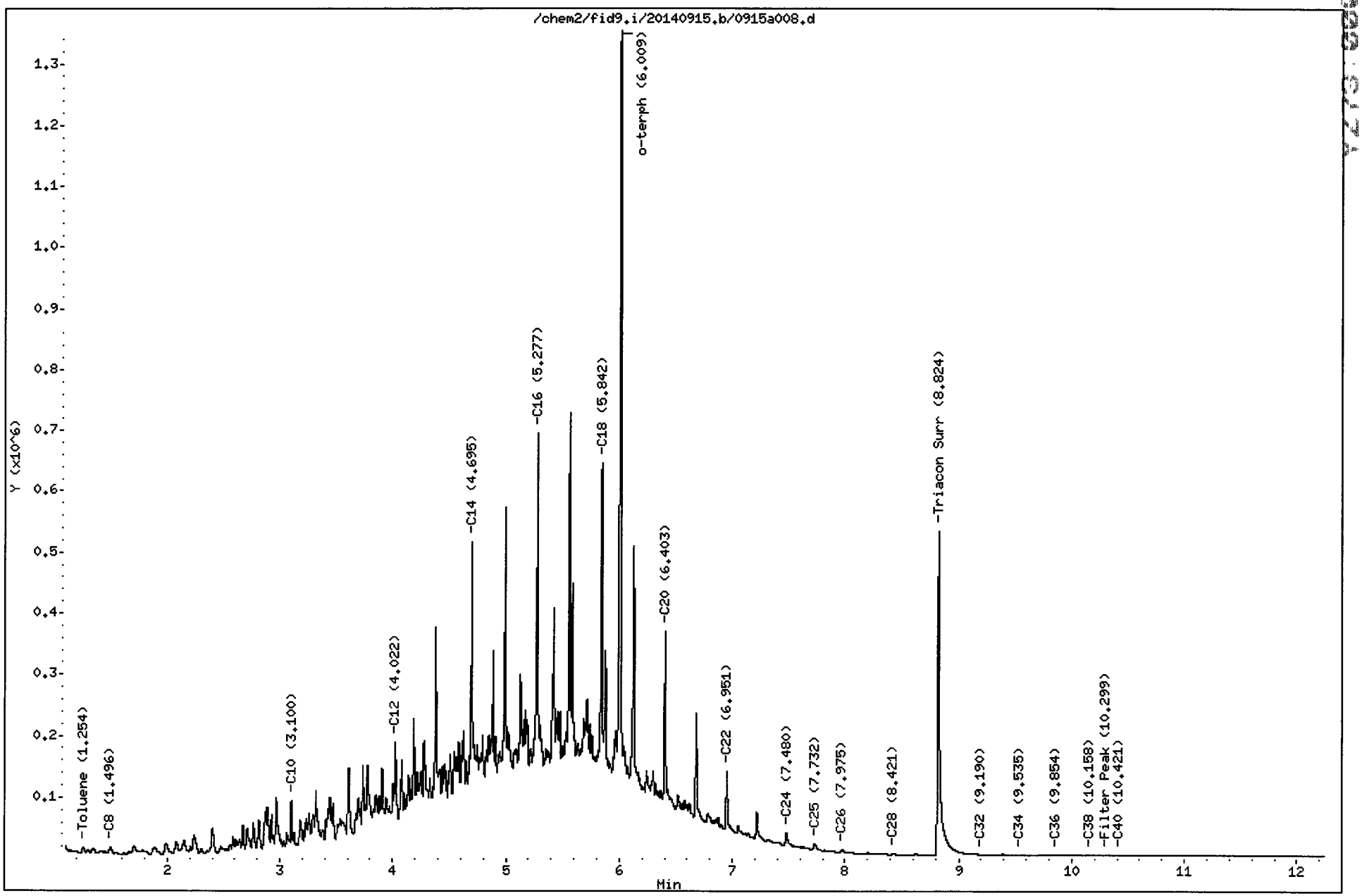
Operator: JW

Column diameter: 0.25

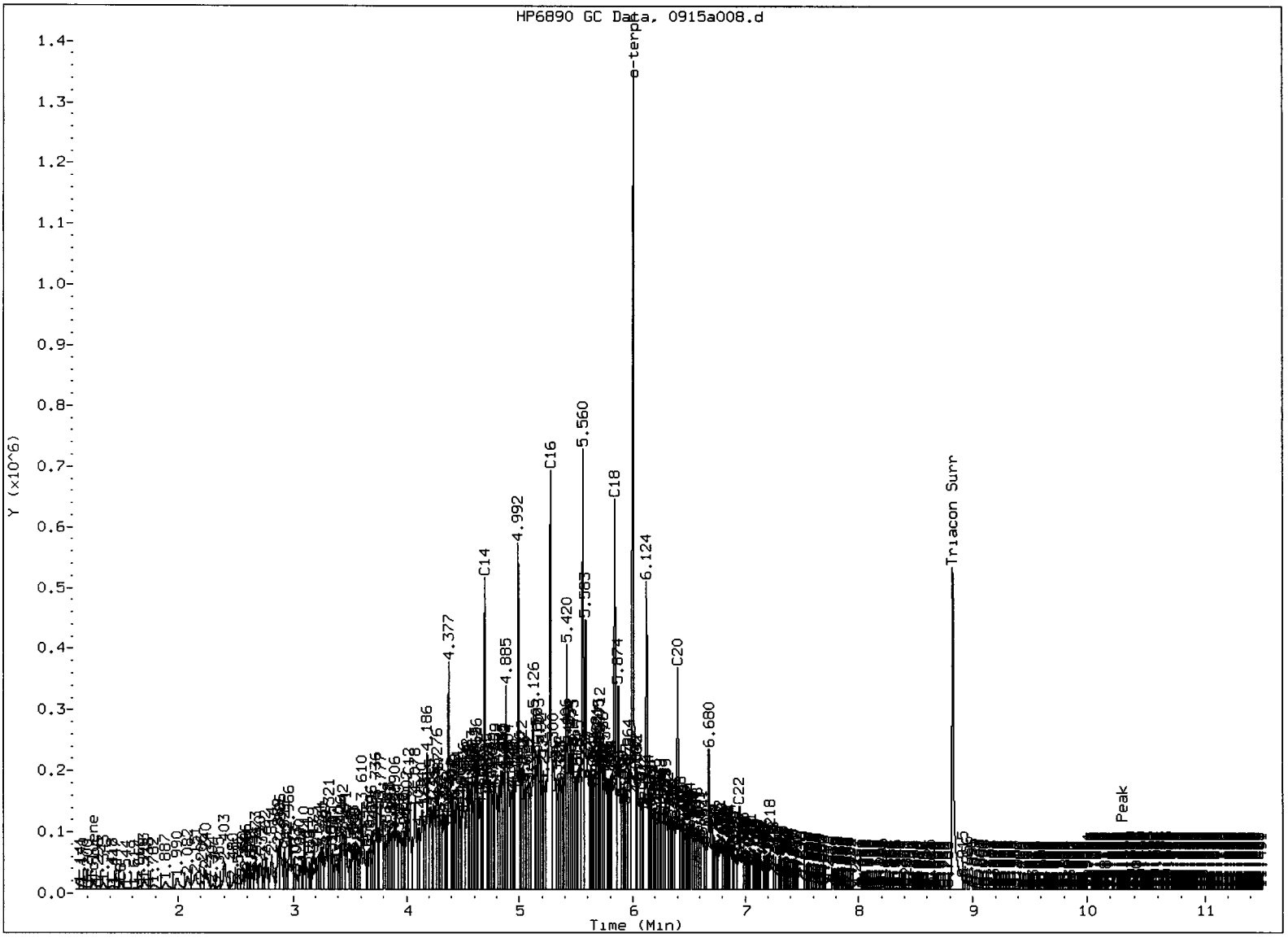


Data File: /chem2/fid9.i/20140915.b/0915a008.d
Date : 15-SEP-2014 14:04
Client ID: YZ73LCSW1
Sample Info: YZ73LCSW1

Instrument: fid9.i
Operator: JW
Column phase: RTX-1
Column diameter: 0.25



FID:9A-2C/RTX-1 YZ73LCSW1 FID:9A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Surrogate Skimmed

Analyst: TW Date: 9/16/14

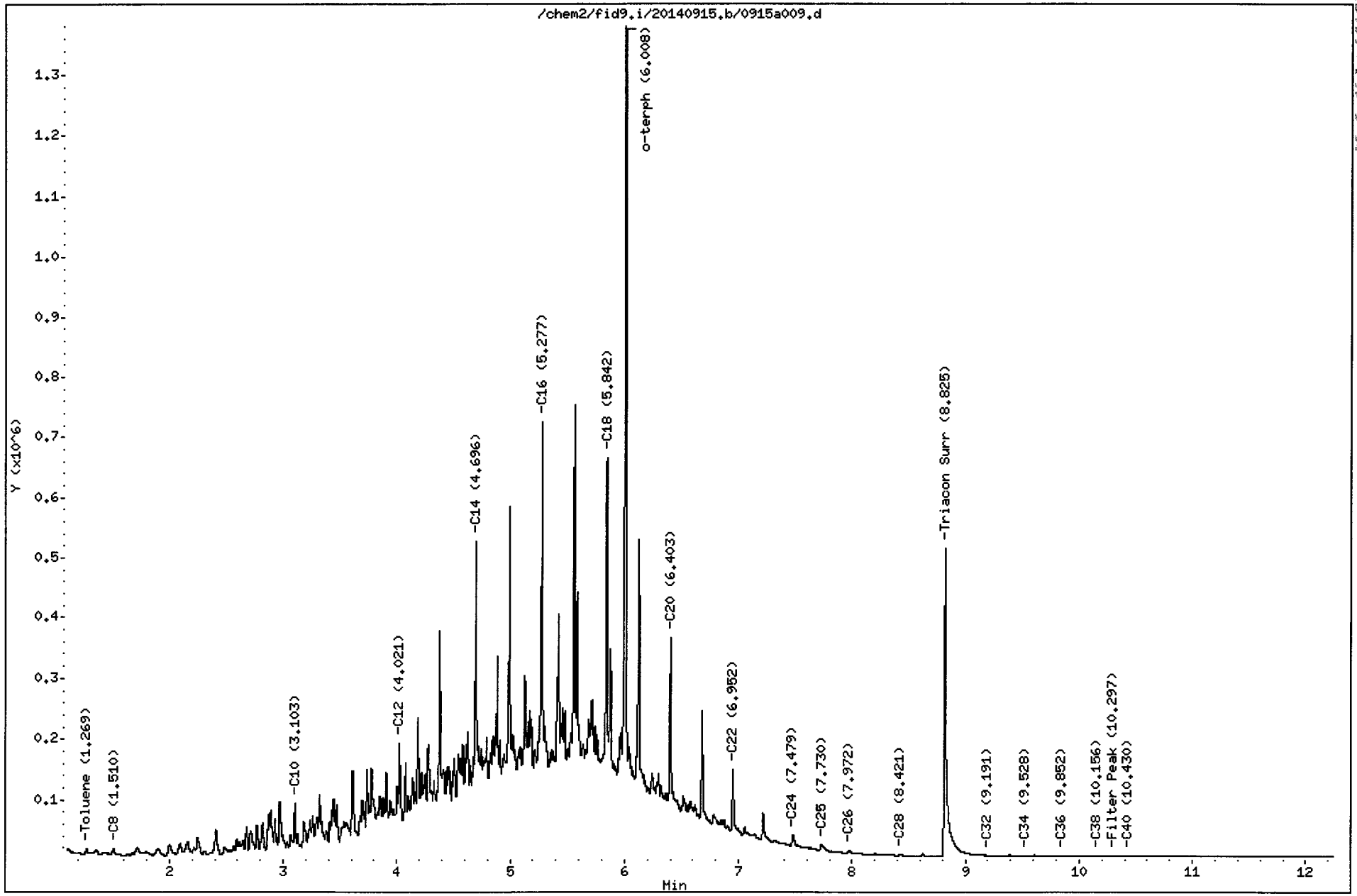
YZ73:0061

Data File: /chem2/fid9.i/20140915.b/0915a009.d
Date : 15-SEP-2014 14:25
Client ID: YZ73LCSDW1
Sample Info: YZ73LCSDW1

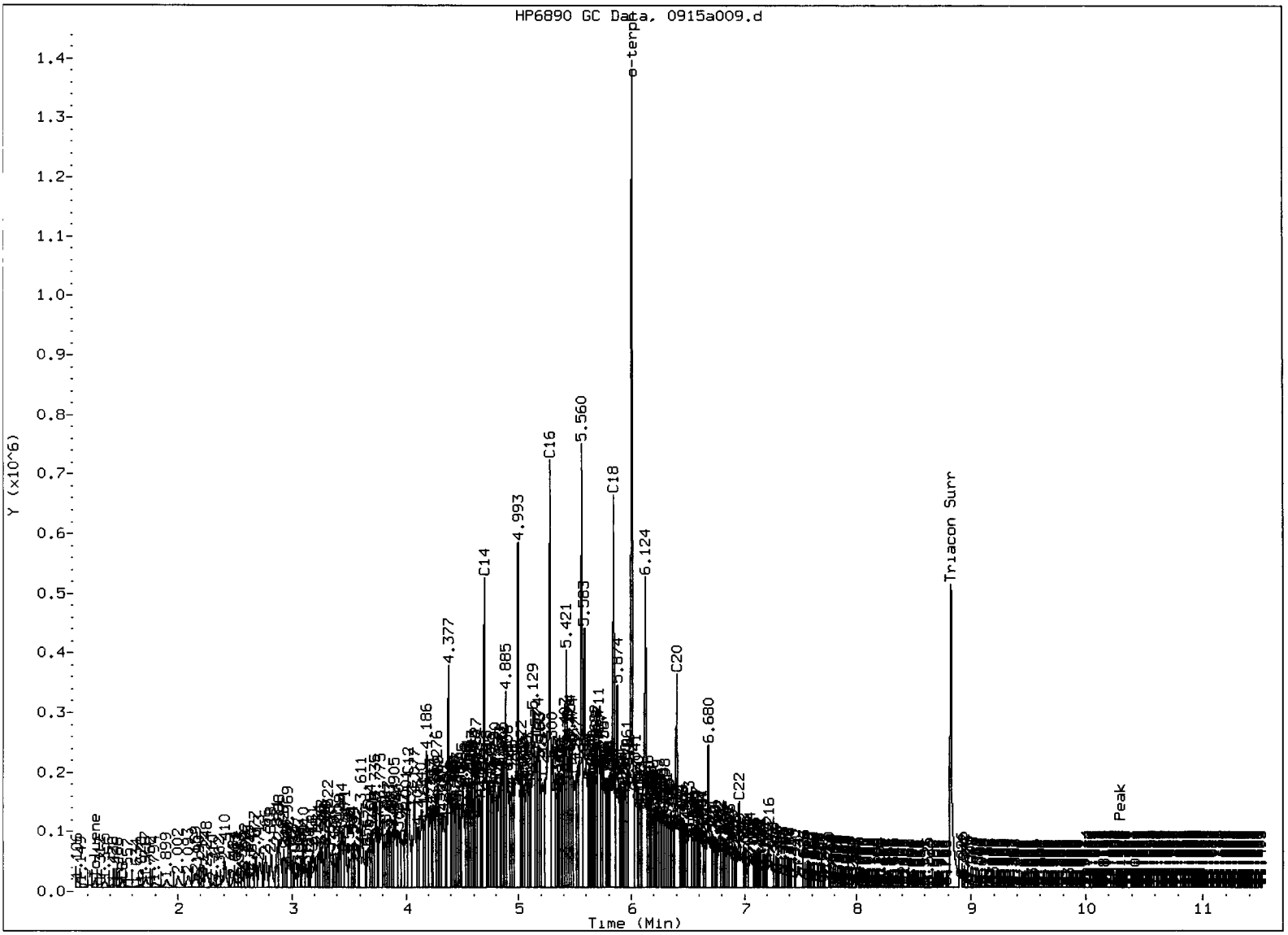
Instrument: fid9.i

Operator: JW
Column diameter: 0.25

Column phase: RTX-1



FID:9A-2C/RTX-1 YZ73LCSDW1 FID:9A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Surrogate Skimmed

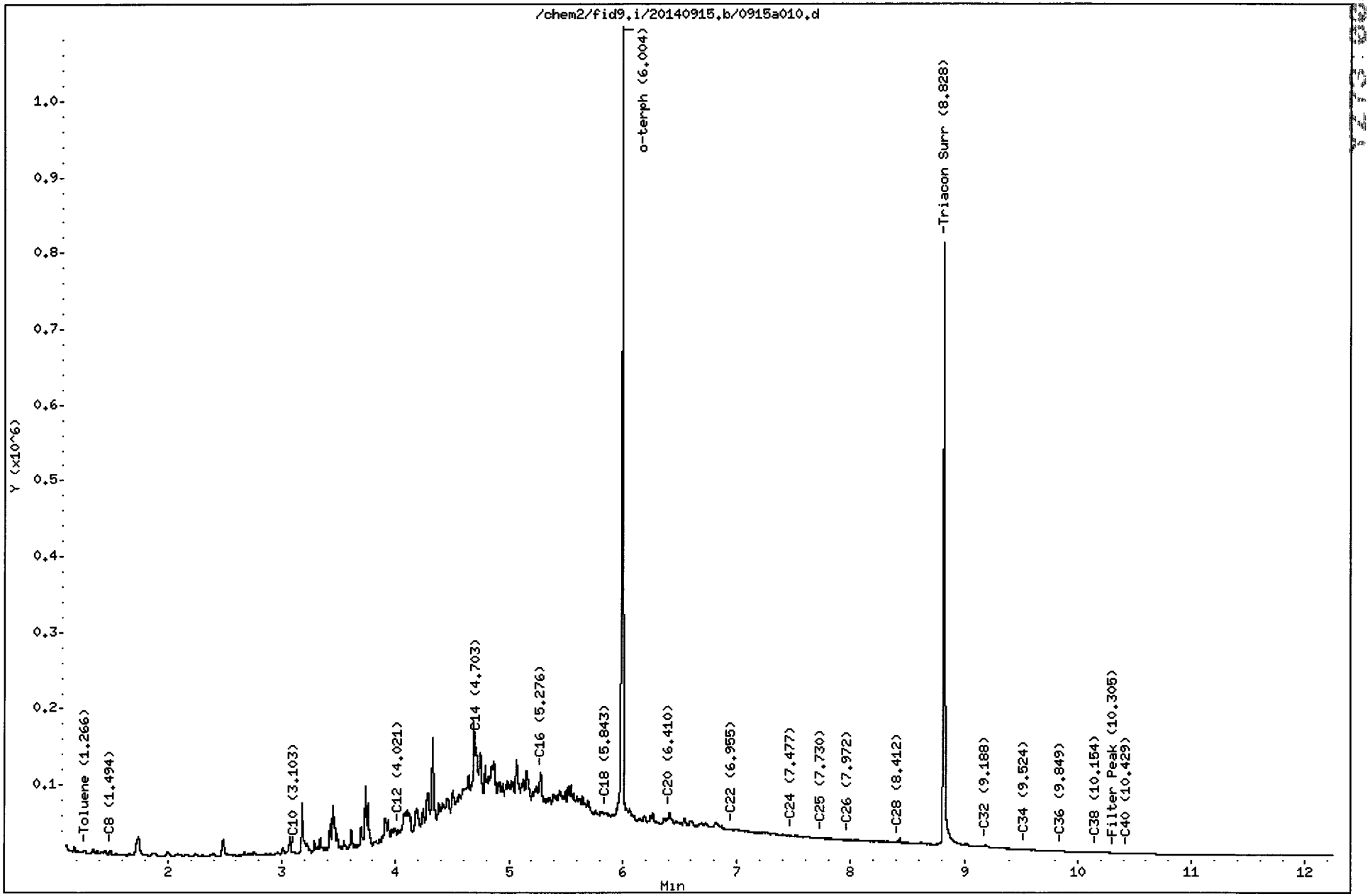
Analyst: JW Date: 9/16/14

YZ73:0915

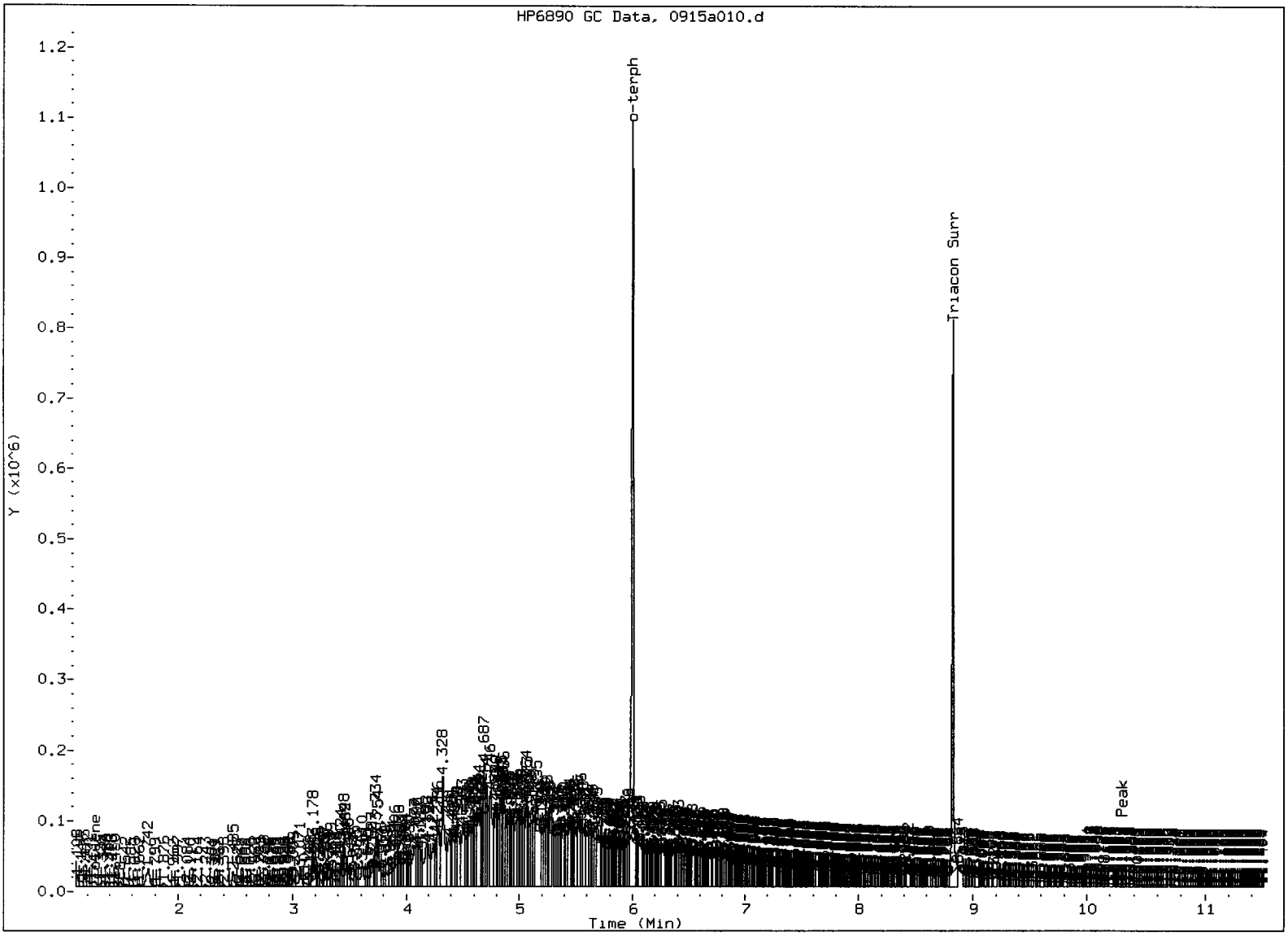
Data File: /chem2/fid9.i/20140915.b/0915a010.d
Date : 15-SEP-2014 14:46
Client ID: MW01-GW-091014
Sample Info: YZ73A

Instrument: fid9.i
Operator: JW
Column diameter: 0.25

Column phase: RTX-1



FID:9A-2C/RTX-1 YZ73A FID:9A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Surrogate Skimmed

