Tiki Car Wash
Bellevue
LUST ID#: 2910

Enhanced Fluid Recovery Pilot Test Report
Tiki Car Wash

Washington State Department of Ecology
Consent Decree # 93-2-077106

Prepared for

Washington State Department of Ecology

Prepared by

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LIST OF ACRONYMS

AS	Air Sparging
bgs	Below ground surface
BTEX	Benzene, toluene, ethylbenzene, and xylene
DRO	Diesel range organics
EA	EA Engineering, Science, and Technology, Inc.
Ecology	Washington State Department of Ecology
EDB	1,2-Dibromoethane
EDC	1,2-Dichloroethane
EFR	Enhanced fluid recovery
Enviros	Enviros, Inc.
EPA	United States Environmental Protection Agency
ft	Feet
GRO	Gasoline range organics
HASP	Health and Safety Plan
LRO	Lube oil-range organics
LUST	Leaking Underground Storage Tank
MTBE	Methyl-tertiary-butyl ether
MTCA	Model Toxics Control Act
NWTPH-Dx	Northwest Total Petroleum Hydrocarbon – Diesel extended range
NWTPH-G	Northwest Total Petroleum Hydrocarbon – Gasoline
PID	Photoionization detector
SAP	Sampling and Analysis Plan
Site	Tiki Car Wash
SVE	Soil vapor extraction
µg/L	Microgram per liter

1.0 INTRODUCTION

1.1 PURPOSE

EA Engineering, Science, and Technology, Inc. (EA) has been contracted by the Northwest Regional Office of the Washington Department of Ecology (Ecology) to perform investigation activities at multiple leaking underground storage tank (LUST) sites in the Puget Sound area. This report has been prepared to present the results of site activities performed during 2008 at the Tiki Car Wash (Site), located at 11909 NE 8th Street in Bellevue, Washington.

Tasks conducted in 2008 included a well location survey, a pilot test for enhanced fluid recovery (EFR) and groundwater monitoring. A revision to the Sampling and Analysis Plan (SAP) for Amendment No. 2 and No. 3, Work Order # 17079, Washington State Department of Ecology, Mixed Funding LUST Sites was submitted to Ecology before performing the field tasks (EA 2008). A Health and Safety Plan (HASP) was included as an appendix to the SAP. The SAP provided details regarding the investigation objectives, planned sampling activities, and field procedures and laboratory methods.

1.2 REPORT ORGANIZATION

This document is organized as follows:

Section 1 Introduction
Section 2 Site Description
Section 3 Field Activities
Section 4 Results
Section 5 Summary and Conclusions
Section 6 References.

2.0 SITE DESCRIPTION AND HISTORY

2.1 SITE DESCRIPTION

The Tiki Car Wash (Site) is a gasoline station with a car washing facility located at 11909 NE 8th Street in Bellevue, King County, Washington (Figure 1). The facility was reportedly constructed in 1971 and purchased by the current owner in 1973.

2.2 SITE CHARACTERIZATION

Numerous properties in the vicinity of the Site are currently or were formerly impacted by petroleum contamination, primarily gasoline. A brief history of the Site investigations is provided below. Additional history of these investigations and other impacted sites is provided in reports prepared for Ecology by Enviros (Enviros, Inc. 1993) and EA (EA 2005).

During July 1990, a consultant working for a neighboring property owner conducted an investigation of the Site. Soil borings were drilled and a monitoring well was installed on the Site. Results of the investigation indicated the presence of gasoline contamination on the Site; however, the source of the contamination was not determined.

In May 1993, soil and groundwater sampling was performed by Enviros for Ecology. Groundwater samples were collected from available monitoring wells in the site area. In addition, 10 hand augered soil borings were advanced and sampled on and adjacent to the Site. One soil sample, collected from the northern portion of the site, exceeded the Model Toxics Control Act (MTCA) Method A cleanup criteria for gasoline range organics (GRO).

An air sparging (AS) and soil vapor extraction (SVE) soil and groundwater remediation system was installed by Ecology at the Site in 1995. The SVE/AS curtain was designed to prevent or limit offsite migration of contaminants and to remediate soil inaccessible for removal (Enviros 1993). The system operated intermittently until about 2000, but ultimately operations were discontinued due to lack of funding. The remediation system was prone to repeated shut-downs due to water accumulation in the moisture separator tank. During fuel line upgrades performed prior to system installation, approximately 40 cubic yards of contaminated soil were removed from under the delivery pumps, above the tanks, and along the south and west property boundaries.

Since the early 1990s, groundwater monitoring wells were installed to delineate a plume of gasoline in groundwater, extending onto a neighboring property west of the Site. The monitoring wells have been sampled infrequently and by a number of different parties during investigations of other nearby sites. Since installation, a number of wells have been damaged or abandoned. In February 2003, nearby monitoring wells were sampled by two consulting firms for different clients, not related to the Site (Hart Crowser 2003; EAI 2003). Results of the 2003 investigation conducted by Hart Crowser indicated that the plume boundary had expanded to the southwest.

On 31 May 2005, EA inspected and sampled available monitoring wells on and near the Site. Only monitoring wells MW-20, MW-23, and MW-29 were sampled and analyzed for GRO, benzene, tolene, ethylbenzene and xylene (BTEX), diesel range organics (DRO), methyl tertiary butyl ether (MTBE), 1,2-dichloroethane (EDC), 1,2-dibromoethane (EDB), and total lead. Former monitoring well MW-21 had been abandoned. Nearby monitoring wells MW-2, MW-5, MW-6, MW-7 and MW-12 were found to be damaged during redevelopment of the property west of the Tiki Car Wash property, and some of them were open during construction activities.

In 2006, EA was able to repair monitoring wells MW-2 and MW-6; however, MW-5, MW-7 and MW-12 had to be abandoned. Since then, monitoring wells MW-2, MW-6, MW-20, MW-23, and MW-29 have been sampled and analyzed for GRO, BTEX, DRO, and total lead.

EA conducted a limited Geoprobe investigation in April 2006 that concentrated on identifying current contaminant concentrations in soil and groundwater. GRO and BTEX constituents were detected at concentrations exceeding the MTCA Method A cleanup levels in groundwater and soil throughout the Tiki property, and to the west and south of the site on neighboring properties (EA 2006).

In February 2007, seven monitoring wells (MW-30, MW-31, MW-32, MW-33, MW-34, MW-35 and MW-36) were installed at the Site and on adjacent properties to better delineate distribution of contaminants on the property, to provide compliance monitoring at property boundaries, and to enable the application of EFR technology at the site. (EA 2007)

The analytical results from groundwater sampling by EA, since 2005, are presented in Table 1.

2.3 GEOLOGY AND HYDROGEOLOGY

A description of the site geology was presented in a 1993 report from Enviros (Enviros 1993). According to that report, the site is underlain by Holocene fill and Pleistocene Vashon Drift. The fill is a loose mixture of silt, fine to medium grained sand and gravel with occasional peat deposits. The Vashon Drift in this area varies from a weathered glacial till to a stratified alluvium. The till is an unsorted, unstratified, compact mixture of boulders, cobbles, pebbles, sand, silt, and clay.

Field investigations performed in the area indicate that the site is underlain by 3 to 5 feet (ft) of fill material, underlain by at least 16 ft of weathered till-like material (Enviros 1993). The upper 3 ft of fill generally consists of fine to medium-grained gravelly sand with intermittent lenses of medium stiff clay.

Shallow groundwater underlying the site area is believed to occur within a perched water table aquifer, which is contained by impermeable glacial till. This aquifer is not used for drinking water (Enviros 1993). Water levels reported in the site area range from about 2 to 14 ft below ground surface (bgs). The groundwater flow direction appears to be to the southwest based on the limited number of groundwater wells that were present historically.

3.0 FIELD ACTIVITIES

During 2008, the following field activities were conducted in support of an EFR pilot test.

- Well location/elevation survey
- Groundwater sampling
- EFR pilot test.

These sampling and pilot study activities were conducted in accordance with the SAP and the associated HASP.

3.1 WELL SURVEY

A well survey was conducted to obtain accurate horizontal and vertical well locations to support determination of a groundwater gradient. On 29 May 2008, the tops of casing on accessible monitoring wells were surveyed by INCA Engineers, Inc. Due to site access restrictions, the surveyors were not able to survey MW-2 and MW-6.

3.2 GROUNDWATER SAMPLING

3.2.1 Pre-EFR Event Groundwater Sampling

On 18 March 2008, EA sampled monitoring wells MW-29, MW-30, MW-31, MW-32, MW-33, MW-34 and MW-35 using a peristaltic pump and low-flow sampling procedures. This sampling was performed to obtain baseline dissolved hydrocarbon concentrations prior to performing an EFR pilot test. At the request of Ecology, samples were not collected from monitoring wells MW-20, MW-23, and MW-36 because dissolved contaminants have never been detected in these wells, and the wells were not likely to be impacted by EFR activities.

Water level measurements were obtained from the wells to be sampled before the start of low flow groundwater purging. A peristaltic pump was used to purge groundwater from the well at a rate of 300-500 milliliters per minute. The tubing intake was placed approximately 3 to 4 ft off the bottom of each well. Groundwater quality parameters were measured every three minutes during purging until parameters stabilized. The parameters measured during purging included pH, conductivity, dissolved oxygen, turbidity, and temperature. Oxygen reduction potential was not measured during sampling due to a malfunctioning meter. Groundwater samples were collected once water quality parameters stabilized. Well purge and sampling forms are included in Appendix A.

A duplicate sample was collected from MW-33 (TK-MW33D).

Table 2 summarizes monitoring well construction information, water level measurements, and field parameter measurements obtained prior to sampling. A site map with monitoring well locations and additional information is attached as Figure 2.

Groundwater samples were sent to TestAmerica Laboratory in Bothell, Washington for analysis for DRO and lube oil-range organics (LRO) by Northwest Total Petroleum Hydrocarbons – Diesel extended range (NWTPH-Dx), GRO by Northwest Total Petroleum Hydrocarbons – Gasoline (NWTPH-G), and BTEX by United States Environmental Protection Agency (EPA) Method 8021B. Groundwater purged during monitoring well sampling was contained in a 50-gallon drum onsite within the remediation compound.

3.2.2 Post-EFR Event Groundwater Sampling

Following the completion of the EFR event on 20 March 2008, groundwater samples were collected at intervals of 3, 6 and 30 weeks following the test. Water level measurements were collected from all accessible wells on 8 June 2008.

9 April 2008

On 9 April 2008, 3 weeks after the EFR test, two monitoring wells (MW-29 and MW-32) were sampled. The wells were first gauged for water levels and free product. Product was not observed. Sampling procedures were the same as during the pre-EFR groundwater sampling previously presented in this report. Groundwater samples were analyzed for GRO, BTEX, and DRO. Sheens were noted on the purged water from MW-29.

29 April 2008

On 29 April 2008, 6 weeks after the EFR test, the seven monitoring wells sampled prior to the EFR test (MW-29, MW-30, MW-31, MW-32, MW-33, MW-34 and MW-35) were sampled again. The wells were first gauged water levels and free product. Only wells sampled were gauged for water levels. Product was not observed in any of the wells. Sampling procedures were the same as previously presented. Groundwater samples were analyzed for GRO, BTEX, and DRO. Strong gas odor was noted on the water purged from MW-29.

Groundwater purged during both monitoring well sampling events was contained in a 50-gallon drum onsite within the remediation compound.

3 June 2008

On 3 June 2008, EA measured water levels at the site monitoring wells shown in Figure 3, with the exception of MW-2 and MW-6.

8 October 2008

Following a delay due to property access issues, another round of groundwater samples was collected on 8 October 2008. Groundwater samples were collected from monitoring wells MW-29, MW-33, MW-35 and MW-30. Groundwater samples were not collected from monitoring wells MW-31 and MW-32 due to the presence of free product. Groundwater samples were analyzed for GRO, BTEX, and DRO.

3.3 EFR PILOT TEST

On 20 March 2008, an EFR pilot test was performed at the site to determine its effectiveness for use as an interim action at the Site. Ecovac Services, Inc. was contracted to perform the test on five monitoring wells at the Tiki Carwash site (MW-29, MW-31, MW-32, MW-33, and MW-35). Wells were gauged for free product and water levels prior to the test. Product was not measured in any of the wells, however sheen was observed on the water surface of MW-29, MW-31, and MW-35.

A vacuum truck was used to provide the vacuum for the test and also the storage, transportation and disposal of the wastewater generated during the test. The test was conducted by inserting drop tube assemblies in each of the test wells. The drop tubes were connected to vacuum hoses connecting to a manifold and then to the vacuum truck. The EFR test was performed first on four wells (MW-29, MW-31, MW-33, and MW-35) for a period of 6 hours followed by testing each of these wells individually for a 15 minute interval. Lastly, a 1 hour test was conducted on well MW-32.

Water levels were measured in surrounding wells while the test was performed to assess drawdown effects of the test. Vacuum readings were recorded from surrounding wells to assess the radius of influence the EFR test was having at the site. Photoionization detector (PID) readings were collected throughout the day, as required by the HASP, to ensure the breathing zone met standards.

4.0 RESULTS

4.1 WATER LEVEL GRADIENT

Historically, it has been difficult to obtain a water level gradient at the site due to the limited well distribution and lack of an up to date land survey. The monitoring wells installed in 2007 provided additional information regarding the onsite water gradient, and the wells for surveyed to accurately determine water elevations.

Using groundwater depths measured in June and October 2008, water level elevations were calculated for the site using the top of casing elevations provided by the recent INCA Engineers survey. Previous calculated groundwater flow direction at this site was generally to the southwest; however, the new information obtained from wells on the Site indicates that the groundwater actually appears to mound. The estimated groundwater flow direction is to the north, southeast and southwest from well MW-33. Groundwater elevations and gradients are shown on Figure 3 and Figure 4. Water flow directions appear consistent in June and October.

Data from MW-6 and MW-2 was unavailable for this analysis (due to well accessibility issues), so groundwater flow directly west of the property is not known.

4.2 PRE-EFR GROUNDWATER SAMPLING RESULTS

Analytical results for groundwater samples collected on 18 March 2008 represent site conditions prior to the EFR pilot test and are presented in Table 1 are summarized below. GRO and DRO concentrations are shown on Figure 4. Measured concentrations in groundwater will be compared against the MTCA Method A cleanup criteria, which are presented in Table 1.

- Analyte concentrations in the groundwater collected from wells MW-29, MW-30, MW-32 and MW-33 exceeded the cleanup criteria for all parameters analyzed. The DRO detected in the sample from MW-29 (4,930 micrograms per Liter [µg/L]) was attributed primarily to overlap from a gasoline range product by the laboratory.

- Analyte concentrations in groundwater samples collected from MW-31and MW-35 exceeded MTCA Method A cleanup criteria for benzene, toluene, ethylbenzene, xylenes, GRO, and DRO.

- Analyte concentrations in the MW-34 sample exceeded MTCA Method A cleanup criteria for benzene, GRO, DRO, and LRO. DRO results were qualified by the lab as being primarily due to overlap from gasoline range compounds. Toluene, ethylbenzene, and xylenes concentrations were below the cleanup criteria.

Quality assurance parameters were acceptable for this round of sampling. No GRO or BTEX was detected in the trip blank submitted with the groundwater samples. Analytical results from

the duplicate sample collected from MW-33 were within the relative percent difference for all analytes as specified in the SAP.

Laboratory analytical reports are included in Appendix B.

4.3 ENHANCED FLUID RECOVERY PILOT TEST

During the 20 March 2008 EFR pilot test, approximately 809 gallons of contaminated groundwater/liquid phase product was removed from the site during the 8-hour EFR test period. The total amount of hydrocarbons removed during the EFR test was estimated to be 103 pounds, as measured in the vapor phase. This mass of hydrocarbons is equivalent to approximately 17 gallons of gasoline. The highest extraction rate observed during the test was from well MW-32 at 45 pounds of hydrocarbons removed during the one hour EFR test.

Vacuum readings, differential pressures, and groundwater levels observed during the EFR event can be found in the Ecovac final report in Appendix C.

4.4 POST-EFR GROUNDWATER SAMPLING RESULTS

The results from the three follow on groundwater sampling events are summarized below. Figure 5 presents the data on a site map, and the complete laboratory results are provided in Attachment B. Data collected during this investigation were submitted in an electronic format compatible with Ecology's Environmental Information Management System.

9 April 2008

On 9 April 2008, groundwater samples were collected from wells MW-29 and MW-32.

- Analyte concentrations in the MW-29 and MW-32 samples exceeded MTCA Method A cleanup criteria for all parameters analyzed. LRO results were qualified by the lab as being due to hydrocarbons eluting primarily in the diesel range.

29 April 2008

On 29 April 2008, groundwater samples were collected from wells MW-29, MW-30, MW-31, MW-32, MW-33, MW-34, and MW-35. Analytical results are summarized below and presented in Table 1 and Figure 5.

- Analyte concentrations in the MW-29, MW-30, MW-31, MW-32, and MW-35 samples exceeded MTCA Method A cleanup criteria for BTEX, GRO, and DRO. LRO was not detected at or above the laboratory reporting limit.

- Analyte concentrations in the MW-33 sample exceeded MTCA Method A cleanup criteria for BTEX, GRO, and DRO. The LRO concentration was below the cleanup criteria.

- Analyte concentrations in the MW-34 sample exceeded MTCA Method A cleanup criteria for benzene, GRO, DRO, and LRO. Toluene, ethylbenzene, and xylenes concentrations were below the cleanup criteria.

Quality assurance parameters were acceptable for this round of sampling. No GRO or BTEX was detected in the trip blank submitted with the groundwater samples. DRO results were qualified by the lab as being primarily due to overlap from a gasoline range product. Analytical results from the duplicate sample collected from MW-32 were within the relative percent difference for all analytes as specified in the SAP.

Since the groundwater chemical concentrations have remained high since monitoring began, especially in MW-29, the chromatograms were sent to Mr. Robert Carrell, a senior chemist at the Manchester Environmental Laboratory to analyze the data and see if any conclusion could be drawn. According to Mr. Carrell, "*Comparing the samplings taken on March 18 and April 29 shows that there does not appear to be any petroleum product present except gasoline and that the gasoline in MW-32 seems to be the freshest in appearance followed by MW-31, MW-33, MW-35, MW-29, MW-30 and MW-34. The gasoline in MW-34 is much more weathered than any of the gasolines in any of the other wells. There did appear to be some increase in weathering of the gasolines in the wells after the EFR with a loss of the early compounds versus the later ones with the exception of the gasoline in MW-34. That well's gasoline did not seem to change between samplings. Just what this all means is open to speculation. We probably need to look at these wells again to see if they are continuing to weather or have reverted back to the earlier stage.*" If the future results indicate continued weathering, a leak may be discounted. If not, and fresh components of gasoline are found, a source investigation should be undertaken.

8 October 2008

On 8 October 2008, groundwater samples were collected from wells MW-29, MW-30, MW-33, and MW-35. Groundwater samples were not collected from MW-31 and MW-32 due to the presence of free product (0.29 and 0.04 ft, respectively). Field observations indicated the free product from monitoring well MW-32 appeared fresher than the fuel observed in monitoring well MW-31. Analytical results are summarized below and presented in Table 1 and Figure 5.

- Analyte concentrations in the MW-29, MW-33, and MW-35 groundwater samples exceeded MTCA Method A cleanup criteria for BTEX, GRO, and DRO. LRO was not detected in the samples at concentrations exceeding the laboratory reporting limit.

- Analyte concentrations in the MW-30 samples exceeded MTCA Method A cleanup criteria for BTEX, GRO, DRO, and LRO.

Quality assurance parameters were acceptable for this round of sampling. No GRO or BTEX was detected in the trip blank submitted with the groundwater samples. DRO results were qualified by the lab as being primarily due to overlap from a gasoline range product. Analytical

results from the duplicate sample were within the relative percent difference specified in the SAP for all analytes.

Since the groundwater chemical concentrations have remained high since monitoring began in 1993, especially in MW-29, the chromatograms from this sampling event were also sent to Mr. Robert Carrell at the Manchester Environmental Laboratory. He indicated that the presence of benzene in all of the samples would indicate that the gasoline is relatively fresh. He stated that "*Over time, assuming that the source has been shut off, gasoline in groundwater should lose all of its benzene due to its solubility and thus its moving away from the MWs. Similarly there should be a progressive loss of toluene and eventually xylenes for the same reasons. As it stands now, it is difficult to determine relative freshness versus weathered when all of the constituents are still present.*"

5.0 SUMMARY AND RECOMMENDATIONS

The groundwater concentration of hydrocarbons remains very high at this site. The data from the groundwater samples collected over the last several years (Table 1) indicates a source of hydrocarbon at the Site. This was confirmed during the October sampling event by the presence of free product in MW-31 and MW-32. The source is suspected to be in the soil near the water table. It is unclear if an ongoing release is contributing to contamination at the Site, although the presence of benzene in all of the samples suggests that some of the gasoline dissolved in groundwater is relatively fresh.

Given the apparent mass of the hydrocarbon source at this site, it is unlikely that MTCA Method A groundwater cleanup levels will be achieved in the near future without an aggressive effort to remove the source. Excavation of the contaminated soil would likely be very effective, but this cannot be accomplished with an operating service station on the Site. Since the gasoline station is still operating, EFR is recommended. With EFR, contaminant mass can be removed on an as needed basis with limited disruption to station operations, no excavation is required, and there are no long term operation and maintenance activities.

In the limited test conducted in March 2008, the EFR was able to extract more than 100 pounds of hydrocarbon vapors. Six weeks after the test, groundwater concentrations of GRO decreased in monitoring wells MW-29, MW-30, MW-32, and MW-33 and remained approximately the same in monitoring wells, and MW-34. MW-35. Thirty weeks after the test, significant free product was measured for the first time at the site in two of the new monitoring wells, MW-31 and MW-32. While sheen has been observed in monitoring wells during prior sampling events, no significant quantity of free product had ever been observed. The cause of the free product that appeared in two wells at the site is not known, however ~~an~~ one reason for its presence could indicate that EFR was able to dislodge free product entrained in the subsurface. Of the four monitoring wells where groundwater samples were collected 30 weeks after the test (MW-29, MW-30, MW-33, MW-35), GRO, toluene, ethylbenzene and xylene concentrations decreased or remained close to the pre test concentrations. Concentrations of benzene increased in MW-29, MW-30 and MW-35.