Analyst: JW Date: 9/16/14

Data File: /chem2/fid9.i/20140915.b/0915a011.d

Page 1

Date : 15-SEP-2014 15:08

Client ID: MW02-GW-091014

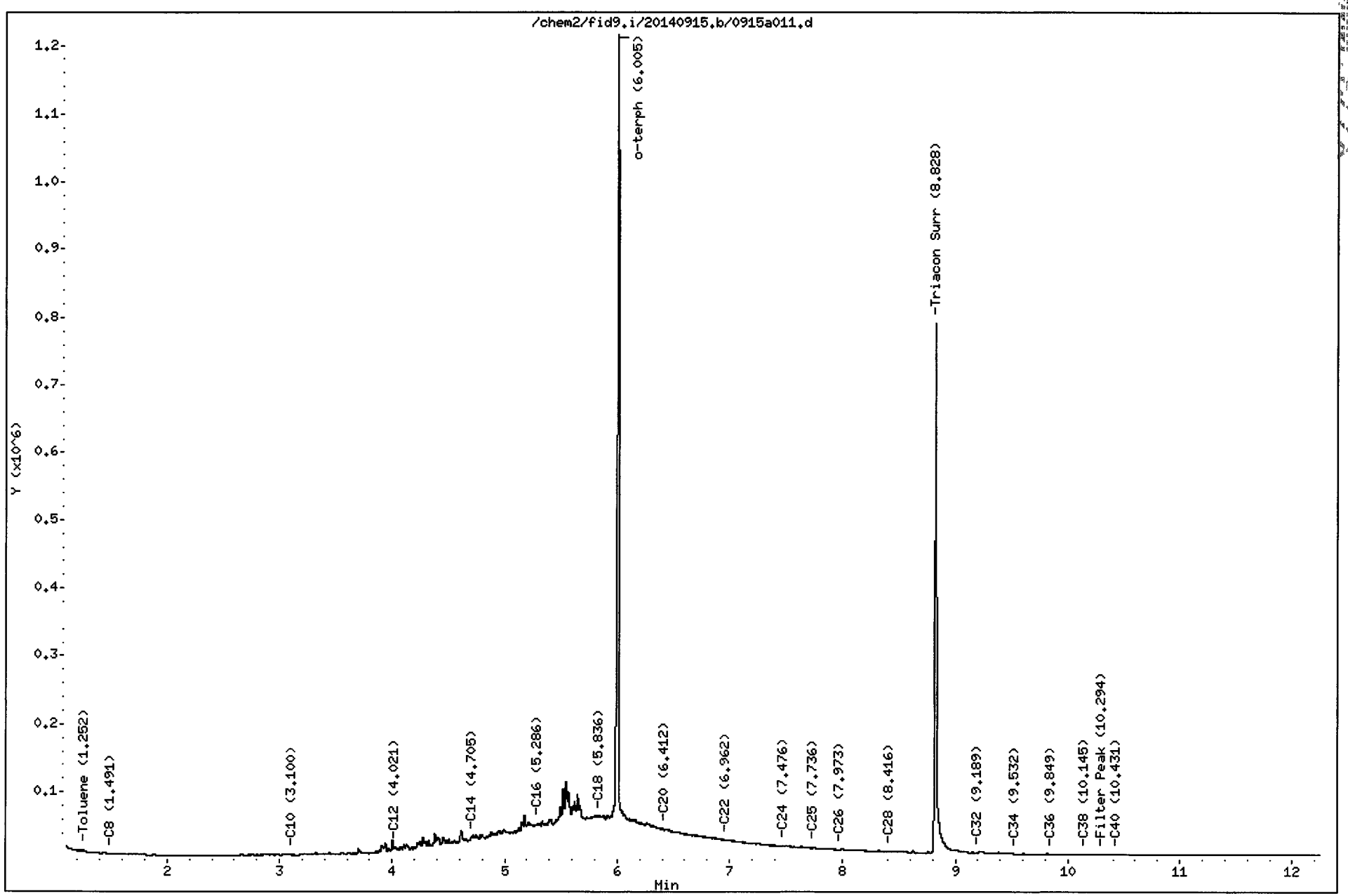
Instrument: fid9.i

Sample Info: YZ73B

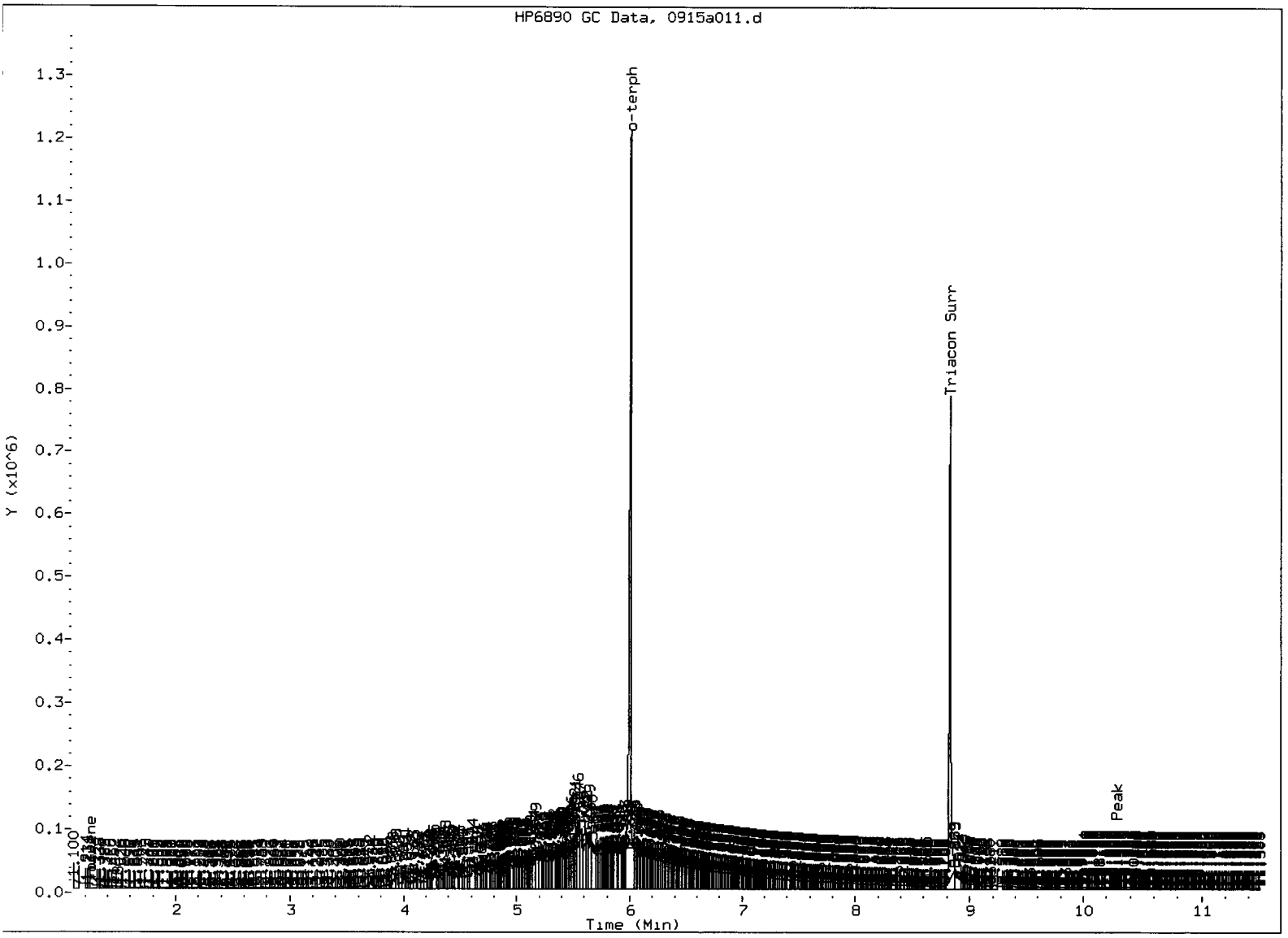
Operator: JW

Column phase: RTX-1

Column diameter: 0.25



FID:9A-2C/RTX-1 YZ73B FID:9A SIGNAL



MANUAL INTEGRATION

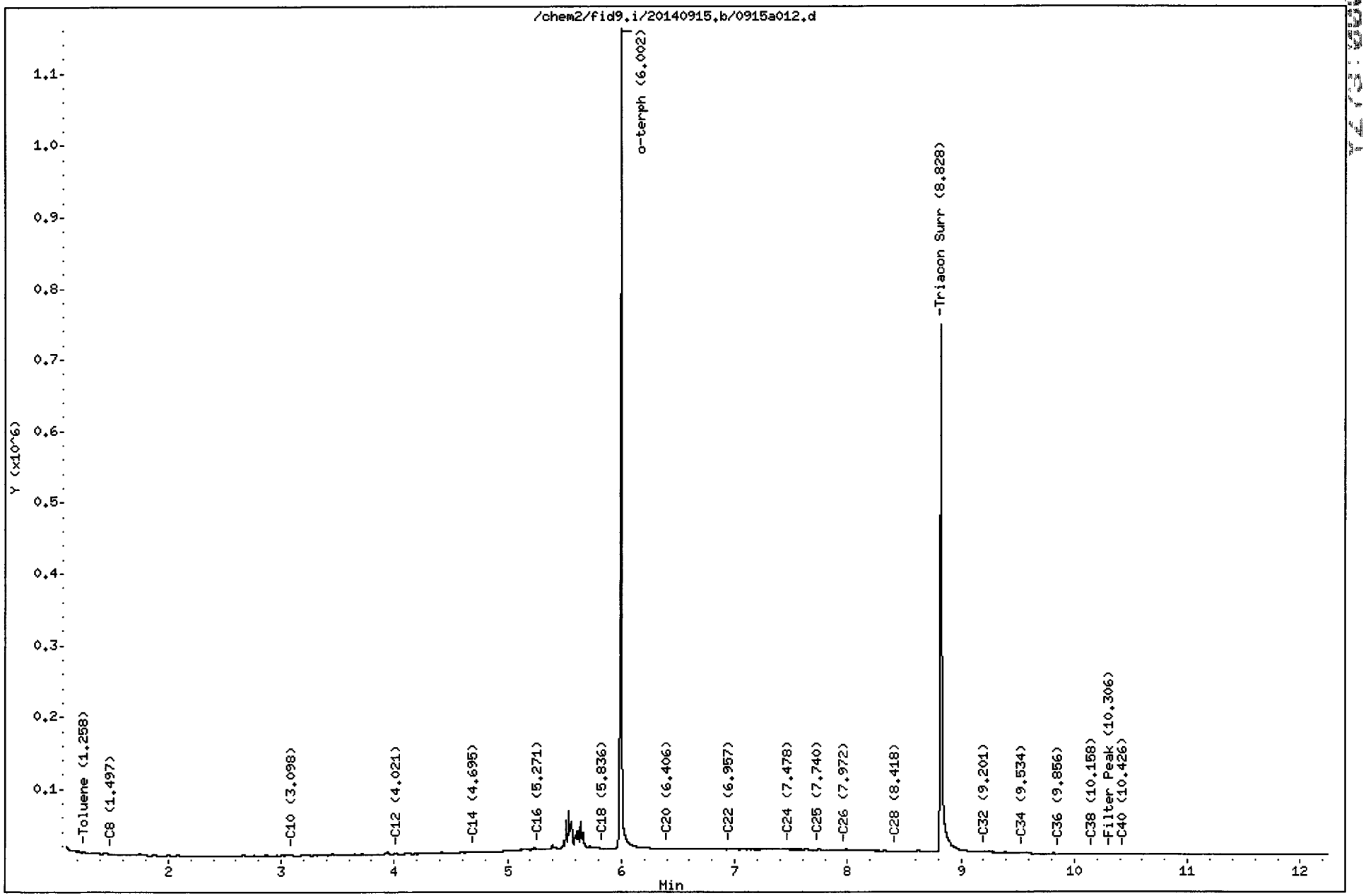
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Surrogate Skimmed

Analyst: JW Date: 9/16/14

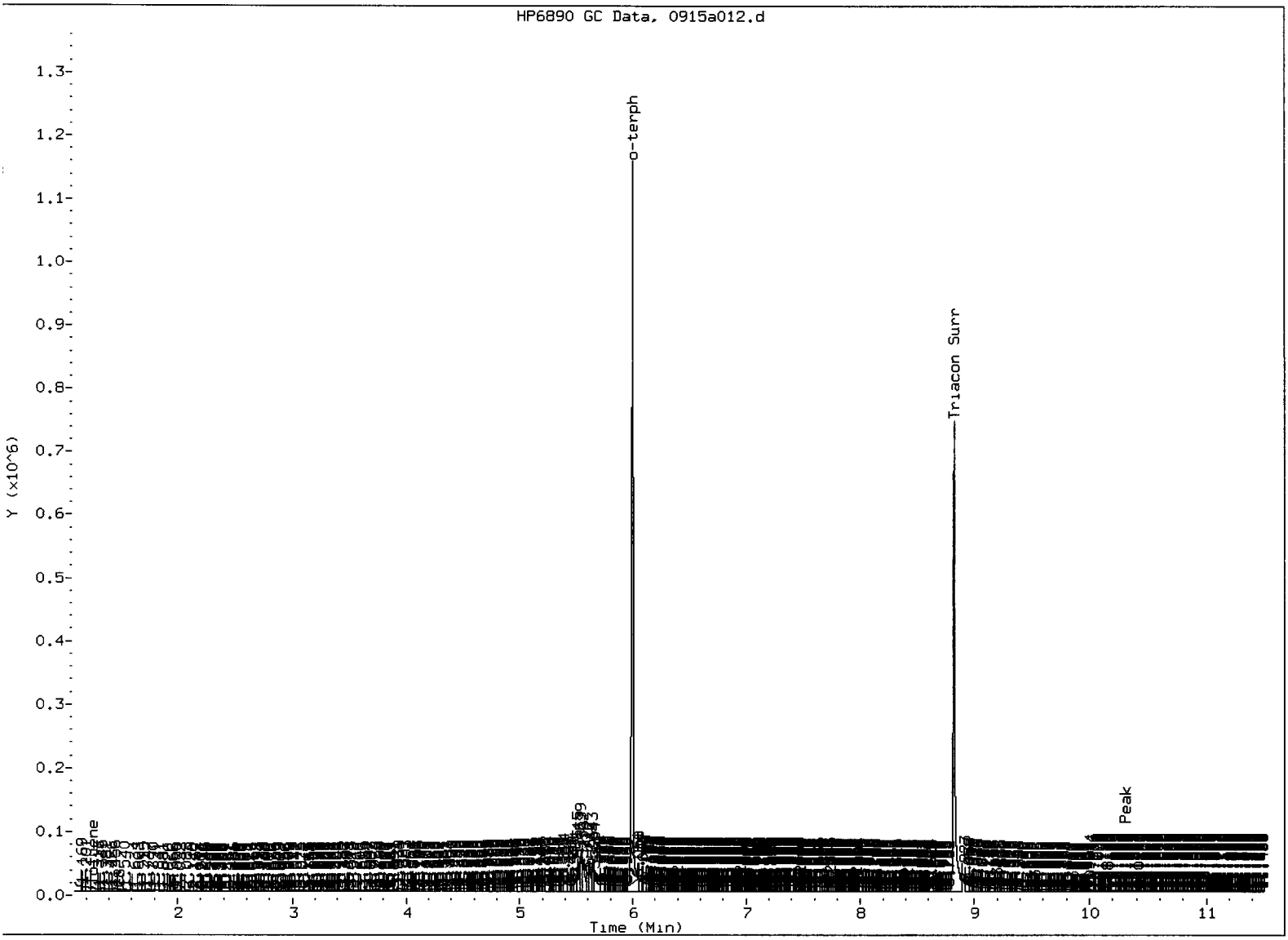
Data File: /chem2/fid9.i/20140915.b/0915a012.d
Date : 15-SEP-2014 15:29
Client ID: MW03-GW-091014
Sample Info: YZ73C

Instrument: fid9.i
Operator: JW
Column diameter: 0.25

Column phase: RTX-1



FID:9A-2C/RTX-1 YZ73C FID:9A SIGNAL



MANUAL INTEGRATION

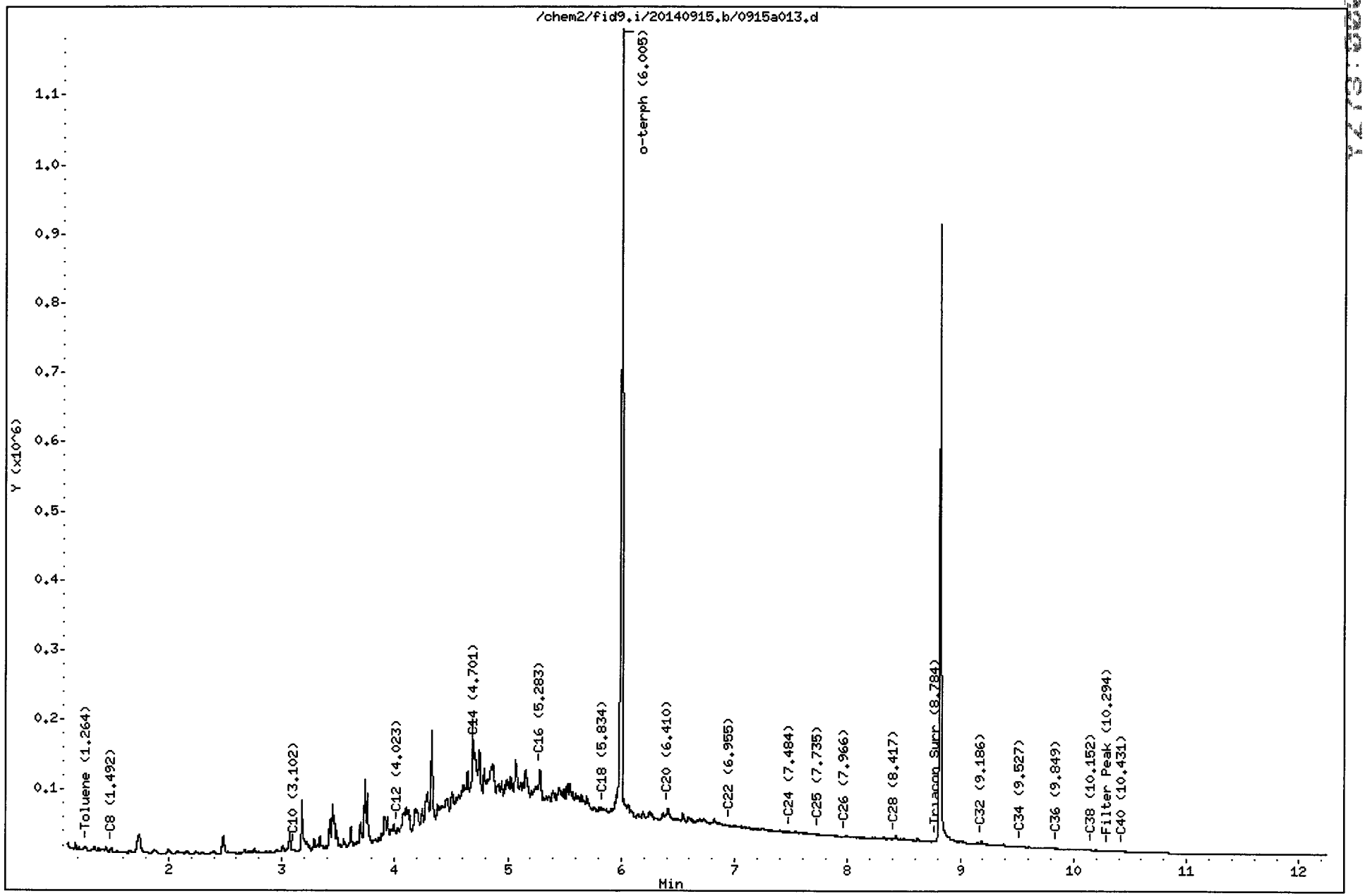
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Surrogate Skimmed

Analyst: JC Date: 9/14/01

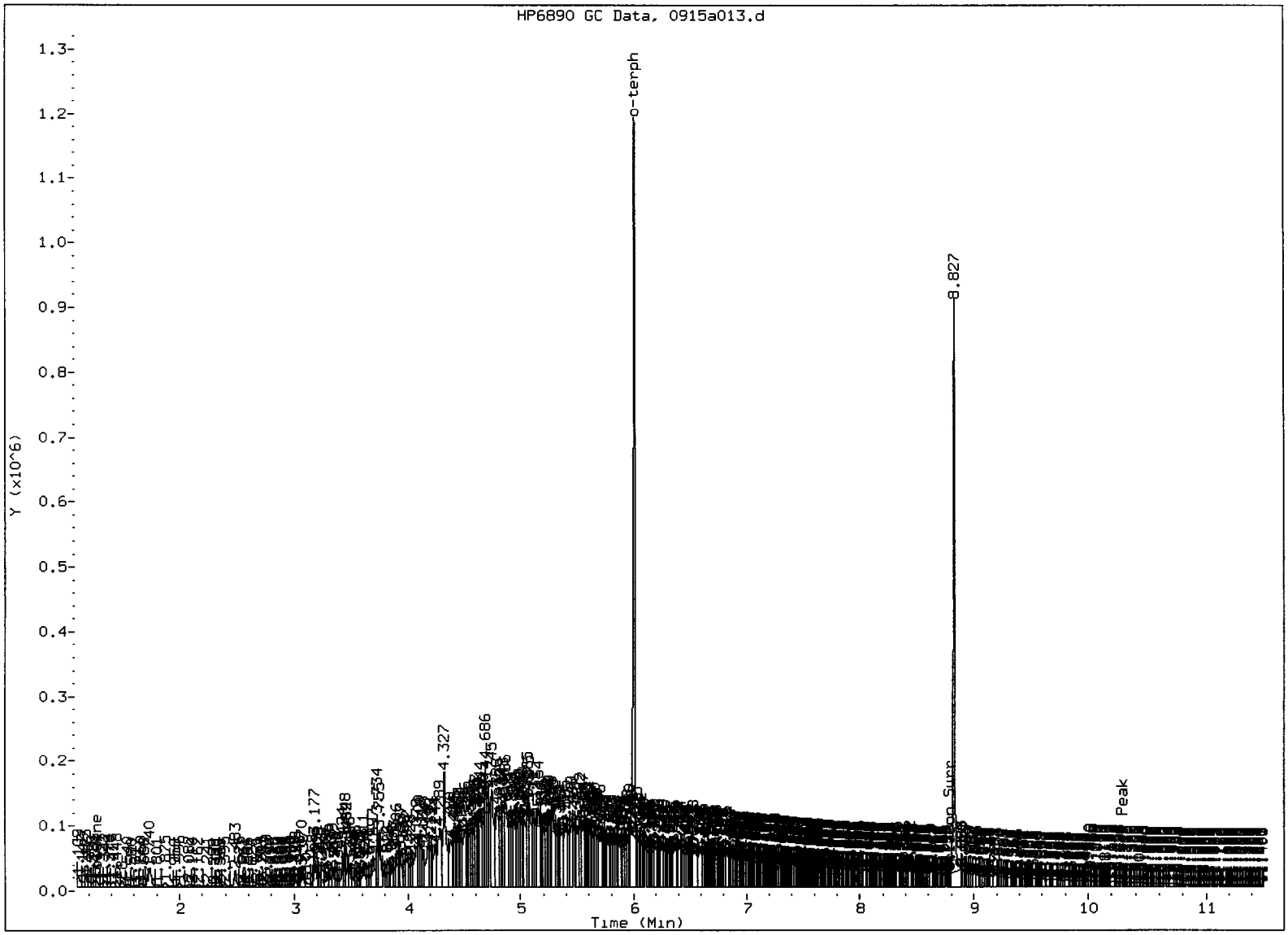
Data File: /chem2/fid9.i/20140915.b/0915a013.d
Date : 15-SEP-2014 15:51
Client ID: FD-091014
Sample Info: YZ73D

Instrument: fid9.i
Operator: JW
Column diameter: 0.25

Column phase: RTX-1



FID:9A-2C/RTX-1 YZ73D FID:9A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Surrogate Skimmed

Analyst: JW Date: 9/16/11

YZ73:66624

Analytical Resources, Incorporated
Analytical Chemists and Consultants

19 December 2014

Carolyn Wise
Maul, Foster and Alongi, Inc
1329 North State Street, Suite 301
Bellingham, WA 98225

RE: Project: North Cascade Ford, 0747.01.03
ARI Job No.: ZO48

Dear Carolyn:

Please find enclosed the original chain of custody record and the final results for the samples from the project referenced above. Analytical Resources, Inc. (ARI) accepted four watersamples on December 11, 2014. The samples were analyzed for NWTPH-Dx as requested.

These analyses proceeded without incident of note.

An electronic copy of this report and all associated raw data will be kept on file at ARI. If you have any questions or require additional information, please contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

Enclosures

cc: file ZO48

MDH/mdh

4611 South 134th Place, Suite 100 • Tukwila WA 98168 • **206-695-6200** • **206-695-6201** fax

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: 7048	Turn-around Requested: Standard	Page: 1 of 1	
ARI Client Company: Maul Foster Alongi	Phone: 3605946255	Date: 12/10/14	Ice Present? Y
Client Contact: Carolyn Wise		No. of Coolers: 1	Cooler Temps: 2.6
Client Project Name: North Cascade Ford			
Client Project #: 0747.01.03	Samplers: C. Wise		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)
www.arilabs.com

Sample ID	Date	Time	Matrix	No Containers	Analysis Requested: TPH-Dx	Notes/Comments
MW01-GW-121014	12/10/14	1240	Water	2	X	
MW02-GW-121014	12/10/14	1422		2	X	
MW03-GW-121014	12/10/14	1546		2	X	
FD-121014	12/10/14	1240	↓	2	X	

Comments/Special Instructions	Relinquished by: (Signature)	Received by (Signature)	Relinquished by. (Signature)	Received by (Signature)
	Printed Name: Carolyn Wise	Printed Name: A. Volgardsen	Printed Name:	Printed Name:
	Company: MFA	Company: ARI	Company	Company
	Date & Time: 12/11 10:53 am	Date & Time: 12/11/14 1053	Date & Time	Date & Time

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Mau Foster — Project Name: North Cascade Road

COC No(s): _____ (NA) — Delivered by: Fed-Ex UPS Courier Hand Delivered Other: _____

Assigned ARI Job No: 2048 — Tracking No: _____ (NA)

Preliminary Examination Phase:

Were intact, properly signed and dated custody seals attached to the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?	(YES)	NO
Were custody papers properly filled out (ink, signed, etc.)	(YES)	NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry): 2.6

Time: 1055

If cooler temperature is out of compliance fill out form 00070F — Temp Gun ID#: 90277982

Cooler Accepted by: AV — Date: 12/11/14 — Time: 1053

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler?		YES	(NO)
What kind of packing material was used?	Bubble Wrap (Wet Ice) Gel Packs Baggies Foam Block Paper Other: _____		
Was sufficient ice used (if appropriate)?	NA	(YES)	NO
Were all bottles sealed in individual plastic bags?		YES	(NO)
Did all bottles arrive in good condition (unbroken)?		(YES)	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number of containers received?		(YES)	NO
Did all bottle labels and tags agree with custody papers?		(YES)	NO
Were all bottles used correct for the requested analyses?		(YES)	NO
Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs)	(NA)	YES	NO
Were all VOC vials free of air bubbles?	(NA)	YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI.	(NA)	_____	

Was Sample Split by ARI: (NA) YES Date/Time: _____ Equipment: _____ Split by: _____

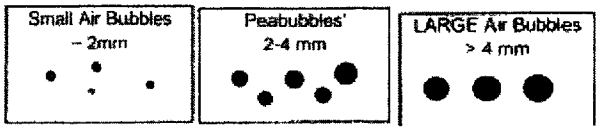
Samples Logged by: TB — Date: 12-11-14 — Time: 1522

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By: Date:



Small → "sm"	(< 2 mm)
Peabubbles → "pb"	(2 to < 4 mm)
Large → "lg"	(4 to < 6 mm)
Headspace → "hs"	(> 6 mm)

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: ZO48
Client: Maul Foster & Alongi
Project Event: 0747.01.03
Project Name: North Cascade Ford

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	MW01-GW-121014	ZO48A	14-27004	Water	12/10/14 12:40	12/11/14 10:53
2.	MW02-GW-121014	ZO48B	14-27005	Water	12/10/14 14:22	12/11/14 10:53
3.	MW03-GW-121014	ZO48C	14-27006	Water	12/10/14 15:46	12/11/14 10:53
4.	FD-121014	ZO48D	14-27007	Water	12/10/14 12:40	12/11/14 10:53

ZO48 · 00001

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 12/31/13

Inorganic Data

U — Indicates that the target analyte was not detected at the reported concentration

* — Duplicate RPD is not within established control limits

B — Reported value is less than the CRDL but ≥ the Reporting Limit

N — Matrix Spike recovery not within established control limits

NA — Not Applicable, analyte not spiked

H — The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible

L — Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U — Indicates that the target analyte was not detected at the reported concentration

* — Flagged value is not within established control limits

B — Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.

J — Estimated concentration when the value is less than ARI's established reporting limits

D — The spiked compound was not detected due to sample extract dilution

E — Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

2048 : 00005

Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).
S	Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte
NA	The flagged analyte was not analyzed for
NR	Spiked compound recovery is not reported due to chromatographic interference
NS	The flagged analyte was not spiked into the sample
M	Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"
Y	The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.
EMPC	Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**
C	The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column
P	The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference
X	Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**
Z	Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

ZOU8 : 00006

Geotechnical Data

A — The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.

F — Samples were frozen prior to particle size determination

SM — Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations

SS — Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis

W — Weight of sample in some pipette aliquots was below the level required for accurate weighting

ZOU8 : 00007

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
TOTAL DIESEL RANGE HYDROCARBONS
NWTPHD by GC/FID
Extraction Method: SW3510C
Page 1 of 1

QC Report No: ZO48-Maul Foster & Alongi
Project: North Cascade Ford
0747.01.03

Matrix: Water

Date Received: 12/11/14

Data Release Authorized:
Reported: 12/18/14

ARI ID	Sample ID	Extraction Date	Analysis Date	EFV DF	Range/Surrogate	RL	Result
MB-121314	Method Blank	12/13/14	12/15/14	1.00	Diesel Range	0.10	< 0.10 U
14-27004	HC ID: ---		FID9	1.0	Motor Oil Range	0.20	< 0.20 U
					o-Terphenyl		92.6%
ZO48A	MW01-GW-121014	12/13/14	12/15/14	1.00	**Diesel Range**	**0.10**	**2.4**
14-27004	HC ID: **DIESEL/RRO**		FID9	1.0	**Motor Oil Range**	**0.20**	**1.4**
					o-Terphenyl		77.3%
ZO48B	MW02-GW-121014	12/13/14	12/15/14	1.00	**Diesel Range**	**0.10**	**1.3**
14-27005	HC ID: **DIESEL/RRO**		FID9	1.0	**Motor Oil Range**	**0.20**	**0.41**
					o-Terphenyl		70.5%
ZO48C	MW03-GW-121014	12/13/14	12/15/14	1.00	**Diesel Range**	**0.10**	**0.21**
14-27006	HC ID: **DIESEL/MOTOR OIL**		FID9	1.0	**Motor Oil Range**	**0.20**	**0.30**
					o-Terphenyl		81.4%
ZO48D	FD-121014	12/13/14	12/15/14	1.00	**Diesel Range**	**0.10**	**1.9**
14-27007	HC ID: **DIESEL/RRO**		FID9	1.0	**Motor Oil Range**	**0.20**	**1.2**
					o-Terphenyl		67.6%

Reported in mg/L (ppm)

EFV-Effective Final Volume in mL.
DL-Dilution of extract prior to analysis.
RL-Reporting limit.

Diesel range quantitation on total peaks in the range from C12 to C24.
Motor Oil range quantitation on total peaks in the range from C24 to C38.
HC ID: DRO/RRO indicates results of organics or additional hydrocarbons in ranges are not identifiable.

ZO48 · 00000

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
NWTPHD by GC/FID
Page 1 of 1

Sample ID: LCS-121314
LAB CONTROL

Lab Sample ID: LCS-121314
LIMS ID: 14-27004
Matrix: Water
Data Release Authorized:
Reported: 12/18/14

QC Report No: ZO48-Maul Foster & Alongi
Project: North Cascade Ford
0747.01.03
Date Sampled: NA
Date Received: NA

Date Extracted: 12/13/14
Date Analyzed: 12/15/14 16:38
Instrument/Analyst: FID9/VTS

Sample Amount: 500 mL
Final Extract Volume: 1.0 mL
Dilution Factor: 1.00

Range	Lab Control	Spike Added	Recovery
Diesel	2.64	3.00	88.0%

TPHD Surrogate Recovery

o-Terphenyl	87.7%

Results reported in mg/L

FORM III

ANALYTICAL RESOURCES INCORPORATED

TOTAL DIESEL RANGE HYDROCARBONS-EXTRACTION REPORT

ARI Job: ZO48
Matrix: Water
Project: North Cascade Ford
Date Received: 12/11/14
0747.01.03

ARI ID	Client ID	Samp Amt	Final Vol	Prep Date
14-27004-121314MB1	Method Blank	500 mL	1.00 mL	12/13/14
14-27004-121314LCS1	Lab Control	500 mL	1.00 mL	12/13/14
14-27004-ZO48A	MW01-GW-121014	500 mL	1.00 mL	12/13/14
14-27005-ZO48B	MW02-GW-121014	500 mL	1.00 mL	12/13/14
14-27006-ZO48C	MW03-GW-121014	500 mL	1.00 mL	12/13/14
14-27007-ZO48D	FD-121014	500 mL	1.00 mL	12/13/14

ANALYTICAL RESOURCES INCORPORATED

TPHD SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: ZO48-Maul Foster & Alongi
Project: North Cascade Ford
0747.01.03

Client ID	OTER	TOT OUT
MB-121314	92.6%	0
LCS-121314	87.7%	0
MW01-GW-121014	77.3%	0
MW02-GW-121014	70.5%	0
MW03-GW-121014	81.4%	0
FD-121014	67.6%	0

	LCS/MB LIMITS	QC LIMITS
(OTER) = o-Terphenyl	(50-150)	(50-150)

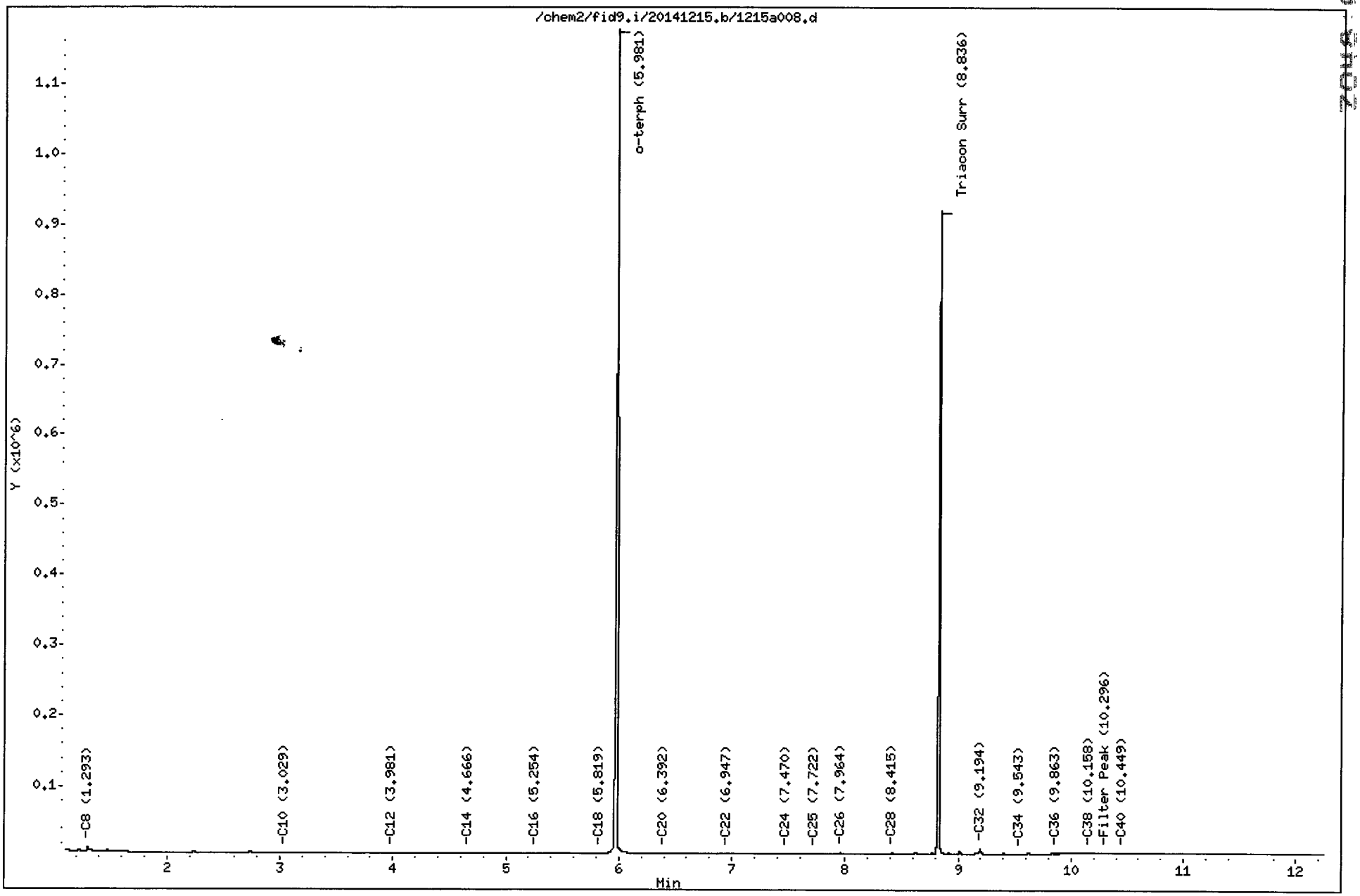
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Log Number Range: 14-27004 to 14-27007

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Instrument: fid9.i

Operator: JW
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Column phase: RTX-1



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Date : 15-DEC-2014 16:38

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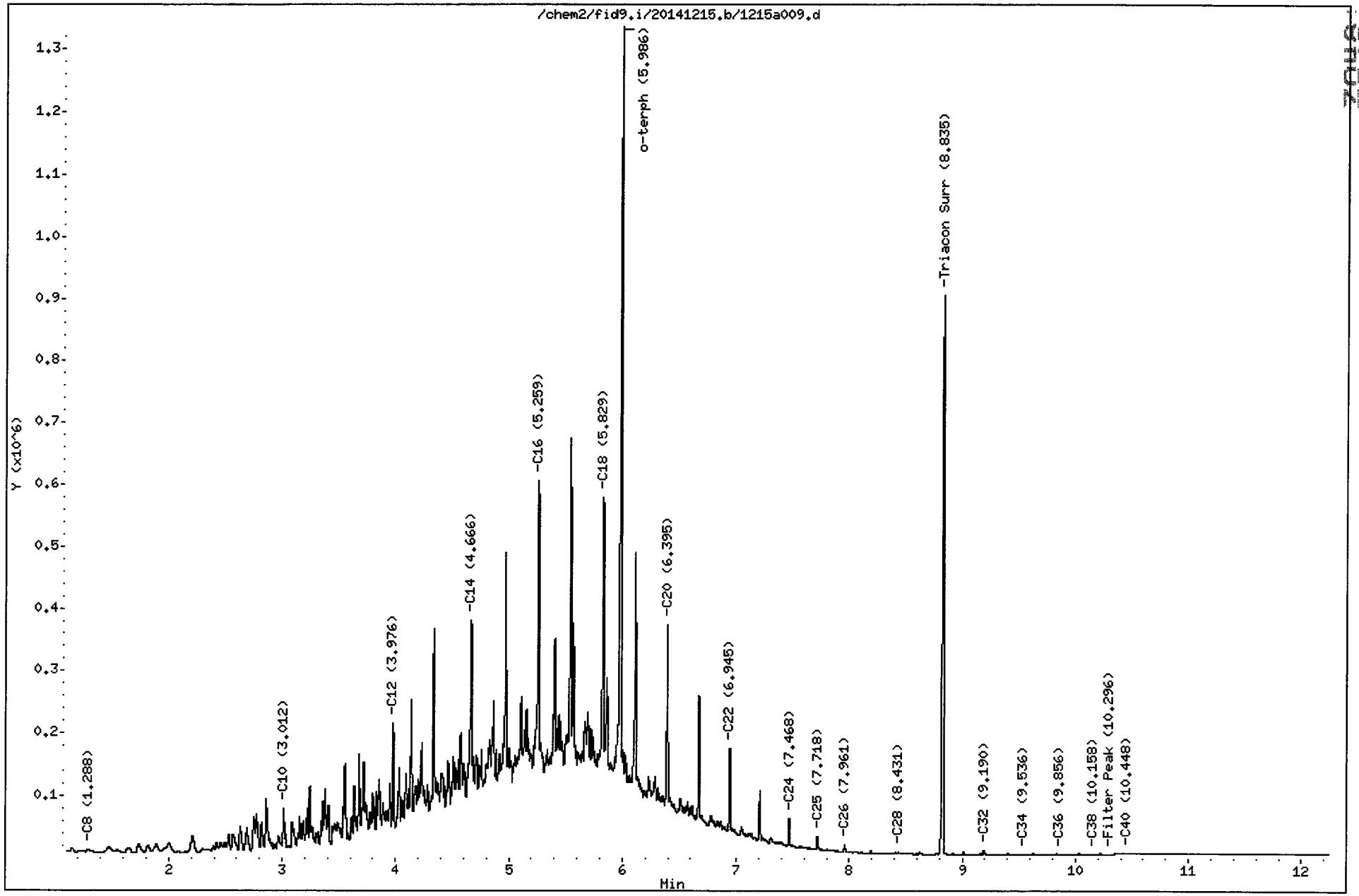
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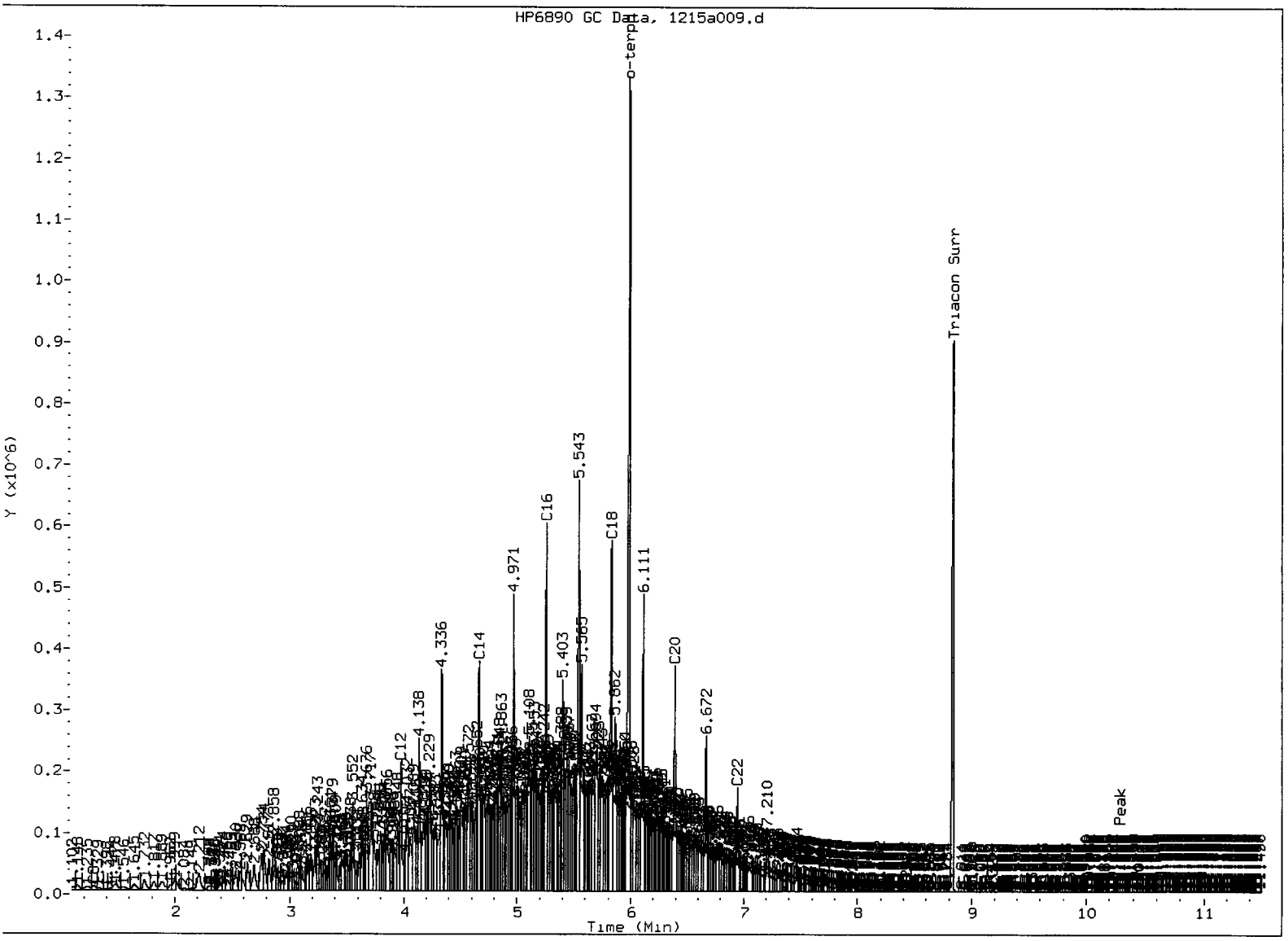
Instrument: fid9.i

Operator: JW

Column diameter: 0.25



FID:9A-2C/RTX-1 ZO48LCSW1 FID:9A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Surrogate Skimmed

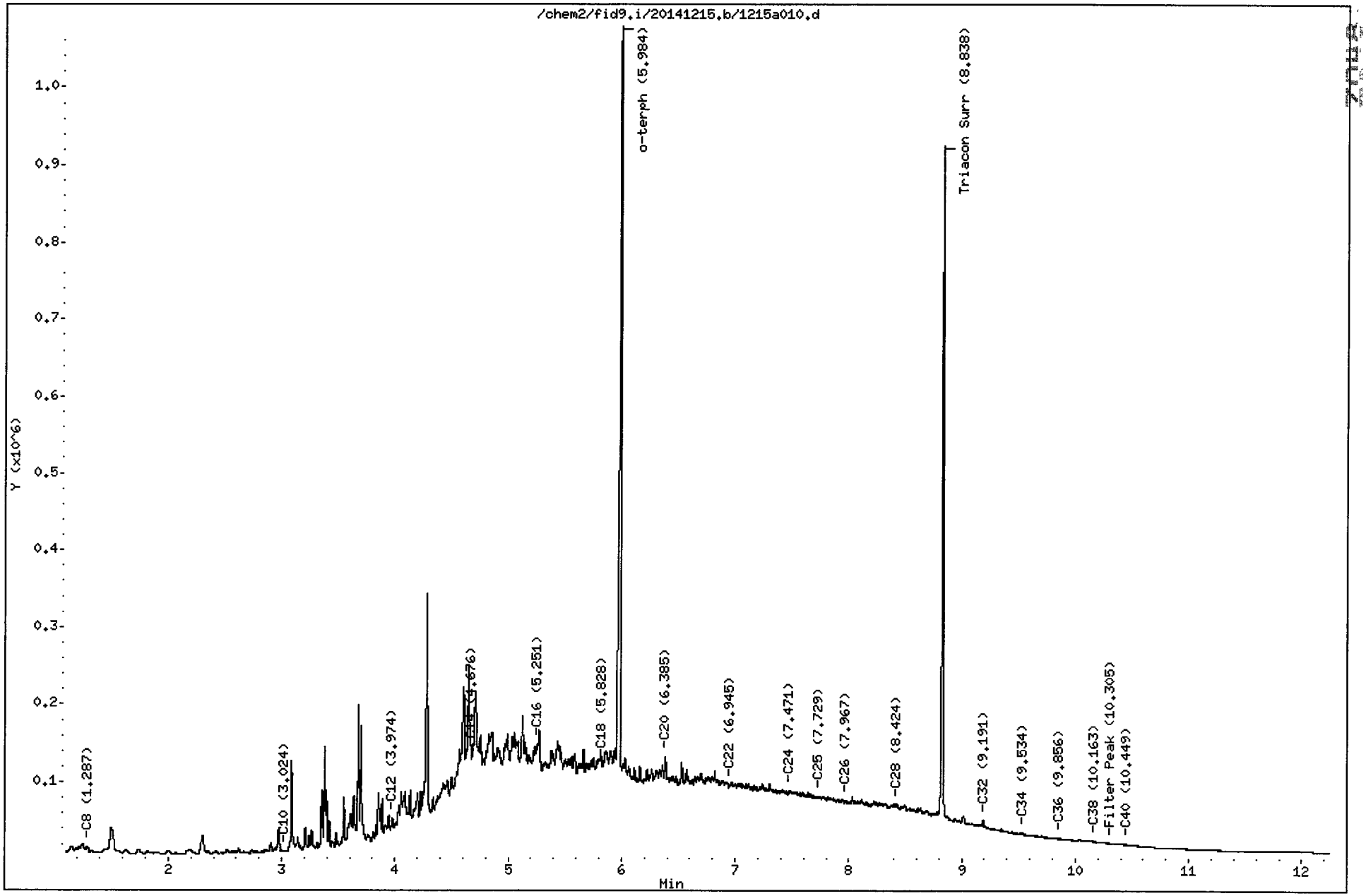
Analyst: SJ Date: 12/16/14

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Sample Info: Z048A

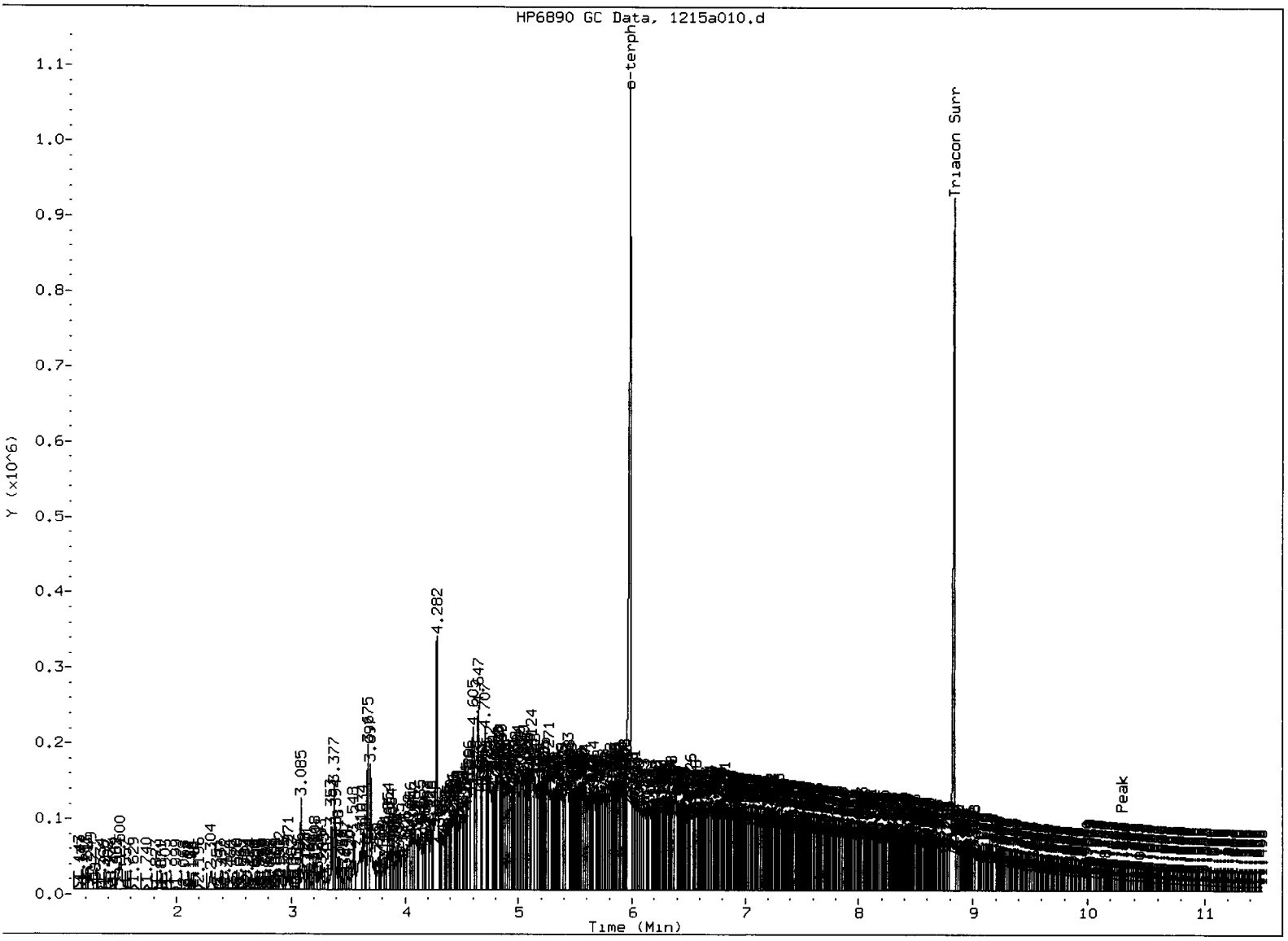
Instrument: fid9.i

Operator: JW
Column diameter: 0.25

Column phase: RTX-1



FID:9A-2C/RTX-1 ZO48A FID:9A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Surrogate Skimmed

Analyst: JD Date: 12/16/14

Data File: /chem2/fid9.i/20141215.b/1215a011.d

Date : 15-DEC-2014 17:20

Client ID: MW02-GW-121014

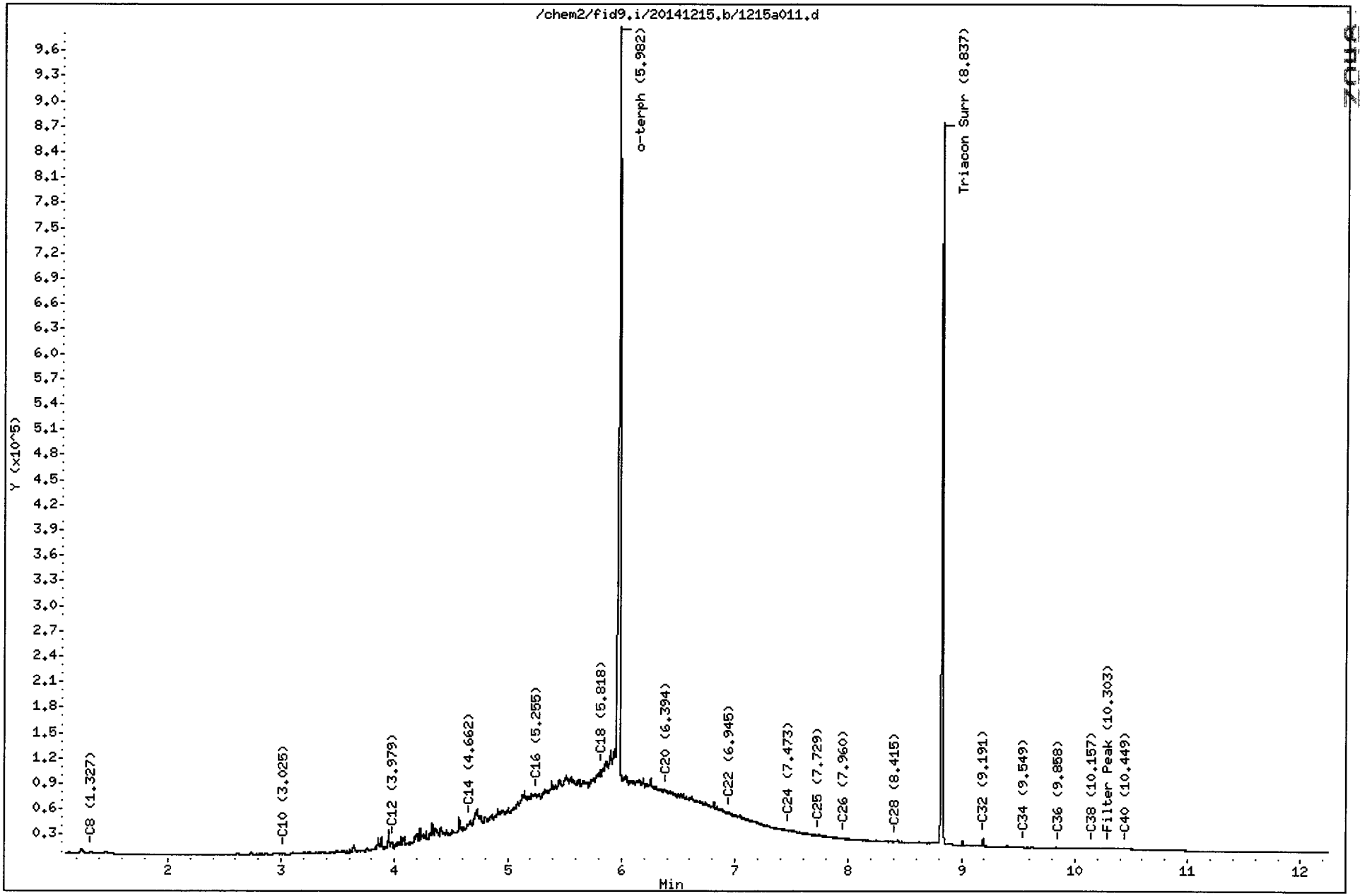
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Instrument: fid9.i

Operator: JW

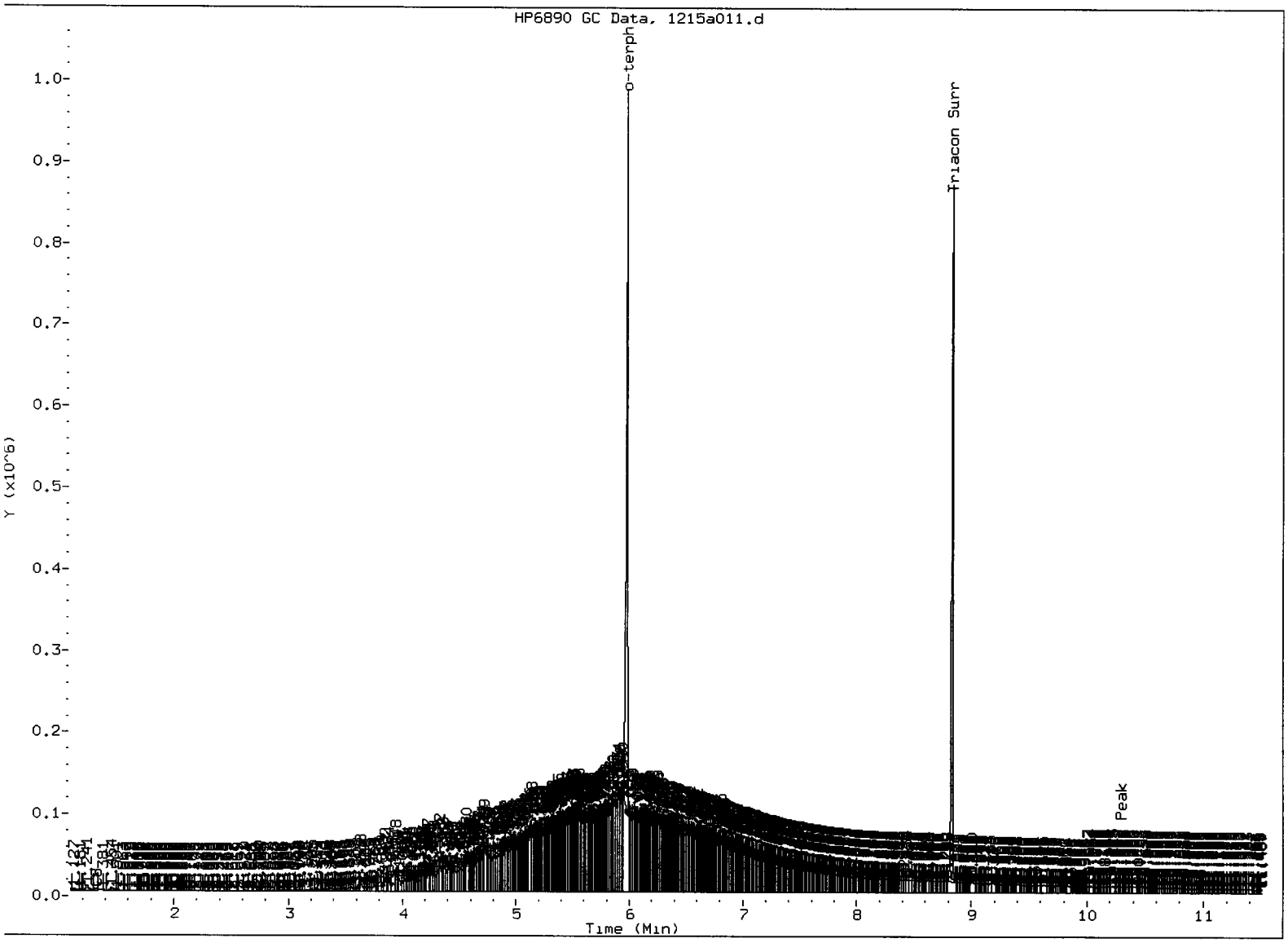
Column phase: RTX-1

Column diameter: 0.25



FID:9A-2C/RTX-1 ZO48B

FID:9A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Surrogate Skimmed

Analyst: JV Date: 12/16/14

Data File: /chem2/fid9.i/20141215.b/1215a012.d

Date : 15-DEC-2014 17:41

Client ID: MW03-GW-121014

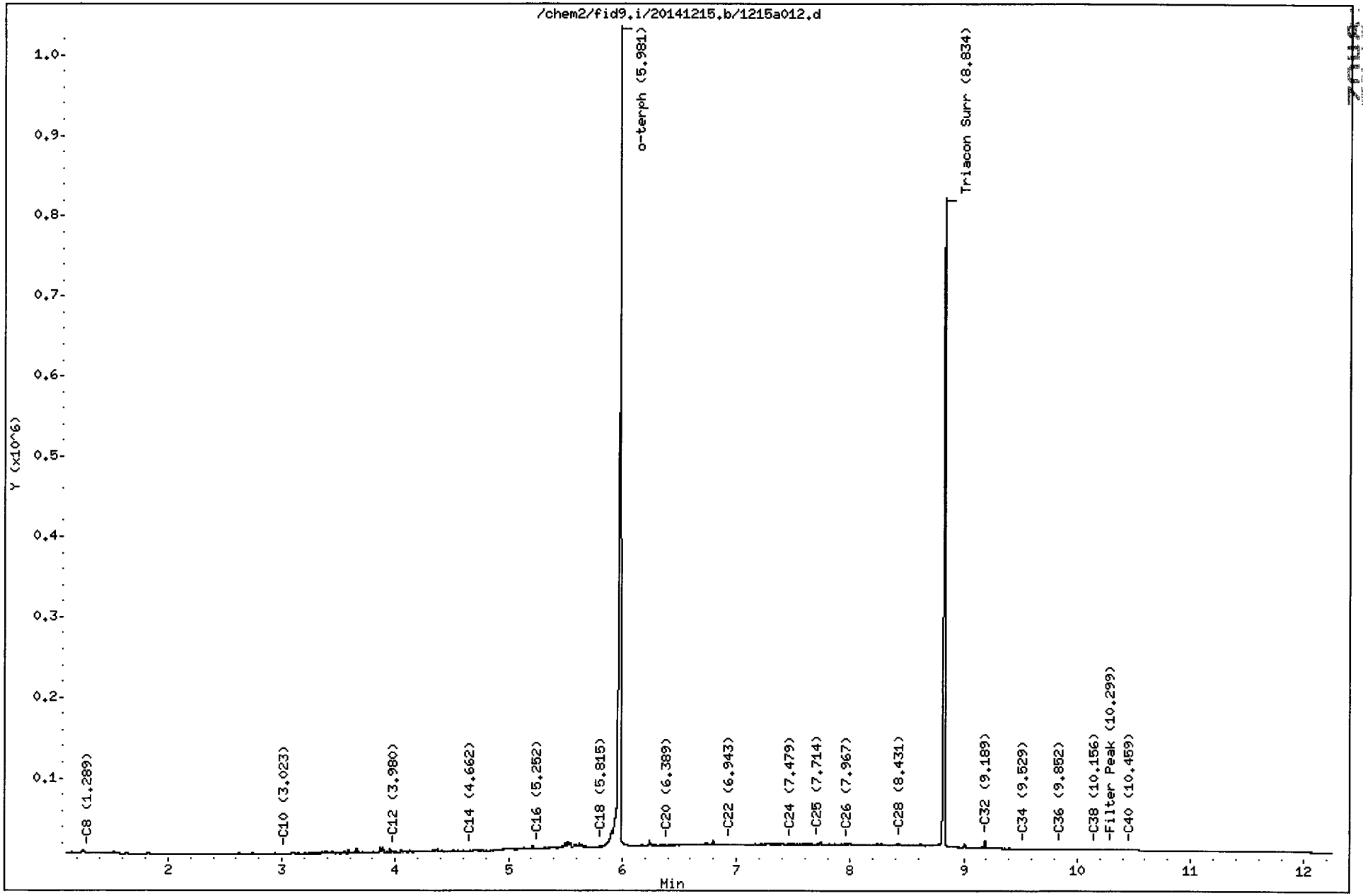
Sample Info: Z048C

Column phase: RTX-1

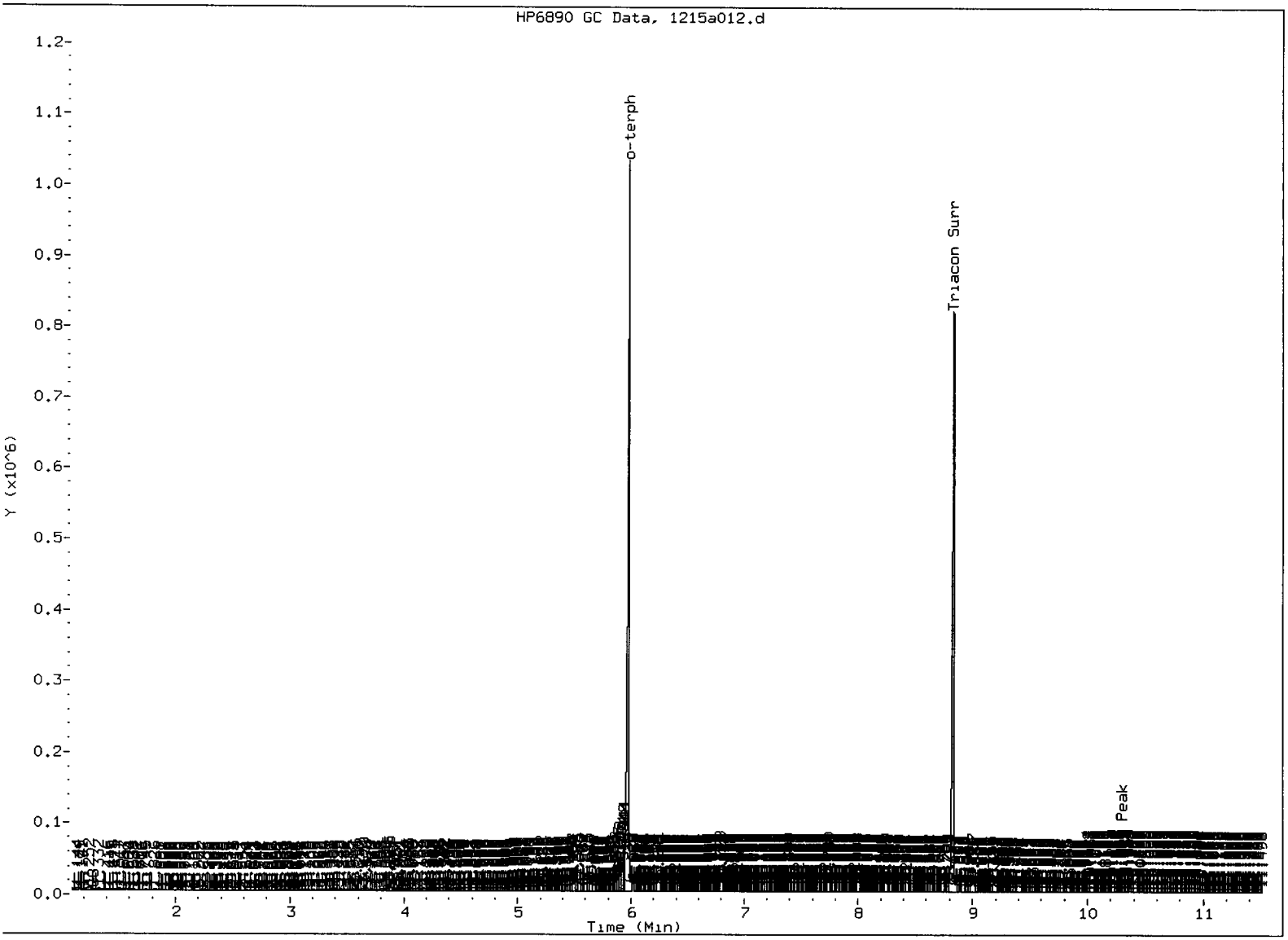
Instrument: fid9.i

Operator: JW

Column diameter: 0.25



FID:9A-2C/RTX-1 ZO48C FID:9A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Surrogate Skimmed