Based on the results of this EFR pilot test, it is evident that repeated applications of EFR would be beneficial at this site. It could be used to remove free product and additional contaminant mass from the site groundwater, thus limiting off site migration. EFR is relatively inexpensive and successfully removed contaminant mass. Adding surfactant would likely increase the overall mass of contaminants removed by EFR.

6. REFERENCES

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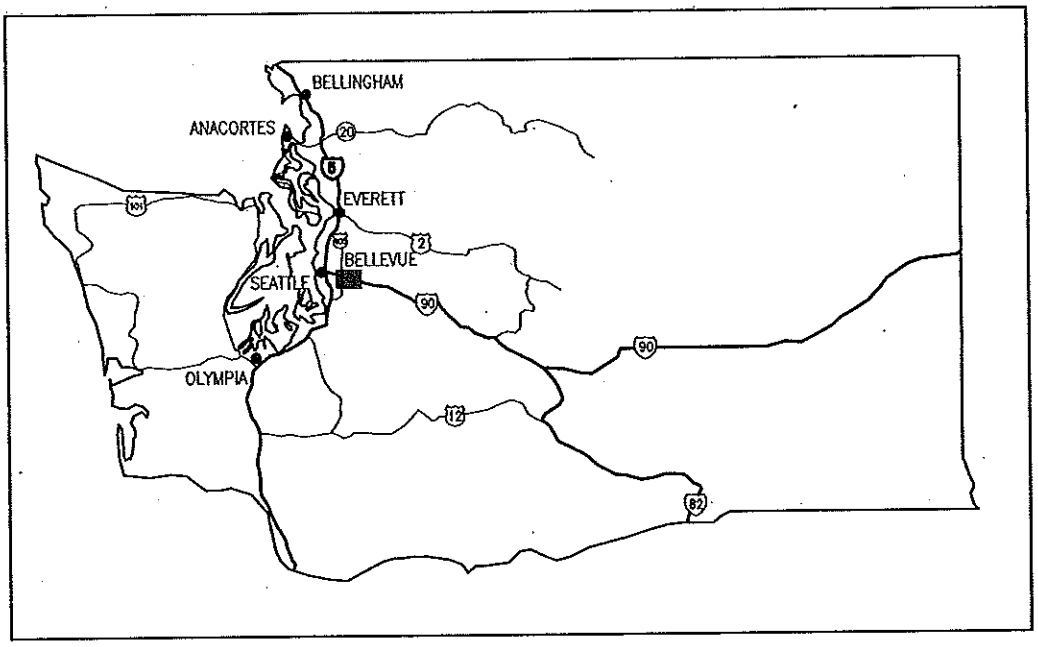
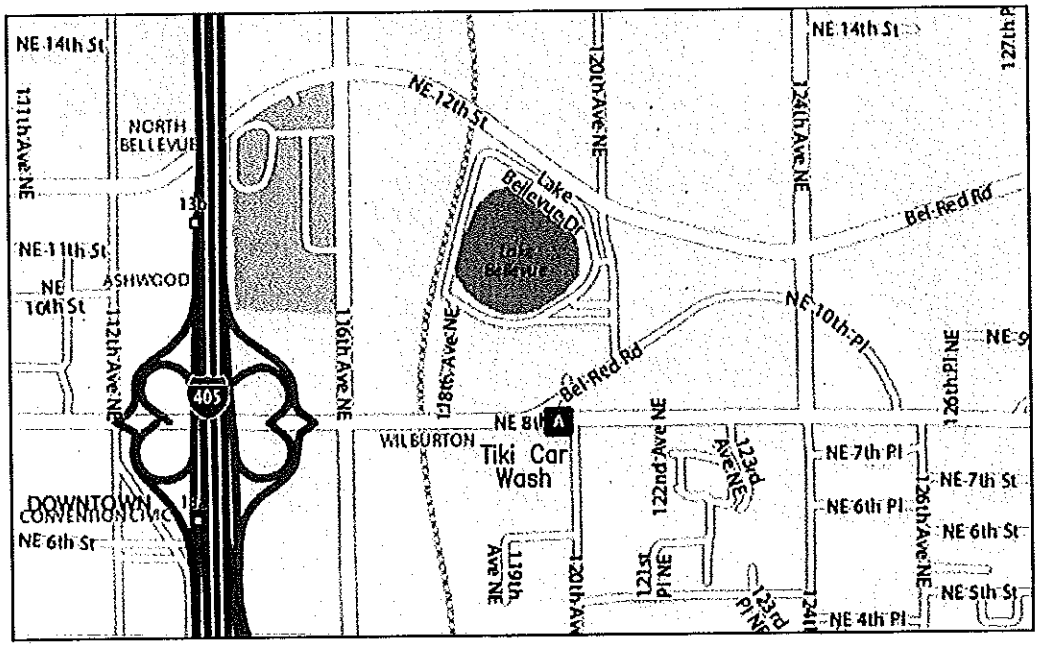
Hart Crowser, 1993. Letter report to Bellevue Properties, RE: Groundwater Sampling and Analysis, Barrier Motors Lot, NE 6th Street, Bellevue, Washington. March 7.

FIGURES





Source: Yahoo Maps 2008.

Figure 1. Site Location Map, Tiki Car Wash, Bellevue, Washington

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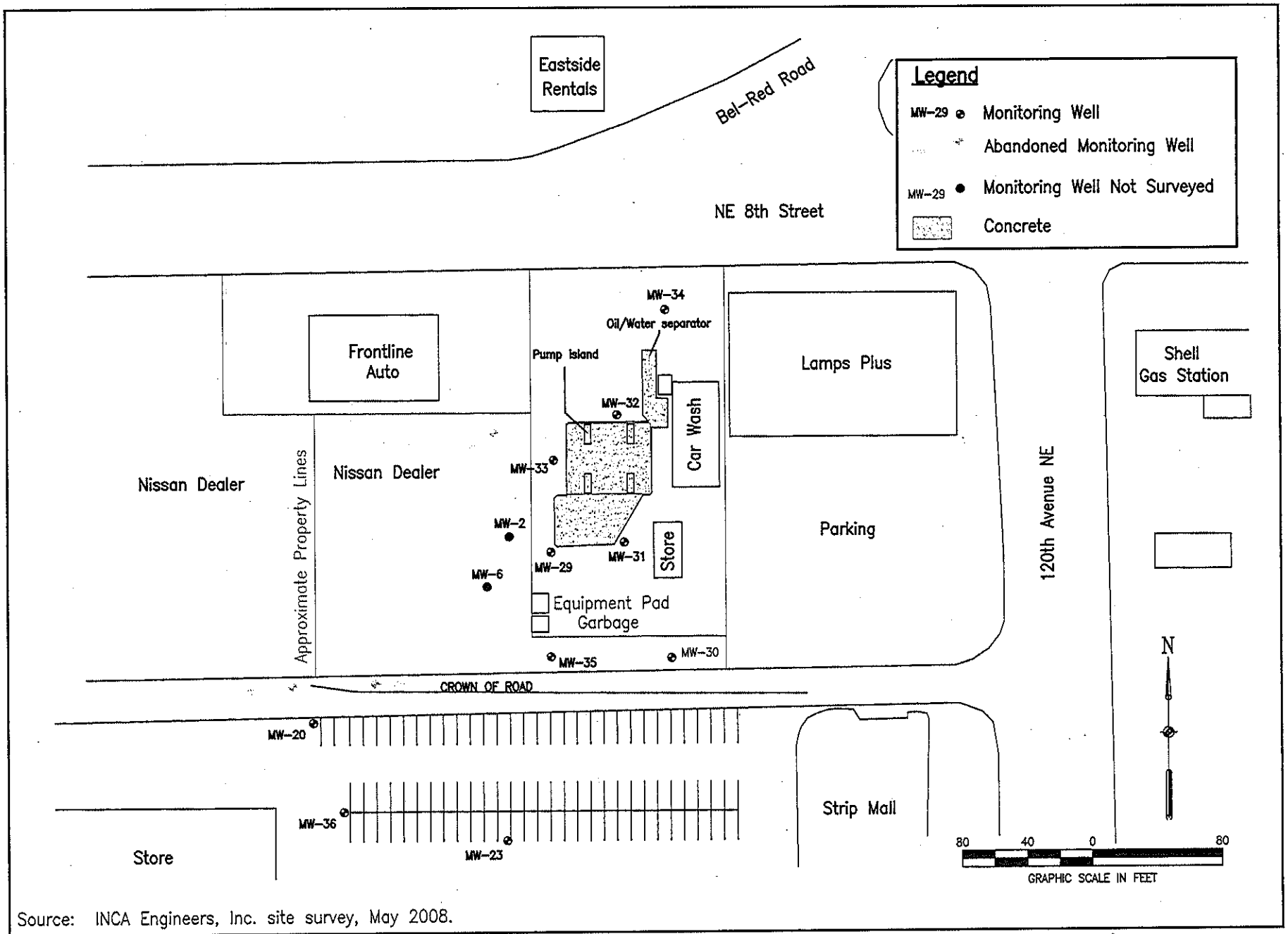

Source: INCA Engineers, Inc. site survey, May 2008.

Figure 2. Tiki Car Wash Site Layout

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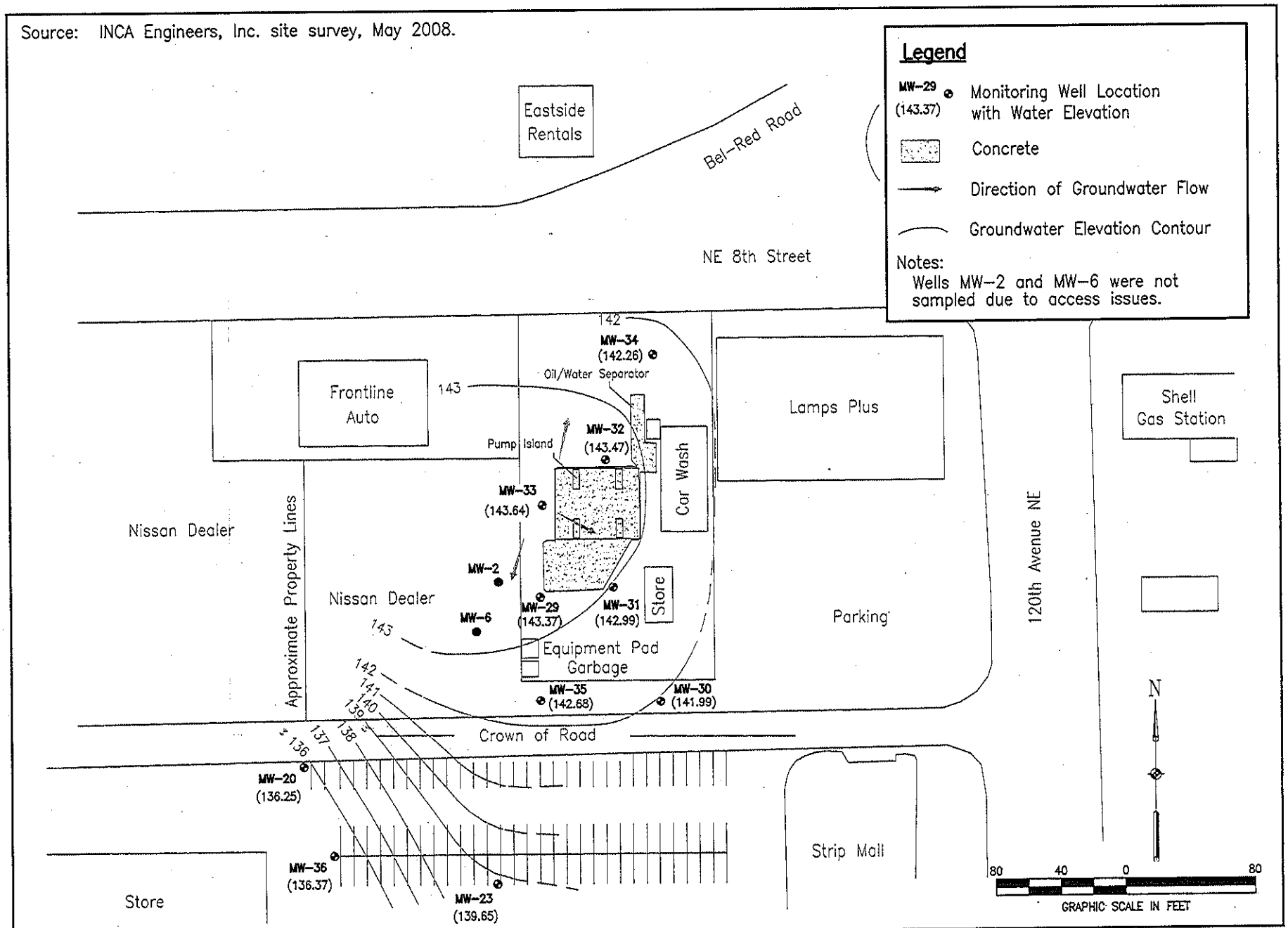

Figure 3. Groundwater Elevations and Flow Direction, June 2008, Tiki Car Wash.

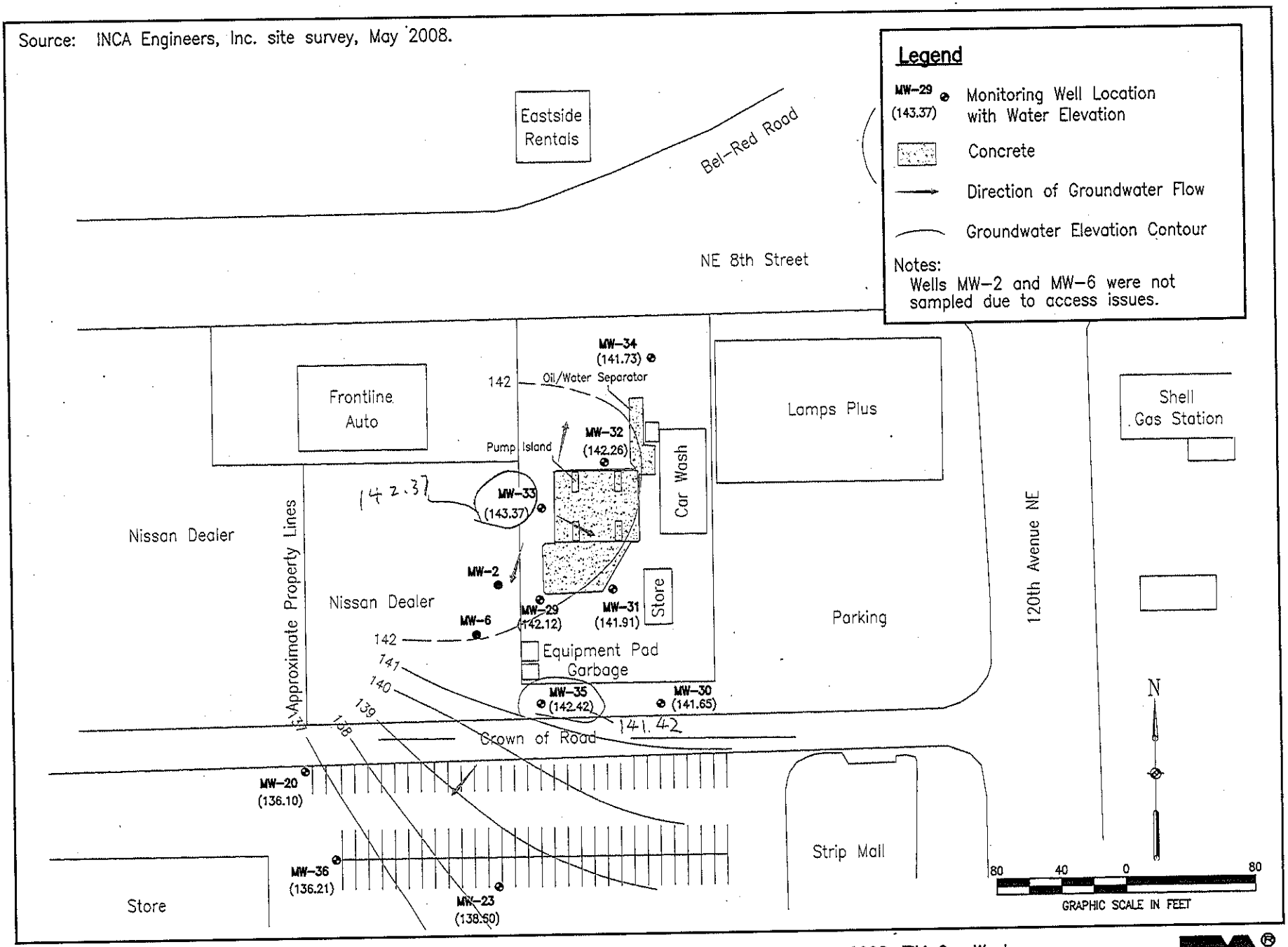

Figure 4. Groundwater Elevations and Flow Direction, October 2008, Tiki Car Wash.

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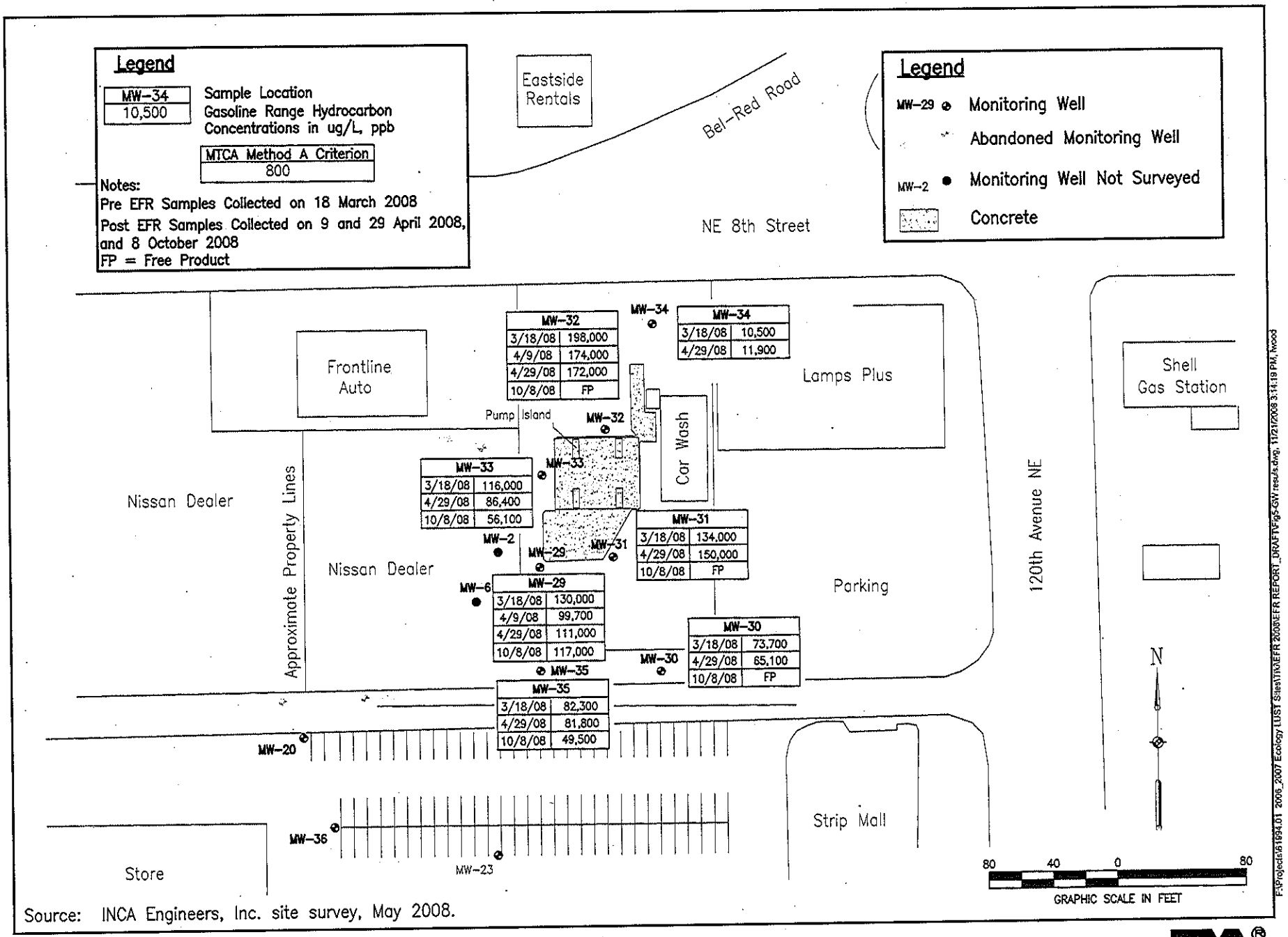

Source: INCA Engineers, Inc. site survey, May 2008.

Figure 5. Site Map with Groundwater Analytical Results from 2008, Tiki Car Wash.

TABLES

TABLE 1. SUMMARY OF GROUNDWATER ANALYTICAL DATA - TIKI CAR WASH

Well ID	Date Sampled	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (total) (ug/L)	GRO (ug/L)	DRO (ug/L)	LRO (ug/L)	MTBE (ug/L)	EDB (ug/L)	EDC (ug/L)	Lead (mg/L)
TK-MW-2	6/6/2006	2.16	0.5 U	13.4	6.32	1,410	268 D-08	485 U	NA	NA	NA	0.00100 U
TK-MW-2	9/6/2006	21.4	18.3	188	394	6,550	508 D-08	495 U	NA	NA	NA	0.00100 U
TK-MW6	6/6/2006	3,120	16,600	2,980	17,800	116,000	2,060 D-08	500 U	NA	NA	NA	0.01190
TK-MW6D*	6/6/2006	3,040	16,100	2,770	16,700	103,000	1,790 D-08	472 U	NA	NA	NA	0.01000
TK-MW6	9/6/2006	3,600	15,000	2,960	18,500	102,000	2,650 D-08	495 U	NA	NA	NA	0.01440
TK-MW6D*	9/6/2006	3,800	15,200	2,820	16,900	91,800	2,570 D-08	495 U	NA	NA	NA	0.01440
TK-MW-20	5/31/2005	0.500 U	0.500 U	0.500 U	1.00 U	50.0 U	250 U	500 U	1.00 U	0.010 U	0.200 U	0.00100 U
TK-MW20	2/13/2006	0.500 U	0.500 U	0.500 U	1.00 U	50.0 U	240 U	481 U	NA	NA	NA	0.00100 U
TK-MW20	6/6/2006	0.500 U	0.500 U	0.500 U	1.00 U	50.0 U	236 U	472 U	NA	NA	NA	0.00106
TK-MW20	9/6/2006	0.500 U	2.000 U	1.000 U	1.50 U	100.0 U	236 U	472 U	NA	NA	NA	0.00100 U
TK-MW-23	5/31/2005	0.500 U	0.806	0.500 U	1.44	50.0 U	250 U	500 U	1.00 U	0.010 U	2.00 U	0.00100 U, E
TK-MW23	2/13/2006	0.500 U	0.500 U	0.500 U	1.00 U	50.0 U	238 U	476 U	NA	NA	NA	0.00100 U
TK-MW23D*	2/13/2006	0.500 U	0.500 U	0.500 U	1.00 U	50.0 U	238 U	476 U	NA	NA	NA	0.00100 U
TK-MW23	6/6/2006	0.500 U	0.500 U, Q-41	0.500 U	1.00 U, Q-41	50.0 U, Q-41	240 U	481 U	NA	NA	NA	0.00220
TK-MW23	9/6/2006	0.500 U	2.000 U	1.000 U	1.50 U	100.0 U	243 U	485 U	NA	NA	NA	0.00100 U
TK-MW-29	5/31/2005	14,100	21,500	3,370	20,400	123,000	2,380 D-08	250 U	1.00 U	0.207 P-03	166 E	0.03240
TK-MW-29D*	5/31/2005	14,800	22,800	3,430	20,600	131,000	2,280 D-08	250 U	1.00 U	0.242 P-03	141 E	0.03310
TK-MW29	2/13/2006	8,750	17,900 E	3,450	20,400	145,000	2,630 D-08	1,660	NA	NA	NA	0.02270
TK-MW29	6/6/2006	11,300	20,600	3,690	22,300	143,000	7,370 D-08	10,900	NA	NA	NA	0.03960
TK-MW29	9/6/2006	9,030	15,200	2,650	17,100	121,000	2,680 D-08	4,850 U	NA	NA	NA	0.04940
TK-MW29	3/18/2008	9,780	16,400	3,520	22,100	130,000	4,930 Q5	3,620	NA	NA	NA	NA
TK-MW29	4/9/2008	4,450	9,090	3,000	19,500	99,700	5,190 Q5	759 Q7	NA	NA	NA	NA
TK-MW29	4/29/2008	5,810	10,600	3,230	20,100	111,000	5,220 Q5	ND	NA	NA	NA	NA
TK-MW-29	10/8/2008	12,800	14,600	3,530	21,000	117,000	3,740 Q5	ND	NA	NA	NA	NA
TK-MW-30	3/15/2007	14,000	11,700	2,500	12,100	90,600	3,160 Q5	716	NA	NA	NA	NA
TK-MW30D*	3/15/2007	13,600	10,500	2,430	11,200	104,000	3,360 Q5	956	NA	NA	NA	NA
TK-MW30	3/18/2008	11,000	4,820	2,460	8,060	73,700	2,160 Q5	603	NA	NA	NA	NA
TK-MW30	4/29/2008	8,240	4,210	2,370	7,930	65,100	2,600 Q5	ND	NA	NA	NA	NA
TK-MW30	10/8/2008	18,700	9,300	2,770	12,400	89,400	2,980 Q5	1,850	NA	NA	NA	NA
TK-MW31	3/18/2008	5,030	21,800	2,810	16,100	134,000	2,210 Q5	472 U	NA	NA	NA	NA
TK-MW31	4/29/2008	5,080	25,000	3,580	22,600	150,000	3,780 Q5	ND	NA	NA	NA	NA
TK-MW32	3/18/2008	22,100	34,600	3,140	17,200	198,000	5,490 Q5	895	NA	NA	NA	NA
TK-MW32	4/9/2008	21,300	32,200	2,950	17,300	174,000	6,570 Q5	900 Q7	NA	NA	NA	NA
TK-MW32	4/29/2008	18,400	29,700	2,490	15,400	167,000	6,500 Q5	ND	NA	NA	NA	NA
TK-MW32D	4/29/2008	19,600	28,400	2,620	16,500	172,000	5,970 Q5	ND	NA	NA	NA	NA
TK-MW33	3/18/2008	11,200	18,900	2,760	15,100	116,000	3,930 Q5	542	NA	NA	NA	NA
TK-MW33D	3/18/2008	11,300	19,000	2,590	14,100	112,000	4,190 Q5	518	NA	NA	NA	NA
TK-MW33	4/29/2008	2,490	9,860	2,780	15,500	86,400	4,320 Q5	480	NA	NA	NA	NA
TK-MW33	10/8/2008	6,670	4,320	2,070	11,100	56,100	3,030 Q5	ND	NA	NA	NA	NA
TK-MW34	3/18/2008	271	17.3	616	921	10,500	1,620 Q5	654	NA	NA	NA	NA
TK-MW34	4/29/2008	272	38.9	594	951	11,900	1,420 Q5	601	NA	NA	NA	NA
TK-MW35	3/15/2007	2,760	7,030	1,450	12,900	65,400	1,910 Q5	485 U	NA	NA	NA	NA
TK-MW35	3/18/2008	3,620	10,400	2,910	13,600	82,300	2,730 Q5	489	NA	NA	NA	NA
TK-MW35	4/29/2008	1,740	7,430	2,890	13,300	81,800	2,560 Q5	ND	NA	NA	NA	NA
TK-MW35	10/8/2008	10,500	1,630	2,500	5,600	49,500	1,350 Q5	ND	NA	NA	NA	NA
TK-MW35D	10/8/2008	10,300	1,600	2,480	5,480	48,300	1,370 Q5	ND	NA	NA	NA	NA
TK-MW36	3/15/2007	1 U	1 U	1 U	1 U	50 U	238 U	476 U	NA	NA	NA	NA
MTCA Method A Cleanup Criteria		5	1,000	700	1,000	800/1,000	500	500	20	0.01	5	0.015

NOTES:

Shaded cells indicate the results exceed the cleanup criteria.
NA = Not Analyzed.
ug/L = micrograms per liter.
D= Duplicate Sample.
DRO = Diesel Range organics.
EDB = 1,2-Dibromoethane.
EDC = 1,2-Dichloroethane.
GRO = Gasoline range organics.
MTCA Method A cleanup level for gasoline if 800 ug/L instead of 1,000 ug/L when benzene is present.

Data Qualifiers

P-03 = Greater than 40 percent difference between two dissimilar columns. After evaluation, the lower result has been reported.
D-08 or Q5 = Results in the diesel organics range are primarily due to overlap from a gasoline range product.
Q-41 = The analyte had a high bias in the associated calibration verification standard.
E = Estimated value. The reported value exceeds the calibration range of the analysis.
U = Not detected at or above the specified reporting limit.
Q7 = The heavy oil range organics present are due to hydrocarbons eluting primarily in the diesel range.

TABLE 2. MONITORING WELL CONSTRUCTION AND FIELD MEASUREMENT DATA - TIKI CAR WASH

Well ID	Well Diameter (inches)	Total Depth (feet btoc)	Screen Length (feet)	Screened Interval (feet btoc)	Top of Casing Elevation (feet)[1]	Depth To Water 18 March 2008 (feet btoc)	Depth to Water 29 April 2008 (feet btoc)	Depth to Water 3 June 2008 (feet btoc)	Depth to Water 8 Oct 2008 (feet btoc)
MW-2	2	7.85	3	6.50-9.50	NA	NA	NA	NA	NA
MW-6	2	7.01	3	4.01-7.01	NA	NA	NA	NA	NA
MW-20	2	12.32	4	7.50-11.50	144.55	NA	NA	8.3	8.45
MW-23	2	10.23	10	3.00-13.00	142.6	NA	NA	2.95	4.00
MW-29	2	13.62	10	3.50-13.50	148.47	4.70	4.49	5.1	6.35
MW-30	2	13.30	10	2.97-12.97	146.52	4.39	4.39	4.53	4.87
MW-31	4	13.56	10	3.17-13.17	148.96	5.68	5.4	5.97	7.05[2]
MW-32	4	13.28	10	2.95-12.95	149.3	5.59	5.52	5.83	7.04[2]
MW-33	4	13.19	10	2.86-12.86	149.34	5.35	5.15	5.7	6.97
MW-34	2	13.73	10	3.40-13.40	148.99	6.28	6.38	6.73	7.26
MW-35	4	13.00	10	2.67-12.67	146.13	3.02	2.5	3.45	4.71
MW-36	2	13.78	10	3.45-13.45	143.28	NA	NA	6.91	7.07

NOTES:

btoc = Below top of PVC casing.

Total depth measurements were performed on 4 January 2008.

Screened interval was determined by subtracting .33 feet (well sump) from the total depth.

Wells MW-30 through 36 were installed in February 2007.

NA = Data Not Available. Access to MW-2 and MW-6 was not denied by the property owner.

TD = Total depth of well.

[1]Top of Casing Elevation determined from INCA Engineers survey conducted in May 2008.

[2]Free product found in these wells.

TABLE 3. SUMMARY OF GROUNDWATER ANALYTICAL DATA - BEFORE AND AFTER EFR PILOT*

Well ID	Date Sampled	Benzene (ug/L)	Toluene (ug/L)	Ethylbenzene (ug/L)	Xylenes (total) (ug/L)	GRO (ug/L)
TK-MW29	3/18/2008	**9,780**	**16,400**	**3,520**	**22,100**	**130,000**
TK-MW29	4/9/2008	**4,450**	**9,090**	**3,000**	**19,500**	**99,700**
TK-MW29	4/29/2008	**5,810**	**10,600**	**3,230**	**20,100**	**111,000**
TK-MW-29	10/8/2008	**12,800**	**14,600**	**3,530**	**21,000**	**117,000**
TK-MW-30	3/15/2007	**14,000**	**11,700**	**2,500**	**12,100**	**90,600**
TK-MW30D*	3/15/2007	**13,600**	**10,500**	**2,430**	**11,200**	**104,000**
TK-MW30	3/18/2008	**11,000**	**4,820**	**2,460**	**8,060**	**73,700**
TK-MW30	4/29/2008	**8,240**	**4,210**	**2,370**	**7,930**	**65,100**
TK-MW30	10/8/2008	**18,700**	**9,300**	**2,770**	**12,400**	**89,400**
TK-MW31	3/18/2008	**5,030**	**21,800**	**2,810**	**16,100**	**134,000**
TK-MW31	4/29/2008	**5,080**	**25,000**	**3,580**	**22,600**	**150,000**
TK-MW32	3/18/2008	**22,100**	**34,600**	**3,140**	**17,200**	**198,000**
TK-MW32	4/9/2008	**21,300**	**32,200**	**2,950**	**17,300**	**174,000**
TK-MW32	4/29/2008	**18,400**	**29,700**	**2,490**	**15,400**	**167,000**
TK-MW32D	4/29/2008	**19,600**	**28,400**	**2,620**	**16,500**	**172,000**
TK-MW33	3/18/2008	**11,200**	**18,900**	**2,760**	**15,100**	**116,000**
TK-MW33D	3/18/2008	**11,300**	**19,000**	**2,590**	**14,100**	**112,000**
TK-MW33	4/29/2008	**2,490**	**9,860**	**2,780**	**15,500**	**86,400**
TK-MW33	10/8/2008	**6,670**	**4,320**	**2,070**	**11,100**	**56,100**
TK-MW34	3/18/2008	271	17.3	616	921	**10,500**
TK-MW34	4/29/2008	272	38.9	594	951	**11,900**
TK-MW35	3/15/2007	**2,760**	**7,030**	**1,450**	**12,900**	**65,400**
TK-MW35	3/18/2008	**3,620**	**10,400**	**2,910**	**13,600**	**82,300**
TK-MW35	4/29/2008	**1,740**	**7,430**	**2,890**	**13,300**	**81,800**
TK-MW35	10/8/2008	**10,500**	**1,630**	**2,500**	**5,600**	**49,500**
TK-MW35D	10/8/2008	**10,300**	**1,600**	**2,480**	**5,480**	**48,300**
TK-MW36	3/15/2007	1 U	1 U	1 U	1 U	50 U
MTCA Method A Cleanup Criteria		5	1,000	700	1,000	800/1,000

NOTES:

Bold text indicates the results exceed the cleanup criteria.

Shaded cells indicate pre-test analytical results

NA = Not Analyzed.

ug/L = micrograms per liter.

D = Duplicate Sample.

GRO = Gasoline range organics.

MTCA Method A cleanup level for gasoline if 800 ug/L instead of 1,000 ug/L when benzene is present.

*EFR Test conducted on 3/20/2008

Data Qualifiers

U = Not detected at or above the specified reporting limit.

APPENDIX A

PURGE AND SAMPLING FORMS

Ground Water Purge and Sampling Form

Well Identification	MW29
Well Diameter (inches)	2
Well Monument Locked and Good Condition?	no bolts
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	WAC
Well Casing Plug Locked and Good Condition?	Y
Initial Depth to Water (ft btoc)	4.70
Well Total Depth (ft btoc)	13.62

Site Location: Ecology - Tiki Car Wash Date: 3/18/08

Project Number: 6199401 Personnel: MBB, KB

Purge Method: √ Low Flow ___Conventional ___None

Purge Equipment: √ Peristaltic Pump ___Bailer ___Grundfos submersible

Sampling Equipment: √ Peristaltic Pump ___Bailer ___Grundfos submersible

Weather Conditions: 50°

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	1428	1430	1433	1436	1439	1442				
Depth to Ground water (ft btoc)		5.10	5.30	5.45	5.64	5.80				
Total Groundwater Purged (gallons)		.1	.25	.5	.75	1				
Purge Rate (gpm, ml/min, other)		450	450	450	450	450				
pH		5.63	5.30	5.26	5.28	5.30				
Conductivity (mS/cm)		.633	.599	.546	.528	.552				
Turbidity (NTU)		98	22	14	7	7				
Disssolved Oxygen (mg/L)		.13	.03	.05	.08	.09				
Temperature (°C)		12.1	12	11.7	11.6	11.6				
ORP/eH (mV)		—	—	—	—	—				
Color of Purged Water (gray, brown, red, clear)		Clear	→	→	→	→				

Sample Identification: TK-MW 29

Time Sampled: 1450

Purge water disposed To: Drum Onsite

Analysis	# of Bottles
√ NWTPH-Gasoline	3
√ BTEX (8021B)	3
√ NWTPH-Dx	2

Comments: Tubing 4 ft off bottom
sheen observed

Ground Water Purge and Sampling Form

Well Identification	MW30
Well Diameter (inches)	2
Well Monument Locked and Good Condition?	Y
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	D
Well Casing Plug Locked and Good Condition?	Y
Initial Depth to Water (ft btoc)	4.39
Well Total Depth (ft btoc)	13.30

Site Location: Ecology - Tiki Car Wash Date: 3/18/08

Project Number: 6199401 Personnel: MBB, KB

Purge Method: ✓ Low Flow ___Conventional ___None

Purge Equipment: ✓ Peristaltic Pump ___Bailer ___Grundfos submersible

Sampling Equipment: ✓ Peristaltic Pump ___Bailer ___Grundfos submersible

Weather Conditions:

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	1307	1310	1313	1316	1319	1322	1325	1328	1331	1334
Depth to Ground water (ft btoc)		4.58	4.69	4.74	4.78		4.94	5.07	5.27	5.37
Total Groundwater Purged (gallons)			0.25	.5	.75			1.7	2.25	
Purge Rate (gpm, ml/min, other)		350	350	350	350	350	350	350	350	350
pH		5.05	5.25	5.22	5.29	5.37	5.54	5.55	5.49	5.50
Conductivity (mS/cm)		.659	.655	.653	.651	.649	.648	.648	.647	.644
Turbidity (NTU)		0	1	1	0	0	3	2	0	0
Disssolved Oxygen (mg/L)		.85	0.04	.03	.06	0.06	.40	.01	.12	.13
Temperature (°C)		11.3	11.3	11.3	11.3	11.3	11.3	11.4	11.3	11.2
ORP/eH (mV)		-	-	-	-	-	-	-	-	-
Color of Purged Water (gray, brown, red, clear)		Clear/yellow	→	→	→	→	→	→	→	→

Sample Identification: TK-MW30

Time Sampled: 1340

Purge water disposed To: Drum Onsite

Analysis	# of Bottles
✓ NWTPH-Gasoline	3
✓ BTEX (8021B)	
✓ NWTPH-Dx	2

Comments: tubing pulled 3 ft off bottom

Ground Water Purge and Sampling Form

Well Identification	MW31
Well Diameter (inches)	4
Well Monument Locked and Good Condition?	Y
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	D
Well Casing Plug Locked and Good Condition?	Y
Initial Depth to Water (ft btoc)	5.68
Well Total Depth (ft btoc)	13.56

Site Location: Ecology - Tiki Car Wash Date: 3/18/08

Project Number: 6199401 Personnel: MBB, KB

Purge Method: √ Low Flow ___ Conventional ___ None

Purge Equipment: √ Peristaltic Pump ___ Bailer ___ Grundfos submersible

Sampling Equipment: √ Peristaltic Pump ___ Bailer ___ Grundfos submersible

Weather Conditions: overcast

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	1505	1506	1509	1512	1515	1518	1521	1524		
Depth to Ground water (ft btoc)		5.98	6.09	6.23	6.35	6.59	6.70	6.82		
Total Groundwater Purged (gallons)			.5	.8	1.3	2	2.4	2.8		
Purge Rate (gpm, ml/min, other)		450	450	450	450	450	450	450		
pH		5.61	5.63	5.61	5.57	5.56	5.56	5.56		
Conductivity (mS/cm)		.600	.597	.593	.590	.587	.582	.581		
Turbidity (NTU)		7	6	2	3	6	4	1		
Disssolved Oxygen (mg/L)		4.99	3.34	3.17	3.44	2.99	2.74	2.70		
Temperature (°C)		12.2	12.2	12.1	12.1	12	11.9	12		
ORP/eH (mV)		-	-	-	-	-	-	-		
Color of Purged Water (gray, brown, red, clear)		clear								

Sample Identification: TK-MW 31

Time Sampled: 1530

Purge water disposed To: Drum Onsite

Analysis	# of Bottles
√ NWTPH-Gasoline	3
√ BTEX (8021B)	
√ NWTPH-Dx	2

Comments: Tubing 4 ft off bottom
sheen noted on water

Ground Water Purge and Sampling Form

Well Identification	MW-32
Well Diameter (inches)	4 in
Well Monument Locked and Good Condition?	Y
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	WBC
Well Casing Plug Locked and Good Condition?	Y
Initial Depth to Water (ft btoc)	5.59
Well Total Depth (ft btoc)	13.28

Site Location: Ecology - Tiki Car Wash Date: 3/18/08

Project Number: 6199401 Personnel: MBB, KB

Purge Method: X Low Flow ___Conventional ___None

Purge Equipment: X Peristaltic Pump ___Bailer ___Grundfos submersible

Sampling Equipment: X Peristaltic Pump ___Bailer ___Grundfos submersible

Weather Conditions: ~40°F, overcast,

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	1013	1016	1019	1022	1025	1028	1031			
Depth to Ground water (ft btoc)		5.85	6.05	6.18	6.29	6.39	6.53			
Total Groundwater Purged (gallons)			.5	1	1.3	1.5	2			
Purge Rate (gpm, ml/min, other)		400	400	400	400	400	400			
pH		4.38	5.39	5.52	5.59	5.63	5.64			
Conductivity (mS/cm)		1.1	1.09	1.09	1.09	1.09	1.09			
Turbidity (NTU)		1	0	0	0	0	0			
Disssolved Oxygen (mg/L)		1.36	0.59	0.33	.34	0.37	0.44			
Temperature (°C)		11.1	11.1	11.2	11.2	11.2	11.2			
ORP/eH (mV) meter erratic		-45	-68	-72	—	—	—			
Color of Purged Water (gray, brown, red, clear)		clear/yellow →								

Sample Identification: TK-MW32

Time Sampled: 1040

Purge water disposed To: Drum Onsite

Analysis	# of Bottles
X NWTPH-Gasoline	3
X BTEX (8021B)	
✓ NWTPH-Dx	2

Comments:

13.07 + .28 = Well Total Depth

installed tubing 4 ft off bottom

Purge water ~~is~~ smelled musty, or sulfur.