Analyst: JS Date: 12/16/14

Data File: /chem2/fid9.i/20141215.b/1215a013.d

Date : 15-DEC-2014 18:01

Client ID: FD-121014

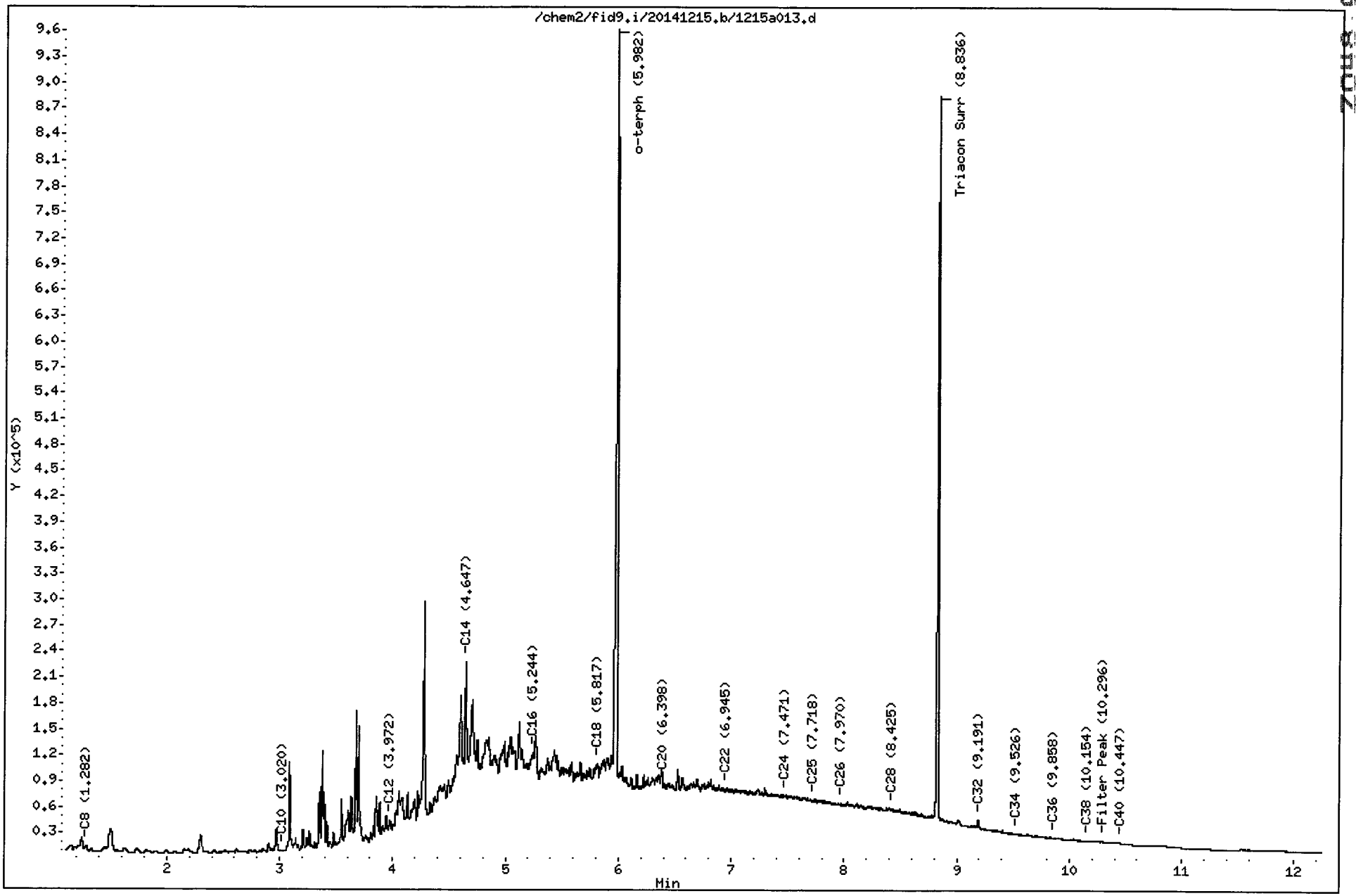
Sample Info: Z048D

Instrument: fid9.i

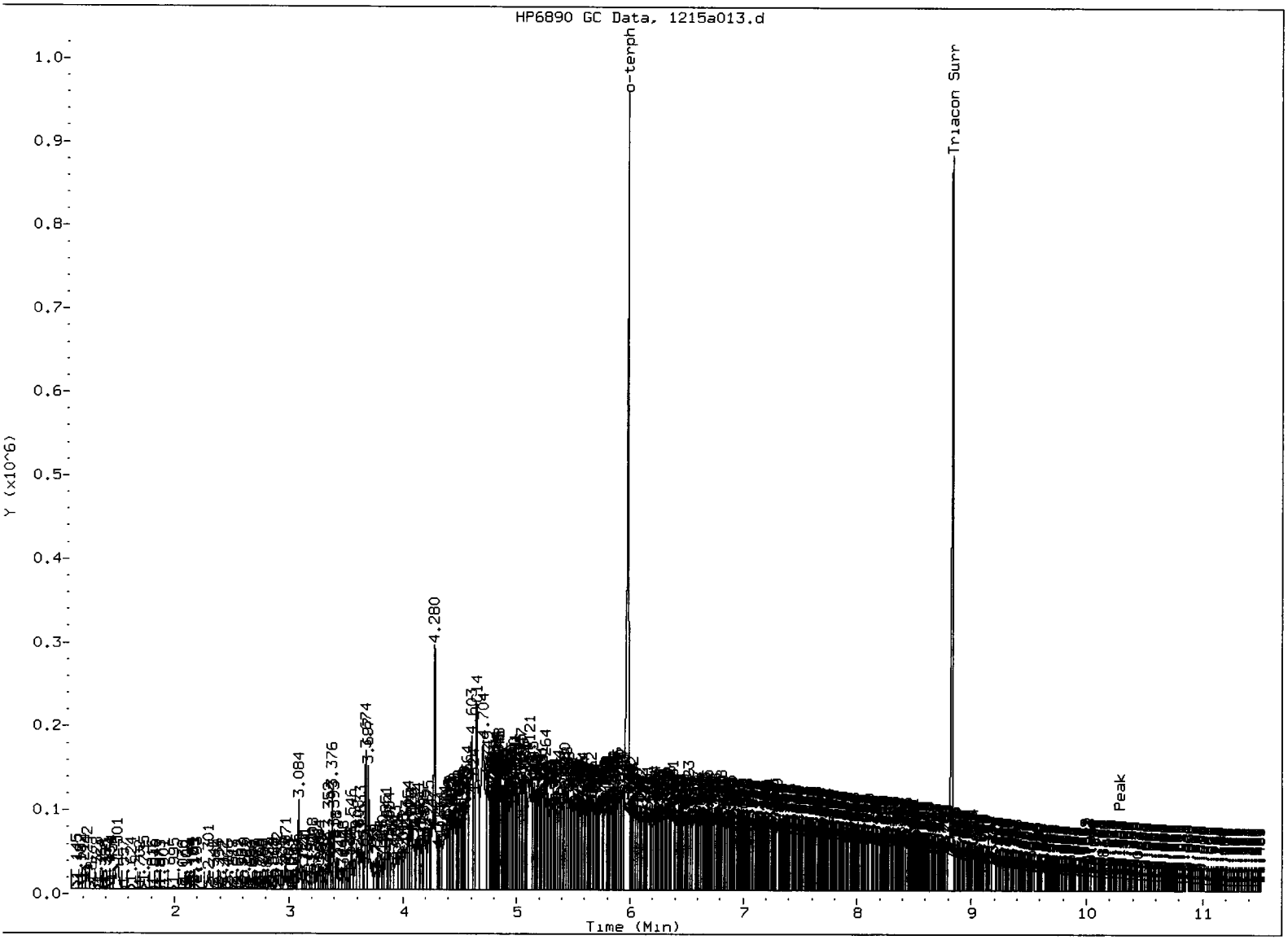
Operator: JW

Column phase: RTX-1

Column diameter: 0.25



FID:9A-2C/RTX-1 ZO48D FID:9A SIGNAL



MANUAL INTEGRATION

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation
5. Surrogate Skimmed

Analyst: JW Date: 12/16/14

APPENDIX H

DATA VALIDATION MEMORANDA



DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 0747.01 | JUNE 6, 2012 | VSF PROPERTIES, LLC

This report reviews the analytical results for groundwater and soil samples collected by the Maul Foster & Alongi, Inc. (MFA) project team on the North Cascade Ford Property. The samples were collected in May 2012.

Analytical Resources, Incorporated (ARI) performed the analyses. ARI report numbers UT25, UT30, UT51, UT57, UT73, UT95, UU22, UU66, and UU68 were reviewed. The analyses performed are listed below.

Diesel and Motor Oil	NWTPH-Dx
Gasoline	NWTPH-Gx
Total and Dissolved RCRA Metals	USEPA 6010/6020
Total and Dissolved Mercury	USEPA 7470/7471
Polycyclic Aromatic Hydrocarbons	USEPA 8270 by SIM
Toxicity Characteristic Leaching Procedure Metals	USEPA 1311/6010
Volatile Organic Compounds	USEPA 5030B/8260
Semivolatile Organic Compounds	USEPA 8270D
Polychlorinated Biphenyl	USEPA 8082
Extractable Petroleum Hydrocarbons	NWTPH-EPH
Volatile Petroleum Hydrocarbons	NWTPH-VPH
Hydrocarbon Identification	NWTPH-HCID

NWTPH = Northwest Total Petroleum Hydrocarbons.
RCRA = Resource Conservation and Recovery Act.
SIM = selective ion monitoring.
USEPA = U.S. Environmental Protection Agency.

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA, 2008, 2010) and appropriate laboratory and method-specific guidelines (ARI, 2012; USEPA, 1986).

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. For purposes of data qualification, the method blanks were associated with all samples prepared in the analytical batch. Where an analyte was detected in a sample and in the associated method blank, the sample result was qualified if the concentration was less than five times the method blank concentration. Based on C8-C10 Aliphatics contamination (2,000 micrograms per kilogram [ug/kg]) in the method blank, the reviewer qualified results for the following sample:

Sample	Component	Original Result (ug/kg)	Qualified Result (ug/kg)
MW1-S-3.1	C8-C10 Aliphatics	3,800	3,800 J

The remaining data are acceptable for use; method blank results are either below the reporting limit and/or associated with non-detect sample results.

Trip Blanks

Trip blanks were submitted and analyzed for this sample event. Five trip blanks submitted and no analytes were present.

Equipment Rinsate Blanks

The sampling event included one equipment rinsate blank. Chloroform was detected at 1.7 micrograms per liter (ug/L), above the 0.2 ug/L reporting limit. The associated samples were all non-detect and the data reviewer did not make any qualifications. No additional analytes were detected in the equipment rinsate blank.

SURROGATE RECOVERY RESULTS

The samples were spiked with surrogate compounds to evaluate laboratory performance on individual samples.

The reviewer took no action based on minor surrogate outliers or surrogate percent recoveries that were outside acceptance limits because of dilutions necessary to quantify high concentrations of target analytes present in the samples.

The laboratory appropriately reanalyzed, documented, and qualified surrogate outliers. Associated batch quality assurance and quality control for samples with surrogate outliers were within acceptance limits. All remaining surrogate recoveries were within acceptance limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Matrix spike/matrix spike duplicate (MS/MSD) results are used to evaluate laboratory precision and accuracy. All MS/MSD samples were extracted and analyzed at the required frequency. Various recovery results were outside the acceptance limits because of matrix interference or minor exceedances. These exceedances were documented by the laboratory, and all other associate quality control was passing.

The reviewer took no action based on MS/MSD outliers, as batch laboratory control sample (LCS) percent recoveries were within acceptance limits and remaining MS/MSD results were within acceptance limits for percent recovery and relative percent difference (RPD).

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. All duplicate samples were extracted and analyzed at the required frequency. All RPDs were within acceptance limits, with the exception of metals. The laboratory noted that the exceedance was due to matrix interference, and the data reviewer took no action.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

An LCS/LCS duplicate (LCSD) are spiked with target analytes to provide information on laboratory precision and accuracy. The LCS/LCSD samples were extracted and analyzed at the required frequency. Except for USEPA 8260C, all LCS/LCSD results were within acceptable limits. In Method 8260C, bromomethane, chloroethane, trichlorofluoromethane, 2,2-dichloropropane, and 2-chloroethylvinyl ether were above the upper recovery limits, the samples were non-detect, and the data reviewer took no action based on the non-detect results.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. One field duplicate was submitted for analysis (MW1-W-8.5/MW1-W-8.5-Dup).

MFA uses acceptance criteria of 100 percent RPD for results that are less than five times the reporting limit, or 50 percent RPD for results that are greater than five times the reporting limit. Non-detect data are not used in the evaluation of field duplicate results. All analytes were within the acceptance criteria.

REPORTING LIMITS

ARI used routine reporting limits for non-detect results, except for samples requiring dilutions because of high analyte concentrations and/or matrix interferences.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies. None were found. The laboratory has used Q qualifiers to indicate that a detected analyte with an initial or continuing calibration does not meet established acceptance criteria (<20%RSD, <20%Drift, or minimum RRF). The laboratory was contacted and stated that this is regular reporting and does not affect the reported results.

REFERENCES

ARI. 2012. Quality assurance manual. Analytical Resources, Incorporated, Tukwila, Washington.

USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 6, February 2007).

USEPA. 2008. USEPA contract laboratory program, national functional guidelines for organics data review. EPA 540/R-08/01. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response. June.

USEPA. 2010. USEPA contract laboratory program national functional guidelines for inorganic Superfund data review. EPA 540/R-10/011. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. January.

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 0747.01.02 | JANUARY 3, 2013 | VERN SIMS FAMILIES PROPERTIES, LLC

This report reviews the analytical results for air, groundwater, and soil samples collected by the Maul Foster & Alongi, Inc. (MFA) project team on the Sims North Cascade Ford site. The samples were collected in October and December 2012.

Analytical Resources, Incorporated (ARI) and Eurofins Air Toxics, Inc. (AT) performed the analyses. ARI report numbers VM60, VU67, VU76, VV00, VV24, and VW96 and AT report numbers 1212187A and 1212187B were reviewed. The analyses performed are listed below.

Analysis	Reference
Diesel and Motor Oil	NWTPH-Dx
Gasoline	NWTPH-Gx
Polycyclic Aromatic Hydrocarbons	USEPA 8270 by SIM
VOCs	USEPA 5030B/8260
Permanent Gases	Modified ASTM D-1946
VOCs in Soil Vapor	Modified USEPA TO-15 SIM
Total Organic Carbon	USEPA 9060M
Polychlorinated Biphenyls as Aroclors	USEPA 8082A
Total and Dissolved Metals	USEPA 200.8/6010C

ASTM = American Society for Testing and Materials.
NWTPH = Northwest Total Petroleum Hydrocarbons.
SIM = selective ion monitoring.
USEPA = U.S. Environmental Protection Agency.
VOC = volatile organic compound.

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA, 2008, 2010) and appropriate laboratory and method-specific guidelines (ARI, 2012; AT, 2012; USEPA, 1986).

Data validation procedures were modified, as appropriate, to accommodate quality-control requirements for methods not specifically addressed by the functional guidelines.

In report VW96, all results for sample GP12-W-25.5 were qualified because of extraction holding time exceedances. Detections for USEPA Method 8260 were qualified with a "J" and non-detects were qualified with an "R." Detections for USEPA Method 8270D SIM were qualified with a "J" and non-detects were qualified with a "UJ." National functional guidelines (NFG) for organics (USEPA, 2008) do not specify data qualifications for diesel and motor oil; detections for NWTPH diesel and motor oil were qualified with a "J" and non-detects were qualified with a "UJ."

In report VU67, the USEPA Method 8270D SIM result for total benzofluoranthenes for sample GP-11-S-1.25 was qualified by the laboratory as an estimated value because of low spectral match parameters. The result was qualified as estimated with a "J."

Report	Sample	Component	Initial Result (ug/L)	Qualified Result (ug/L)
VU67	GP-11-S-1.25	total benzofluoranthenes	200 M	200 J

ug/L = micrograms per liter.

In report VV24, all dissolved-iron results were qualified with a "J" because of preservation holding time exceedances.

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Analysis for dissolved iron was added to all samples in report VV24 after the samples were received at the laboratory. The samples were filtered and preserved at the laboratory past the recommended holding time for dissolved metals. The results have been qualified with a "J" as estimated.

In report VW96, all analyses for sample GP12-W-25.5 were requested past recommended extraction holding times. The holding time for USEPA Method 8260 was exceeded by two days, the holding time for USEPA Method 8270D SIM was exceeded by 13 days, and the holding time for NWTPH diesel and motor oil was exceeded by three days. Detections for USEPA Method 8260 were qualified with a "J" and non-detects were qualified with an "R." Detections for USEPA Method 8270D SIM were qualified with a "J" and non-detects were qualified with a "UJ." NFG do not specify data qualifications for diesel and motor oil; detections for NWTPH diesel and motor oil were qualified with a "J" and non-detects were qualified with a "UJ."

The remaining extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. For purposes of data qualification, the method blanks were associated with all samples prepared in the analytical batch. Where an analyte was detected in a sample and in the associated method

blank, the sample result was qualified if the concentration was less than five times the method blank concentration. All method blank results are below the reporting limit (RL) and/or are associated with non-detect sample results.

If an analyte was detected in a sample and in the associated method blank below the RL but above the method detection limit (MDL), sample detections below the level found in the method blank were qualified as "UJ" and reported as not detected (at or below the levels found in the method blank). Sample detections above the level found in the method blank were not qualified.

In report VU67, USEPA Method 8260 soil method blanks were reported at two dry weight sample amounts. The method blank reported with sample amount of 5 grams (g) was associated with sample GP-13-S-1.6, and the method blank reported with a 100-milligram (mg) sample amount was associated with sample GP-11-S-1.25. The 5-g method blank had low detections, but the associated sample was either non-detect or had detections greater than five times the method blank. The 100-mg method blank had detections for several compounds below the MDL. The associated sample was either non-detect or had detections greater than the method blank.

Trip Blanks

Trip blanks were submitted and analyzed for this sample event. One trip blank was submitted for ARI report VM60; no analytes were present.

Equipment Rinsate Blanks

There were no equipment rinsate blanks associated with this sampling event.

SURROGATE RECOVERY RESULTS

The samples were spiked with surrogate compounds to evaluate laboratory performance on individual samples.

The reviewer took no action based on minor surrogate outliers or surrogate percent recoveries that were outside acceptance limits because of dilutions necessary to quantify high concentrations of target analytes present in the samples.

The laboratory appropriately documented and qualified surrogate outliers. Associated batch quality assurance and quality control for samples with surrogate outliers were within acceptance limits. All remaining surrogate recoveries were within acceptance limits.

In report VU76, USEPA Method 8082 sample GP10-S-2.0 exceeded the upper acceptance limit for surrogate decachlorobiphenyl. The sample was non-detect for all polychlorinated biphenyl Aroclors; the results were not qualified.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Matrix spike/matrix spike duplicate (MS/MSD) results are used to evaluate laboratory precision and accuracy. MS/MSD samples were not extracted or analyzed for every analysis. The reviewer took no action for the laboratory not analyzing MS/MSD samples; additional aqueous sample volume was not supplied to the laboratory to accommodate specific batch MS/MSD. Reported MS/MSD samples were within acceptance limits for percent recovery and relative percent difference (RPD).

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. All duplicate samples were extracted and analyzed at the required frequency. All RPDs were within acceptance limits.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

A laboratory control sample/laboratory control sample duplicate (LCS/LCSD) is spiked with target analytes to provide information on laboratory precision and accuracy. The LCS/LCSD samples were extracted and analyzed at the required frequency. NFG do not specifically address the evaluation of LCS/LCSD recoveries for VOC and semivolatile organic compound analyses. ARI report VM60 LCS/LCSD recoveries ranged from 46 to 67 percent and 56 to 77 percent, respectively. The reviewer took no action, as laboratory acceptance limits were met.

In report 1212187AR1, the modified USEPA Method TO-15 LCS exceeded the upper acceptance limit for carbon disulfide. The LCSD was within acceptance limits, and the exceedance was minor; no associated data were qualified.

In report VW96, the cover letter states that "several VOC LCS and LCSD percent recoveries were outside control limits," but the laboratory did not qualify LCS/LCSD analytes exceeding control limits in the report. The LCS/LCSD percent recoveries were evaluated against ARI LCS/LCSD control limits. All LCS/LCSD percent recovery exceedances were minor; no associated data were qualified.

The remaining LCS/LCSD samples were within acceptance limits for percent recovery and RPD.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. In report VM60, one field duplicate was submitted for analysis (MW-3-GW-20121009/FD-GW-20121009). One field duplicate was submitted for analysis in report VU76 (GP-10-W-7.5/GPDUP-W-7.5).

MFA uses acceptance criteria of 100 percent RPD for results that are less than five times the RL, or 50 percent RPD for results that are greater than five times the RL. Non-detect data are not used in the evaluation of field duplicate results. All analytes were within the acceptance criteria.

CONTINUING CALIBRATION VERIFICATION RESULTS

Continuing calibration verification results are used to demonstrate instrument precision and accuracy through the end of the sample batch. In ARI report VU67, USEPA Method 8260 for soil, acetone, and trichlorofluoromethane exceeded 20 percent drift in the continuing calibration. All associated sample detections were qualified with a "J" as estimated.

Report	Sample	Analyte	Original Result (ug/kg)	Qualified Result (ug/kg)
VU67	GP-11-S-1.25	acetone	530	530 J
VU67	GP-13-S-1.6	acetone	40	40 J

ug/kg = micrograms per kilogram.

For the remaining ARI reported results, USEPA Method 8260 water and soil continuing calibration drift exceedances were associated with samples that either were non-detect or with sample detections below the RL that were already qualified as estimated; no additional results were qualified.

REPORTING LIMITS

ARI used routine RLs for non-detect results, except for samples requiring dilutions because of high analyte concentrations and/or matrix interferences. Target compounds with detections between the MDL and the RL were reported as estimated with a "J."

AT reported results for target compounds that were detected below the RL but above the MDL. Detected results reported below the RL were qualified with a "J" as estimated. RLs and detection limits were raised when samples required dilutions because of residual sample canister vacuum.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies.

The chain of custody and receiving notes for AT report 1212187B indicate that two air samples were submitted to the laboratory on hold. One of the samples, SV01-121204, was removed from hold status, but the instructions for analyses were not included in report 1212187B.

In report VU67, the USEPA Method NWTPH gasoline result for sample GP-11-S-1.25 does not match an identifiable gasoline pattern. The result was not qualified by the reviewer.

In reports VU76 and VV00, some USEPA 8270 SIM results for samples GP19-S-0.7, GP22-S-1.8, GP24-S-0.8, GP25-S-1.1, GP26-S-1.7, GP30-S-0.8, GP31-S-0.9, and GP32-S-1.2 exceeded the instrument calibration range. All samples with calibration range exceedances were also reported in the same reports at dilutions with results within the instrument calibration range.

Report VV24 cover letter incorrectly states that dissolved lead was requested and reported. The attached e-mails and report correctly show dissolved iron. The attached e-mail also

indicated a "hold" on samples GP10-W-16.5 and GP-W-25.5, but these samples were also analyzed for dissolved lead.

No additional issues were found.

REFERENCES

ARI. 2012. Quality assurance manual. Analytical Resources, Incorporated, Tukwila, Washington.

AT. 2012. Quality assurance manual. Eurofins Air Toxics, Inc., Folsom, California.

USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 6, February 2007).

USEPA. 2008. USEPA contract laboratory program, national functional guidelines for organics data review. EPA 540/R-08/01. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response. June.

USEPA. 2010. USEPA contract laboratory program national functional guidelines for inorganic superfund data review. EPA 540/R-10/011. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation. January.

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 0747.01.03 | APRIL 28, 2014 | VERN SIMS FAMILIES PROPERTIES, LLC

This report reviews the analytical results for groundwater samples collected by the Maul Foster & Alongi, Inc. (MFA) project team on the Sims North Cascade Ford site. The samples were collected in April 2014.

Analytical Resources, Inc. (ARI) performed the analyses. ARI report number YG35_Sims-N_Cascade_rpt (YG35_I) was reviewed. The analyses performed and samples analyzed are listed below. Some analyses may not have been performed on all samples.

Analysis	Reference
Diesel and Motor Oil	NWTPH-Dx
EPH	NWTPH-EPH
Gasoline	NWTPH-Gx
Polychlorinated Biphenyls as Aroclors	USEPA 8082A
volatile organic compounds	USEPA 8260C

EPH = extractable petroleum hydrocarbons.
NWTPH = Northwest Total Petroleum Hydrocarbons.
USEPA = U.S. Environmental Protection Agency.

Samples Analyzed
MW01
MWDUP
MW02
MW03
Trip Blank

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of USEPA procedures (USEPA, 2008) and appropriate laboratory and method-specific guidelines (ARI, 2014; USEPA, 1986).

Data validation procedures were modified, as appropriate, to accommodate quality-control requirements for methods not specifically addressed by the functional guidelines (e.g., NWTPH-EPH analysis).

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

Samples were received by the laboratory above the recommended storage temperature range, at 7.4 and 7.3°C. The temperature exceedances were minor; thus, no results were qualified. The samples were preserved and stored at the laboratory appropriately.

BLANKS

Method Blanks

Laboratory method blank analyses were performed at the required frequencies. For purposes of data qualification, the method blanks were associated with all samples prepared in the analytical batch. All laboratory method blanks were non-detect.

Trip Blanks

A trip blank was submitted with samples for USEPA Method 8260C analysis. The trip blank was non-detect for all analytes.

Equipment Rinsate Blanks

Equipment rinsate blanks were not required for this sampling event, as all samples were collected using dedicated, single-use equipment.

SURROGATE RECOVERY RESULTS

When appropriate, individual samples were spiked with surrogate compounds to evaluate laboratory performance. All surrogate recoveries were within acceptance limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Matrix spike/matrix spike duplicate (MS/MSD) results are used to evaluate laboratory precision and accuracy. MS/MSD results were not reported by the laboratory. Batch precision and accuracy were demonstrated by laboratory control samples (LCSs) and laboratory duplicate samples.

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. All duplicate samples were extracted and analyzed at the required frequency. All laboratory duplicate relative percent differences (RPDs) were within acceptance limits.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

An LCS and LCS duplicate (LCSD) are spiked with target analytes to provide information on laboratory precision and accuracy. The LCS/LCSD samples were extracted and analyzed at the required frequency.

The USEPA Method 8260C LCS exceeded upper percent recovery acceptance limits for n-butylbenzene, 1,2,4-trichlorobenzene, naphthalene, and 1,2,3-trichlorobenzene. The LCSD also exceeded upper percent recovery acceptance limits for 1,2,4-trichlorobenzene and naphthalene. ARI noted that the associated continuing calibration verification (CCV) exceeded percent difference acceptance criteria for n-butylbenzene, 1,2,4-trichlorobenzene, naphthalene, and 1,2,3-trichlorobenzene and that associated detections are considered estimated. Associated sample results with detections were qualified as estimated. The remaining results were non-detect and were not qualified.