Ground Water Purge and Sampling Form

Well Identification	MW33
Well Diameter (inches)	4 in
Well Monument Locked and Good Condition?	Y
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	WBC
Well Casing Plug Locked and Good Condition?	Y
Initial Depth to Water (ft btoc)	5.35
Well Total Depth (ft btoc)	13.19

Site Location: Ecology - Tiki Car Wash Date: 3/18/08

Project Number: 6199401 Personnel: MBB, KB

Purge Method: ✓ Low Flow ___Conventional ___None

Purge Equipment: ✓ Peristaltic Pump ___Bailer ___Grundfos submersible

Sampling Equipment: ✓ Peristaltic Pump ___Bailer ___Grundfos submersible

Weather Conditions: 40° F overcast

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	1112	1115	1118	1121	1124	1127	1130	1133	1136	
Depth to Ground water (ft btoc)	5.59	5.73		5.99		6.26	6.46		6.65	
Total Groundwater Purged (gallons)	.25	.5	1	1.25	1.5	2	2.25	2.5	3	3.7
Purge Rate (gpm, ml/min, other)	400	400	400	400	400	400	400	400	400	
pH	5.57	5.03	4.88	5.05	5.24	5.35	5.43	5.47	5.50	
Conductivity (mS/cm)	.775	.766	.769	.768	.766	.763	.762	.762	.761	
Turbidity (NTU) Dumping around a lot	16	~~345~~	60	82	72	86	67	69	67	
Disssolved Oxygen (mg/L)	2.07	3.54	3.82	3.82	3.93	3.59	3.62	3.40	3.32	
Temperature (°C)	11.2	11.3	11.3	11.4	11.3	11.4	11.3	11.3	11.3	
ORP/eH (mV)	—	—	—	—	—	—	—	—	—	
Color of Purged Water (gray, brown, red, clear)	Clear/yellow	→	→	→	→	→	→	→	→	

Sample Identification: TK-MW33 / TK-MW33D

Time Sampled: 1145 / 1150

Purge water disposed To: Drum Onsite

Analysis	# of Bottles
✓ NWTPH-Gasoline	3
✓ BTEX (8021B)	3
✓ NWTPH-Dx	8

Comments:
- Installed tubing intake 4 ft off bottom
- bubbles

Ground Water Purge and Sampling Form

Well Identification	MW-34
Well Diameter (inches)	2 in
Well Monument Locked and Good Condition?	Yes
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	D
Well Casing Plug Locked and Good Condition?	Y
Initial Depth to Water (ft btoc)	6.28
Well Total Depth (ft btoc)	13.73

Site Location: Ecology - Tiki Car Wash Date: 3/18/08

Project Number: 6199401 Personnel: MBB, KB

Purge Method: X Low Flow ___Conventional ___None

Purge Equipment: X Peristaltic Pump ___Bailer ___Grundfos submersible

Sampling Equipment: X Peristaltic Pump ___Bailer ___Grundfos submersible

Weather Conditions: Overcast, ~40°F

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	9:28 AM	9:31	9:34	9:37	9:40	9:43	9:46			
Depth to Ground water (ft btoc)		6.81	6.90	—	—	7.45				
Total Groundwater Purged (gallons)		.25	0.5							
Purge Rate (gpm, ml/min, other)		450	400							
pH		4.43	4.88	4.98	5.1	5.13	5.19			
Conductivity (mS/cm)		.826	.761	.746	.742	.738	.736			
Turbidity (NTU)		18	11	6	4	3	4			
Disssolved Oxygen (mg/L)		.07	.02	.05	0.07	.08	.08			
Temperature (°C)		11.7	11.9	12	12	12	12.1			
ORP/eH (mV)		—	—	—	—	—				
Color of Purged Water (gray, brown, red, clear)		Clear/yellow	Clear/Yellow	Clear/yellow						

Sample Identification: TK-MW34

Time Sampled: 9:50 AM

Purge water disposed To: Drum Onsite

Analysis	# of Bottles
X NWTPH-Gasoline	3
X BTEX (8021B)	
X NWTPH-Dx	2

Comments: Tubing installed intake 4 ft off bottom

Ground Water Purge and Sampling Form

Well Identification	MW35
Well Diameter (inches)	4
Well Monument Locked and Good Condition?	Y
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	D
Well Casing Plug Locked and Good Condition?	Y
Initial Depth to Water (ft btoc)	3.02
Well Total Depth (ft btoc)	13.00

Site Location: Ecology - Tiki Car Wash Date: 3/18/08

Project Number: 6199401 Personnel: MBB, KB

Purge Method: √ Low Flow ___Conventional ___None

Purge Equipment: √ Peristaltic Pump ___Bailer ___Grundfos submersible

Sampling Equipment: √ Peristaltic Pump ___Bailer ___Grundfos submersible

Weather Conditions: scattered clouds 50°

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	1354	1356	1359	1402	1405	1408				
Depth to Ground water (ft btoc)		3.05	3.37	3.48	3.62	3.71				
Total Groundwater Purged (gallons)		0.1	0.25	0.5	0.75	1				
Purge Rate (gpm, ml/min, other)		400	400	400	400	400				
pH		4.94	5.43	5.47	5.47	5.49				
Conductivity (mS/cm)		.648	.648	.649	.648	.649				
Turbidity (NTU)		0	1	1	1	1				
Disssolved Oxygen (mg/L)		.11	.04	.09	.11	.11				
Temperature (°C)		11.4	11.4	11.4	11.4	11.4				
ORP/eH (mV)		-	-	-	-	-				
Color of Purged Water (gray, brown, red, clear)		clear								

Sample Identification: TK-MW 35

Time Sampled: 1415

Purge water disposed To: Drum Onsite

Analysis	# of Bottles
√ NWTPH-Gasoline	3
√ BTEX (8021B)	
√ NWTPH-Dx	2

Comments: 3.01 ft to product (±.01') Tubing 3ft off Bottom

Ground Water Purge and Sampling Form

Well Identification	MW-29
Well Diameter (inches)	2
Well Monument Locked and Good Condition?	NO BOLTS
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	WAC
Well Casing Plug Locked and Good Condition?	Y
Initial Depth to Water (ft btoc)	~~4.36~~
Well Total Depth (ft btoc)	13.62

Site Location: Ecology - Tiki Car Wash Date: ~~3/18/08~~ 4/9/08

Project Number: 6199401 Personnel: ~~MBB~~, KB, AJ

Purge Method: ✓ Low Flow ___ Conventional ___ None

Purge Equipment: ✓ Peristaltic Pump ___ Bailer ___ Grundfos submersible

Sampling Equipment: ✓ Peristaltic Pump ___ Bailer ___ Grundfos submersible

Weather Conditions: PARTLY CLOUDY 40°F

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	0958	1008	1011	1014	1017	1020				
Depth to Ground water (ft btoc)	4.36	5.11	5.23	5.3	5.41	5.57				
Total Groundwater Purged ~~(gallons)~~ Liters		0.5	1.85	3.20	4.55	5.90				
Purge Rate (gpm, ml/min, other)		450	450	450	450	450				
pH		3.97	3.77	3.64	3.69	3.74				
Conductivity (mS/cm)		.314	.312	.322	.328	.339				
Turbidity (NTU)		59	57	35	42	51				
Disssolved Oxygen (mg/L)		0.04	0.06	0.08	0.09	0.08				
Temperature (°C)		11.8	11.8	11.7	11.7	11.8				
ORP/eH (mV)		—	—	—	—	—				
Color of Purged Water (gray, brown, red, clear)		Yellowish	Yellowish	→	→	→				

Sample Identification: TK-MW 29

Time Sampled: 1030

Purge water disposed To: Drum Onsite

Analysis	# of Bottles
X NWTPH-Gasoline	> 3
X BTEX (8021B)	
X NWTPH-Dx	2

Comments: Sheen

Ground Water Purge and Sampling Form

Well Identification	MW-32
Well Diameter (inches)	4
Well Monument Locked and Good Condition?	Y
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	D
Well Casing Plug Locked and Good Condition?	Y
Initial Depth to Water (ft btoc)	5.48
Well Total Depth (ft btoc)	13.28

Site Location: Ecology - Tiki Car Wash Date: ~~3/18/08~~ 4/9/08

Project Number: 6199401 Personnel: ~~MBB~~, KB, AJ

Purge Method: X Low Flow ___Conventional ___None

Purge Equipment: X Peristaltic Pump ___Bailer ___Grundfos submersible

Sampling Equipment: X Peristaltic Pump ___Bailer ___Grundfos submersible

Weather Conditions: 240°F overcast

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	1058	1101	1104	1107	1110	1113	1116	1119		
Depth to Ground water (ft btoc)	5.85	6.08	6.26	6.44	6.62	6.82	6.98	7.16		
Total Groundwater Purged (~~gallons~~) Liters	.9	2.25	3.60	4.95	6.30	7.65	9.00	10.35		
Purge Rate (gpm, ml/min, other)	450	450	450	450	450	450	450	450		
pH	4.44	3.70	3.77	3.98	4.11	4.15	4.16	4.17		
Conductivity (mS/cm)	.920	.870	.812	.779	.776	.779	.782	.788		
Turbidity (NTU)	81	84	85	86	82	49	47	36		
Disssolved Oxygen (mg/L)	5.15	5.31	4.92	4.98	5.28	4.88	4.80	4.78		
Temperature (°C)	11.6	11.5	11.4	11.2	11.2	11.2	11.2	11.2		
ORP/eH (mV)	—	—	—	—	—	—	—	—		
Color of Purged Water (gray, brown, red, clear)	pale yellow	→	→	→	→	→	→	→		

Sample Identification: TK-MW 32

Time Sampled: 1125

Purge water disposed To: Drum Onsite

Analysis	# of Bottles
X NWTPH-Gasoline	3
X BTEX (8021B)	
X NWTPH-Dx	2

Comments:

Ground Water Purge and Sampling Form

Well Identification	MW-30
Well Diameter (inches)	2"
Well Monument Locked and Good Condition?	yes
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	D
Well Casing Plug Locked and Good Condition?	yes
Initial Depth to Water (ft btoc)	4.39
Well Total Depth (ft btoc)	

Site Location: Ecology - Tiki Car Wash Date: 4/29/08

Project Number: 6199401 Personnel: MBB

Purge Method: _X_Low Flow ___Conventional ___None

Purge Equipment: _X_Peristaltic Pump ___Bailer ___Grundfos submersible

Sampling Equipment: _X_Peristaltic Pump ___Bailer ___Grundfos submersible

Weather Conditions: Overcast, ~50°F

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	0930	0933	0936	0939	0942	0945				
Depth to Ground water (ft btoc)	4.39	4.80	4.85	5.05	5.10	5.16				
Total Groundwater Purged (gallons)						2.2				
Purge Rate (gpm, ml/min, other)	400									
pH	5.57	4.96	5.33	5.60	5.70	5.74				
Conductivity (mS/cm)	.680	.668	.653	.650	.647	.645				
Turbidity (NTU)	0	0	0	0	0	0				
Disssolved Oxygen (mg/L)	0.17	0.04	0.08	0.10	0.12	0.12				
Temperature (°C)	12.4	12.3	12.2	12.1	12.1	12.0				
ORP/eH (mV)	—	—	—	—	—					
Color of Purged Water (gray, brown, red, clear)	clear									

Sample Identification: TK-MW30

Time Sampled: 0950

Purge water disposed To: Drum Onsite

Analysis	# of Bottles
_X_ NWTPH-Gasoline	3
_X_ BTEX (8021B)	
_X_ NWTPH-Dx	2

Comments: Tubing pulled 3' off bottom.

Ground Water Purge and Sampling Form

Well Identification	MW-35
Well Diameter (inches)	4"
Well Monument Locked and Good Condition?	yes
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	D
Well Casing Plug Locked and Good Condition?	yes
Initial Depth to Water (ft btoc)	2.50
Well Total Depth (ft btoc)	

Site Location: Ecology - Tiki Car Wash Date: 4/29/08

Project Number: 6199401 Personnel: MBB

Purge Method: _X_Low Flow ___Conventional ___None

Purge Equipment: _X_Peristaltic Pump ___Bailer ___Grundfos submersible

Sampling Equipment: _X_Peristaltic Pump ___Bailer ___Grundfos submersible

Weather Conditions: Overcast, 50's

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	1006	1009	1012	1015	1018					
Depth to Ground water (ft btoc)	2.59	—	3.28	3.43	3.54					
Total Groundwater Purged (gallons)					2.5					
Purge Rate (gpm, ml/min, other)	400	—	—	—	—					
pH	4.44	5.68	5.54	5.49	5.42					
Conductivity (mS/cm)	.595	.595	.595	.576	.576					
Turbidity (NTU)	2	1	1	1	1					
Disssolved Oxygen (mg/L)	0.05	0.04	0.09	0.11	0.13					
Temperature (°C)	12.0	12.9	11.9	11.9	11.8					
ORP/eH (mV)	—	—	—	—	—					
Color of Purged Water (gray, brown, red, clear)	clear/yellow		clear	clear	clear					

Sample Identification: TK-MW35

Time Sampled: 1020

Purge water disposed To: Drum Onsite

Analysis	# of Bottles
_X_ NWTPH-Gasoline	3
_X_ BTEX (8021B)	
_X_ NWTPH-Dx	2

Comments: Tubing pulled ~ 3' off bottom

Ground Water Purge and Sampling Form

Well Identification	MW-34
Well Diameter (inches)	2"
Well Monument Locked and Good Condition?	yes
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	D
Well Casing Plug Locked and Good Condition?	yes
Initial Depth to Water (ft btoc)	6.38
Well Total Depth (ft btoc)	

Site Location: Ecology - Tiki Car Wash Date: 4/29/08

Project Number: 6199401 Personnel: MBB

Purge Method: _X_Low Flow ___Conventional ___None

Purge Equipment: _X_Peristaltic Pump ___Bailer ___Grundfos submersible

Sampling Equipment: _X_Peristaltic Pump ___Bailer ___Grundfos submersible

Weather Conditions: Overcast ~50's

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	1042	1045	1048	1051	1054	1057				
Depth to Ground water (ft btoc)	6.85	6.89	8.10	7.16	7.20	7.25				
Total Groundwater Purged (gallons)						2.6				
Purge Rate (gpm, ml/min, other)	400	→	→	→	→					
pH	5.43	5.11	5.08	5.141	5.18	5.21				
Conductivity (mS/cm)	.710	.717	.721	.725	.727	.726				
Turbidity (NTU)	5	4	3	3	1	2				
Disssolved Oxygen (mg/L)	0.03	0.06	0.09	0.11	0.10	0.11				
Temperature (°C)	12.7	12.7	12.7	12.7	12.7	12.7				
ORP/eH (mV)	—	—	—							
Color of Purged Water (gray, brown, red, clear)	clear	→	→	→	→					

Sample Identification: TK-MW34

Time Sampled: 1100

Purge water disposed To: Drum Onsite

Analysis	# of Bottles
_X_ NWTPH-Gasoline	3
_X_ BTEX (8021B)	
_X_ NWTPH-Dx	2

Comments: Tubing pulled = 'off bottom

Ground Water Purge and Sampling Form

Well Identification	MW-33
Well Diameter (inches)	4"
Well Monument Locked and Good Condition?	yes
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	D
Well Casing Plug Locked and Good Condition?	yes
Initial Depth to Water (ft btoc)	5.15
Well Total Depth (ft btoc)	

Site Location: Ecology - Tiki Car Wash Date: 4/29/08

Project Number: 6199401 Personnel: MBB

Purge Method: __X_Low Flow ___Conventional ___None

Purge Equipment: __X_Peristaltic Pump ___Bailer ___Grundfos submersible

Sampling Equipment: _X_Peristaltic Pump ___Bailer ___Grundfos submersible

Weather Conditions: Overcast - ~55°F

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	1150	1153	1156	1159	1202	1206				
Depth to Ground water (ft btoc)	5.43	5.45	~~5.85~~ 5.85	5.85	6.00	6.04				
Total Groundwater Purged (gallons)						2.8				
Purge Rate (gpm, ml/min, other)	400	~	~	~	~					
pH	5.43	5.42	5.42	5.45	5.49	5.54				
Conductivity (mS/cm)	.545	.549	.547	.551	.549	.547				
Turbidity (NTU)	63	62	51	42	32	43				
Disssolved Oxygen (mg/L)	8.02	6.96	6.65	6.18	6.31	6.17				
Temperature (°C)	12.1	12.1	12.1	12.1	12.1	12.1				
ORP/eH (mV)	—	—	—	—	—					
Color of Purged Water (gray, brown, red, clear)	clear	~	~	~	~					

Sample Identification: TK-MW33

Time Sampled: 1210

Purge water disposed To: Drum Onsite

Analysis	# of Bottles
__X_ NWTPH-Gasoline	3
__X_ BTEX (8021B)	3
__X_ NWTPH-Dx	2

Comments: Tubing pulled ~3.5' off bottom.
-Air leaking into tubing near peristaltic pump.

Ground Water Purge and Sampling Form

Well Identification	MW-32
Well Diameter (inches)	4"
Well Monument Locked and Good Condition?	yes
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	D
Well Casing Plug Locked and Good Condition?	yes
Initial Depth to Water (ft btoc) ?	5.52
Well Total Depth (ft btoc)	

Site Location: Ecology - Tiki Car Wash Date: 4/29/08

Project Number: 6199401 Personnel: MBB

Purge Method: _X_Low Flow ___Conventional ___None

Purge Equipment: _X_Peristaltic Pump ___Bailer ___Grundfos submersible

Sampling Equipment: _X_Peristaltic Pump ___Bailer ___Grundfos submersible

Weather Conditions: Overcast ~ 55°F

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	1237	1240	1243	1246	1249	1252				1545
Depth to Ground water (ft btoc)	5.52	5.59	5.81	5.89	6.03	6.07				5.94
Total Groundwater Purged (gallons)						2.5				
Purge Rate (gpm, ml/min, other)	<100	→	→	→	→	→				
pH	6.33	5.72	5.72	5.92	6.00	5.98				
Conductivity (mS/cm)	.939	.939	.937	.935	.938	.943				
Turbidity (NTU)	82	69	34	40	34	36				
Disssolved Oxygen (mg/L)	6.99	8.62	7.94	8.03	7.85	7.83				
Temperature (°C)	12.4	12.0	11.9	11.8	11.7	11.7				
ORP/eH (mV)	—	—	—	—	—	—				
Color of Purged Water (gray, brown, red, clear)	yellow	→	→	→	→	→				

Sample Identification: TK-MW32/TK-MW32D	Analysis	# of Bottles
Time Sampled: 1258 1300	_X_ NWTPH-Gasoline	6
	_X_ BTEX (8021B)	
Purge water disposed To: Drum Onsite	_X_ NWTPH-Dx	4
	X VOA unpreserved for Butane.	3

Comments: Tubing pulled ~3' off bottom.
- Air bubbles in tubing near S. pump.
- purge water smells of sulfur, or Fats, oils, grease (FOG)

Ground Water Purge and Sampling Form

Well Identification	MW-31
Well Diameter (inches)	4"
Well Monument Locked and Good Condition?	yes
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	D
Well Casing Plug Locked and Good Condition?	yes
Initial Depth to Water (ft btoc)	5.40
Well Total Depth (ft btoc)	

Site Location: Ecology - Tiki Car Wash Date: 4/29/08

Project Number: 6199401 Personnel: MBB

Purge Method: __X_Low Flow ___Conventional ___None

Purge Equipment: __X_Peristaltic Pump ___Bailer ___Grundfos submersible

Sampling Equipment: _X_Peristaltic Pump ___Bailer ___Grundfos submersible

Weather Conditions: overcast, drizzle ~50°F

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	1353	1356	1359	1402	1405					
Depth to Ground water (ft btoc)	5.48	6.10	6.32	6.48	6.57					
Total Groundwater Purged (gallons)					2.8					
Purge Rate (gpm, ml/min, other)	400	—	—	—	—					
pH	6.01	6.12	5.92	5.95	5.97					
Conductivity (mS/cm)	.618	.618	.583	.579	.576					
Turbidity (NTU)	20	18	20	26	28					
Disssolved Oxygen (mg/L)	0.08	0.06	0.09	0.10	0.10					
Temperature (°C)	12.9	12.8	12.8	12.8	12.8					
ORP/eH (mV)	—	—	—	—	—					
Color of Purged Water (gray, brown, red, clear)										

Sample Identification: TK-MW31

Time Sampled: 1415

Purge water disposed To: Drum Onsite

Analysis	# of Bottles
__X_ NWTPH-Gasoline	3
__X_ BTEX (8021B)	
__X_ NWTPH-Dx	2
X VOA, for Butane unpreserved	3

Comments: Tubing pulled ~3' off bottom

Ground Water Purge and Sampling Form

Well Identification	MW-29
Well Diameter (inches)	2"
Well Monument Locked and Good Condition?	yes
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	WBC
Well Casing Plug Locked and Good Condition?	yes
Initial Depth to Water (ft btoc) 1432	4.49
Well Total Depth (ft btoc)	

Site Location: Ecology - Tiki Car Wash Date: 4/29/08

Project Number: 6199401 Personnel: MBB

Purge Method: _X_Low Flow ___Conventional ___None

Purge Equipment: _X_Peristaltic Pump ___Bailer ___Grundfos submersible

Sampling Equipment: _X_Peristaltic Pump ___Bailer ___Grundfos submersible

Weather Conditions: Overcast, ~55°F

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	1436	1439	1442	1445	1448					
Depth to Ground water (ft btoc)	4.70	4.82	5.10	—	—					
Total Groundwater Purged (gallons)					2.9					
Purge Rate (gpm, ~~ml/min~~, other)	400	→	→	→	→					
pH	5.99	5.82	5.87	5.89	5.94					
Conductivity (mS/cm)	.496	.498	.494	.456	.456					
Turbidity (NTU)	18	12	93	23	28					
Disssolved Oxygen (mg/L)	0.05	0.04	0.08	0.07	0.07					
Temperature (°C)	12.5	12.6	12.6	12.7	12.7					
ORP/eH (mV)	—	—	—	—	—					
Color of Purged Water (gray, brown, red, clear)	clear	→	→	→	→					

Sample Identification: TK-MW29

Time Sampled: 1500

Purge water disposed To: Drum Onsite

Analysis	# of Bottles
_X_ NWTPH-Gasoline	3
_X_ BTEX (8021B)	3
X NWTPH-Dx	2
X VOAs for Butane unpreserved	3

Comments: Tubing pulled 3.5' off bottom. — No product measured, but probe smells of strong gas odor.

Ground Water Purge and Sampling Form

Well Identification	MW29	Site Location: TK			Date: 10/8/2008					
Well Diameter (inches)	2"	Project Number: 61994.01			Personnel: AJ					
Well Monument Locked and Good Condition?	YES	Purge Method: _X_Low Flow			___Conventional		___None			
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	WAC	Purge Equipment: _X_Peristaltic Pump			___Redi-flo Pump		___Other			
Well Casing Plug Locked and Good Condition?	Y	Sampling Equipment: _X_Peristaltic Pump			___Redi-flo Pump		___Bailer			
Depth to Ground water (ft btoc)	6.35	Weather Conditions: PARTLY CLOUDY 50°F								
Well Total Depth (ft btoc) 0918	~~15.35~~ 15.35	Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons								
Time	0930	0933	0936	0939	0942					
Depth to Ground water (ft btoc)	6.87	7.02	7.11	7.16	7.22					
Total Groundwater Purged(gallons, liters, other) 3	.6	.9	1.2	1.5	1.8					
Purge Rate (gpm, ft³/min, ml/min, other)	300	300	300	300	300					
pH	5.65	5.65	5.67	5.67	5.67					
Conductivity (mS/cm)	.679	.650	.650	.649	.646					
Turbidity (NTU)	35	22	18	16	16					
Disssolved Oxygen (mg/L)	0.27	0.06	0.03	0.02	0.01					
Temperature (°C)	18.8	19.0	19.1	19.2	19.1					
ORP/eH (mV)	-036	-029	-032	-035	-035					
Color of Purged Water (gray, brown, red, clear)	TAN	TAN	CLR	CLR	CLR					

Sample Identification: TK-MW29

Time Sampled: 0945

Purge water disposed To: 1DW DRUM ONSITE

Analysis

_X_ NWTPH-G/BTEX by 8021b

_X_ NWTPH-Dx

___ Total Lead

Comments:

NO PRODUCT MEASURED

Ground Water Purge and Sampling Form

Well Identification	MW3	Site Location: TK1			Date: 10/8/2008					
Well Diameter (inches)	2"	Project Number: 61994.01			Personnel: AJ					
Well Monument Locked and Good Condition?	Y	Purge Method:	X Low Flow		Conventional		None			
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	D	Purge Equipment:	X Peristaltic Pump		Redi-flo Pump		Other			
Well Casing Plug Locked and Good Condition?	Y	Sampling Equipment:	X Peristaltic Pump		Redi-flo Pump		Bailer			
Depth to Ground water (ft btoc)	4.87	Weather Conditions:								
Well Total Depth (ft btoc)	13.34	52°F. cloudy			Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons					
Time	1229	1232	1235	1238	1241					
Depth to Ground water (ft btoc)	5.59	5.73	5.82	6.05	6.21					
Total Groundwater Purged(gallons, liters, other)	1.0	1.5	2.0	2.5	3.0					
Purge Rate (gpm, ft³/min, ml/min, other)	500	500	500	500	500					
pH	6.06	6.04	6.05	6.03	6.02					
Conductivity (mS/cm)	.620	.628	.632	.633	.632					
Turbidity (NTU)	2	2	2	2	2					
Disssolved Oxygen (mg/L)	0.05	0.01	0.00	0.00	0.00					
Temperature (°C)	18.4	18.6	18.7	18.7	18.7					
ORP/eH (mV)	-044	-059	-064	-061	-017					
Color of Purged Water (gray, brown, red, clear)	CLR	CLR	CLR	CLR	CLR					

Sample Identification: TK-MW3D

Time Sampled: 1245

Purge water disposed To: IDW Drum ON SITE

Analysis

X NWTPH-G/BTEX by 8021b

X NWTPH-Dx

Total Lead

Comments:

Ground Water Purge and Sampling Form

Well Identification	MW-33	Site Location:	Date: 10/8/2008
Well Diameter (inches)	4"	Project Number: 61994.01	Personnel: AJ
Well Monument Locked and Good Condition?	Y	Purge Method:	_X_Low Flow ___Conventional ___None
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	D	Purge Equipment:	_X_Peristaltic Pump ___Redi-flo Pump ___Other
Well Casing Plug Locked and Good Condition?	Y	Sampling Equipment:	_X_Peristaltic Pump ___Redi-flo Pump ___Bailer
Depth to Ground water (ft btoc) 10/9	6.97	Weather Conditions:	CLOUDY 52F
Well Total Depth (ft btoc)		Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons	

Time	1057	1100	1103	1106	1109	1119	1122			
Depth to Ground water (ft btoc)	7.27	7.42	7.50	7.51	7.52	7.54	7.55			
Total Groundwater Purged(gallons, liters, other)	.7	1.05	1.4	1.75	2.10	2.45	2.80			
Purge Rate (gpm, ft³/min, ml/min, other)	350	350	350	350	350	350	350			
pH	6.01	6.01	6.17	6.21	6.26	6.26	6.24			
Conductivity (mS/cm)	.510	.744	.740	.738	.734	.734	.731			
Turbidity (NTU)	25	18	18	19	9	9	9			
Disssolved Oxygen (mg/L)	8.36	8.36	7.65	8.33	8.56	8.64	8.72			
Temperature (°C)	16.7	16.8	16.6	16.6	16.6	16.6	16.7			
ORP/eH (mV)	-050	-055	-059	-059	-057	-056	-056			
Color of Purged Water (gray, brown, red, clear)	CLR	CLR	CLR	CLR	CLR	CLR	CLR			

Sample Identification: DK-MW33

Time Sampled: 1125

Purge water disposed To: IDW DRUM ONSITE

Analysis

_X_ NWTPH-G/BTEX by 8021b

_X_ NWTPH-Dx

___ Total Lead

Comments:

NO PROD MEASURED

REPAIRED TUBING FROM 1100 - 1107

Ground Water Purge and Sampling Form

Well Identification	MW 35	Site Location:	TIKI
Well Diameter (inches)	4	Date:	10/8/2008
Well Monument Locked and Good Condition?	Y	Project Number:	61994.01
Inside Well Head and Outside Well Casing (D=dry), (WAC=Water above Casing), WBC=Water Below Casing)	D	Personnel:	AJ
Well Casing Plug Locked and Good Condition?	Y	Purge Method:	_X_ Low Flow ___ Conventional ___ None
Depth to Ground water (ft btoc)	4.71	Purge Equipment:	_X_ Peristaltic Pump ___ Redi-flo Pump ___ Other
Well Total Depth (ft btoc)	12.99	Sampling Equipment:	_X_ Peristaltic Pump ___ Redi-flo Pump ___ Bailer
		Weather Conditions:	52°F / RAIN

Well Volume Calculation: 2"=.16, 4"=.64, 6"=1.44 gallons

Time	1150	1153	1156	1159	1202					
Depth to Ground water (ft btoc)	5.23	5.25	5.40	5.62	5.76					
Total Groundwater Purged(gallons, liters, other)	.9	1.35	1.80	2.25	2.70					
Purge Rate (gpm, ft³/min, ml/min, other)	450	450	450	450	450					
pH	5.96	5.96	5.96	5.96	5.95					
Conductivity (mS/cm)	.556	.556	.555	.555	.555					
Turbidity (NTU)	1	1	0	1	2					
Disssolved Oxygen (mg/L)	0.06	0.04	0.01	0.00	0.00					
Temperature (°C)	18.0	18.1	18.2	18.2	18.3					
ORP/eH (mV)	-030	-33	-37	-40	-42					
Color of Purged Water (gray, brown, red, clear)	CLR	CLR	CLR	CLR	CLR					

Sample Identification: TK-MW35 1205

Time Sampled: TK-MW35 1210

Purge water disposed To: ON DRUM

Analysis

_X_ NWTPH-G/BTEX by 8021b

_X_ NWTPH-Dx

___ Total Lead

Comments: Tubing 4' off bottom. NO Product Measured

APPENDIX B

LABORATORY REPORTS

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

March 26, 2008

Jil Frain
EA Engineering, Science and Technology
12011 NE 1st Street, Suite 100
Bellevue, WA/USA 98005

RE: Tiki Carwash

Enclosed are the results of analyses for samples received by the laboratory on 03/19/08 15:55. The following list is a summary of the Work Orders contained in this report, generated on 03/26/08 14:54.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
BRC0301	Tiki Carwash	61994.01

TestAmerica Seattle

Kate Haney, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name:	**Tiki Carwash**	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	03/26/08 14:54

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TK-MW29	BRC0301-01	Water	03/18/08 14:50	03/19/08 15:55
TK-MW30	BRC0301-02	Water	03/18/08 13:40	03/19/08 15:55
TK-MW31	BRC0301-03	Water	03/18/08 15:30	03/19/08 15:55
TK-MW32	BRC0301-04	Water	03/18/08 10:40	03/19/08 15:55
TK-MW33	BRC0301-05	Water	03/18/08 11:45	03/19/08 15:55
TK-MW33D	BRC0301-06	Water	03/18/08 11:50	03/19/08 15:55
TK-MW34	BRC0301-07	Water	03/18/08 09:50	03/19/08 15:55
TK-MW35	BRC0301-08	Water	03/18/08 14:15	03/19/08 15:55
TK-TB031808	BRC0301-09	Water	03/18/08 17:00	03/19/08 15:55

TestAmerica Seattle

Kate Haney, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	03/26/08 14:54

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRC0301-01 (TK-MW29)		Water			Sampled: 03/18/08 14:50					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	130000	----	5000	ug/l	100x	8C21015	03/21/08 09:40	03/22/08 01:41	
Ethylbenzene	"	3520	----	50.0	"	"	"	"	"	
Xylenes (total)	"	22100	----	100	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			*98.7%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*104%*		*68 - 140 %*	"			"	
BRC0301-01RE1 (TK-MW29)		Water			Sampled: 03/18/08 14:50					
Benzene	NWTPH-Gx/802 1B	9780	---	500	ug/l	1000x	8C24017	03/24/08 09:58	03/25/08 00:43	
Toluene	"	16400	---	500	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			*88.1%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*101%*		*68 - 140 %*	"			"	
BRC0301-02 (TK-MW30)		Water			Sampled: 03/18/08 13:40					
oluene	NWTPH-Gx/802 1B	4820	----	50.0	ug/l	100x	8C21015	03/21/08 09:40	03/22/08 04:25	
Ethylbenzene	"	2460	---	50.0	"	"	"	"	"	
Xylenes (total)	"	8060	----	100	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			*93.9%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*100%*		*68 - 140 %*	"			"	
BRC0301-02RE1 (TK-MW30)		Water			Sampled: 03/18/08 13:40					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	73700	---	25000	ug/l	500x	8C24017	03/24/08 09:58	03/24/08 22:32	
Benzene	"	11000	---	250	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			*94.3%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*101%*		*68 - 140 %*	"			"	
BRC0301-03 (TK-MW31)		Water			Sampled: 03/18/08 15:30					
Benzene	NWTPH-Gx/802 1B	5030	----	50.0	ug/l	100x	8C21015	03/21/08 09:40	03/22/08 04:57	
Ethylbenzene	"	2810	----	50.0	"	"	"	"	"	
Xylenes (total)	"	16100	----	100	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			*98.5%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*105%*		*68 - 140 %*	"			"	

TestAmerica Seattle

Kate Haney, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	03/26/08 14:54

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRC0301-03RE1 (TK-MW31)		Water			Sampled: 03/18/08 15:30					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	134000	----	50000	ug/l	1000x	8C24017	03/24/08 09:58	03/25/08 01:15	
Toluene	"	21800	----	500	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			*95.4%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*102%*		*68 - 140 %*	"			"	
BRC0301-04 (TK-MW32)		Water			Sampled: 03/18/08 10:40					
Ethylbenzene	NWTPH-Gx/802 1B	3140	----	50.0	ug/l	100x	8C21015	03/21/08 09:40	03/22/08 05:30	
Xylenes (total)	"	17200	----	100	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			*94.5%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*105%*		*68 - 140 %*	"			"	
BRC0301-04RE1 (TK-MW32)		Water			Sampled: 03/18/08 10:40					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	198000	----	50000	ug/l	1000x	8C24017	03/24/08 09:58	03/25/08 03:59	
Benzene	"	22100	----	500	"	"	"	"	"	
Toluene	"	34600	----	500	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			*95.1%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*106%*		*68 - 140 %*	"			"	
BRC0301-05 (TK-MW33)		Water			Sampled: 03/18/08 11:45					
Ethylbenzene	NWTPH-Gx/802 1B	2760	----	50.0	ug/l	100x	8C21015	03/21/08 09:40	03/22/08 06:03	
Xylenes (total)	"	15100	----	100	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			*95.6%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*101%*		*68 - 140 %*	"			"	
BRC0301-05RE1 (TK-MW33)		Water			Sampled: 03/18/08 11:45					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	116000	----	25000	ug/l	500x	8C24017	03/24/08 09:58	03/24/08 23:05	
Benzene	"	11200	----	250	"	"	"	"	"	
Toluene	"	18900	----	250	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			*87.2%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*101%*		*68 - 140 %*	"			"	

TestAmerica Seattle

Kate Haney, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	03/26/08 14:54

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRC0301-06 (TK-MW33D)		**Water**			**Sampled: 03/18/08 11:50**					
Ethylbenzene	NWTPH-Gx/802 1B	2590	----	50.0	ug/l	100x	8C21015	03/21/08 09:40	03/22/08 06:36	
Xylenes (total)	"	14100	----	100	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			*96.9%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*101%*		*68 - 140 %*	"			"	
BRC0301-06RE1 (TK-MW33D)		**Water**			**Sampled: 03/18/08 11:50**					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	112000	----	25000	ug/l	500x	8C24017	03/24/08 09:58	03/24/08 23:37	
Benzene	"	11300	----	250	"	"	"	"	"	
Toluene	"	19000	----	250	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			*87.3%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*101%*		*68 - 140 %*	"			"	
BRC0301-07 (TK-MW34)		**Water**			**Sampled: 03/18/08 09:50**					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	10500	----	250	ug/l	5x	8C21015	03/21/08 09:40	03/22/08 00:36	
Benzene	"	271	----	2.50	"	"	"	"	"	
Toluene	"	17.3	----	2.50	"	"	"	"	"	
Xylenes (total)	"	921	----	5.00	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			*140%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*121%*		*68 - 140 %*	"			"	
BRC0301-07RE1 (TK-MW34)		**Water**			**Sampled: 03/18/08 09:50**					
Ethylbenzene	NWTPH-Gx/802 1B	616	----	5.00	ug/l	10x	8C24037	03/24/08 13:42	03/25/08 05:59	
Surrogate(s): 4-BFB (FID)			*116%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*112%*		*68 - 140 %*	"			"	
BRC0301-08 (TK-MW35)		**Water**			**Sampled: 03/18/08 14:15**					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	82300	----	2500	ug/l	50x	8C21015	03/21/08 09:40	03/22/08 01:08	
Benzene	"	3620	----	25.0	"	"	"	"	"	
Ethylbenzene	"	2910	----	25.0	"	"	"	"	"	
Xylenes (total)	"	13600	----	50.0	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			*106%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*106%*		*68 - 140 %*	"			"	

TestAmerica Seattle

Kate Haney, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	03/26/08 14:54

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRC0301-08RE1 (TK-MW35)			**Water**			**Sampled: 03/18/08 14:15**				
Toluene	NWTPH-Gx/802 1B	10400	----	250	ug/l	500x	8C24017	03/24/08 09:58	03/25/08 00:10	
Surrogate(s): 4-BFB (FID)		*94.6%*			*58 - 144 %*	*1x*			"	
4-BFB (PID)		*102%*			*68 - 140 %*	"			"	
BRC0301-09 (TK-TB031808)			**Water**			**Sampled: 03/18/08 17:00**				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	ND	----	50.0	ug/l	1x	8C21015	03/21/08 09:40	03/21/08 20:46	
Benzene	"	ND	----	0.500	"	"	"	"	"	
Toluene	"	ND	----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*89.8%*			*58 - 144 %*	"			"	
4-BFB (PID)		*107%*			*68 - 140 %*	"			"	

TestAmerica Seattle

Kate Haney, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	03/26/08 14:54

Semivolatile Petroleum Products by NWTPH-Dx (w/o Acid/Silica Gel Clean-up)

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRC0301-01 (TK-MW29)		**Water**			**Sampled: 03/18/08 14:50**					
Diesel Range Hydrocarbons	NWTPH-Dx	4.93	----	0.240	mg/l	1x	8C21019	03/21/08 10:44	03/24/08 17:23	Q5
Lube Oil Range Hydrocarbons	"	3.62	----	0.481	"	"	"	"	"	
Surrogate(s): 2-FBP			*92.9%*		*53 - 125 %*	"			"	
Octacosane			*98.1%*		*68 - 125 %*	"			"	
BRC0301-02 (TK-MW30)		**Water**			**Sampled: 03/18/08 13:40**					
Diesel Range Hydrocarbons	NWTPH-Dx	2.16	----	0.238	mg/l	1x	8C21019	03/21/08 10:44	03/24/08 17:53	Q5
Lube Oil Range Hydrocarbons	"	0.603	----	0.476	"	"	"	"	"	
Surrogate(s): 2-FBP			*101%*		*53 - 125 %*	"			"	
Octacosane			*100%*		*68 - 125 %*	"			"	
BRC0301-03 (TK-MW31)		**Water**			**Sampled: 03/18/08 15:30**					
Diesel Range Hydrocarbons	NWTPH-Dx	2.21	----	0.236	mg/l	1x	8C21019	03/21/08 10:44	03/24/08 18:22	Q5
Lube Oil Range Hydrocarbons	"	ND	----	0.472	"	"	"	"	"	
Surrogate(s): 2-FBP			*103%*		*53 - 125 %*	"			"	
Octacosane			*97.3%*		*68 - 125 %*	"			"	
BRC0301-04 (TK-MW32)		**Water**			**Sampled: 03/18/08 10:40**					
Diesel Range Hydrocarbons	NWTPH-Dx	5.49	----	0.240	mg/l	1x	8C21019	03/21/08 10:44	03/24/08 18:51	Q5
Lube Oil Range Hydrocarbons	"	0.895	----	0.481	"	"	"	"	"	
Surrogate(s): 2-FBP			*95.4%*		*53 - 125 %*	"			"	
Octacosane			*102%*		*68 - 125 %*	"			"	
BRC0301-05 (TK-MW33)		**Water**			**Sampled: 03/18/08 11:45**					
Diesel Range Hydrocarbons	NWTPH-Dx	3.93	----	0.240	mg/l	1x	8C21019	03/21/08 10:44	03/24/08 19:21	Q5
Lube Oil Range Hydrocarbons	"	0.542	----	0.481	"	"	"	"	"	
Surrogate(s): 2-FBP			*82.6%*		*53 - 125 %*	"			"	
Octacosane			*105%*		*68 - 125 %*	"			"	
BRC0301-06 (TK-MW33D)		**Water**			**Sampled: 03/18/08 11:50**					
Diesel Range Hydrocarbons	NWTPH-Dx	4.19	----	0.240	mg/l	1x	8C21019	03/21/08 10:44	03/24/08 19:50	Q5
Lube Oil Range Hydrocarbons	"	0.518	----	0.481	"	"	"	"	"	
Surrogate(s): 2-FBP			*86.2%*		*53 - 125 %*	"			"	
Octacosane			*102%*		*68 - 125 %*	"			"	

TestAmerica Seattle

Kate Haney, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	03/26/08 14:54

Semivolatile Petroleum Products by NWTPH-Dx (w/o Acid/Silica Gel Clean-up)

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRC0301-07 (TK-MW34)			Water			Sampled: 03/18/08 09:50				
Diesel Range Hydrocarbons	NWTPH-Dx	1.62	----	0.245	mg/l	1x	8C21019	03/21/08 10:44	03/24/08 21:44	Q5
Lube Oil Range Hydrocarbons	"	0.654	----	0.490	"	"	"	"	"	
Surrogate(s): 2-FBP			*99.2%*		*53 - 125 %*	"			"	
Octacosane			*88.8%*		*68 - 125 %*	"			"	
BRC0301-08 (TK-MW35)			Water			Sampled: 03/18/08 14:15				
Diesel Range Hydrocarbons	NWTPH-Dx	2.73	----	0.240	mg/l	1x	8C21019	03/21/08 10:44	03/24/08 22:12	Q5
Lube Oil Range Hydrocarbons	"	0.489	----	0.481	"	"	"	"	"	
Surrogate(s): 2-FBP			*95.7%*		*53 - 125 %*	"			"	
Octacosane			*104%*		*68 - 125 %*	"			"	

TestAmerica Seattle

Kate Haney, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name: Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number: 61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager: Jil Frain	03/26/08 14:54

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8C21015 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8C21015-BLK1)								Extracted: 03/21/08 09:40						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	--	--	--	--	--	--	03/21/08 14:12	
Benzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Xylenes (total)	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 91.1%*			*Limits: 58-144%*	"							*03/21/08 14:12*	
4-BFB (PID)		*106%*			*68-140%*	"							"	
LCS (8C21015-BS1)								Extracted: 03/21/08 09:40						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	945	---	50.0	ug/l	1x	--	1000	94.5%	(80-120)	--	--	03/21/08 14:45	
Surrogate(s): 4-BFB (FID)		*Recovery: 103%*			*Limits: 58-144%*	"							*03/21/08 14:45*	
LCS (8C21015-BS2)								Extracted: 03/21/08 09:40						
Benzene	NWTPH-Gx/ 8021B	29.6	---	0.500	ug/l	1x	--	30.0	98.6%	(80-120)	--	--	03/21/08 15:17	
Toluene	"	29.5	---	0.500	"	"	--	"	98.4%	"	--	--	"	
Ethylbenzene	"	30.0	---	0.500	"	"	--	"	99.9%	"	--	--	"	
Xylenes (total)	"	89.7	---	1.00	"	"	--	90.0	99.7%	"	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 101%*			*Limits: 68-140%*	"							*03/21/08 15:17*	
Duplicate (8C21015-DUP1)					QC Source: BRC0309-01			Extracted: 03/21/08 09:40						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	ND	--	--	--	5.35%	(25)	03/21/08 16:23	
Benzene	"	ND	---	0.500	"	"	ND	--	--	--	5.54%	"	"	
Toluene	"	ND	---	0.500	"	"	ND	--	--	--	15.2%	"	"	
Ethylbenzene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Xylenes (total)	"	ND	---	1.00	"	"	ND	--	--	--	NR	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 94.3%*			*Limits: 58-144%*	"							*03/21/08 16:23*	
4-BFB (PID)		*107%*			*68-140%*	"							"	
Duplicate (8C21015-DUP2)					QC Source: BRC0310-01			Extracted: 03/21/08 09:40						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	248	---	50.0	ug/l	1x	251	--	--	--	1.48%	(25)	03/21/08 17:29	
Benzene	"	87.4	---	0.500	"	"	89.7	--	--	--	2.67%	"	"	
Toluene	"	0.636	---	0.500	"	"	0.633	--	--	--	0.473%	"	"	
Ethylbenzene	"	ND	---	0.500	"	"	ND	--	--	--		"	"	
Xylenes (total)	"	ND	---	1.00	"	"	ND	--	--	--	3.30%	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 97.2%*			*Limits: 58-144%*	"							*03/21/08 17:29*	
4-BFB (PID)		*100%*			*68-140%*	"							"	

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Kate Haney, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name:	**Tiki Carwash**	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	03/26/08 14:54