Sample	Component	Original Result (ug/L)	Qualified Result (ug/L)
MW01	n-Butylbenzene	0.31	0.31 J
MWDUP	n-Butylbenzene	0.33	0.33 J

ug/L = micrograms per liter.

The NWTPH-EPH LCS/LCSD exceeded laboratory RPD acceptance limits of 30 percent for several aliphatic and aromatic compounds. Associated sample detections were qualified as estimated.

Sample	Component	Original Result (ug/L)	Qualified Result (ug/L)
MW02	C12-C16 Aliphatics	48	48 J

All remaining LCS/LCSD analyte results were within acceptance limits for percent recovery.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. One field duplicate was submitted for analysis (MW01/MWDUP). MFA uses acceptance criteria of 100 percent RPD for results that are less than five times the method reporting limit (MRL), or 50 percent RPD for results that are greater than five times the MRL. Non-detect data are not used in the evaluation of field duplicate results. All field duplicate analytes met RPD acceptance criteria.

CONTINUING CALIBRATION VERIFICATION RESULTS

CCV results are used to demonstrate instrument precision and accuracy throughout the sample batch.

USEPA guidelines (USEPA, 2008) state that results associated with opening CCV percent drift exceedances should be qualified as estimated. However, USEPA Method 8260C states that when CCV percent drift acceptance criteria are met for at least 80 percent of the compounds, non-detect results may be reported for compounds that exceed acceptance limits if the laboratory demonstrates that quantitation limit sensitivity can still be achieved. Detected compounds associated with CCV percent drift exceedances may be reported as estimated values.

In report YG35_I, the USEPA Method 8260C CCV exceeded percent drift acceptance criteria for n-butylbenzene, 1,2,4-trichlorobenzene, naphthalene, and 1,2,3-trichlorobenzene. Associated samples MW01 and MWDUP had detections for n-butylbenzene, which were qualified as estimated in the LCS section of this report. Remaining associated results were non-detect for these analytes and the reviewer confirmed with the laboratory that quantitation limit sensitivity was demonstrated; thus, no results were qualified.

Based on available information, all other CCVs were within acceptance limits for percent recovery.

REPORTING LIMITS

ARI used routine reporting limits for non-detect results, except when samples required dilutions because of high analyte concentrations and/or matrix interferences.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies. None were found.

REFERENCES

ARI. 2014. Quality assurance manual. Analytical Resources, Inc., Tukwila, Washington.

USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 6, February 2007).

USEPA. 2008. USEPA contract laboratory program, national functional guidelines for organics data review. EPA 540/R-08/01. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response. June.

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 0747.01.03 | DECEMBER 30, 2014 | VERN SIMS FAMILIES PROPERTIES, LLC

This report reviews the analytical results for groundwater samples collected by the Maul Foster & Alongi, Inc. (MFA) project team on the Sims North Cascade Ford site. The samples were collected in December 2014.

Analytical Resources, Inc. (ARI) performed the analysis. ARI report number ZO48_N_Cascade_Ford_rpt (ZO48) was reviewed. The analysis performed and samples analyzed are listed below.

Analysis	Reference
Diesel- and Motor-Oil-Range Hydrocarbons	NWTPH-Dx

NWTPH = Northwest Total Petroleum Hydrocarbons.

Samples Analyzed
Report ZO48
MW01-GW-121014
MW02-GW-121014
MW03-GW-121014
1FD-121014

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of U.S. Environmental Protection Agency (USEPA) procedures (USEPA, 2008) and appropriate laboratory and method-specific guidelines (ARI, 2014; USEPA, 1986).

Data validation procedures were modified, as appropriate, to accommodate quality-control requirements for methods not specifically addressed by the functional guidelines (i.e., NWTPH-Dx analysis).

In report ZO48, the laboratory indicated that some NWTPH-Dx motor-oil-range results did not match chromatographic patterns for motor oil; these results were reported as residual-range organic results. The results were not qualified by the reviewer.

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

BLANKS

Method Blanks

A laboratory method blank analysis was performed at the required frequency. For purposes of data qualification, the method blank was associated with all samples prepared in the analytical batch. The laboratory method blank was non-detect.

Trip Blanks

Trip blanks were not required for this sampling event because samples were not analyzed for volatile organic compounds.

Equipment Rinsate Blanks

Equipment rinsate blanks were not required for this sampling event, as all samples were collected using dedicated, single-use equipment.

SURROGATE RECOVERY RESULTS

When appropriate, individual samples were spiked with surrogate compounds to evaluate laboratory performance. All surrogate recoveries were within acceptance limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Matrix spike/matrix spike duplicate (MS/MSD) results are used to evaluate laboratory precision and accuracy. MS/MSD were not reported and the reviewer confirmed that MS/MSD samples were not included with the batch. The NWTPH-Dx method does not require MS/MSD samples.

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. Laboratory duplicate samples were not reported by the laboratory, and the reviewer confirmed that a laboratory duplicate was not included with the batch. The NWTPH-Dx method recommends including at least one duplicate sample with each set of ten or fewer samples. The field duplicate sample demonstrated acceptable precision, and remaining batch quality control had acceptable results; thus, no results were qualified.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

A laboratory control sample/laboratory control sample duplicate (LCS/LCSD) is spiked with target analytes to provide information on laboratory precision and accuracy. The LCS/LCSD samples were extracted and analyzed at the required frequency. The LCS/LCSD analyte results were within acceptance limits for percent recovery and relative percent difference (RPD).

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. One field duplicate was submitted for analysis (MW01-GW-121014/FD-121014). MFA uses acceptance criteria of 100 percent RPD for results that are less than five times the method reporting limit (MRL), or 50 percent RPD for results that are greater than five times the MRL. Non-detect data are not used in the evaluation of field duplicate results. The field duplicate results met acceptance criteria for RPD.

CONTINUING CALIBRATION VERIFICATION RESULTS

Continuing calibration verification (CCV) results are used to demonstrate instrument precision and accuracy throughout the sample batch. CCV results were not reported by the laboratory.

REPORTING LIMITS

ARI used routine reporting limits for non-detect results.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies. None were found.

REFERENCES

ARI. 2014. Quality assurance manual. Analytical Resources, Inc., Tukwila, Washington.

USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 6, February 2007).

USEPA. 2008. USEPA contract laboratory program, national functional guidelines for organics data review. EPA 540/R-08/01. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response. June.

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 0747.01.03 | JUNE 26, 2014 | VERN SIMS FAMILIES PROPERTIES, LLC

This report reviews the analytical results for groundwater samples collected by the Maul Foster & Alongi, Inc. (MFA) project team on the Sims North Cascade Ford site. The samples were collected in June 2014.

Analytical Resources, Inc. (ARI) performed the analysis. ARI report number YO61_N_Cascade_Ford_rpt (YO61) was reviewed. The analysis performed and samples analyzed are listed below.

Analysis	Reference
Diesel and Motor Oil	NWTPH-Dx

NWTPH = Northwest Total Petroleum Hydrocarbons.

Samples Analyzed
MW01-GW-140618
MW02-GW-140618
MW03-GW-140618
FD-GW-140618

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of U.S. Environmental Protection Agency procedures (USEPA, 2008) and appropriate laboratory and method-specific guidelines (ARI, 2014; USEPA, 1986).

Data validation procedures were modified, as appropriate, to accommodate quality-control requirements for methods not specifically addressed by the functional guidelines (i.e., NWTPH-Dx analysis).

In report YO61, the laboratory indicated that some NWTPH-Dx diesel and motor oil results did not match chromatographic patterns for diesel and motor oil; these results were reported as diesel-range organic and residual-range organic results, respectively. The results were not qualified by the reviewer.

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

Samples were received by the laboratory above the recommended storage temperature range, at 6.4°C. The temperature exceedances were minor; thus, no results were qualified. The samples were preserved and stored at the laboratory appropriately.

BLANKS

Method Blanks

A laboratory method blank analysis was performed at the required frequency. For purposes of data qualification, the method blank was associated with all samples prepared in the analytical batch. The laboratory method blank was non-detect.

Trip Blanks

Trip blanks were not required for this sampling event because samples were not analyzed for volatile organic compounds.

Equipment Rinsate Blanks

Equipment rinsate blanks were not required for this sampling event, as all samples were collected using dedicated, single-use equipment.

SURROGATE RECOVERY RESULTS

When appropriate, individual samples were spiked with surrogate compounds to evaluate laboratory performance. All surrogate recoveries were within acceptance limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Matrix spike/matrix spike duplicate (MS/MSD) results are used to evaluate laboratory precision and accuracy. MS/MSD were not reported and the reviewer confirmed that MS/MSD samples were not included with the batch. The NWTPH-Dx method does not require MS/MSD samples.

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. Laboratory duplicate samples were reported by the laboratory, and the reviewer confirmed that a laboratory duplicate was not included with the batch. The NWTPH-Dx method recommends including at least one duplicate sample with each set of ten or fewer samples. The field duplicate sample

demonstrated acceptable precision, and remaining batch quality control had acceptable results; thus, no results were qualified.

LABORATORY CONTROL SAMPLE RESULTS

A laboratory control sample (LCS) is spiked with target analytes to provide information on laboratory precision and accuracy. An LCS sample was extracted and analyzed at the required frequency. The LCS analyte results were within acceptance limits for percent recovery.

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. One field duplicate was submitted for analysis (MW01-GW-140618/FD-GW-140618). MFA uses acceptance criteria of 100 percent relative percent difference (RPD) for results that are less than five times the method reporting limit (MRL), or 50 percent RPD for results that are greater than five times the MRL. Non-detect data are not used in the evaluation of field duplicate results. The field duplicate results met acceptance criteria for RPD.

CONTINUING CALIBRATION VERIFICATION RESULTS

Continuing calibration verification (CCV) results are used to demonstrate instrument precision and accuracy throughout the sample batch. CCV results were not reported by the laboratory.

REPORTING LIMITS

ARI used routine reporting limits for non-detect results, except when samples required dilutions because of high analyte concentrations and/or matrix interferences.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies. None were found.

REFERENCES

ARI. 2014. Quality assurance manual. Analytical Resources, Inc., Tukwila, Washington.

USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 6, February 2007).

USEPA. 2008. USEPA contract laboratory program, national functional guidelines for organics data review. EPA 540/R-08/01. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response. June.

DATA QUALITY ASSURANCE/QUALITY CONTROL REVIEW

PROJECT NO. 0747.01.03 | SEPTEMBER 18, 2014 | VERN SIMS FAMILIES PROPERTIES, LLC

This report reviews the analytical results for groundwater samples collected by the Maul Foster & Alongi, Inc. (MFA) project team on the Sims North Cascade Ford site. The samples were collected in September 2014.

Analytical Resources, Inc. (ARI) performed the analysis. ARI report number YZ73_N_Cascade_Ford_rpt (YZ73) was reviewed. The analysis performed and samples analyzed are listed below.

Analysis	Reference
Diesel- and Motor-Oil-Range Hydrocarbons	NWTPH-Dx

NWTPH = Northwest Total Petroleum Hydrocarbons.

Samples Analyzed
Report YZ73
MW01-GW-091014
MW02-GW-091014
MW03-GW-091014
FD-091014

DATA QUALIFICATIONS

Analytical results were evaluated according to applicable sections of U.S. Environmental Protection Agency procedures (USEPA, 2008) and appropriate laboratory and method-specific guidelines (ARI, 2014; USEPA, 1986).

Data validation procedures were modified, as appropriate, to accommodate quality-control requirements for methods not specifically addressed by the functional guidelines (i.e., NWTPH-Dx analysis).

In report YZ73, the laboratory indicated that some NWTPH-Dx motor-oil-range results did not match chromatographic patterns for motor oil; these results were reported as residual-range organic results. The results were not qualified by the reviewer.

The data are considered acceptable for their intended use, with the appropriate data qualifiers assigned.

HOLDING TIMES, PRESERVATION, AND SAMPLE STORAGE

Holding Times

Extractions and analyses were performed within the recommended holding time criteria.

Preservation and Sample Storage

Samples were received by the laboratory above the recommended storage temperature range, at 6.4°C. The temperature exceedances were minor; thus, no results were qualified. The samples were preserved and stored at the laboratory appropriately.

BLANKS

Method Blanks

A laboratory method blank analysis was performed at the required frequency. For purposes of data qualification, the method blank was associated with all samples prepared in the analytical batch. The laboratory method blank was non-detect.

Trip Blanks

Trip blanks were not required for this sampling event because samples were not analyzed for volatile organic compounds.

Equipment Rinsate Blanks

Equipment rinsate blanks were not required for this sampling event, as all samples were collected using dedicated, single-use equipment.

SURROGATE RECOVERY RESULTS

When appropriate, individual samples were spiked with surrogate compounds to evaluate laboratory performance. All surrogate recoveries were within acceptance limits.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE RESULTS

Matrix spike/matrix spike duplicate (MS/MSD) results are used to evaluate laboratory precision and accuracy. MS/MSD were not reported, and the reviewer confirmed that MS/MSD samples were not included with the batch. The NWTPH-Dx method does not require MS/MSD samples.

LABORATORY DUPLICATE RESULTS

Duplicate results are used to evaluate laboratory precision. Laboratory duplicate samples were reported by the laboratory, and the reviewer confirmed that a laboratory duplicate was not included with the batch. The NWTPH-Dx method recommends including at least one duplicate sample with each set of ten or fewer samples. The field duplicate sample

demonstrated acceptable precision, and remaining batch quality control had acceptable results; thus, no results were qualified.

LABORATORY CONTROL SAMPLE/LABORATORY CONTROL SAMPLE DUPLICATE RESULTS

A laboratory control sample/laboratory control sample duplicate (LCS/LCSD) is spiked with target analytes to provide information on laboratory precision and accuracy. The LCS/LCSD samples were extracted and analyzed at the required frequency. The LCS/LCSD analyte results were within acceptance limits for percent recovery and relative percent difference (RPD).

FIELD DUPLICATE RESULTS

Field duplicate samples measure both field and laboratory precision. One field duplicate was submitted for analysis (MW01-GW-091014/FD-091014). MFA uses acceptance criteria of 100 percent RPD for results that are less than five times the method reporting limit (MRL), or 50 percent RPD for results that are greater than five times the MRL. Non-detect data are not used in the evaluation of field duplicate results. The field duplicate results met acceptance criteria for RPD.

CONTINUING CALIBRATION VERIFICATION RESULTS

Continuing calibration verification (CCV) results are used to demonstrate instrument precision and accuracy throughout the sample batch. CCV results were not reported by the laboratory.

REPORTING LIMITS

ARI used routine reporting limits for non-detect results, except when samples required dilutions because of high analyte concentrations and/or matrix interferences.

DATA PACKAGE

The data packages were reviewed for transcription errors, omissions, and anomalies. None were found.

REFERENCES

ARI. 2014. Quality assurance manual. Analytical Resources, Inc., Tukwila, Washington.

USEPA. 1986. Test methods for evaluating solid waste: physical/chemical methods. EPA-530/SW-846. U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. September (revision 6, February 2007).

USEPA. 2008. USEPA contract laboratory program, national functional guidelines for organics data review. EPA 540/R-08/01. U.S. Environmental Protection Agency, Office of Emergency and Remedial Response. June.

ATTACHMENT

DATA VALIDATION TRACKING



DATA VALIDATION TRACKING

This document tracks Stage 2A validation completion for the analysis indicated below.

Lab Report	YZ73
Analysis/Method	Diesel- and Motor-Oil-Range Hydrocarbons/NWTPH-Dx
Batch Number(s)	091214

Reviewer	MEB
Date	9/18/2014

	Validation Area	Acceptable Yes/No/NA/NR	Comments	Q
Sample	Temperature	Yes		
	Holding Time	Yes		
	Trip Blank	NA		
	Field/Eq. Blank	NA		
	Field Dup RPD	Yes		
Calibr.	CCB	NA		
	ICV	NA		
	CCV	NA		
Batch	Method Blank	Yes		
	LCS/LCSD %	Yes		
	LCS/LCSD RPD	Yes		
	Lab Dup RPD	NA		
	MS/MSD %	NA		
	MS/MSD RPD	NA		
General	Dilution	Yes		
	Reporting Limit	Yes		
	MDL	NA		
	Surrogates	Yes		
Dioxins	Labeled Analog	NA		
	EMPC	NA		
	2378-TCDF	NA		

Samples reviewed (in bold font):			
MW01-GW-091014	-	-	-
MW02-GW-091014	-	-	-
MW03-GW-091014	-	-	-
FD-091014	-	-	-

Notes:

Definitions:

Calibr. = calibration.
CCB = continuing calibration blank.
EMPC = estimated maximum potential concentration.
MDL = method detection limit.
NA = not applicable.
NR = not reported.
Q = qualifier.

APPENDIX I

TERRESTRIAL ECOLOGICAL EVALUATION



The simplified terrestrial ecological evaluation (TEE) procedure is structured with the intent to protect terrestrial wildlife at industrial or commercial sites, and terrestrial plants, soil biota, and terrestrial wildlife at other sites, as provided under Washington Administrative Code (WAC) 173-340-7490(3)(b). The Model Toxics Control Act (MTCA) of WAC 173-340 specifies that the simplified TEE process is intended to identify only those sites that do not have substantial potential for posing a threat of significant adverse effects to terrestrial ecological receptors and that therefore may be removed from further ecological consideration during the remedial investigation and cleanup process (WAC 173-340-7492).

A desktop habitat evaluation was conducted by an MFA ecologist (Phil Wiescher) in December 2012 to assess the North Cascade Ford property (the Property) and surrounding areas. Under MTCA (WAC 173-340-7491), the simplified TEE process is applicable to the Property since:

- The site (the area where the contamination is located) is not on or directly adjacent to an area where management or land use plans will maintain or restore native or semi-native vegetation.

- The site is not used by a threatened or endangered species, a wildlife species classified by the state department of fish and wildlife as a "priority species" or "species of concern" under Title 77 Revised Code of Washington (RCW), or a plant species classified by the Washington State Department of Natural Resources natural heritage program as "endangered," "threatened," or "sensitive" under Title 79 RCW.

- The site is located on a property that contains less than ten acres of native vegetation within 500 feet of the site (see Figure).

- The Washington State Department of Ecology has not determined that the site may present a risk to significant wildlife populations.

WAC 173-340-7492(2) provides the steps necessary for conducting the simplified TEE. MTCA Table 749-1 may be used to determine whether land use at a site and surrounding area is likely to result in substantial wildlife exposure. If this is demonstrated, MTCA specifies that no further evaluation is necessary to conclude that a site does not pose a substantial threat to potential ecological receptors.

A photo log of the Property is provided as Attachment 1. The completed MTCA Table 749-1 included as Attachment 2 shows that the site is unlikely to pose a threat to ecological receptors and that no further evaluation is necessary. The attached table shows the rationale for the scoring on Table 749-1.

Attachments: Table
Figure
1—Site Photographs
2—MTCA Table 749-1

TABLE

*



Appendix G Table
Simplified TEE Scoresheet
VSF Properties, LLC, North Cascade Ford Property Investigation
Sedro-Woolley, Washington

Line Number	Scoring Parameters	Score	Rationale
1	Estimate the area of contiguous (connected) undeveloped land on the site or within 500 feet of any area of the site to the nearest 0.5 acre (0.25 acre if the area is less than 0.5 acre). From the table below, find the number of points corresponding to the area and enter this number in the field to the right. Area (acres) — Points 0.25 or less — 4 0.5 — 5 1.0 — 6 1.5 — 7 2.0 — 8 2.5 — 9 3.0 — 10 3.5 — 11 4.0 or more — 12	7	No undeveloped land is present on the site. Approximately 1.5 acres of undeveloped land are present on the parcels immediately northeast of the site (see figure). No additional undeveloped land is present within 500 feet of any area of the site. The surrounding residential, commercial, and industrial properties are developed and are unlikely to attract wildlife.
2	Is this an industrial or commercial property? If yes, enter a score of 3. If no, enter a score of 1.	3	
3	Enter a score in the box to the right for the habitat quality of the site, using the following rating system. High=1, Intermediate=2, Low=3.	3	The site is a highly disturbed commercial property. No vegetation is present on the site. The entire ground surface is covered by structures, concrete or asphalt paving, or gravel driveways.
4	Is the undeveloped land likely to attract wildlife? If yes, enter a score of 1 in the box to the right. If no, enter a score of 2.	2	The areas surrounding the site, and the undeveloped land to the northeast of the site, are primarily rail lines and developed commercial, industrial, and residential lots with yards that are unlikely to attract wildlife. The site and contiguous undeveloped land are largely absent of native vegetation and trees that may be attractive to birds, and the undeveloped land is not a habitat island.
5	Are any of the following soil contaminants present: chlorinated dioxins/furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, pentachlorobenzene? If yes, enter a score of 1 in the box to the right. If no, enter a score of 4.	1	PCB mixtures are present in soil at the site.
Add the numbers in the boxes on lines 2–5 and enter this number in the box to the right. If this number is larger than the number in the box on line 1, the simplified evaluation may be ended.		9	Simplified evaluation ended. Total score exceeds 7.

NOTES:
Table adapted from Model Toxics Control Act Table 749-1.
TEE = terrestrial ecological evaluation.

FIGURE



Path: X:\0747.01\Projects\02\Fig_Contiguous Undeveloped Land.mxd

Print Date: 1/2/2013

Approved By: H. Hirsch

Produced By: cborbely

Project: 0747.01

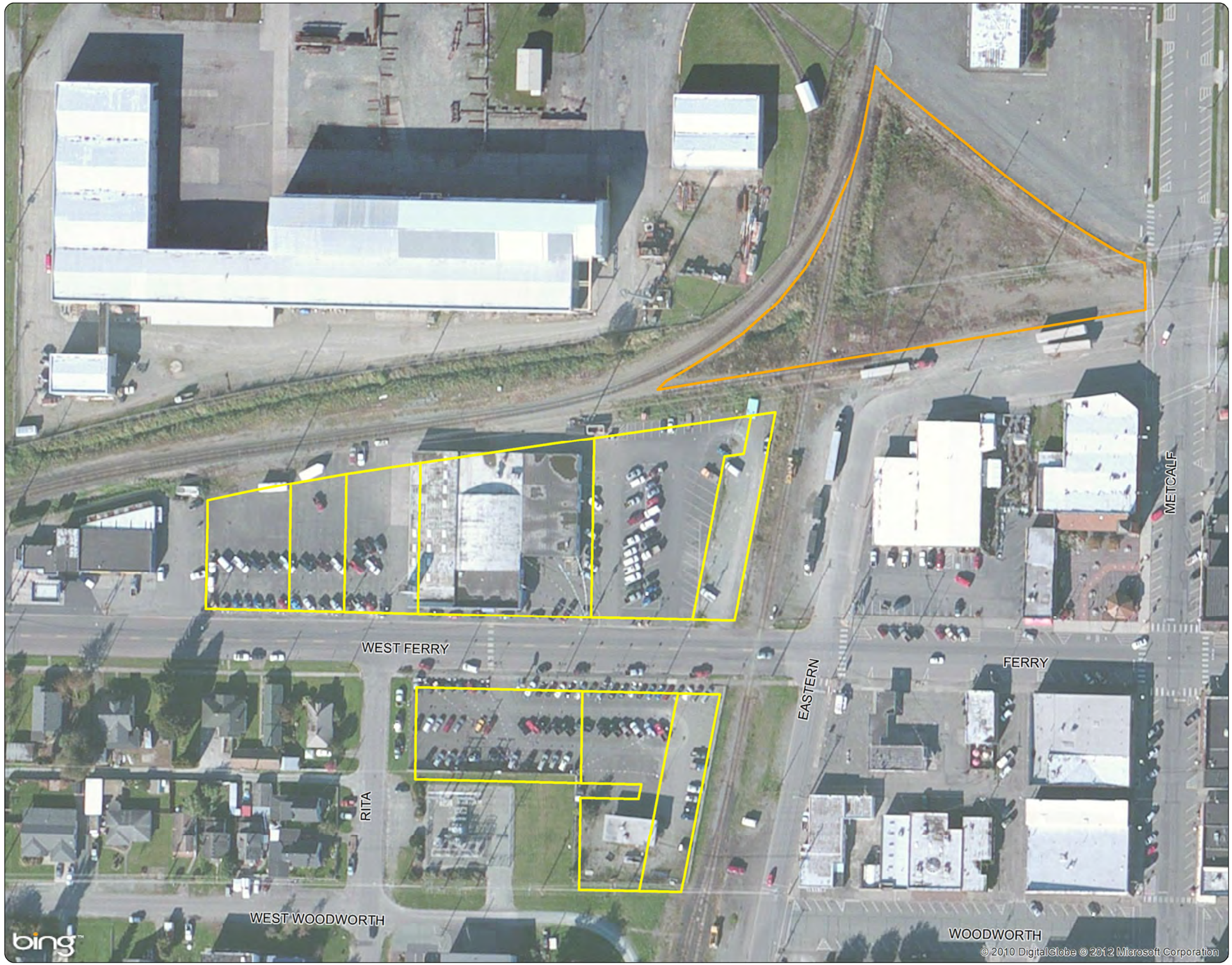


Figure
Contiguous Undeveloped Land

North Cascade Ford
116 W Ferry Street
Sedro-Woolley, Washington

Legend

- Site Parcels
- Undeveloped Area

0 50 100
Feet

Source: Aerial photograph obtained from ESRI, Inc. ArcGIS Online/Bing Maps; Parcels obtained from Skagit County GIS Department.

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This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

ATTACHMENT 1

SITE PHOTOGRAPHS

PHOTOGRAPHS

Project Name: North Cascade Ford Property, VSF Properties, LLC
Project Number: 0747.01.02

Photo No.
1

Date
April 10, 2012

Description
Northeast corner of parcel P109239 facing northeast.



Photo No.
2

Date
April 10, 2012

Description
Northeast corner of parcel P109239 facing south.



PHOTOGRAPHS

Project Name: North Cascade Ford Property, VSF Properties, LLC
Project Number: 0747.01.02

Photo No.
3

Date
April 10, 2012

Description
Northeast corner of parcel P109239 facing west.



Photo No.
4

Date
April 10, 2012

Description
Southwest corner of parcel P77410 facing east.



PHOTOGRAPHS

Project Name: North Cascade Ford Property, VSF Properties, LLC
Project Number: 0747.01.02

Photo No.
5

Date
October 9, 2012

Description
Northeast corner of parcel P77451 facing northwest.



ATTACHMENT 2

MTCA TABLE 749-1



Washington State Department of Ecology
Toxics Cleanup Program

Table 749-1

Simplified Terrestrial Ecological Evaluation-Exposure Analysis Procedure

Estimate the area of contiguous (connected) undeveloped land on the site or within 500 feet of any area of the site to the nearest 1/2 acre (1/4 acre if the area is less than 0.5 acre).	
1) From the table below, find the number of points corresponding to the area and enter this number in the field to the right.	
Area (acres) / Points: 0.25 or less — 4; 0.5 — 5; 1.0 — 6; 1.5 — 7; 2.0 — 8; 2.5 — 9; 3.0 — 10; 3.5 — 11; 4.0 or more — 12	7
2) Is this an industrial or commercial property? If yes, enter a score of 3. If no, enter a score of 1	3
3)[a] Enter a score in the box to the right for the habitat quality of the site, using the following rating system[b]. High=1, Intermediate=2, Low=3	3
4) Is the undeveloped land likely to attract wildlife? If yes, enter a score of 1 in the box to the right. If no, enter a score of 2.[c]	2
5) Are there any of the following soil contaminants present: Chlorinated dioxins/furans, PCB mixtures, DDT, DDE, DDD, aldrin, chlordane, dieldrin, endosulfan, endrin, heptachlor, benzene hexachloride, toxaphene, hexachlorobenzene, pentachlorophenol, pentachlorobenzene? If yes, enter a score of 1 in the box to the right. If no, enter a score of 4.	1
6) Add the numbers in the boxes on lines 2-5 and enter this number in the box to the right. If this number is larger than the number in the box on line 1, the simplified evaluation may be ended.	9

Notes for Table 749-1

[a] It is expected that this habitat evaluation will be undertaken by an experienced field biologist. If this is not the case, enter a conservative score of (1) for questions 3 and 4.

[b] **Habitat rating system.** Rate the quality of the habitat as high, intermediate or low based on your professional judgment as a field biologist. The following are suggested factors to consider in making this evaluation:

> **Low:** Early successional vegetative stands; vegetation predominantly noxious, nonnative, exotic plant species or weeds. Areas severely disturbed by human activity, including intensively cultivated croplands. Areas isolated from other habitat used by wildlife.

High: Area is ecologically significant for one or more of the following reasons: Late-successional native plant communities present; relatively high species diversity; used by an uncommon or rare species; priority habitat (as defined by the Washington Department of fish and Wildlife); part of a larger area of habitat where size or fragmentation may be important for the retention of some species.

Intermediate: Area does not rate as either high or low.

[c] Indicate "yes" if the area attracts wildlife or is likely to do so. Examples: Birds frequently visit the area to feed; evidence of high use b mammals (tracks, scat, etc.); habitat "island" in an industrial area; unusual features of an area that make it important for feeding animals; heavy use during seasonal migrations.

[Area Calculation Aid] [Aerial Photo with Area Designations] [TEE Table 749-1] [Index of Tables]

[Exclusions Main] [TEE Definitions] [Simplified or Site-Specific?] [Simplified Ecological Evaluation] [Site-Specific Ecological Evaluation] [WAC 173-340-7493]

[TEE Home]

APPENDIX J

WATER WELL REPORTS

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

File Original and First Copy with Department of Ecology
Second Copy — Owner's Copy
Third Copy — Driller's Copy

35/4E/24/M

WATER WELL REPORT

STATE OF WASHINGTON WRE 16936

Application No. 35/04-24M

Permit No. .....

(1) **OWNER:** Name Lemley Mortuary Address 1008 Third St Sedro Woolley, Wn

(2) **LOCATION OF WELL:** County Skagit NW¼ of SW ¼ ¼ Sec 24 T. 35 N., R. 4-E W.M.

Bearing and distance from section or subdivision corner

(3) **PROPOSED USE:** Domestic ☐ Industrial ☐ Municipal ☐
Irrigation ☒ Test Well ☐ Other ☐

(4) **TYPE OF WORK:** Owner's number of well (if more than one) 1
New well ☐ Method: Dug ☐ Bored ☐
Deepened ☐ Cable ☐ Driven ☒
Reconditioned ☐ Rotary ☐ Jetted ☐

(5) **DIMENSIONS:** Diameter of well 1¼ Inches.
Drilled ..... ft. Depth of completed well 27ft ft.