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8C21015 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (8C21015-MS1)				QC Source: BRC0309-01				Extracted: 03/21/08 09:40						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	1020	---	50.0	ug/l	1x	46.6	1000	97.1%	(75-131)	--	--	03/21/08 18:02	
Surrogate(s): 4-BFB (FID)		*Recovery: 101%*			*Limits: 58-144%*	"							*03/21/08 18:02*	
Matrix Spike (8C21015-MS2)				QC Source: BRC0310-01				Extracted: 03/21/08 09:40						
Benzene	NWTPH-Gx/ 8021B	107	---	0.500	ug/l	1x	89.7	30.0	59.2%	(46-130)	--	--	03/21/08 18:35	E
Toluene	"	32.2	---	0.500	"	"	0.633	"	105%	(60-124)	--	--	"	
Ethylbenzene	"	32.7	---	0.500	"	"	ND	"	109%	(56-141)	--	--	"	
Xylenes (total)	"	97.3	---	1.00	"	"	0.646	90.0	107%	(66-132)	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 99.8%*			*Limits: 68-140%*	"							*03/21/08 18:35*	

QC Batch: 8C24017 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Note
Blank (8C24017-BLK1)								Extracted: 03/24/08 09:58						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	--	--	--	--	--	--	03/24/08 13:13	
Benzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Xylenes (total)	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 92.0%*			*Limits: 58-144%*	"							*03/24/08 13:13*	
4-BFB (PID)		*102%*			*68-140%*	"							"	
LCS (8C24017-BS1)								Extracted: 03/24/08 09:58						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	922	---	50.0	ug/l	1x	--	1000	92.2%	(80-120)	--	--	03/24/08 13:46	
Surrogate(s): 4-BFB (FID)		*Recovery: 103%*			*Limits: 58-144%*	"							*03/24/08 13:46*	
LCS (8C24017-BS2)								Extracted: 03/24/08 09:58						
Benzene	NWTPH-Gx/ 8021B	29.0	---	0.500	ug/l	1x	--	30.0	96.8%	(80-120)	--	--	03/24/08 14:19	
Toluene	"	29.7	---	0.500	"	"	--	"	98.8%	"	--	--	"	
Ethylbenzene	"	29.4	---	0.500	"	"	--	"	98.1%	"	--	--	"	
Xylenes (total)	"	88.9	---	1.00	"	"	--	90.0	98.8%	"	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 103%*			*Limits: 68-140%*	"							*03/24/08 14:19*	

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EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	03/26/08 14:54

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8C24017 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL[A]	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Duplicate (8C24017-DUP1)					QC Source: BRC0339-02				Extracted: 03/24/08 09:58					
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	ND	--	--	--	3.23%	(25)	03/24/08 15:25	
Benzene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Toluene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Ethylbenzene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Xylenes (total)	"	ND	---	1.00	"	"	ND	--	--	--	NR	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 93.9%*			*Limits: 58-144%*	"							*03/24/08 15:25*	
4-BFB (PID)		*102%*			*68-140%*	"							"	
Duplicate (8C24017-DUP2)					QC Source: BRC0339-03				Extracted: 03/24/08 09:58					
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	168	---	50.0	ug/l	1x	182	--	--	--	8.22%	(25)	03/24/08 16:31	
Benzene	"	ND	---	0.500	"	"	ND	--	--	--	8.70%	"	"	
Toluene	"	9.60	---	0.500	"	"	9.89	--	--	--	3.01%	"	"	
Ethylbenzene	"	0.650	---	0.500	"	"	0.698	--	--	--	7.12%	"	"	
Xylenes (total)	"	3.19	---	1.00	"	"	3.16	--	--	--	1.01%	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 97.3%*			*Limits: 58-144%*	"							*03/24/08 16:31*	
4-BFB (PID)		*101%*			*68-140%*	"							"	
Matrix Spike (8C24017-MS1)					QC Source: BRC0339-02				Extracted: 03/24/08 09:58					
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	1070	---	50.0	ug/l	1x	35.0	1000	103%	(75-131)	--	--	03/24/08 17:36	
Surrogate(s): 4-BFB (FID)		*Recovery: 104%*			*Limits: 58-144%*	"							*03/24/08 17:36*	
Matrix Spike (8C24017-MS2)					QC Source: BRC0339-03				Extracted: 03/24/08 09:58					
Benzene	NWTPH-Gx/ 8021B	31.3	---	0.500	ug/l	1x	0.0990	30.0	104%	(46-130)	--	--	03/24/08 18:10	
Toluene	"	43.9	---	0.500	"	"	9.89	"	113%	(60-124)	--	--	"	
Ethylbenzene	"	35.0	---	0.500	"	"	0.698	"	114%	(56-141)	--	--	"	
Xylenes (total)	"	106	---	1.00	"	"	3.16	90.0	114%	(66-132)	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 105%*			*Limits: 68-140%*	"							*03/24/08 18:10*	

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
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EA Engineering, Science and Technology	Project Name:	**Tiki Carwash**	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	03/26/08 14:54

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8C24037 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8C24037-BLK1)								Extracted: 03/24/08 13:42						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	--	--	--	--	--	--	03/24/08 22:23	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 88.7%*			*Limits: 58-144%*	"							*03/24/08 22:23*	
4-BFB (PID)		*100%*			*68-140%*	"							"	
LCS (8C24037-BS1)								Extracted: 03/24/08 13:42						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	955	---	50.0	ug/l	1x	--	1000	95.5%	(80-120)	--	--	03/24/08 22:56	
Ethylbenzene	"	15.5	---	0.500	"	"	--	17.1	90.5%	"	--	--	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 93.9%*			*Limits: 58-144%*	"							*03/24/08 22:56*	
4-BFB (PID)		*91.9%*			*68-140%*	"							"	
Duplicate (8C24037-DUP1)					QC Source: BRC0265-02RE1			Extracted: 03/24/08 13:42						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	501	---	50.0	ug/l	1x	523	--	--	--	4.33%	(25)	03/25/08 00:01	
Ethylbenzene	"	6.30	---	0.500	"	"	6.48	--	--	--	2.79%	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 90.2%*			*Limits: 58-144%*	"							*03/25/08 00:01*	
4-BFB (PID)		*101%*			*68-140%*	"							"	
Matrix Spike (8C24037-MS1)					QC Source: BRC0265-04RE1			Extracted: 03/24/08 13:42						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	1340	---	50.0	ug/l	1x	890	1000	44.6%	(75-131)	--	--	03/25/08 03:16	M2
Ethylbenzene	"	25.5	---	0.500	"	"	18.6	17.1	40.4%	(56-141)	--	--	"	M2
Surrogate(s): 4-BFB (FID)		*Recovery: 95.4%*			*Limits: 58-144%*	"							*03/25/08 03:16*	
4-BFB (PID)		*92.5%*			*68-140%*	"							"	

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EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	03/26/08 14:54

Semivolatile Petroleum Products by NWTPH-Dx (w/o Acid/Silica Gel Clean-up) - Laboratory Quality Control Results
TestAmerica Seattle

QC Batch: 8C21019 Water Preparation Method: EPA 3520C

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8C21019-BLK1)							Extracted: 03/21/08 10:44							
Diesel Range Hydrocarbons	NWTPH-Dx	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	03/24/08 15:25	
Lube Oil Range Hydrocarbons	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 2-FBP		*Recovery: 81.1%*			*Limits: 53-125%*	"							*03/24/08 15:25*	
Octacosane		*79.8%*			*68-125%*	"							"	
LCS (8C21019-BS1)							Extracted: 03/21/08 10:44							
Diesel Range Hydrocarbons	NWTPH-Dx	1.91	---	0.250	mg/l	1x	--	2.00	95.6%	(61-132)	--	--	03/24/08 15:55	
Surrogate(s): 2-FBP		*Recovery: 89.1%*			*Limits: 53-125%*	"							*03/24/08 15:55*	
Octacosane		*83.6%*			*68-125%*	"							"	
LCS Dup (8C21019-BSD1)							Extracted: 03/21/08 10:44							
Diesel Range Hydrocarbons	NWTPH-Dx	1.96	---	0.250	mg/l	1x	--	2.00	98.0%	(61-132)	2.48%	(40)	03/24/08 16:25	
Surrogate(s): 2-FBP		*Recovery: 90.6%*			*Limits: 53-125%*	"							*03/24/08 16:25*	
Octacosane		*84.1%*			*68-125%*	"							"	

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12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	03/26/08 14:54

Notes and Definitions

Report Specific Notes:

E	-	Concentration exceeds the calibration range and therefore result is semi-quantitative.
M2	-	The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
Q5	-	Results in the diesel organics range are primarily due to overlap from a gasoline range product.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Seattle

Kate Haney, Project Manager

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CHAIN OF CUSTODY REPORT

Work Order #: BRC0301

CLIENT: WA Dept. of Ecology

REPORT TO: EA Engineering – Jill Fram
ADDRESS: 12011 NE 1st Street, Suite 100
Bellevue, WA 98005
PHONE: 425-451-7400 FAX: 425-457-7800

INVOICE TO: WA Dept of Ecology / NWRO
Attn: Roger Nye
3190 160th Ave SE
Bellevue, WA 98008
P.O. NUMBER: Field Order #: PF313180

PROJECT NAME: Tiki Carwash
PROJECT NUMBER: 61994.01
SAMPLED BY: MBB, KB

TURNAROUND REQUEST
In Business Days *
Organic & Inorganic Analyses: 10 STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1
Petroleum Hydrocarbon Analyses: ☒ STD. | 4 | 3 | 2 | 1 | <1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE		REQUESTED ANALYSES		MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
			HCL	HCL	NWTPH G/BTEX	NWTPH DX				
1	TK-MW29	3/18/08 1450			X	X	W	5	sheen observed	01
2	TK-MW30	1340			X	X				02
3	TK-MW31	1530			X	X			sheen observed	03
4	TK-MW32	1040			X	X				04
5	TK-MW#33	1145			X	X				05
6	TK-MW33D	1150			X	X				06
7	TK-MW34	950			X	X				07
8	TK-MW35	1415			X	X			sheen observed	08
9	TK-TB031808	—			X			2		09
10										

RELEASED BY: Mark Blenstub — DATE: 3/18/08
PRINT NAME: Mark Blenstub — FIRM: EA Eng. — TIME: 1715

RECEIVED BY: [signature] — DATE: 3/19/08
PRINT NAME: Francisco Lung, Jr — FIRM: TALS — TIME: 1130

RELEASED BY: — DATE:
PRINT NAME: — FIRM: — TIME:

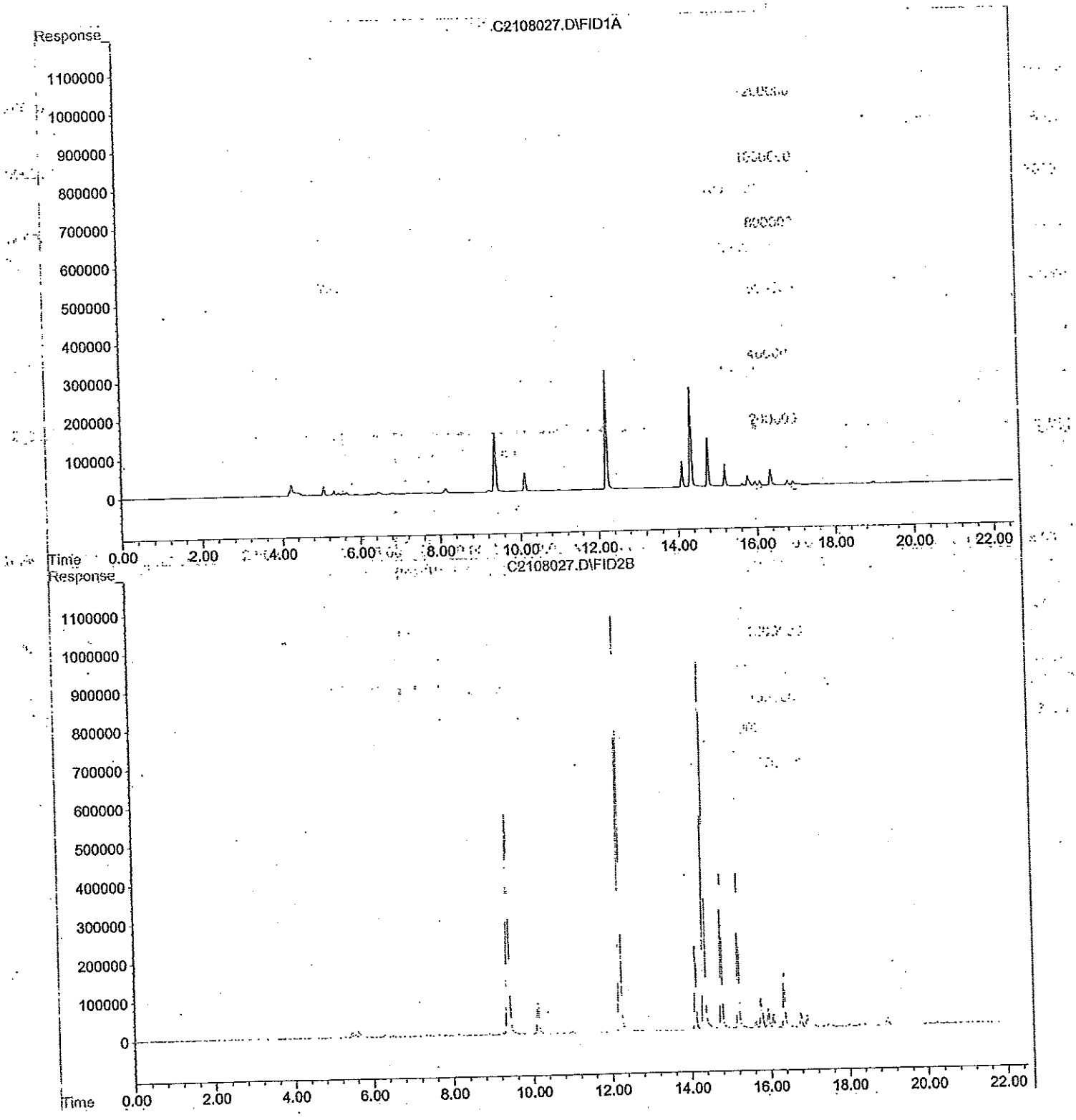
RECEIVED BY: — DATE:
PRINT NAME: — FIRM: — TIME:

ADDITIONAL REMARKS:

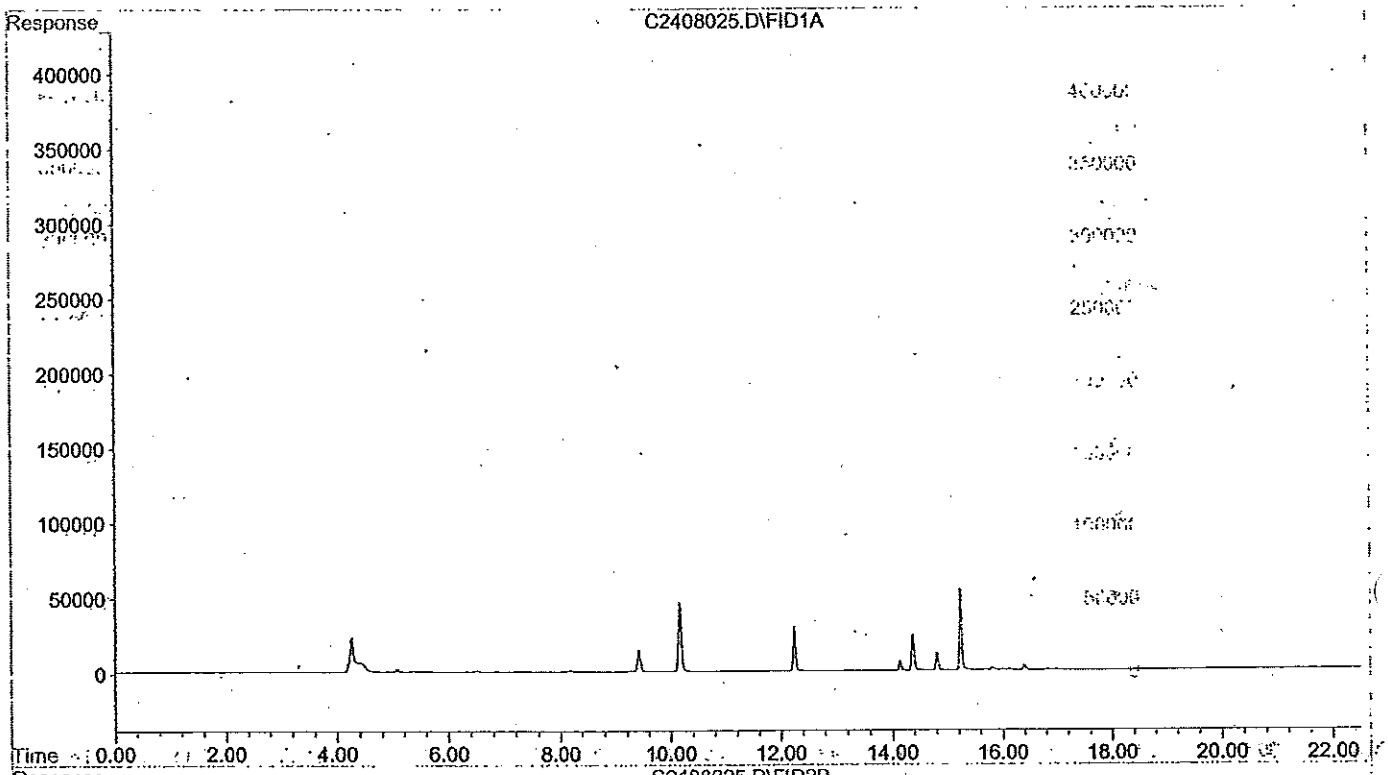
@ Lab 1555 w/cs — TEMP: 5.3 °C — PAGE 1 OF 1

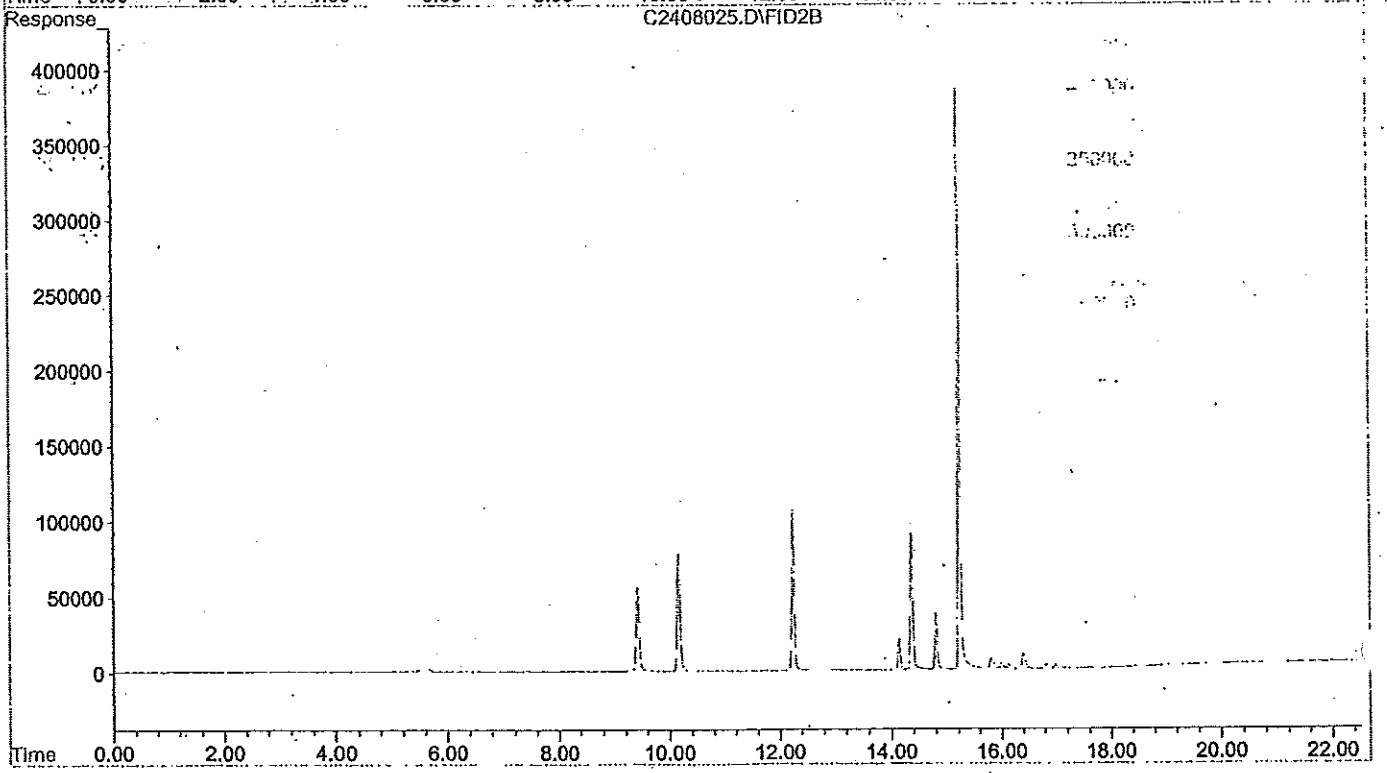
TAL-1000(0108)

File : O:\HPCHEM\1\DATA\C2108\C2108027.D
Operator : edw
Acquired : 22 Mar 2008 1:41 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-01
Misc Info : 100x 50uL
Vial Number: 23

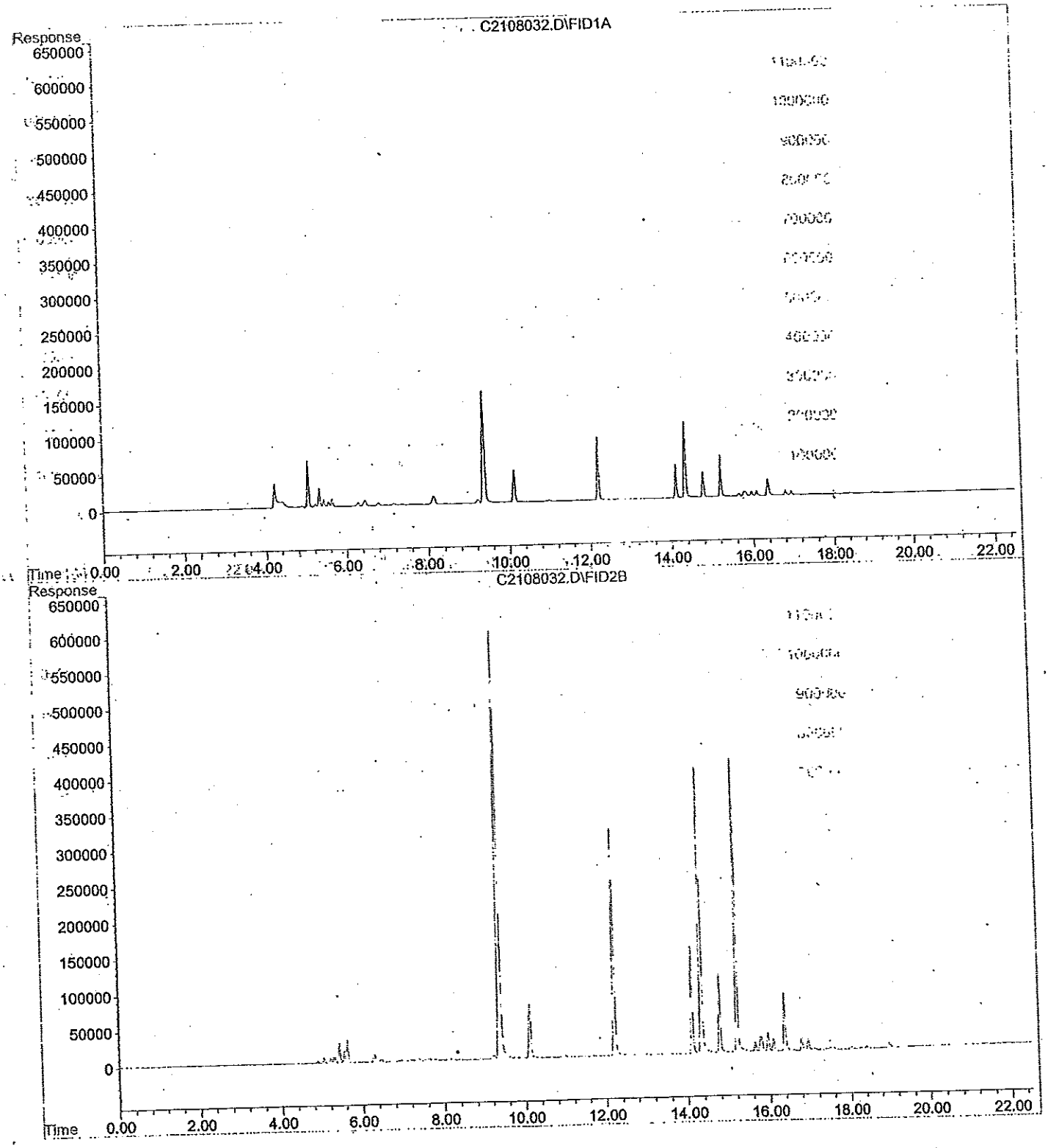


File : O:\HPCHEM\1\DATA\C2408\C2408025.D
Operator : edw
Acquired : 25 Mar 2008 00:43 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-01RE1
Misc Info : 1000x 5uL
Vial Number: 23

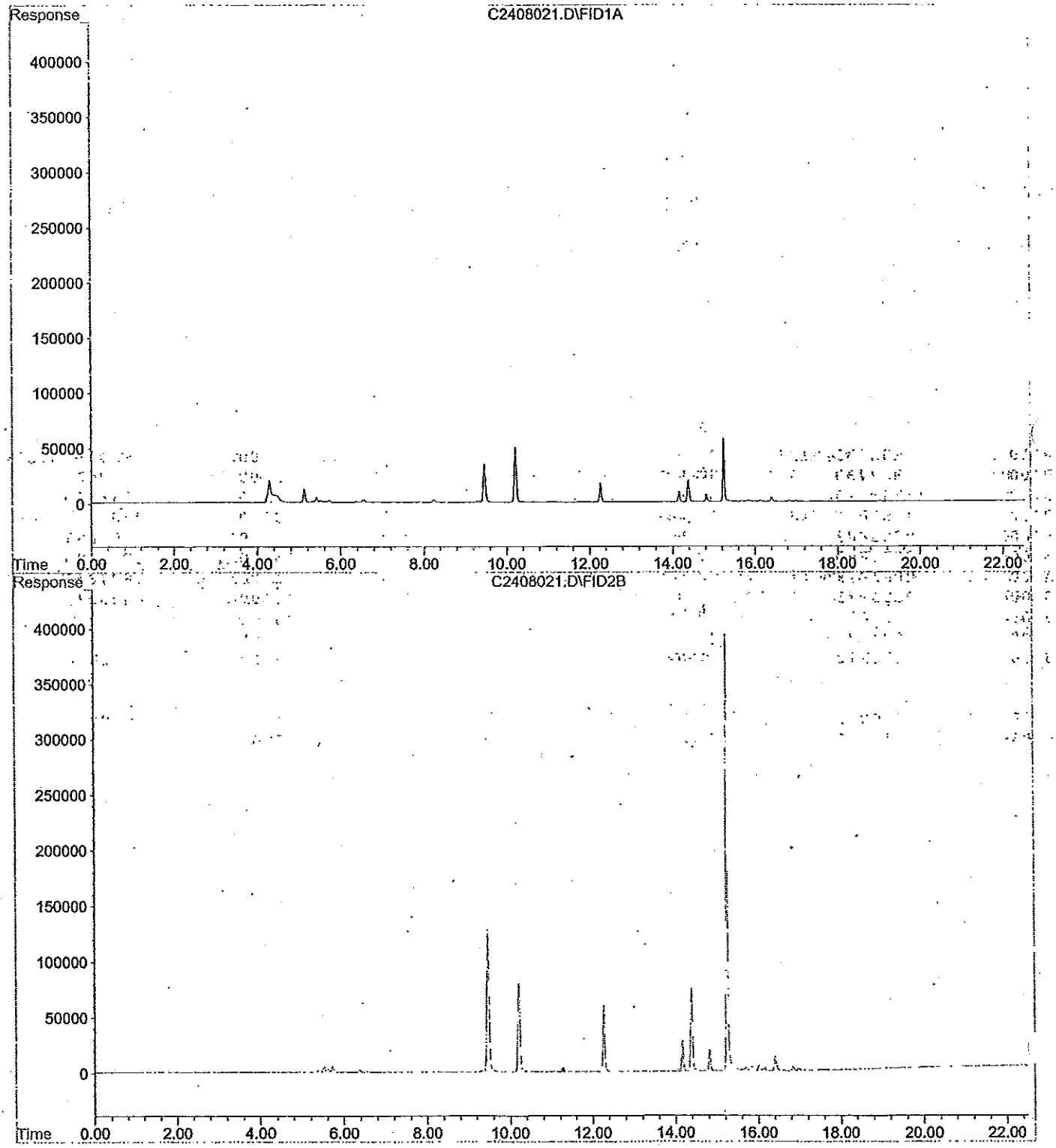




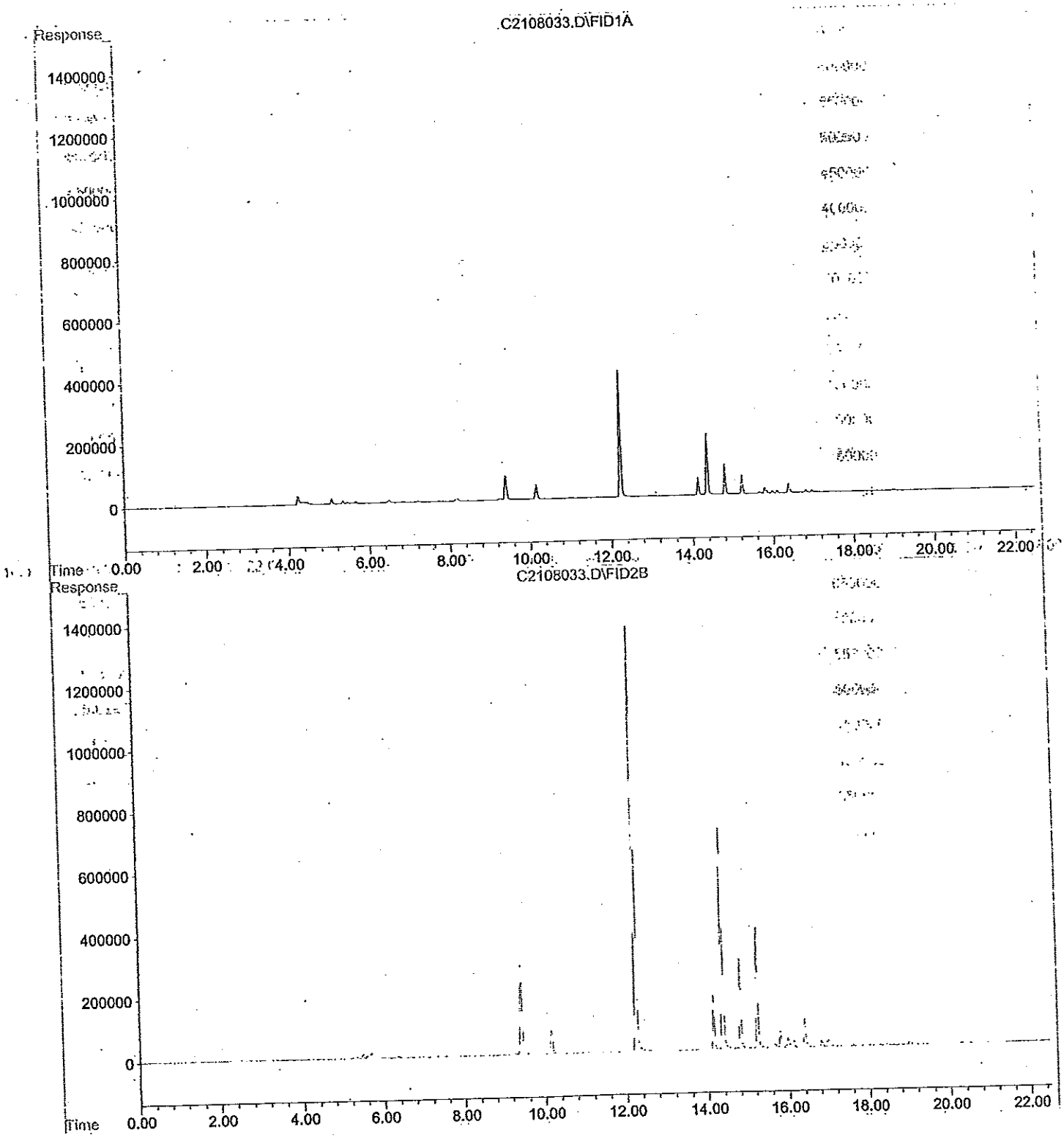
File : O:\HPCHEM\1\DATA\C2108\C2108032.D
Operator : edw
Acquired : 22 Mar 2008 4:25 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-02
Misc Info : 100x 50uL
Vial Number: 28



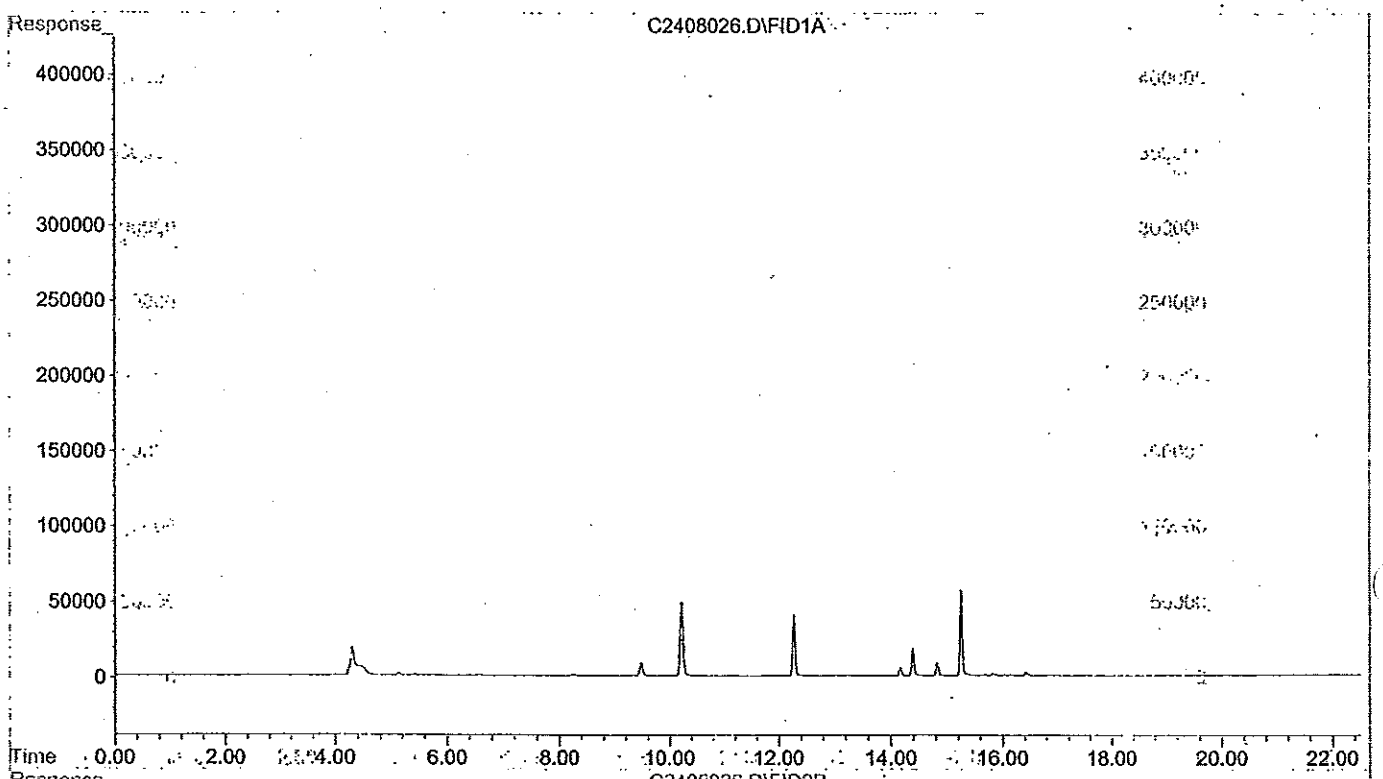
File : O:\HPCHEM\1\DATA\C2408\C2408021.D
Operator : edw
Acquired : 24 Mar 2008 22:32 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-02RE1
Misc Info : 500x 10uL
Vial Number: 19

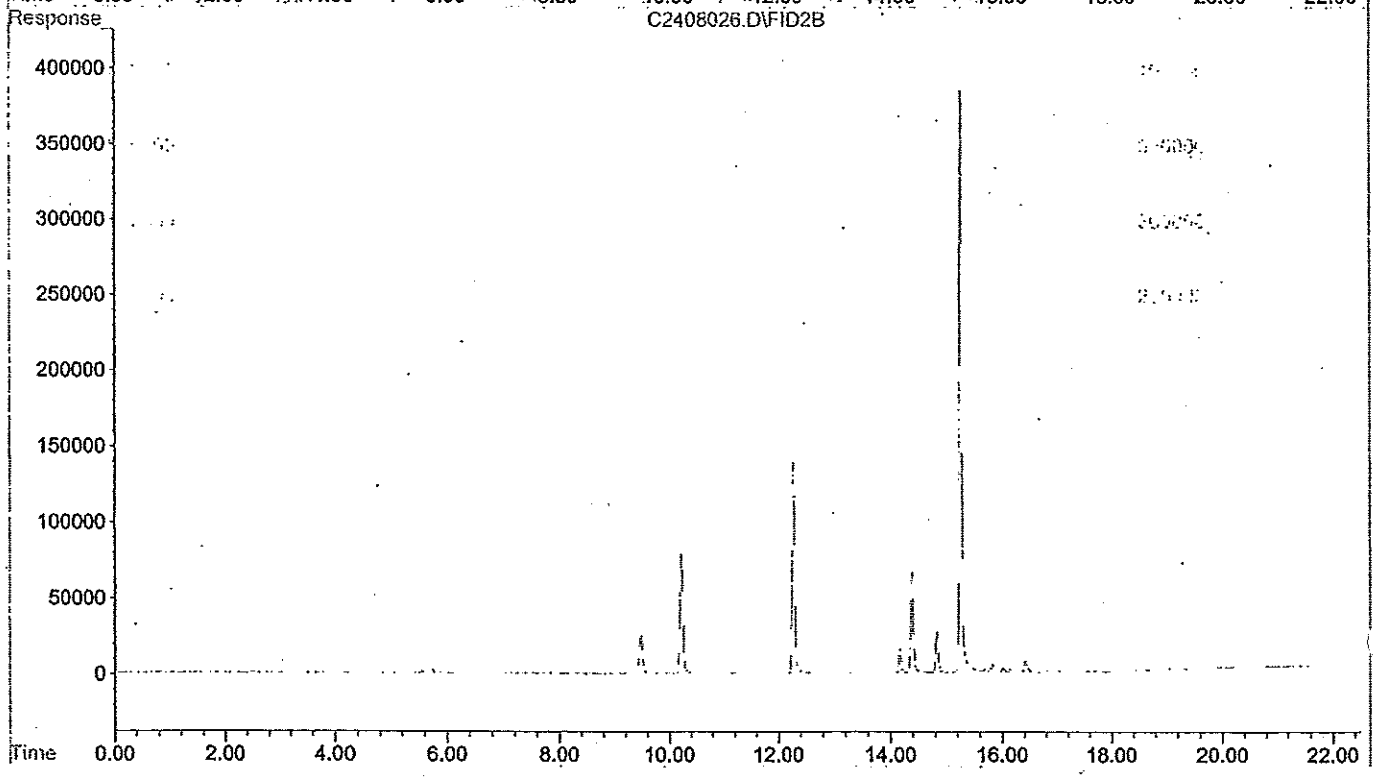


File : O:\HPCHEM\1\DATA\C2108\C2108033.D
Operator : edw
Acquired : 22 Mar 2008 4:57 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-03
Misc Info : 100x 50uL
Vial Number: 29

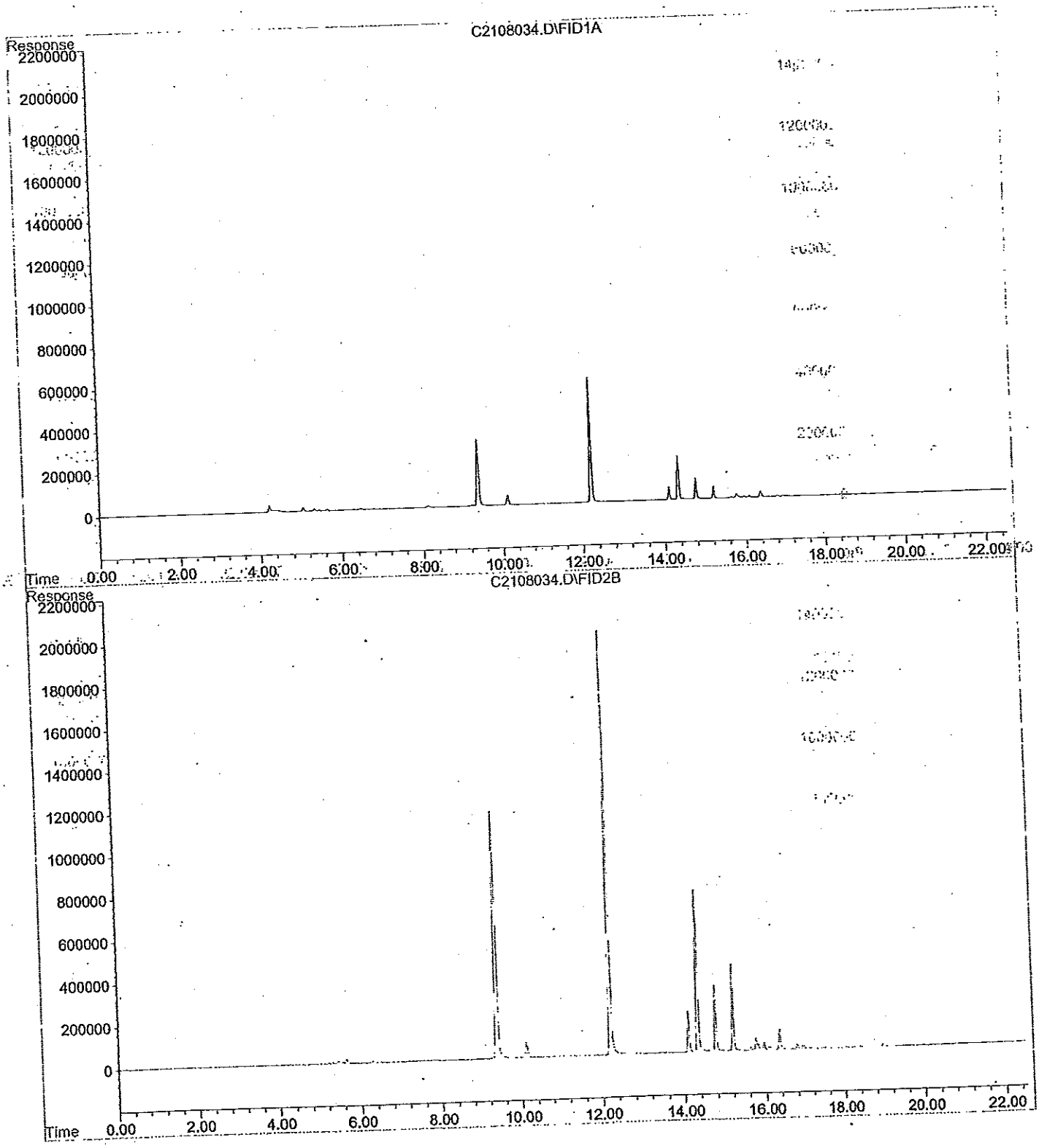


File : O:\HPCHEM\1\DATA\C2408\C2408026.D
Operator : edw
Acquired : 25 Mar 2008 1:15 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-03RE1
Misc Info : 1000x 5uL
Vial Number: 24