(6) **CONSTRUCTION DETAILS:**
Casing installed: 1¼ " Diam. from ..... ft. to ..... ft.
Threaded ☒ ..... " Diam. from ..... ft. to ..... ft.
Welded ☐ ..... " Diam. from ..... ft. to ..... ft.

Perforations: Yes ☐ No ☐
Type of perforator used Stainless Steel point
SIZE of perforations ..... in. by ..... in.
..... perforations from ..... ft. to ..... ft.
..... perforations from ..... ft. to ..... ft.
..... perforations from ..... ft. to ..... ft.

Screens: Yes ☐ No ☐
Manufacturer's Name .....
Type ..... Model No. .....
Diam. ..... Slot size ..... from ..... ft. to ..... ft.
Diam. ..... Slot size ..... from ..... ft. to ..... ft.

Gravel packed: Yes ☐ No ☐ Size of gravel: .....
Gravel placed from ..... ft. to ..... ft.

Surface seal: Yes ☐ No ☐ To what depth? ..... ft.
Material used in seal .....
Did any strata contain unusable water? Yes ☐ No ☐
Type of water? ..... Depth of strata .....
Method of sealing strata off .....

(7) **PUMP:** Manufacturer's Name Burks
Type: rotary H.P. ½

(8) **WATER LEVELS:** Land-surface elevation above mean sea level .... 56ft ft.
Static level ..... ft. below top of well Date .....
Artesian pressure ..... lbs. per square inch Date .....
Artesian water is controlled by ..... (Cap, valve, etc.)

(9) **WELL TESTS:** Drawdown is amount water level is lowered below static level
Was a pump test made? Yes ☐ No ☐ If yes, by whom? .....
Yield: ..... gal./min. with ..... ft. drawdown after ..... hrs.
" " " "
" " " "

Recovery data (time taken as zero when pump turned off) (water level measured from well top to water level)

Time	Water Level	Time	Water Level	Time	Water Level

Date of test .....
Bailer test ..... gal./min. with ..... ft. drawdown after ..... hrs.
Artesian flow ..... g.p.m. Date .....
Temperature of water ..... Was a chemical analysis made? Yes ☐ No ☐

(10) **WELL LOG:**

Formation: *Describe by color, character, size of material and structure, and show thickness of aquifers and the kind and nature of the material in each stratum penetrated, with at least one entry for each change of formation.*

MATERIAL	FROM	TO
I drove this well in 1935		

SEP 12 10 30 AM '72
DEPT. OF ECOLOGY

Work started ....., 19..... Completed ....., 19.....

WELL DRILLER'S STATEMENT:

This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.

NAME Lemley Mortuary
(Person, firm, or corporation) (Type or print)
Address 1008 Third St Sedro Woolley Wn

[Signed] W T Lemley
(Well Driller)

License No. ..... Date ....., 19.....

(USE ADDITIONAL SHEETS IF NECESSARY)

S. F. No. 7356—OS—(Rev. 4-71).

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

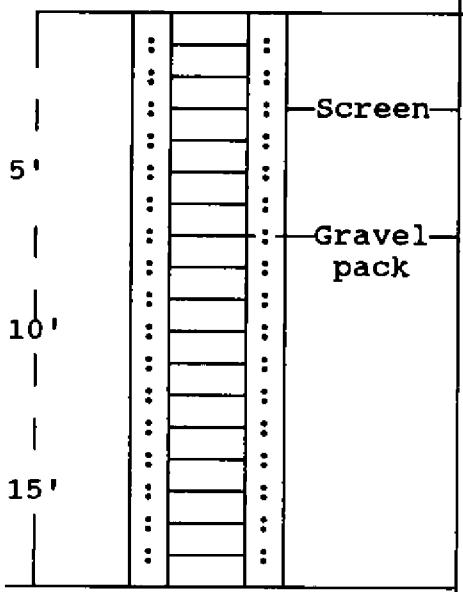
ENVIRONMENTAL WELL REPORT

START CARD NO: D05638

PROJECT NAME: STATE ST/SEDRO WOOLLEY
WELL IDENTIFICATION NO.A 949 DW3
DRILLING METHOD: HOLLOW STEM AUGER
DRILLER: WAYNE LOGSDON
FIRM: HAYES DRILLING, INC.
SIGNATURE: Wayne Logsdon
CONSULTING FIRM: TRICO CONSTRUCTION
REPRESENTATIVE: ROCKY MCDONALD

LOCATION: T 35 R 4E SEC 23
DISTANCE: SE ¼
SE ¼
DATUM: 8" COMPLETION
WATER LEVEL ELEVATION:
INSTALLED: 03/04/94
DEVELOPED: 03/04/94
DEPTH DRILLED: 18' COMPLETED: 18'

AS BUILT



WELL DATA

+2'-18' 8" PVC Screen monoflex 20 slot

0'-18' Gravel pack 8/12 sand

FORMATION DESCRIPTION

0'-4'	Brown sand & gravel
4'-15'	Gray sand & water
15'	Gray clay

RECEIVED
MAR 11 1994
DEPT. OF ECOLOGY

Skagit

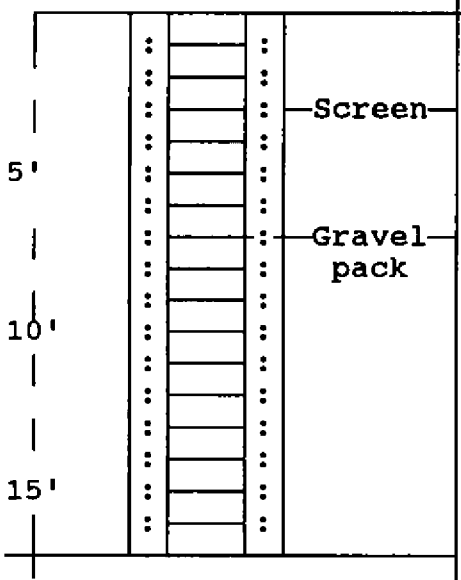
35/4/23

ENVIRONMENTAL WELL REPORT

START CARD NO: D05638

PROJECT NAME: STATE ST/SEDRO WOOLLEY
WELL IDENTIFICATION NO.A 949 DW 1&2
DRILLING METHOD: HOLLOW STEM AUGER
DRILLER: WAYNE LOGSDON
FIRM: HAYES DRILLING, INC.
SIGNATURE: Wayne Logsdon
CONSULTING FIRM: TRICO CONSTRUCTION
REPRESENTATIVE: ROCKY MCDONALD

LOCATION: T 35 R 4E SEC 23
DISTANCE: SE ¼
SE ¼
DATUM: 8" COMPLETION
WATER LEVEL ELEVATION:
INSTALLED: 03/04/94
DEVELOPED: 03/04/94
DEPTH DRILLED: 17' COMPLETED: 17'



WELL DATA

+2'-17'	8" PVC Screen monoflex	20 slot
0'-17'	Gravel pack w/buckshot	

FORMATION DESCRIPTION

0'-8'	Brown sand gravel & watet
8'	Brown silty sand

RECEIVED
MAR 11 1994
DEPT. OF ECOLOGY

The Department of Ecology does NOT Warranty the Data and/or the Information on this Well Report.

APPENDIX K

WATER RIGHTS

999

S. F. No. 7341—3-31—3M. 57713.

CERTIFICATE RECORD NO. 2 PAGE NO. 999-A

STATE OF WASHINGTON, COUNTY OF Skagit

Certificate of Ground Water Right

Issued in accordance with the provisions of Chapter 263, Laws of Washington for 1945, and amendments thereto, and the rules and regulations of the State Supervisor of Water Resources thereunder.

THIS IS TO CERTIFY That WILLIS-ROOKS & PEARSON LUMBER CO., INC.

of Sedro Woolley, Washington, has made proof to the satisfaction of the State Supervisor of Water Resources of Washington, of a right to the use of the ground waters of a well

located within the NE¼ of NW¼ of Sec. 25, Twp. 35 N., Rge. 4 E.W.M.

for the purpose of industrial use

under and subject to provisions contained in Ground Water Permit No. 1963 issued by the State Supervisor of Water Resources and that said right to the use of said ground waters has been perfected in accordance with the laws of Washington, and is hereby confirmed by the State Supervisor of Water Resources of Washington and entered of record in Volume 2 at page 999-A; that the right hereby confirmed dates from September 11, 1951; that the quantity of ground water under the right hereby confirmed for the purposes aforesaid, is limited to an amount actually beneficially used for said purposes, and shall not exceed 500 gallons per minute; acre-feet per year to be restricted to actual amount of water used to fill and supply the proposed log pond. ~~not to exceed ..... acre~~

A description of the lands to which such ground water right is appurtenant, and the place where such water is put to beneficial use, is as follows:

A tract of land in the NE¼ of the NW¼ of Sec. 25, Twp. 35 N., Rge. 4 E.W.M., Skagit County, Washington, described as follows: Commencing on the South line of a proposed railroad avenue, 342.9 feet West and 6 feet South of the Northeast corner of Block 56 of First Addition to Sedro; thence South 52°51' East 420 feet; thence South 37°09' West 650 feet, more or less, to the South line of the NE¼ of the NW¼ of Sec. 25, Twp. 35 N., Rge. 4 E.W.M.; thence West 215 feet, approximately, to the right-of-way of the Northern Pacific Railway Company; thence Northerly along the East line of said right-of-way of the Northern Pacific Railway Company, to a point intersecting the North line of said tract projected Northwesterly to said Northern Pacific Railway Company's right-of-way; thence South 52°51' East to the point of beginning; ~~AND~~ the following described tract: Commencing on the South line of proposed railroad avenue 342.9 feet West and 6 feet South of the Northeast corner of Block 56 of First Addition to Sedro;

Thence S. 52°51' East 200 feet;
Thence S. 37°09' West 200 feet;
Thence N. 52°51' West 200 feet;
Thence N. 37°09' East 200 feet;

to point of beginning; EXCEPTING THEREFROM an easement for truck road and log dump on the Southerly side of said tract above flood stage.

The right to the use of the ground water aforesaid hereby confirmed is restricted to the lands or place of use herein described, except as provided in Sections 6 and 7, Chapter 122, Laws of 1929.

WITNESS the seal and signature of the State Supervisor of Water Resources affixed this 29th day of February, 19 52.

State Supervisor of Water Resources

ENGINEERING DATA
O.K. MSa

STATE OF WASHINGTON
DEPARTMENT OF WATER RESOURCES
DIVISION OF WATER MANAGEMENT

RECEIVED
DEPARTMENT OF ECOLOGY
JAN-5 71002798
CASH___ OTHER ✓ NONE___

WATER RIGHT CLAIM

1 NAME DONIVAN JAMES

ADDRESS 1106 BORSETH ST.

SEDRO-WOOLLEY, WASH. ZIP CODE 98284

2 SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED GROUND WATER (SURFACE OR GROUND WATER)

W.R.I.A. 03 (LEAVE BLANK)

A IF GROUND WATER, THE SOURCE IS SHALLOW WELL ~~OR DEEP~~

B IF SURFACE WATER, THE SOURCE IS ———

3 THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED.

A QUANTITY OF WATER CLAIMED INSTANTANEOUS PRESENTLY USED 450 gallons per min.
(CUBIC FEET PER SECOND OR GALLONS PER MINUTE)

B. ANNUAL QUANTITY CLAIMED TWO [redacted] ACRE PRESENTLY USED 325,850 GALLONS
ACRE FEET PER YEAR

C IF FOR IRRIGATION ACRES CLAIMED ——— PRESENTLY IRRIGATED ———

D TIME(S) DURING EACH YEAR WHEN WATER IS USED. Jan 1 to JAN. 1st - all year round

4 DATE OF FIRST PUTTING WATER TO USE 1st MONTH JANUARY YEAR 1930

5 LOCATION OF THE POINT(S) OF DIVERSION WITHDRAWAL # 750 FEET EAST AND
165 FEET NORTH FROM THE ~~SW~~ S.W. CORNER OF SECTION 24 ~~35~~
BEING WITHIN SW¼ SW¼ OF SECTION 24 T 35 N. R 4E (~~E or W~~) W.M

IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY LOT ——— BLOCK ——— OF
GIVE NAME OF PLAT OR ADDITION

6 LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED DEED, [redacted] COM 448'10" W. and 110' N. of SE COR. of SW¼ of SW¼ TH N. 110' W. 205' S. 110' TH E TO BEG. [redacted] 24 35 4W SW101 .16 P2

COUNTY SKAGIT

7 PURPOSE(S) FOR WHICH WATER IS USED HOUSEHOLDS—TWO

8 THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED. COMMON LAW.

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE

DATE RETURNED REGISTRY NUMBER

JAN-5 71002040 < THIS HAS BEEN ASSIGNED WATER RIGHT CLAIM REGISTRY NO

Glen H. Fiedler

ASSISTANT DIRECTOR DIVISION OF WATER MANAGEMENT DEPARTMENT OF WATER RESOURCES

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

X Donivan James

DATE Jan. 4, 1971

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW

1106 BORSETH ST.
SEDRO-WOOLLEY, WASH. 98284

☐ ADDITIONAL INFORMATION AS TO WATER QUALITY IS AND OR ADDITIONAL INFORMATION IS AVAILABLE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

[redacted]
DEPARTMENT OF WATER RESOURCES
DIVISION OF WATER MANAGEMENT
[redacted]

STATE OF WASHINGTON
DEPARTMENT OF WATER RESOURCES
DIVISION OF WATER MANAGEMENT

WATER RIGHT CLAIM

RECEIVED
DEPARTMENT OF ECOLOGY
FEB 16 71 003603
CASH___ OTHER___ NONE___

1. NAME Leonard Crisman

ADDRESS 305 W Bennett

Sedro Woolley, Wash ZIP CODE 98284

2. SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED: Ground
(SURFACE OR GROUND WATER)

W.R.I.A. 03
(LEAVE BLANK)

A. IF GROUND WATER, THE SOURCE IS Well

B IF SURFACE WATER, THE SOURCE IS

3. THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:

A. QUANTITY OF WATER CLAIMED 5 1/2 PRESENTLY USED 5 1/2
(~~CUBIC FEET PER SECOND~~ OR GALLONS PER MINUTE)

B. ANNUAL QUANTITY CLAIMED 1.6 PRESENTLY USED 1.6
(ACRE FEET PER YEAR)

C. IF FOR IRRIGATION, ACRES CLAIMED 1 city lot PRESENTLY IRRIGATED 1 city lot

D. TIME(S) DURING EACH YEAR WHEN WATER IS USED: June Thru Sept.

4. DATE OF FIRST PUTTING WATER TO USE: ____ MONTH July YEAR 1970

5 LOCATION OF THE POINT(S) OF DIVERSION/WITHDRAWAL. ____ FEET ____ AND

____ FEET ____ FROM THE ____ CORNER OF SECTION ____

BEING WITHIN ____ OF SECTION 26 T. 35 N. ____ R 4 E (E. OR W.) W.M.

IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, LOT 3 BLOCK 4 OF

Susan Taylor Add. To Sedro Woolley
(GIVE NAME OF PLAT OR ADDITION)

6. LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED.

Lot 3, Block 4, Susan Taylor Addition to Sedro Woolley as per plat recorded in Volume 6 of Plats, page 45, Records of Skagit County.

COUNTY Skagit

7. PURPOSE(S) FOR WHICH WATER IS USED: Irrigation

8. THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED. Appropriation

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE.

DATE RETURNED REGISTRY NUMBER

FEB 16 71 002578 < THIS HAS BEEN ASSIGNED WATER RIGHT CLAIM REGISTRY NO

John H. Lindberg

ASSISTANT DIRECTOR DIVISION OF WATER MANAGEMENT - DEPARTMENT OF WATER RESOURCES

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

X Leonard Crisman

DATE Feb 12 1971

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW

ADDITIONAL INFORMATION RELATIVE TO WATER QUALITY AND OR WELL CONSTRUCTION AVAILABLE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

RETURN ALL THREE COPIES OF THIS CLAIM AND THE FILING FEE TO
DEPARTMENT OF WATER RESOURCES
DIVISION OF WATER MANAGEMENT
[illegible] AVE. BUILDING [illegible]

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION

WATER RIGHT CLAIM

RECEIVED
DEPARTMENT OF ECOLOGY
OCT-5 71008084
CASH___ OTHER✓ NONE___

RECEIVED
DEPARTMENT OF ECOLOGY
OCT 12 71008179

1. NAME Florence L. Burns

ADDRESS 413 Moore ST
Sedro Wooley Wn ZIP CODE 98284

2 SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED: Ground ✓
(SURFACE OR GROUND WATER) NONE

W.R.I.A 03
(LEAVE BLANK)

A IF GROUND WATER THE SOURCE IS Driven Well Point & Pump

B IF SURFACE WATER, THE SOURCE IS

3 THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:

A. QUANTITY OF WATER CLAIMED 12 (GALLONS PER DAY OR GALLONS PER MINUTE) PRESENTLY USED 8

B. ANNUAL QUANTITY CLAIMED 4 acre feet (ACRE FEET PER YEAR) PRESENTLY USED 4 acre feet

C IF FOR IRRIGATION, ~~ACRES~~ Lots CLAIMED 2 1/2 PRESENTLY IRRIGATED 2 1/2

D. TIME(S) DURING EACH YEAR WHEN WATER IS USED: April to November

4 DATE OF FIRST PUTTING WATER TO USE MONTH April YEAR 1941

5 LOCATION OF THE POINT(S) OF DIVERSION, WITHDRAWAL: 42'-6" FEET West AND 27'
FEET South FROM THE NE Corner Lot #1 CORNER OF ~~SECTION~~
BEING WITHIN ~~24~~ Block 24 OF SECTION 26 T. 35 N. R. 4 E. (E. ~~W.~~) W.M.
IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, LOT ~~1~~ 1 BLOCK 26 OF
Junction Add To Sedro
(GIVE NAME OF PLAT OR ADDITION)

6. LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED: Lots # 1-2 3 1/2 of Lot # 3

COUNTY Skagit

7. PURPOSE(S) FOR WHICH WATER IS USED Domestic and Irrigation

8 THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED: Appropriation

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OF MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE.

DATE RETURNED THIS HAS BEEN ASSIGNED
WATER RIGHT CLAIM REGISTRY NO.

OCT 12 71 006096

DIRECTOR, DEPARTMENT OF ECOLOGY

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

X Florence L Burns

DATE Oct 5 - 1971

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW.

☐ ADDITIONAL INFORMATION RELATING TO WATER QUALITY AND/OR WELL CONSTRUCTION IS AVAILABLE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

ORIGINAL DWR

RETURN ALL THREE COPIES WITH CARBONS INTACT ALONG WITH YOUR FEE TO
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION
P.O. BOX 829 OLYMPIA WASHINGTON 9850

STATE OF WASHINGTON
DEPARTMENT OF WATER RESOURCES
DIVISION OF WATER MANAGEMENT

WATER RIGHT CLAIM

RECEIVED
DEPARTMENT OF ECOLOGY
OCT -5 71008085
CASH ___ OTHER ✓ NONE ___

RECEIVED
DEPARTMENT OF ECOLOGY
OCT 12 71008178
CASH ___ OTHER ✓ NONE ___

1. NAME Harry W. Osborne
ADDRESS 402 Moore St.
Sedro Woolley, Wash. ZIP CODE 98284

2. SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED: Ground (SURFACE OR GROUND WATER)
W.R.I.A 03 (LEAVE BLANK)

A. IF GROUND WATER, THE SOURCE IS Driven Well Point and Pump.

B. IF SURFACE WATER, THE SOURCE IS ___

3 THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:

A QUANTITY OF WATER CLAIMED 18 (CUBIC FEET PER SECOND OR GALLONS PER MINUTE) PRESENTLY USED 8

B ANNUAL QUANTITY CLAIMED 4 acre feet (ACRE FEET PER YEAR) PRESENTLY USED 4 acre feet

C IF FOR IRRIGATION ACRES CLAIMED 1 acre PRESENTLY IRRIGATED 1 acre

D TIME(S) DURING EACH YEAR WHEN WATER IS USED April to Nov

4 DATE OF FIRST PUTTING WATER TO USE ___ MONTH May 1 YEAR 1937

5. LOCATION OF THE POINT(S) OF DIVERSION WITHDRAWAL: 72 FEET North AND 56 FEET East FROM THE S.W. CORNER OF ~~SECTION~~ Lot 2

BEING WITHIN ___ OF SECTION 24 T. 35 N. ___ R. 4 (E. ~~W.~~) W.M.

IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, LOT 6 BLOCK 27 OF Junction add To Sedro (GIVE NAME OF PLAT OR ADDITION)

6 LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED: Lots 2-3-6-7 Block 27 Junction add To Sedro and Lot #1 Block #1 Rosedale Gorden Tracts

COUNTY Skagit

7. PURPOSE(S) FOR WHICH WATER IS USED: Domestic and Irrigation

8. THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED: Appropriation

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE.

DATE RETURNED REGISTRY NUMBER

OCT 12 71 006105 THIS HAS BEEN ASSIGNED WATER RIGHT CLAIM REGISTRY NO.

J. A. Biggs
~~ASSISTANT~~ DIRECTOR ~~DIVISION OF WATER MANAGEMENT~~ DEPARTMENT OF ~~WATER RESOURCES~~ ECOLOGY

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

X Harry Osborne

DATE Oct 1-1971

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE, PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW

☐ ADDITIONAL INFORMATION RELATING TO WATER QUALITY AND/OR WELL CONSTRUCTION IS AVAILABLE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

ORIGINAL
COPY

RETURN ALL THREE COPIES WITH CARBONS INTACT ALONG WITH YOUR FEE TO
DEPARTMENT OF WATER RESOURCES
DIVISION OF WATER MANAGEMENT
UNION AVE BUILDING-OLYMPIA, WASHINGTON 9850

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION

WATER RIGHT CLAIM

RECEIVED
DEPARTMENT OF ECOLOGY
MAR-6 72011691
CASH___ OTHER ✓ NONE___

1. NAME Allison J . Tucker

ADDRESS P. O. Box 189 434 Warner St.

Sedro Woolley, Wash. ZIP CODE 98284

2. SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED: Ground (SURFACE OR GROUND WATER)

W.R.I.A. 03 (LEAVE BLANK)

A. IF GROUND WATER, THE SOURCE IS ~~Skagit River~~ A well

B. IF SURFACE WATER, THE SOURCE IS

3. THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:

A. QUANTITY OF WATER CLAIMED 5 G.P.M. (~~CUBIC FEET PER SECOND~~ OR GALLONS PER MINUTE) PRESENTLY USED 5 G. P.M.

B. ANNUAL QUANTITY CLAIMED One (1) Acre Foot (ACRE FEET PER YEAR) PRESENTLY USED One (1) Acre Foot

C. IF FOR IRRIGATION, ACRES CLAIMED _____ PRESENTLY IRRIGATED _____

D. TIME(S) DURING EACH YEAR WHEN WATER IS USED: 12 Months Each Year

4. DATE OF FIRST PUTTING WATER TO USE: MONTH Unknown YEAR 1903

5. LOCATION OF THE POINT(S) OF DIVERSION/WITHDRAWAL: 38 FEET South AND 19½ FEET East FROM THE NW corner of Lot 12 (less the West 11' thereof) CORNER OF SECTION

BEING WITHIN _____ OF SECTION 24, T. 35 N., R. 4E (E.OR W.) W.M.

IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, LOT 11 & 12, less 11' West of 12 BLOCK 33 OF First Addition to the Town of Sedro
(GIVE NAME OF PLAT OR ADDITION)

6. LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED: Lot 12, EXCEPT the West 11 feet thereof, and all of Lot 11 in Block 33, "First Addition to the Town of Sedro", according to the plat recorded in Volume 3 of Plats, on page 29, records of Skagit County, Washington.

COUNTY Skagit

7. PURPOSE(S) FOR WHICH WATER IS USED: Domestic Supply

8. THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED: Vested Rights

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE.

DATE RETURNED THIS HAS BEEN ASSIGNED WATER RIGHT CLAIM REGISTRY NO.

MAR-6 72 008810

John Biggs
DIRECTOR - DEPARTMENT OF ECOLOGY

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

X Allison J. Tucker

DATE March 2, 1972

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE, PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW.

☐ ADDITIONAL INFORMATION RELATING TO WATER QUALITY AND/OR WELL CONSTRUCTION IS AVAILABLE.

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

ORIGINAL DWR

RETURN ALL THREE COPIES WITH CARBONS INTACT, ALONG WITH YOUR FEE TO:
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION
P.O. BOX 829 OLYMPIA, WASHINGTON 98501

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION

WATER RIGHT CLAIM

RECEIVED
DEPARTMENT OF ECOLOGY
MAR 27 72 013331
BASIN ___ OTHER ✓

1. NAME Jack E Taylor
ADDRESS 125 North Reed st
Sedro Woolley Wash. ZIP CODE 98284

2. SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED: Ground (SURFACE OR GROUND WATER)
WATER W.R.I.A. 03 (LEAVE BLANK)

A. IF GROUND WATER, THE SOURCE IS Well

B. IF SURFACE WATER, THE SOURCE IS ___

3. THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:
A QUANTITY OF WATER CLAIMED 1 (~~CUBIC FEET PER SECOND~~ OR GALLONS PER MINUTE) PRESENTLY USED 1
B. ANNUAL QUANTITY CLAIMED 1.6 (ACRE FEET PER YEAR) PRESENTLY USED 1.6
C. IF FOR IRRIGATION, ACRES CLAIMED 1 PRESENTLY IRRIGATED 1
D. TIME(S) DURING EACH YEAR WHEN WATER IS USED: May 1 - Oct 30

4 DATE OF FIRST PUTTING WATER TO USE. MONTH July YEAR 1964

5. LOCATION OF THE POINT(S) OF DIVERSION/WITHDRAWAL: ___ FEET ___ AND ___
FEET ___ FROM THE ___ CORNER OF SECTION ___
BEING WITHIN ___ OF SECTION 24 T. 35 N., R. 4E (E.OR W.) W.M.
IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, LOT 1 BLOCK 2 OF
Rosedale Garden Tracts Sedro Woolley Wn.
(GIVE NAME OF PLAT OR ADDITION)

6. LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED: SAME

COUNTY Skagit

7. PURPOSE(S) FOR WHICH WATER IS USED: Irrigation

8. THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED: Appropriation

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE

DATE RETURNED THIS HAS BEEN ASSIGNED WATER RIGHT CLAIM REGISTRY NO
MAR 28 72 009992

John Biggs
DIRECTOR - DEPARTMENT OF ECOLOGY

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

X Jack E. Taylor
DATE 3-24-72

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW

☐ ADDITIONAL INFORMATION RELATING TO WATER QUALITY AND/OR WELL CONSTRUCTION IS AVAILABLE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

ORIGINAL DWR

RETURN ALL THREE COPIES WITH CARBONS INTACT ALONG WITH YOUR FEE TO
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION
P.O. BOX 829 OLYMPIA WASHINGTON 98501

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION

WATER RIGHT CLAIM

APR 13 72 0 10955

1. NAME Charles F Roether

ADDRESS Route 4 Box 209

Sedro-Woolley, Wash ZIP CODE 98284

2. SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED: Ground Water (SURFACE OR GROUND WATER)

W.R.I.A. 03 (LEAVE BLANK)

A. IF GROUND WATER, THE SOURCE IS Drilled Well

B. IF SURFACE WATER, THE SOURCE IS _____

3. THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:

A. QUANTITY OF WATER CLAIMED 109 gpm 4000 Daily (CUBIC FEET PER SECOND OR GALLONS PER MINUTE) PRESENTLY USED 2500 Daily

B. ANNUAL QUANTITY CLAIMED 2 a.f. (ACRE FEET PER YEAR) PRESENTLY USED _____

C. IF FOR IRRIGATION, ACRES CLAIMED 1/2 Acre Lawn PRESENTLY IRRIGATED 1/2 Acre

D. TIME(S) DURING EACH YEAR WHEN WATER IS USED: All year round Domestic - 3 Mo Irrigation

4. DATE OF FIRST PUTTING WATER TO USE: MONTH _____ YEAR 1901

5. LOCATION OF THE POINT(S) OF DIVERSION/WITHDRAWAL: 96 FEET East AND 57 FEET North FROM THE South West CORNER OF SECTION 24

BEING WITHIN _____ OF SECTION 24 T. 35 N., R. 4E (E. OR W.) W.M.

IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, LOT _____ BLOCK _____ OF _____

(GIVE NAME OF PLAT OR ADDITION)

6. LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED: Tax 42 1/2 W 151' of Fol Dist Ft Com At A Pt 15' E of S W Cor of NW 1/4 of NW 1/4 Th E 29 Rds 1 1/2' Th N 244' Sec 24 Twp 35 Rg 4 EWM Rd S-W Sch 101 Acr 1.07

COUNTY Skagit

7. PURPOSE(S) FOR WHICH WATER IS USED: Domestic + Lawn Irrigation

8. THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED: Appropriation

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE.

DATE RETURNED THIS HAS BEEN ASSIGNED WATER RIGHT CLAIM REGISTRY NO.

APR 13 72 0 10955

DIRECTOR - DEPARTMENT OF ECOLOGY

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

X Charles F Roether

DATE 4-12-72

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW.

☐ ADDITIONAL INFORMATION RELATING TO WATER QUALITY AND/OR WELL CONSTRUCTION IS AVAILABLE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

ORIGINAL DWR

RETURN ALL THREE COPIES WITH CARBONS INTACT ALONG WITH YOUR FEE TO:
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION
P O BOX 829 OLYMPIA WASHINGTON 98501

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION

WATER RIGHT CLAIM

1. NAME Roger N Jensen

ADDRESS 600 Central

Sedro-Woolley, Wa. ZIP CODE 98284

2. SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED: Ground
(SURFACE OR GROUND WATER)

W.R.I.A. 03
(LEAVE BLANK)

A. IF GROUND WATER, THE SOURCE IS Well (1½" Sand point driven)

B. IF SURFACE WATER, THE SOURCE IS _____

3. THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:

A. QUANTITY OF WATER CLAIMED 10 GPM PRESENTLY USED 6 GPM
(CUBIC FEET PER SECOND OR GALLONS PER MINUTE)

B. ANNUAL QUANTITY CLAIMED 2 AC-FT PRESENTLY USED ½ Ac-Ft
(ACRE FEET PER YEAR)

C. IF FOR IRRIGATION, ACRES CLAIMED 1 (ONE) PRESENTLY IRRIGATED 1 (ONE)

D. TIME(S) DURING EACH YEAR WHEN WATER IS USED: March 15 to November 1

4. DATE OF FIRST PUTTING WATER TO USE: MONTH July YEAR 1972

5. LOCATION OF THE POINT(S) OF DIVERSION/WITHDRAWAL: 100 FEET West AND 290

FEET South FROM THE E'ly line on E-W ℄ ~~CORNER~~ OF SECTION 24

BEING WITHIN NW¼ of SE¼ OF SECTION 24, T. 35 N., R. 4E (E~~AST~~.) W.M.

IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, LOT 16 BLOCK 7 OF

Replat of the Junction Addition to Sedro
(GIVE NAME OF PLAT OR ADDITION)

6. LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED:

Lots 16-17 & 18 of above Block & recorded Plat in the City of Sedro-Woolley, located in NW¼ of ~~SE¼~~ SE¼ Sec 24, Twp 35N, Rge 4E WM.

COUNTY SKAGIT

7. PURPOSE(S) FOR WHICH WATER IS USED: IRRIGATION (Yard, lawn, garden)

8. THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED: riparian (fee simple owner)

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE.

DATE RETURNED JUL 17 72 THIS HAS BEEN ASSIGNED WATER RIGHT CLAIM REGISTRY NO. 015828

John Biggs
DIRECTOR - DEPARTMENT OF ECOLOGY

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

X Roger N. Jensen

DATE July 15 1972

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE, PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW.

☐ ADDITIONAL INFORMATION RELATING TO WATER QUALITY AND/ OR WELL CONSTRUCTION IS AVAILABLE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

ORIGINAL DWR

RETURN ALL THREE COPIES WITH CARBONS INTACT, ALONG WITH YOUR FEE TO:
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION
P O BOX 829 OLYMPIA WASHINGTON 98504

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION

WATER RIGHT CLAIM

1. NAME Mrs Ida L Beaman

ADDRESS 426 Nelson

Sedro-Woolley ZIP CODE 98284

2. SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED. GROUND (SURFACE OR GROUND WATER)

W.R.I.A. 03 (LEAVE BLANK)

A. IF GROUND WATER, THE SOURCE IS DRIVEN WELL

B. IF SURFACE WATER, THE SOURCE IS —

3 THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:

A QUANTITY OF WATER CLAIMED 800 GAL. PER DAY PRESENTLY USED 200 GAL PER DAY (CUBIC FEET PER SECOND OR GALLONS PER MINUTE)

B. ANNUAL QUANTITY CLAIMED .55 AF PER YEAR PRESENTLY USED .22 AF PER YEAR (ACRE FEET PER YEAR)

C. IF FOR IRRIGATION, ACRES CLAIMED — PRESENTLY IRRIGATED —

D. TIME(S) DURING EACH YEAR WHEN WATER IS USED 1/1 TO 12/31

4. DATE OF FIRST PUTTING WATER TO USE: MONTH MAY YEAR 1946

5. LOCATION OF THE POINT(~~S~~) OF ~~DIVERSION~~/WITHDRAWAL: 400 FEET North AND 2000 FEET West FROM THE SE CORNER OF SECTION 24

BEING WITHIN SE 1/4 OF SECTION 24 T 35 N., R. 4 E (E.or~~W.~~) W.M.

IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, LOT 13 & E½ of 14 BLOCK 59 OF FIRST ADDITION TO THE TOWN OF SEDRO (GIVE NAME OF PLAT OR ADDITION)

6. LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED: LOT THIRTEEN AND THE EAST HALF OF LOT FOURTEEN IN BLOCK FIFTY-NINE, FIRST ADDITION OF THE TOWN OF SEDRO

COUNTY SKAGIT

7. PURPOSE(S) FOR WHICH WATER IS USED: DOMESTIC

8. THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED: APPROPRIATION

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE

DATE RETURNED THIS HAS BEEN ASSIGNED WATER RIGHT CLAIM REGISTRY NO.

JAN 16 73 02 1330

John Biggs

DIRECTOR - DEPARTMENT OF ECOLOGY

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

X Ida L Beaman

DATE 10-26-72

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW

☐ ADDITIONAL INFORMATION RELATING TO WATER QUALITY AND/OR WELL CONSTRUCTION IS AVAILABLE

A FEE OF $7.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

ORIGINAL DWR

RETURN ALL THREE COPIES WITH CARBONS INTACT ALONG WITH YOUR FEE TO
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION
P O BOX 829 OLYMPIA WASHINGTON 98501

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION

WATER RIGHT CLAIM

RECEIVED
DEPARTMENT OF ECOLOGY
MAY -4 7303824
CASH__ OTHER__ NONE__

1. NAME Clyde Belles
ADDRESS Route 4 Box 180
Sedro-Woolley, Wash. ZIP CODE 98284

2. SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED: Ground Water (SURFACE OR GROUND WATER)
W.R.I.A. 03 (LEAVE BLANK)

A. IF GROUND WATER, THE SOURCE IS A Well

B. IF SURFACE WATER, THE SOURCE IS

3. THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:
A QUANTITY OF WATER CLAIMED 10 gpm (CUBIC FEET PER SECOND OR GALLONS PER MINUTE) PRESENTLY USED Some
B. ANNUAL QUANTITY CLAIMED 10 (ACRE FEET PER YEAR) PRESENTLY USED
C. IF FOR IRRIGATION, ACRES CLAIMED PRESENTLY IRRIGATED None
D. TIME(S) DURING EACH YEAR WHEN WATER IS USED: all year

4 DATE OF FIRST PUTTING WATER TO USE: MONTH April YEAR 1942

5. LOCATION OF THE POINT(S) OF DIVERSION/WITHDRAWAL: 250 FEET South AND
FEET FROM THE North West CORNER OF SECTION ¼ NE¼
BEING WITHIN Then 50' E From W line Fence OF SECTION 24 T. 35 N., R. 4 E (E. OR W.) W.M.

IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, LOT BLOCK OF
(GIVE NAME OF PLAT OR ADDITION)

6. LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED: That Part of NE¼ NW¼ of Sec 24 Township thirty Five (35) North Range Four (4) East of the Willamette meridian, Lying West of Northern Pacific Railway Right of Way and South of the Puget Sound & Baker River Railway Right of Way.
COUNTY: Skagit

7. PURPOSE(S) FOR WHICH WATER IS USED: Domestic + water for stock

8. THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED: Appropriation

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE.

DATE RETURNED THIS HAS BEEN ASSIGNED WATER RIGHT CLAIM REGISTRY NO.
MAY 2 3 7302853

DIRECTOR - DEPARTMENT OF ECOLOGY

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

X Clyde Belles

DATE 5-3-73

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW

☐ ADDITIONAL INFORMATION RELATING TO WATER QUALITY AND OR WELL CONSTRUCTION IS AVAILABLE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

RETURN ALL THREE COPIES WITH CARBONS INTACT ALONG WITH YOUR FEE TO
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION
OLYMPIA, WASHINGTON 98504

ORIGINAL DWR

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION

WATER RIGHT CLAIM

RECEIVED
DEPARTMENT OF ECOLOGY
MAY -8 7303840 4
CASH___OTHER___NONE___

1. NAME Marie Elva Langlois (Mrs)
ADDRESS 813 Central Street
Sedro Woolley Wash ZIP CODE 98284

2. SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED: Ground (SURFACE OR GROUND WATER)
W.R.I.A. 03 (LEAVE BLANK)

A. IF GROUND WATER, THE SOURCE IS well

B. IF SURFACE WATER, THE SOURCE IS

3. THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:

A. QUANTITY OF WATER CLAIMED 10GPM PRESENTLY USED Same
(CUBIC FEET PER SECOND OR GALLONS PER MINUTE)

B. ANNUAL QUANTITY CLAIMED 1 PRESENTLY USED "
(ACRE FEET PER YEAR)

C. IF FOR IRRIGATION, ACRES CLAIMED PRESENTLY IRRIGATED

D. TIME(S) DURING EACH YEAR WHEN WATER IS USED: continuously

4. DATE OF FIRST PUTTING WATER TO USE: MONTH YEAR 1934

5. LOCATION OF THE POINT(S) OF DIVERSION/WITHDRAWAL: FEET AND
FEET FROM THE CORNER OF SECTION
BEING WITHIN OF SECTION 24 T. 35 N., R. 4E (E.OR W.) W.M.
IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, LOT BLOCK OF
(GIVE NAME OF PLAT OR ADDITION)

6. LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED: That portion of Tract 7 Plate #1 Sedro Home Acreage Skagit Co, Wash, as per plat recorded in VOLUME 3 of Plats page 39 Beginning 186 feet North of the North LINE of State Street and a point East of the East LINE of Central AVENUE; thence East 120 feet North parallel with Central AVENUE 40 feet; thence East 120 feet; thence South 40 feet; thence West 120 feet to the point of beginning

COUNTY Skagit

7. PURPOSE(S) FOR WHICH WATER IS USED: House hold

8. THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED: Deed to the property with a $700.00 Mortgage on it to NBC of S.W.

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE.

DATE RETURNED THIS HAS BEEN ASSIGNED WATER RIGHT CLAIM REGISTRY NO.

JUN 11 7302970 9

DIRECTOR, DEPARTMENT OF ECOLOGY

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

X Marie E Langlois

DATE May 7, 1973

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW

☐ ADDITIONAL INFORMATION RELATING TO WATER QUALITY AND/OR WELL CONSTRUCTION IS AVAILABLE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

RETURN ALL THREE COPIES WITH CARBONS INTACT ALONG WITH YOUR FEE TO
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION
OLYMPIA, WASHINGTON 98504

ORIGINAL DWR

State of Washington
Department of Ecology

Water Right Claims Registration

Water Right Claim

RECEIVED
AUG -9 73045594
OR OTHER NONE
(Short Form) 03

Name H.F. CINQMARS

Address 102 TALCOTT ST.

SEDRO-WOOLLEY WA Zip Code 98284

Phone No 595-2295

1) Source from which the right to take and make use of water is claimed Surface Water X Ground Water

If surface water, please indicate source; give name if known

WELL

(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☐ Domestic ☐ Stockwatering X Irrigation (lawn and garden) ☐ Other Use (specify) _____

3) Legal description of lands on which water is used.

LOT 35 AND THE WEST 20 FT. OF LOT 34 BLOCK 48 FIRST ADDITION TO THE TOWN OF SEDRO, ACCORDING TO THE RECORDED PLAT THEREOF IN THE OFFICE OF THE AUDITOR OF SKAGIT CO. WASHINGTON IN VOLUME 3 OF PLATS, PAGE 29

If located within the limits of a recorded platted property

Lot 35-34 Block 48 of FIRST ADDITION, SEDRO
(Give name of plat or addition)

In addition, please indicate Sec 24 T 35 N R 4E E W.W.M

County in which lands are located SKAGIT

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee

Date Registered

This has been assigned
Water Right Claim Registry No.

SEP 173034923

Director, Department of Ecology

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X H.F. Cinq Mars

Date August 7-1973

If claim filed by designated representative print or type full name and mailing address of agent below.

Additional information relating to water quality and/or well construction is available

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to
Department of Ecology Water Right Claims Registration Olympia, Washington 98504

ORIGINAL DOE

State of Washington
Department of Ecology

RECEIVED
DEPARTMENT OF ECOLOGY
AUG 31 730486 30
CASH___ OTHER___ NONE___

Water Right Claims Registration

Water Right Claim

Name Mrs. Irene F. Trudeau (Short Form) 03

Address Route #4 Box 215

Sedro Woolley, Washington Zip Code 98284 Phone No. 856 - 8460

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water XXX Ground Water

If surface water, please indicate source; give name if known:

(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☐ Domestic ☐ Stockwatering XXX Irrigation (lawn and garden) ☐ Other Use (specify)

3) Legal description of lands on which water is used:

Sec 23 TWP 35 RGE 04 AC. in Sedro Woolley
S23 T35 R4
DT 14
TAX 10 COMM 20' N & 509' E OF SW COR OF SE 1/4 of NE 1/4 TH N 320' E 129' 5 S 320' TH W TO PCB

If located within the limits of a recorded platted property:

Lot ___ Block ___ of ___ (Give name of plat or addition)

In addition, please indicate Sec. 23 T. 35 N. R. 4 E E/W, W.M.

County in which lands are located Skagit

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date Registered

This has been assigned Water Right Claim Registry No.

OCT 15 7303/485

Director, Department of Ecology

John Biggs

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X Mrs. Irene Trudeau

Date 30 August 1973

If claim filed by designated representative print or type full name and mailing address of agent below.

☒ Additional information relating to water quality and/or well construction is available.

ORIGINAL DOE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

State of Washington
Department of Ecology

RECEIVED
DEPARTMENT OF ECOLOGY
SEP 7 73 04974

CASH ___ OTHER ___ NONE ✓

Water Right Claims Registration

Water Right Claim

(Short Form) Ø3

Name John R. Coward

Address 308 Moore St

Sedro Woolley Zip Code 98284

Phone No. 855-3915

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water ☑ Ground Water

If surface water, please indicate source; give name if known:

_____

(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☑ Domestic ☑ Stockwatering ☑ Irrigation (lawn and garden) ☐ Other Use (specify) _____

3) Legal description of lands on which water is used: _____

JUNCTION TO Sedro
LOT 8 BLK 24
E ½ of 1-4-5 8

If located within the limits of a recorded platted property:

Lot 8 Block 24 of JUNCTION TO Sedro
(Give name of plat or addition)

In addition, please indicate Sec. 24 T. 35 N., R. 4 E E/W, W.M.

County in which lands are located SKAGIT

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date Registered

This has been assigned Water Right Claim Registry No.

OCT 25 73038566

Director, Department of Ecology

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X John R. Coward

Date 5-9-73

If claim filed by designated representative print or type full name and mailing address of agent below.

☐ Additional information relating to water quality and/or well construction is available.

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

ORIGINAL DOE

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION

WATER RIGHT CLAIM

RECEIVED
DEPARTMENT OF ECOLOGY
AUG 29 73 048419
CASH ___ OTHER X NONE ___
recd 10/23

1. NAME Wm A. Rivord
ADDRESS 504 Talcott St.
Sedro Woolley, Wa. ZIP CODE 98284

2. SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED: ground (SURFACE OR GROUND WATER)
W.R.I.A. 03 (LEAVE BLANK)

A. IF GROUND WATER, THE SOURCE IS shallow well

B. IF SURFACE WATER, THE SOURCE IS ___

3. THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:

A. QUANTITY OF WATER CLAIMED 12 g.p.m. (~~CUBIC FEET PER SECOND~~ OR GALLONS PER MINUTE) PRESENTLY USED 12 g.p.m.

B. ANNUAL QUANTITY CLAIMED Less than 1 acre feet (ACRE FEET PER YEAR) PRESENTLY USED Less than 1 acre feet

C. IF FOR IRRIGATION, ACRES CLAIMED 1/3 acre PRESENTLY IRRIGATED none

D. TIME(S) DURING EACH YEAR WHEN WATER IS USED: May 1 to Sept. 30

4. DATE OF FIRST PUTTING WATER TO USE: MONTH Sept. YEAR 1961

5. LOCATION OF THE POINT(S) OF DIVERSION/WITHDRAWAL: ___ FEET ___ AND ___ FEET ___ FROM THE ___ CORNER OF SECTION ___ BEING WITHIN ___ OF SECTION 24, T. 35 N., R. 4E (E.OR W.) W.M.

IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, LOT 18-19-20 BLOCK 45 OF First Addition to Sedro (GIVE NAME OF PLAT OR ADDITION)

6. LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED: Same as above
The pump is located near the center of Lot 18.

COUNTY Skagit

7. PURPOSE(S) FOR WHICH WATER IS USED: Lawn and plant irrigation

8. THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED: appropriation

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE.

DATE RETURNED ___ THIS HAS BEEN ASSIGNED WATER RIGHT CLAIM REGISTRY NO. OCT 05 73 038644

John Biggs
DIRECTOR - DEPARTMENT OF ECOLOGY

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

X William A. Rivord

DATE August 28, 1973

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE, PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW

☐ ADDITIONAL INFORMATION RELATING TO WATER QUALITY AND/ OR WELL CONSTRUCTION IS AVAILABLE.

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

ORIGINAL DWR

RETURN ALL THREE COPIES WITH CARBONS INTACT, ALONG WITH YOUR FEE TO:
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION
P.O. BOX 829 OLYMPIA, WASHINGTON 98504

State of Washington
Department of Ecology

RECEIVED
DEPARTMENT OF ECOLOGY
SEP 19 73051321
CASH ___ OTHER ✓ NONE ___

Water Right Claims Registration

Water Right Claim

Name Ray O. Bozell

Address 406 Moore St.,

Sedro Woolley, Wa. Zip Code 98284

(Short Form) 03

Phone No. 855-7973

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water ☒ Ground Water

If surface water, please indicate source; give name if known:

_____

(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☒ Domestic ☐ Stockwatering ☒ Irrigation (lawn and garden) ☐ Other Use (specify) _____

3) Legal description of lands on which water is used: Block 28, Lots 1, 2, 3, [redacted]
Replat of Junction Addition to Sedro

If located within the limits of a recorded platted property:

Lots 1, 2 & 3 Block 28 of _____
(Give name of plat or addition)

In addition, please indicate Sec. 24 T 35N N., R. 4E E/W. W.M.

County in which lands are located Skagit

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date Registered

This has been assigned Water Right Claim Registry No.

[redacted] 973040242

Director, Department of Ecology

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X Ray O Bozell

Date _____

If claim filed by designated representative print or type full name and mailing address of agent below.

_____

_____

☐ Additional information relating to water quality and/or well construction is available.

ORIGINAL DOE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION

WATER RIGHT CLAIM

1. NAME B. W. Davis

ADDRESS 308 West Bennett St.

Sedro Woolley Wn. ZIP CODE 98248

2. SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED: 03 (SURFACE OR GROUND WATER)

Ground Water W.R.I.A. (LEAVE BLANK)

A. IF GROUND WATER, THE SOURCE IS Well with Pump

B. IF SURFACE WATER, THE SOURCE IS

3. THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:

A. QUANTITY OF WATER CLAIMED 5 gpm. (CUBIC FEET PER SECOND OR GALLONS PER MINUTE) PRESENTLY USED 5 gpm

B. ANNUAL QUANTITY CLAIMED 1 Ac-Ft. (ACRE FEET PER YEAR) PRESENTLY USED 1 Ac-Ft

C. IF FOR IRRIGATION, ACRES CLAIMED One (1) PRESENTLY IRRIGATED One (1)

D. TIME(S) DURING EACH YEAR WHEN WATER IS USED. June thru Oct

4. DATE OF FIRST PUTTING WATER TO USE MONTH May YEAR 1956

5. LOCATION OF THE POINT S) OF DIVERSION/WITHDRAWAL 696.43 FEET East AND 45.0 FEET South FROM THE N W CORNER OF SECTION 25

BEING WITHIN NW¼ of NW¼ OF SECTION 25 T 35 N. R. 4E (E or W) W.M.

IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY LOT 3 BLOCK 1 OF "Susan Taylor Addition to Sedro Woolley"

(GIVE NAME OF PLAT OR ADDITION)

6. LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED

The East 110 Ft. of Lot 3, Block 1, "Susan Taylor Addition to Sedro Woolley" according to the recorded plat thereof in the office of the auditor of Skagit County, Washington, in Volume 6 of plats, page 43.

COUNTY Skagit

7. PURPOSE(S) FOR WHICH WATER IS USED: Irrigation

8. THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED Appropriation

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE.

DATE RETURNED THIS HAS BEEN ASSIGNED WATER [redacted]

DIRECTOR, DEPARTMENT OF ECOLOGY

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

X B W Davis

DATE 12/16/73

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW

ADDITIONAL INFORMATION RELATING TO WATER QUALITY AND OR WELL CONSTRUCTION MAY BE ABLE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

State of Washington
Department of Ecology

RECEIVED
DEPARTMENT OF ECOLOGY
FEB 1 1407145
CASH OTHER NONE

Water Right Claims Registration

Water Right Claim

Ø3

Name GARVEY L. TOLLIVER, JR.

Address 555 MOORE ST.

SEDRO WOOLLEY, WASH. Zip Code 98284 Phone No. 855- 4443

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water ☒ Ground Water

If surface water, please indicate source; give name if known:

(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used.

☒ Domestic ☐ Stockwatering ☒ Irrigation (lawn and garden) ☐ Other Use (specify)

3) Legal description of lands on which water is used

Lots 3 and 4, block 30, "Replat of Junction Addition to Sedro", according to the plat recorded in volume 3 of plats, page 48, records of Skagit County, Washington.

If located within the limits of a recorded platted property

Lot 3,4 Block 30 of "Replet of Junction Addition to Sedro"
(Give name of plat or addition)

In addition, please indicate Sec. 24 T 35 N R. 4 E E W.W.M.

County in which lands are located SKAGIT

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date Registered

This has been assigned Water Right Claim Registry No.

APR 27 058492

Director, Department of Ecology

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X Garvey L Tolliver Jr

Date January 29, 1974

If claim filed by designated representative print or type full name and mailing address of agent below.

☐ Additional information relating to water quality and/or well construction is available.

A FEE OF $200 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

ORIGINAL DOE

State of Washington
Department of Ecology

RECEIVED
DEPARTMENT OF ECOLOGY
FEB 4 1974 071752
CASH OTHER NONE
$3

Water Right Claims Registration

Water Right Claim

Name GARVEY L. TOLLIVER, SR.

Address 107 N.Central

Sedro Woolley, Wash. Zip Code 98284 Phone No. 856 4632

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water ☒ Ground Water

If surface water, please indicate source; give name if known:

_____
(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☒ Domestic ☐ Stockwatering ☒ Irrigation (lawn and garden) ☐ Other Use (specify) _____

3) Legal description of lands on which water is used: Part of the Northeast Quarter (NE¼) of the Northeast Quarter (NE¼) of Section twenty four (24), Township Thirty-five (35) North, Range 4, East of the Willamette Meridian, described as follows:
BEGINNING at a point 10 feet East and 214 feet North of the southwest corner of said northeast quarter of the northeast quarter (NE¼); thence East parallel with the south line of said subdivision, a distance of 94 feet to the true point of beginning of this description, said true point of beginning being the northeast (NE) corner of a tract heretofore conveyed by the grantors therein to the grantees herein, by deed dated April 12, 1960, and recorded in the office of the auditor of Skagit County, Washington, in Vol. 308 of Deeds, page 714; thence East 40 feet; thence south 74 feet; thence west 40 feet; thence north 74 feet, to the true point of beginning.

If located within the limits of a recorded platted property:

Lot _____ Block _____ of _____
(Give name of plat or addition)

In addition, please indicate Sec. 24 T. 35 N. R. 4 E/W. W.M.

County in which lands are located Skagit

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date Registered: APR 12 74

This has been assigned Water Right Claim Registry No. 059332

Director, Department of Ecology

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X G.L. Tolliver

Date January 30, 1974

If claim filed by designated representative print or type full name and mailing address of agent below.

_____

_____

☐ Additional information relating to water quality and/or well construction is available.

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

ORIGINAL DOE

State of Washington
Department of Ecology

RECEIVED
DEPARTMENT OF ECOLOGY
MAR 21 74 084249
CASH ___ CHECK ___ NONE ___

Water Right Claims Registration

Water Right Claim

Name PATRICK BAUGHMAN

Address 321 CENTRAL

SEDRO WOOLLEY Zip Code 98284

Phone No. 855-0603

$3

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water ☒ Ground Water
If surface water, please indicate source; give name if known:

_____
(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☐ Domestic ☐ Stockwatering ☒ Irrigation (lawn and garden) ☐ Other Use (specify) _____

3) Legal description of lands on which water is used: THE NORTH ½ OF TRACT 23 OF PLATE NO 2 SEDRO-HOME ACREAGE, SKAGIT COUNTY WASHINGTON AS PER PLAT RECORDED IN VOLUME 3 OF PLATS PAGE 60, RECORDS OF SKAGIT COUNTY.

If located within the limits of a recorded platted property:

Lot _____ Block _____ of _____
(Give name of plat or addition)

In addition, please indicate Sec. 24 T. 35 N. R. 4E E W.W.M.

County in which lands are located Skagit

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date Registered

This has been assigned Water Right Claim Registry No.

AUG 15 74 73059

Director, Department of Ecology

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

Patrick Baughman

Date 3-20-74

If claim filed by designated representative print or type full name and mailing address of agent below.

_____

_____

☐ Additional information relating to water quality and/or well construction is available.

ORIGINAL DOE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

State of Washington
Department of Ecology

RECEIVED
DEPARTMENT OF ECOLOGY
MAR 25 1974
CASH ___ OTHER ___ NONE ___

Water Right Claims Registration

Water Right Claim

Name A.L. PETTIS (Short Form) 03

Address 524 TALCOTT ST

SEDRO WOOLLEY WASH Zip Code 98284 Phone No. 855-3515

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water ☒ Ground Water
If surface water, please indicate source; give name if known:

_____
(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☐ Domestic ☐ Stockwatering ☒ Irrigation (lawn and garden) ☐ Other Use (specify) _____

3) Legal description of lands on which water is used: _____

If located within the limits of a recorded platted property:

Lot 4 Block 45 of First Addition to Sedro (Give name of plat or addition)

In addition, please indicate Sec. 2 T. 35 N. R. 4 E E/W.W.M.

County in which lands are located Skagit

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date Registered — This has been assigned Water Right Claim Registry No.

AUG 23 74 / 3424

Director, Department of Ecology John Biggs

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X A L Pettis

Date 3-25-74

If claim filed by designated representative print or type full name and mailing address of agent below.

_____

_____

☒ Additional information relating to water quality and/or well construction is available.

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

ORIGINAL DOE

State of Washington
Department of Ecology

RECEIVED
DEPARTMENT OF ECOLOGY
APR 17 1974 091944
CASH OTHER NONE

Water Right Claims Registration

Water Right Claim

Name Zola B. Lipsey

(Short Form) Ø3

Address 801 Reed Street

Sedro- Woolley Zip Code 98284

Phone No. 855-6293

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water ☒ Ground Water

If surface water, please indicate source; give name if known:

(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☐ Domestic ☐ Stockwatering ☒ Irrigation (lawn and garden) ☒ Other Use (specify) auxiliary ~~domestic~~

3) Legal description of lands on which water is used:

Lot 1 Block 13 Junction to Sedro Skagit County

Section 24 Township 35 N Range 4 E W.M.

in the City of Sedro-Woolley

Commonly known as 801 Reed Street, Sedro-Woolley

and on City property adjacent thereto on north and west.

If located within the limits of a recorded platted property:

Lot Lot 1 Block 13 of Junction to Sedro
(Give name of plat or addition)

In addition, please indicate Sec. 24 T. ~~11~~ 35 N., R. 4 E ~~W~~, W.M.

County in which lands are located Skagit

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date Registered

This has been assigned
Water Right Claim Registry No.

OCT 5 74082406

Director, Department of Ecology

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X Zola B Lipsey

Date April 12, 1974

If claim filed by designated representative print or type full name and mailing address of agent below.

☐ Additional information relating to water quality and/or well construction is available.

ORIGINAL DOE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

State of Washington
Department of Ecology

RECEIVED
DEPARTMENT OF ECOLOGY
MAY 21 74 106186
CASH OTHER / NONE

Water Right Claims Registration

Water Right Claim

Name Harry & Mae Osborne (Short Form) 03

Address 402 Moore St

Sedro Woolley Zip Code 98284 Phone No. 855-2691

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water ☒ Ground Water

If surface water, please indicate source; give name if known:

_____

(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☒ Domestic ☒ Stockwatering ☒ Irrigation (lawn and garden) ☐ Other Use (specify) _____

3) Legal description of lands on which water is used: Lot 1 Block 1 Rosedale Garden Tracts and Junction To Sedro Lots 2-3-6 and 7 Block 27

If located within the limits of a recorded platted property:

Lot #1 Block #1 of Rosedale Garden Tracts
(Give name of plat or addition)

In addition, please indicate Sec. 24 T. 35 N., R. 4E ~~W.M.~~ W.H.

County in which lands are located Skagit

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date Registered

This has been assigned Water Right Claim Registry No.

NOV 1 8 74088600

Director, Department of Ecology: Bigg

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X Harry Osborne

Date May 17-1974

If claim filed by designated representative print or type full name and mailing address of agent below.

_____

_____

☐ Additional information relating to water quality and/or well construction is available.

ORIGINAL DOE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

State of Washington
Department of Ecology

RECEIVED
DEPARTMENT OF ECOLOGY
MAY 21 '74 105934
CASH__OTHER__NONE

Water Right Claims Registration

Water Right Claim

Name Margaret Cabe (Short Form) 03

Address PO Box 162

Lyman, Wash Zip Code 98263 Phone No. 826-3584

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water ☒ Ground Water
If surface water, please indicate source; give name if known:

_____
(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☒ Domestic ☐ Stockwatering ☒ Irrigation (lawn and garden) ☐ Other Use (specify) _____

3) Legal description of lands on which water is used: TAK 36 R. COM AT PT 32 RDS 8.25' N & 32 RDS W of SEC of NW1/4 NW1/4 of SEC 24 TH N 5 1/2 RDS 3FT TH W 29 RDS TH S 5 1/2 RDS & 3' TH E 29 RDS To POB

If located within the limits of a recorded platted property:

Lot _____ Block _____ of _____
(Give name of plat or addition)

In addition, please indicate Sec. 24 T. 35 N., R. 4E ~~E~~ W.M.

County in which lands are located SKAGIT

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date Registered

This has been assigned Water Right Claim Registry No.

NOV 18 74088811

Director, Department of Ecology Lyn Biggs

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X Margaret Cabe

Date 5-13-74

If claim filed by designated representative print or type full name and mailing address of agent below.

_____

_____

☐ Additional information relating to water quality and/or well construction is available.

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

ORIGINAL DOE

State of Washington
Department of Ecology

RECEIVED
DEPARTMENT OF ECOLOGY
MAY 17 74 10537
CASH OTHER NONE
$3

Water Right Claims Registration

Water Right Claim

Name John J. Guddall

Address 1301 - 3rd Street

Sedro-Woolley Wash Zip Code 98284 Phone No. 855-6642

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water ☒ Ground Water

If surface water, please indicate source; give name if known:

_____

(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☒ Domestic ☐ Stockwatering ☒ Irrigation (lawn and garden) ☐ Other Use (specify) _____

3) Legal description of lands on which water is used: Lots 1 and 2, Block 12, First addition to the Town of Sedro, according to the recorded plat thereof in the office of the Auditor of Skagit County, in Volume 3 of plats, Page 29, records of said County

If located within the limits of a recorded platted property:

Lot 1 and 2 Block 12 of Plat of the Town of Sedro
(Give name of plat or addition)

In addition, please indicate Sec. 24 T. 35 N., R. 4E E/W. W.M.

County in which lands are located Skagit

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date Registered

This has been assigned Water Right Claim Registry No.

DEC 974091847

Director, Department of Ecology John Biggs

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X John J. Guddall

Date May 15, 1974

If claim filed by designated representative print or type full name and mailing address of agent below.

_____

_____

☐ Additional information relating to water quality and/or well construction is available.

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

ORIGINAL DOE

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION

WATER RIGHT CLAIM

RECEIVED
DEPARTMENT OF ECOLOGY
APR 1974092436
CASH__ OTHER__ NONE✓

1. NAME Goodyear Nelson Hardwood Lbr. Co. Inc.

ADDRESS P. O. Box 71

Sedro Woolley, Washington ZIP CODE 98284

2. SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED: Ground Water (SURFACE OR GROUND WATER)

W.R.I.A. 03 (LEAVE BLANK)

A. IF GROUND WATER, THE SOURCE IS Drilled well

B. IF SURFACE WATER, THE SOURCE IS

3. THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:

A. QUANTITY OF WATER CLAIMED 250 gallons per minute (CUBIC FEET PER SECOND OR GALLONS PER MINUTE) PRESENTLY USED same

B. ANNUAL QUANTITY CLAIMED 400 acre feet per year (ACRE FEET PER YEAR) PRESENTLY USED same

C. IF FOR IRRIGATION, ACRES CLAIMED PRESENTLY IRRIGATED

D. TIME(S) DURING EACH YEAR WHEN WATER IS USED: Continuously all year.

4. DATE OF FIRST PUTTING WATER TO USE: MONTH December YEAR 1957

5. LOCATION OF THE POINT(S) OF DIVERSION/WITHDRAWAL: ~~525~~ 883 FEET South AND 625 FEET East FROM THE Northwest CORNER OF SECTION 25

BEING WITHIN the $NW\frac{1}{4}$ $NW\frac{1}{4}$ OF SECTION 25 T. 35 N., R. 4 EWM (E.OR W.) W.M.

IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, LOT BLOCK OF
(GIVE NAME OF PLAT OR ADDITION)

6. LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED: That portion of $NW\frac{1}{4}$ $NW\frac{1}{4}$, S. 25 T35N., R4 E.W.M. lying South of the County road running west from Jameson St., City of Sedro Woolley and west of Northern Pacific Railroad right of way.

That part of the $E\frac{1}{2}$ $NE\frac{1}{4}$ $NE\frac{1}{4}$, Sec. 26, T.35 N., R. 4 EWM., lying south of James Young and Sterling County Road.

Lots 9, 10 and 11, Block 3, and Lots 6, 7, 8, 9, 10 and 11, Block 4, "Susan Taylor Addition to Sedro Woolley, Washington COUNTY Skagit

7. PURPOSE(S) FOR WHICH WATER IS USED: Industrial Supply

8. THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED:

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE.

DATE RETURNED THIS HAS BEEN ASSIGNED WATER RIGHT CLAIM REGISTRY NO.

DEC 16 74 094423

DIRECTOR, DEPARTMENT OF ECOLOGY John Biggs

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

X A. Fred Nelson

DATE April 18, 1974

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE, PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW.

[X] ADDITIONAL INFORMATION RELATING TO WATER QUALITY AND/ OR WELL CONSTRUCTION IS AVAILABLE.

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

RETURN ALL THREE COPIES WITH CARBONS INTACT, ALONG WITH YOUR FEE TO:
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION
OLYMPIA, WASHINGTON 98504

ORIGINAL DWR

©L

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION

DEPARTMENT OF ECOLOGY
MAY 23 74 110127
CASH ___ OTHER ___ NONE X

WATER RIGHT CLAIM

1. NAME H. Bear Hardware
ADDRESS Reed & State St.
Sedro Woolley, Wash. ZIP CODE 98284

2. SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED: Ground Water (SURFACE OR GROUND WATER)
W.R.I.A. 03 (LEAVE BLANK)

A. IF GROUND WATER, THE SOURCE IS Well

B. IF SURFACE WATER, THE SOURCE IS

3. THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:
A. QUANTITY OF WATER CLAIMED 1 Cubic foot (CUBIC FEET PER SECOND OR GALLONS PER MINUTE) PRESENTLY USED 1/2 Cubic foot
B. ANNUAL QUANTITY CLAIMED 1/4 Acre ft (ACRE FEET PER YEAR) PRESENTLY USED 1/4 Acre foot
C. IF FOR IRRIGATION, ACRES CLAIMED None PRESENTLY IRRIGATED None
D. TIME(S) DURING EACH YEAR WHEN WATER IS USED: daily - for pump demonstration

4. DATE OF FIRST PUTTING WATER TO USE: MONTH April YEAR 1972

5. LOCATION OF THE POINT(S) OF DIVERSION/WITHDRAWAL: ___ FEET ___ AND ___ FEET ___ FROM THE ___ CORNER OF SECTION ___
BEING WITHIN ___ OF SECTION 24, T. 35 N., R. 4E (E. OR W.) W.M.
IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, LOT 1 BLOCK 1 OF Junction Addition (GIVE NAME OF PLAT OR ADDITION)

6. LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED:
Township 35 - Range 4 - Section 25

COUNTY Skagit

7. PURPOSE(S) FOR WHICH WATER IS USED: Store - Used for pump demonstration

8. THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED: Appropriation

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE.

DATE RETURNED ___ THIS HAS BEEN ASSIGNED WATER RIGHT CLAIM REGISTRY NO.

DEC 1 8 74 096395

DIRECTOR - DEPARTMENT OF ECOLOGY John Biggs

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

X Martin Bear F.T. Rapenchuk

DATE May 10, 1974

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE, PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW.

☐ ADDITIONAL INFORMATION RELATING TO WATER QUALITY AND/OR WELL CONSTRUCTION IS AVAILABLE.

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

RETURN ALL THREE COPIES WITH CARBONS INTACT, ALONG WITH YOUR FEE TO:
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION
OLYMPIA, WASHINGTON 98504

ORIGINAL DWR

State of Washington
Department of Ecology

RECEIVED
DEPARTMENT OF ECOLOGY
JUN 17 74 125298
CASH OTHER NONE
3

Water Right Claims Registration

Water Right Claim

Name Ida J. Humphreys

Address R2 Box

Sedro Woolley Zip Code 98284 Phone No. 856-3015

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water ☒ Ground Water

If surface water, please indicate source; give name if known:

Well water on premises

(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☐ Domestic ☐ Stockwatering ☐ Irrigation (lawn and garden) ☐ Other Use (specify) _____

3) Legal description of lands on which water is used: A certain tract of land lying and being South and West of the right of way of the Fairhaven and Southern Railroad in the Northeast Quarter of the Northeast Quarter of Section 23, Township 35, North of Range 4, East of W.M., described as follows:
Commencing at a point 124½ feet West of the Southeast corner of said Northeast Quarter where said right of way of said railroad interects the South line of said Northeast Quarter, for a point of beginning; thence running Northwest along the South line of said right of way 297½ feet; thence Southwesterly 236 feet to a point 20 feet from where said line, if continued, would intersect the South line of said Northeast Quarter of Northeast Quarter; thence Southeasterly to the said South lineofosaid Northeast of the Northeast Quarter, 404½ feet West of the place of beginning; and thence East 404½ feet to the place of beggining.

If located within the limits of a recorded platted property:

Lot _____ Block _____ of _____
(Give name of plat or addition)

In addition, please indicate Sec. 23 T. 35 N., R. 4E E/W, W.M.

County in which lands are located Skagit

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date Registered

This has been assigned Water Right Claim Registry No.

JAN 975102589

Director, Department of Ecology

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X Ida J. Humphreys

Date June 13 - 1974

If claim filed by designated representative print or type full name and mailing address of agent below.

☐ Additional information relating to water quality and/or well construction is available.

ORIGINAL DOE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

State of Washington
Department of Ecology

RECEIVED
DEPARTMENT OF ECOLOGY
JUN 25 1974 136708
CASH ___ OTHER ___ NONE ___

Water Right Claims Registration

Water Right Claim

Name DENNIS P. LONDON

$3

Address 212 WEST NELSON

SEDRO WOOLLEY Zip Code 98284

Phone No. 856-3631

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water ☒ Ground Water
If surface water, please indicate source; give name if known:

(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☐ Domestic ☐ Stockwatering ☒ Irrigation (lawn and garden) ☐ Other Use (specify) _____

3) Legal description of lands on which water is used: That portion of the SW 1/4 of the SW1/4 of Section 24, Township 35 North, Range 4 E.W.M. described as follows: Beginning at a point on the south line of the SW1/4 of the SW1/4 224 Feet 5 Inches west of the Southeast corner of said subdivision; thence north 143 feet; thence west 102.6 feet; thence south 143 feet and east 102.6 feet to the place of beginning.

If located within the limits of a recorded platted property:

Lot _____ Block _____ of _____
(Give name of plat or addition)

In addition, please indicate Sec. 24 T. 35 N., R. 4 E/W, W.M.

County in which lands are located SKAGIT

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date Registered

This has been assigned Water Right Claim Registry No.

JAN 21 75 109837

Director, Department of Ecology John Biggs

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X Dennis P. London

Date June 24, 1974

If claim filed by designated representative print or type full name and mailing address of agent below.

☐ Additional information relating to water quality and/or well construction is available.

ORIGINAL DOE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION

WATER RIGHT CLAIM

1. NAME Charles Jessett

ADDRESS 615 Puget Ave

ZIP CODE 98284 PHONE NO. 8553763

2. SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED: Ground Water (SURFACE OR GROUND WATER)

W.R.I.A. (LEAVE BLANK) 03

A. IF GROUND WATER, THE SOURCE IS Well

B. IF SURFACE WATER, THE SOURCE IS

3. THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:

A. QUANTITY OF WATER CLAIMED 1000 Gallons per day (CUBIC FEET PER SECOND OR GALLONS PER MINUTE) PRESENTLY USED 1000 gallons per day.

B. ANNUAL QUANTITY CLAIMED 120000 Gallons (ACRE FEET PER YEAR) PRESENTLY USED 120000 Gallons

C. IF FOR IRRIGATION, ACRES CLAIMED ½ acre PRESENTLY IRRIGATED ½ acre

D. TIME(S) DURING EACH YEAR WHEN WATER IS USED: May June July August

4. DATE OF FIRST PUTTING WATER TO USE: MONTH May YEAR 1963

5. LOCATION OF THE POINT(S) OF DIVERSION/WITHDRAWAL: FEET AND

FEET FROM THE CORNER OF SECTION

BEING WITHIN OF SECTION 24, T. 35 N., R. 4E (E.OR W.) W.M.

IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, LOT 4 and 5 BLOCK 5 OF

(GIVE NAME OF PLAT OR ADDITION) Junction To Sedro

6. LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED:

Lots 4 and 5 Block 5 Junction To Sedro

COUNTY Skagit

7. PURPOSE(S) FOR WHICH WATER IS USED: Irrigation

8. THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED: Appropriation

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE.

DATE RETURNED JAN 30 1974 THIS HAS BEEN ASSIGNED WATER RIGHT CLAIM REGISTRY NO. 5191

John Biggs

DIRECTOR - DEPARTMENT OF ECOLOGY

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

X Charles Jessett

DATE 6-20-74

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE, PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW

☒ ADDITIONAL INFORMATION RELATING TO WATER QUALITY AND/ OR WELL CONSTRUCTION IS AVAILABLE.

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM.

ORIGINAL DWR

RETURN ALL THREE COPIES WITH CARBONS INTACT, ALONG WITH YOUR FEE TO:
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION
OLYMPIA, WASHINGTON 98504

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION

WATER RIGHT CLAIM

RECEIVED
DEPARTMENT OF ECOLOGY
OLYMPIA, WASHINGTON

1. NAME Skagit Corporation

ADDRESS P.O. Box 151

Sedro-Woolley, Washington ZIP CODE 98284

2. SOURCE FROM WHICH THE RIGHT TO TAKE AND MAKE USE OF WATER IS CLAIMED: Ground
(SURFACE OR GROUND WATER)

W.R.I.A. 03
(LEAVE BLANK)

A. IF GROUND WATER, THE SOURCE IS Well

B. IF SURFACE WATER, THE SOURCE IS

3. THE QUANTITIES OF WATER AND TIMES OF USE CLAIMED:

A. QUANTITY OF WATER CLAIMED 450 GPM PRESENTLY USED 20 GPM
(CUBIC FEET PER SECOND OR GALLONS PER MINUTE)

B. ANNUAL QUANTITY CLAIMED 50 PRESENTLY USED 2.2
(ACRE FEET PER YEAR)

C. IF FOR IRRIGATION, ACRES CLAIMED PRESENTLY IRRIGATED

D. TIME(S) DURING EACH YEAR WHEN WATER IS USED: January 1 thru December 31

4. DATE OF FIRST PUTTING WATER TO USE: MONTH March YEAR 1964

5. LOCATION OF THE POINT(S) OF DIVERSION/WITHDRAWAL: 903 FEET West AND 160

FEET south FROM THE Center CORNER OF SECTION 24

BEING WITHIN NE 1/4 of the SW 1/4 OF SECTION 24, T. 35 N., R. 4 (E. ~~or W.~~) W.M.

IF THIS IS WITHIN THE LIMITS OF A RECORDED PLATTED PROPERTY, LOT BLOCK OF

West Addition to Woolley in the City of Sedro Woolley, Washington
(GIVE NAME OF PLAT OR ADDITION)

6. LEGAL DESCRIPTION OF LANDS ON WHICH THE WATER IS USED: See copy attached.

COUNTY Skagit County

7. PURPOSE(S) FOR WHICH WATER IS USED: Industrial Cooling

8. THE LEGAL DOCTRINE(S) UPON WHICH THE RIGHT OF CLAIM IS BASED: Appropriation

DO NOT USE THIS SPACE

THE FILING OF A STATEMENT OF CLAIM DOES NOT CONSTITUTE AN ADJUDICATION OF ANY CLAIM TO THE RIGHT TO USE OF WATERS AS BETWEEN THE WATER USE CLAIMANT AND THE STATE OR AS BETWEEN ONE OR MORE WATER USE CLAIMANTS AND ANOTHER OR OTHERS. THIS ACKNOWLEDGEMENT CONSTITUTES RECEIPT FOR THE FILING FEE.

DATE RETURNED FEB 19 1975 THIS HAS BEEN ASSIGNED WATER RIGHT CLAIM REGISTRY NO. 126409

DIRECTOR - DEPARTMENT OF ECOLOGY John Biggs

I HEREBY SWEAR THAT THE ABOVE INFORMATION IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF

X T E Farmerlee Treasurer

DATE June 27, 1974

IF CLAIM FILED BY DESIGNATED REPRESENTATIVE, PRINT OR TYPE FULL NAME AND MAILING ADDRESS OF AGENT BELOW

☐ ADDITIONAL INFORMATION RELATING TO WATER QUALITY AND/ OR WELL CONSTRUCTION IS AVAILABLE.

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

ORIGINAL DWR

RETURN ALL THREE COPIES WITH CARBONS INTACT, ALONG WITH YOUR FEE TO.
DEPARTMENT OF ECOLOGY
WATER RIGHT CLAIMS REGISTRATION
P.O. BOX 829 OLYMPIA, WASHINGTON 98504

State of Washington
Department of Ecology

Water Right Claims Registration

Water Right Claim

RECEIVED

03

Name Immaculate Heart of Mary Church

Address 719 Ferry Street

Sedro Woolley, Wash. Zip Code 98284 Phone No. 855-3814

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water ☒ Ground Water

If surface water, please indicate source; give name if known:

_____

(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☐ Domestic ☐ Stockwatering ☒ Irrigation (lawn and garden) ☐ Other Use (specify) _____

3) Legal description of lands on which water is used:

Lot 1, "Plat No. 1, Sedro Home Acreage", EXCEPT the north 20 feet and the south 20 feet thereof; The north 120 feet of Lot 2, "Plat no. 1, Sedro Home Acreage", EXCEPT the north 20 feet and the south 20 feet thereof. South one-half of West 90 feet of Lot 3, "Plat No. 1, Sedro Home Acreage". Section 24, Township 35, Range 4. E. W. M. (photostat attached)

If located within the limits of a recorded platted property:

Lot _____ Block _____ of _____
(Give name of plat or addition)

In addition, please indicate Sec. 24 T. 35 N., R. 4E E/W, W.M.

County in which lands are located Skagit

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date Registered

This has been assigned Water Right Claim Registry No.

FEB 07 75 126822

Director, Department of Ecology

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X Rev. Jerome Daley Pastor

Date June 27, 1974

If claim filed by designated representative print or type full name and mailing address of agent below.

_____

_____

☐ Additional information relating to water quality and/or well construction is available.

ORIGINAL DOE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

State of Washington
Department of Ecology

Water Right Claims Registration

Water Right Claim

RECEIVED
DEPARTMENT OF ECOLOGY
JUN 17 1987
CASH OTHER NONE
03

Name Richard E. and Helen M. Young

Address Route 2 Box 396

Sedro Woolley, Wa. Zip Code 98284 Phone No. 856-9583

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water ☒ Ground Water
If surface water, please indicate source; give name if known:

_____
(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☒ Domestic ☐ Stockwatering ☐ Irrigation (lawn and garden) ☐ Other Use (specify) _____

3) Legal description of lands on which water is used: _____

SEC 23 TWP 35 RGE 04

001 XX	002 XX
003 XXX	004 TAX 17 COM AT A PT 487' W &
005 423' S OF NE COR OF NE 1/4 OF	006 NE 1/4 TH S 484' TO F. & S.
007 RLY TH SE'LY ALG RLY 160' TH	008 N 610' TH W TO BEG

If located within the limits of a recorded platted property:

Lot _____ Block _____ of _____
(Give name of plat or addition)

In addition, please indicate Sec. 23 T. 35 N., R. 04 E/W, W.M.

County in which lands are located SKAGIT

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date Registered

This has been assigned Water Right Claim Registry No.

JUN 6 75162910

Director, Department of Ecology

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X _____

Date June 3, 1974

If claim filed by designated representative print or type full name and mailing address of agent below.

_____

_____

☐ Additional information relating to water quality and/or well construction is available.

ORIGINAL DOE

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

State of Washington
Department of Ecology

RECEIVED
DEPARTMENT OF ECOLOGY
OCT 17 73054961
CASH ___ OTHER ___ NONE ___

Water Right Claims Registration

Water Right Claim

Name Raymond Armfield (Short Form) Ø3

Address 1112 Borseth St.

Sedro Woolley, Wash. Zip Code 98284 Phone No. 856-3782

1) Source from which the right to take and make use of water is claimed: ☐ Surface Water ☒ Ground Water

If surface water, please indicate source; give name if known:

(River, stream, lake, pond, spring, etc.)

2) Purpose(s) for which water is used:

☒ Domestic ☐ Stockwatering ☐ Irrigation (lawn and garden) ☐ Other Use (specify)

3) Legal description of lands on which water is used: Sec.24 TWP 35 RGE 04 E.of W.M.

AC. In Sedro Woolley S24 T35 R4 XXX Tax 13A Com.448' W OF SE COR OF OF SW¼ OF SW ¼ TH N 110' W205' S110' TH E205' To POB LESS HIWAY.

If located within the limits of a recorded platted property:

Lot ___ Block ___ of ___
(Give name of plat or addition)

In addition, please indicate Sec. ## 24 T. 35 N., R. 4 E E/W, W.M.

County in which lands are located Skagit

DO NOT USE THIS SPACE

The filing of a statement of claim does not constitute an adjudication of any claim to the right to use of waters as between the water use claimant and the state or as between one or more use claimants and another or others. This acknowledgment constitutes receipt for the filing fee.

Date returned This has been assigned Water Right Claim Registry No.

DEC 10 73043274

Director, Department of Ecology

John Biggs

I hereby swear that the above information is true and accurate to the best of my knowledge and belief.

X Raymond Armfield

Date Oct. 16, 1973

If claim filed by designated representative print or type full name and mailing address of agent below.

☒ Additional information relating to water quality and/or well construction is available.

A FEE OF $2.00 MUST ACCOMPANY THIS WATER RIGHT CLAIM

Return all three copies with carbons intact, along with your fee to:
Department of Ecology, Water Right Claims Registration, Olympia, Washington 98504

ORIGINAL DOE

APPENDIX L

SITE-SPECIFIC TOTAL PETROLEUM HYDROCARBON CLEANUP LEVEL CALCULATIONS

A2. 1B Worksheet for Calculating Soil Cleanup Levels for Protection of Human Health: (Soil Direct Contact Pathway)
Method B: Unrestricted Land Use (WAC 173-340-740)

Date: 5/6/2012
Site Name: Sims - N. Cascade Ford
Sample Name: GP01-S-2.5

Chemical of Concern or EC group	Current Condition				Adjusted Condition			
	Measured Soil Conc @dry basis	HQ	RISK	Pass or Fail?	Soil Conc being tested	HQ	RISK	Pass or Fail?
	mg/kg	unitless	unitless		mg/kg	unitless	unitless	
Petroleum EC Fraction								
AL_EC >5-6	6.3	5.01E-05			2.23E+00	1.77E-05		
AL_EC >6-8	7	5.57E-05			2.48E+00	1.97E-05		
AL_EC >8-10	880	3.97E-01			3.11E+02	1.40E-01		
AL_EC >10-12	1400	6.31E-01			4.95E+02	2.23E-01		
AL_EC >12-16	930	5.58E-01			3.29E+02	1.97E-01		
AL_EC >16-21	1400	1.26E-02			4.95E+02	4.46E-03		
AL_EC >21-34	8800	7.92E-02			3.11E+03	2.80E-02		
AR_EC >8-10	147.9	2.00E-02			5.23E+01	7.08E-03		
AR_EC >10-12	198.8	1.35E-01			7.03E+01	4.76E-02		
AR_EC >12-16	200.4	7.21E-02			7.09E+01	2.55E-02		
AR_EC >16-21	490	2.94E-01			1.73E+02	1.04E-01		
AR_EC >21-34	1299.01	5.85E-01			4.60E+02	2.07E-01		
Benzene	0.7	2.19E-03	3.85E-08		2.48E-01	7.75E-04	1.36E-08	
Toluene	0.7	1.17E-04			2.48E-01	4.13E-05		
Ethylbenzene	10	1.34E-03			3.54E+00	4.74E-04		
Total Xylenes	2.1	1.41E-04			7.43E-01	4.99E-05		
Naphthalene	1.2	9.91E-04			4.25E-01	3.51E-04		
1-Methyl Naphthalene	8.6	2.21E-03			3.04E+00	7.82E-04		
2-Methyl Naphthalene	11	3.53E-02			3.89E+00	1.25E-02		
n-Hexane	0.7	1.58E-04			2.48E-01	5.59E-05		
MTBE	0.7				2.48E-01			
Ethylene Dibromide (EDB)	0		0.00E+00		0.00E+00	0.00E+00	0.00E+00	
1,2 Dichloroethane (EDC)	0		0.00E+00		0.00E+00	0.00E+00	0.00E+00	
Benzo(a)anthracene	0.15		1.45E-07	*For*	5.31E-02		5.12E-08	*For*
Benzo(b)fluoranthene	0.0625		6.03E-08	*all*	2.21E-02		2.13E-08	*all*
Benzo(k)fluoranthene	0.0625		6.03E-08	*cPAHs*	2.21E-02		2.13E-08	*cPAHs*
Benzo(a)pyrene	0.125		1.21E-06		4.42E-02		4.27E-07	
Chrysene	0.34		3.28E-08	*Fail*	1.20E-01		1.16E-08	
Dibenz(a,h)anthracene	0.125		1.21E-07	Σ Risk=	4.42E-02		4.27E-08	Σ Risk=
Indeno(1,2,3-cd)pyrene	0.125		1.21E-07	1.74E-06	4.42E-02		4.27E-08	6.17E-07
Sum	**15796.1**	2.83E+00	1.78E-06	Fail	5.59E+03	1.00E+00	6.31E-07	

TEST CURRENT CONDITION

Measured TPH Soil Conc, mg/kg= 15796.100
HI= 2.826E+00
RISK= 1.783E-06
Pass or Fail? ***Fail***

CALCULATE PROTECTIVE CONDITION

This tool allows the user to calculate protective TPH soil concentration based on various soil quality criteria. The Workbook uses the same composition ratio as for the measured data.

Calculate Protective TPH Soil Conc

Selected Criterion: @HI=1
Most Stringent? YES
Protctive TPH Soil Conc, mg/kg = 5589.64
HI = 1.00E+00
RISK = 6.31E-07

TEST ADJUSTED CONDITION

This tool allows the user to test whether a particular TPH soil concentration is protective of human health. The Workbook uses the same composition ratio as for the measured data.

Test Adjusted TPH Soil Conc

Tested TPH Soil Conc, mg/kg =
HI =
RISK =
Pass or Fail?

A2. 1B Worksheet for Calculating Soil Cleanup Levels for Protection of Human Health: (Soil Direct Contact Pathway)
Method B: Unrestricted Land Use (WAC 173-340-740)

Date: 5/7/2012
Site Name: Sims - N. Cascade Ford
Sample Name: MW01-S-3.1

Chemical of Concern or EC group	Current Condition				Adjusted Condition			
	Measured Soil Conc @dry basis	HQ	RISK	Pass or Fail?	Soil Conc being tested	HQ	RISK	Pass or Fail?
	mg/kg	unitless	unitless		mg/kg	unitless	unitless	
Petroleum EC Fraction								
AL_EC >5-6	8	6.37E-05			1.45E+02	1.15E-03		
AL_EC >6-8	8	6.37E-05			1.45E+02	1.15E-03		
AL_EC >8-10	3.8	1.71E-03			6.88E+01	3.10E-02		
AL_EC >10-12	8	3.61E-03			1.45E+02	6.54E-02		
AL_EC >12-16	1.3	7.80E-04			2.35E+01	1.41E-02		
AL_EC >16-21	6.3	5.67E-05			1.14E+02	1.03E-03		
AL_EC >21-34	10	9.00E-05			1.81E+02	1.63E-03		
AR_EC >8-10	8	1.08E-03			1.45E+02	1.96E-02		
AR_EC >10-12	8	5.41E-03			1.45E+02	9.80E-02		
AR_EC >12-16	1.3	4.68E-04			2.35E+01	8.48E-03		
AR_EC >16-21	1.3	7.80E-04			2.35E+01	1.41E-02		
AR_EC >21-34	1.3	5.85E-04			2.35E+01	1.06E-02		
Benzene	0.0006	1.88E-06	3.30E-11		1.09E-02	3.40E-05	5.98E-10	
Toluene	0.0007	1.17E-07			1.27E-02	2.11E-06		
Ethylbenzene	0.0006	8.04E-08			1.09E-02	1.46E-06		
Total Xylenes	0.0006	4.03E-08			1.09E-02	7.29E-07		
Naphthalene	0.0045	3.72E-06			8.15E-02	6.73E-05		
1-Methyl Naphthalene	0.0067	1.72E-06			1.21E-01	3.12E-05		
2-Methyl Naphthalene	0.0088	2.83E-05			1.59E-01	5.12E-04		
n-Hexane	0.8	1.80E-04			1.45E+01	3.27E-03		
MTBE	0.8				1.45E+01			
Ethylene Dibromide (EDB)	0.0006	9.02E-07	5.52E-08		1.09E-02	1.63E-05	1.00E-06	
1,2 Dichloroethane (EDC)	0.0006	2.71E-07	5.91E-11		1.09E-02	4.90E-06	1.07E-09	
Benzo(a)anthracene	0.00235		2.27E-09	*For*	4.26E-02		4.11E-08	*For*
Benzo(b)fluoranthene	0.00235		2.27E-09	*all*	4.26E-02		4.11E-08	*all*
Benzo(k)fluoranthene	0.00235		2.27E-09	*cPAHs*	4.26E-02		4.11E-08	*cPAHs*
Benzo(a)pyrene	0.00235		2.27E-08		4.26E-02		4.11E-07	
Chrysene	0.0058		5.59E-10		1.05E-01		1.01E-08	
Dibenz(a,h)anthracene	0.00235		2.27E-09	Σ Risk=	4.26E-02		4.11E-08	Σ Risk=
Indeno(1,2,3-cd)pyrene	0.00235		2.27E-09	3.46E-08	4.26E-02		4.11E-08	6.26E-07
Sum	**66.9436**	1.49E-02	8.99E-08		1.21E+03	2.70E-01	1.63E-06	

TEST CURRENT CONDITION

Measured TPH Soil Conc, mg/kg= 66.944
HI= 1.492E-02
RISK= 8.986E-08
Pass or Fail? Pass

CALCULATE PROTECTIVE CONDITION

This tool allows the user to calculate protective TPH soil concentration based on various soil quality criteria. The Workbook uses the same composition ratio as for the measured data.

Calculate Protective TPH Soil Conc

Selected Criterion:
Most Stringent?

Protctive TPH Soil Conc, mg/kg =
HI =
RISK =

TEST ADJUSTED CONDITION

This tool allows the user to test whether a particular TPH soil concentration is protective of human health. The Workbook uses the same composition ratio as for the measured data.

Test Adjusted TPH Soil Conc

Tested TPH Soil Conc, mg/kg =
HI =
RISK =
Pass or Fail?