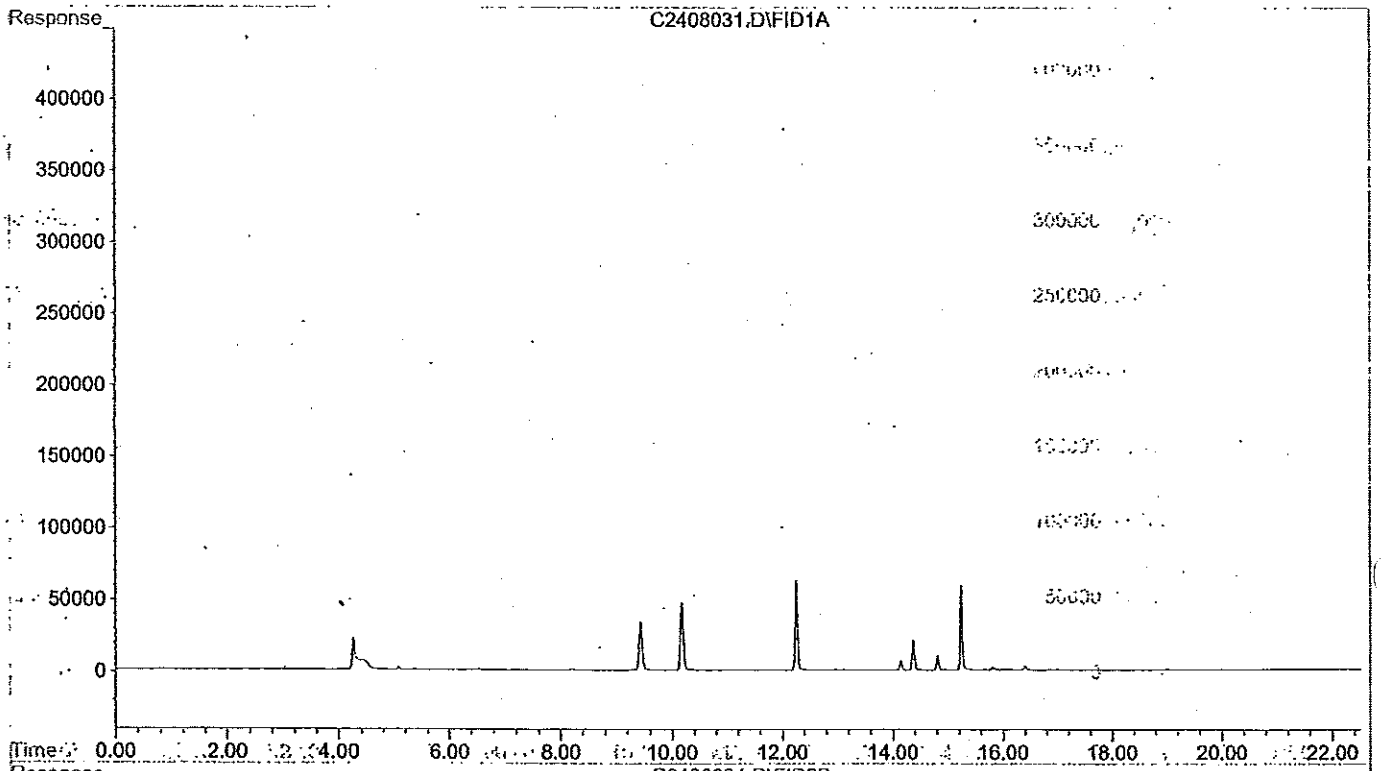


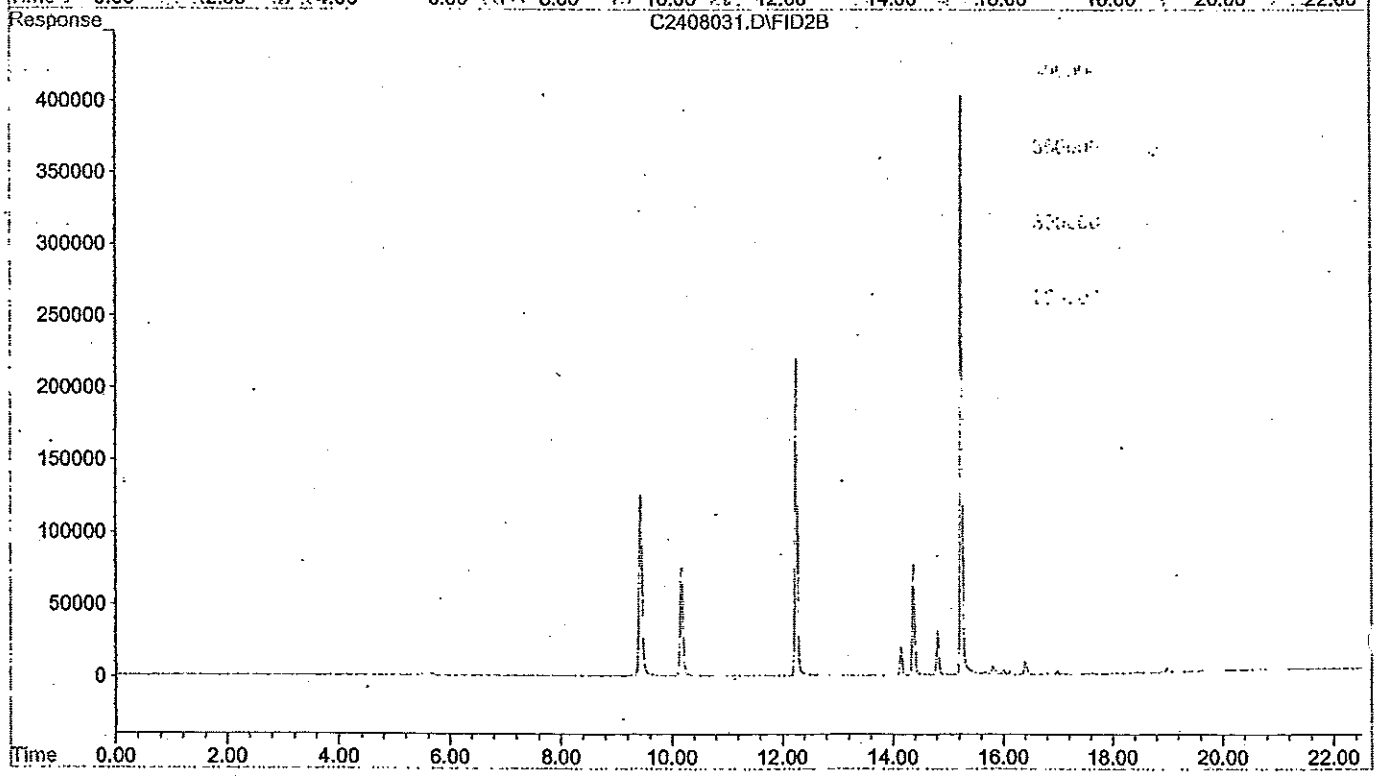


File : O:\HPCHEM\1\DATA\C2108\C2108034.D
Operator : edw
Acquired : 22 Mar 2008 5:30 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-04
Misc Info : 100x 50uL
Vial Number: 30

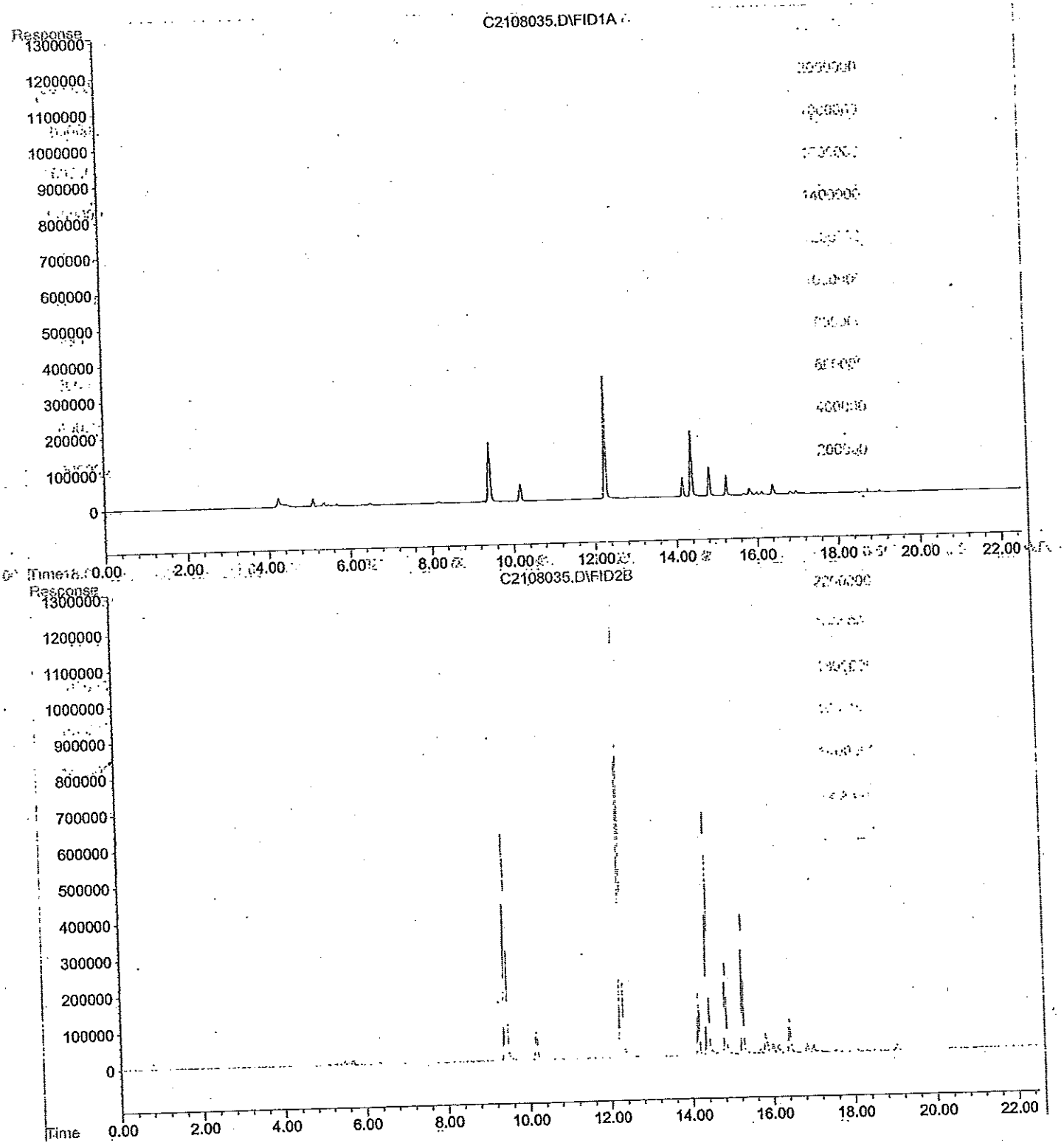


File : O:\HPCHEM\1\DATA\C2408\C2408031.D
Operator : edw
Acquired : 25 Mar 2008 3:59 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-04RE1
Misc Info : 1000x 5uL
Vial Number: 29

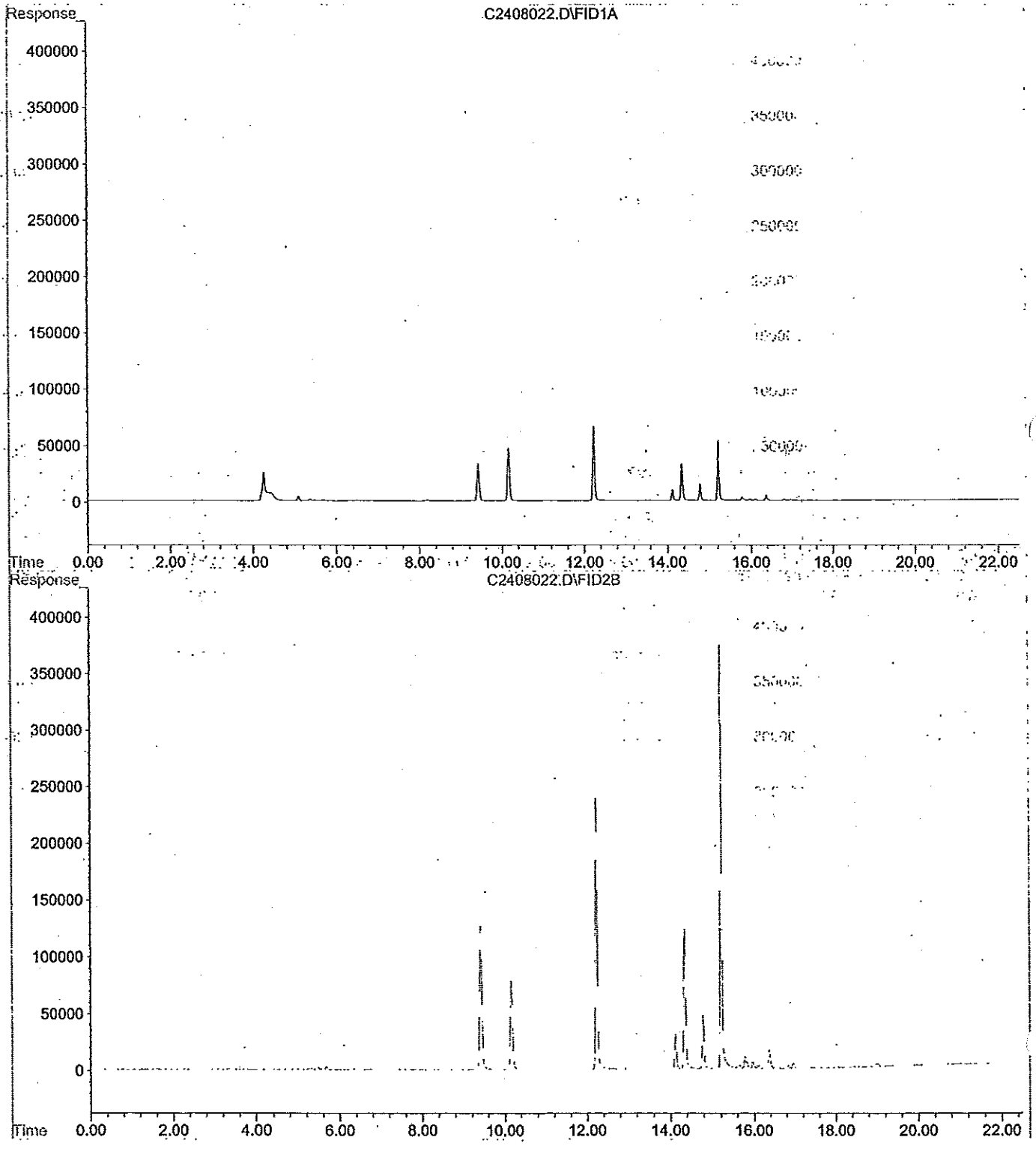




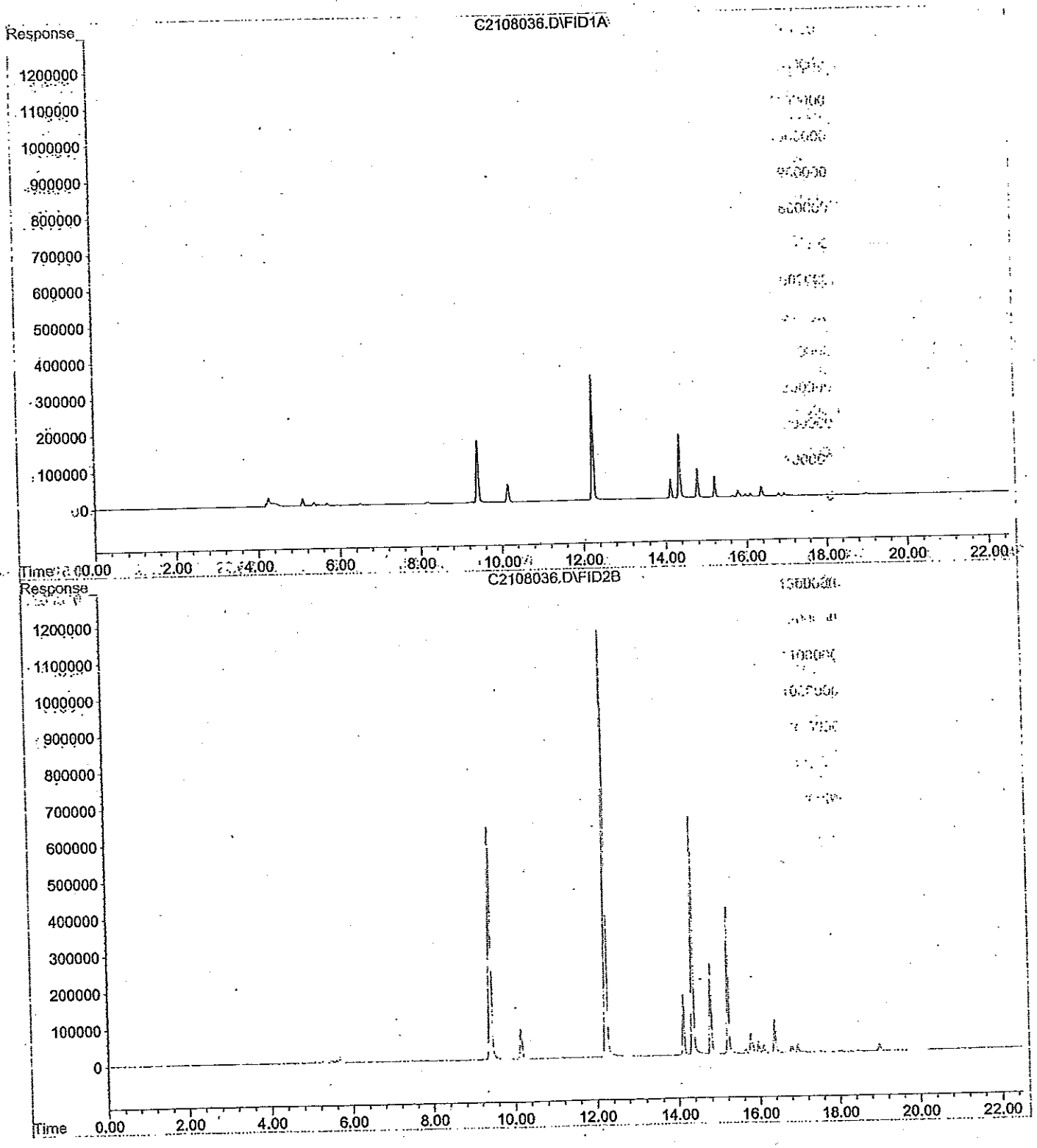
File : O:\HPCHEM\1\DATA\C2108\C2108035.D
Operator : edw
Acquired : 22 Mar 2008 6:03 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-05
Misc Info : 100x 50uL
Vial Number: 31



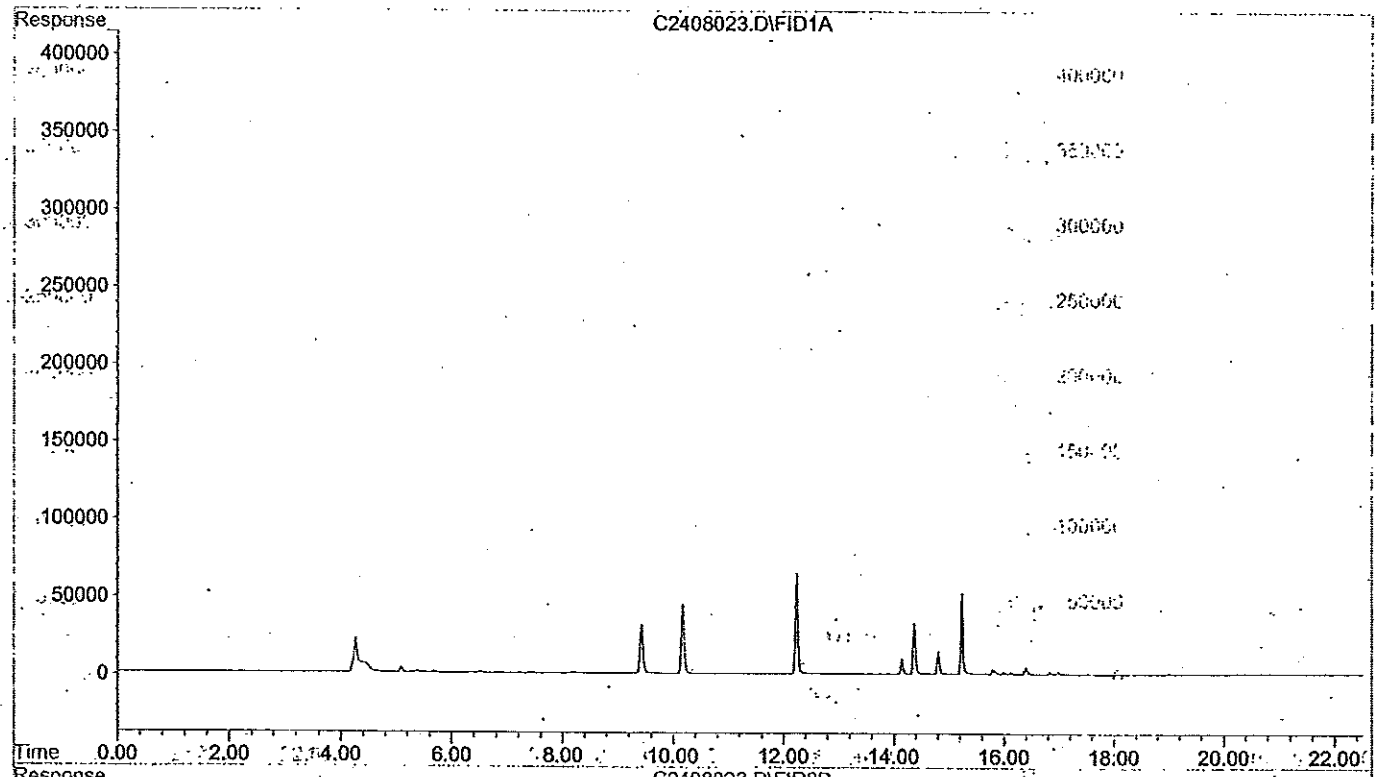
File : O:\HPCHEM\1\DATA\C2408\C2408022.D
Operator : edw
Acquired : 24 Mar 2008 23:05 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-05RE1
Misc Info : 500x 10uL
Vial Number: 20

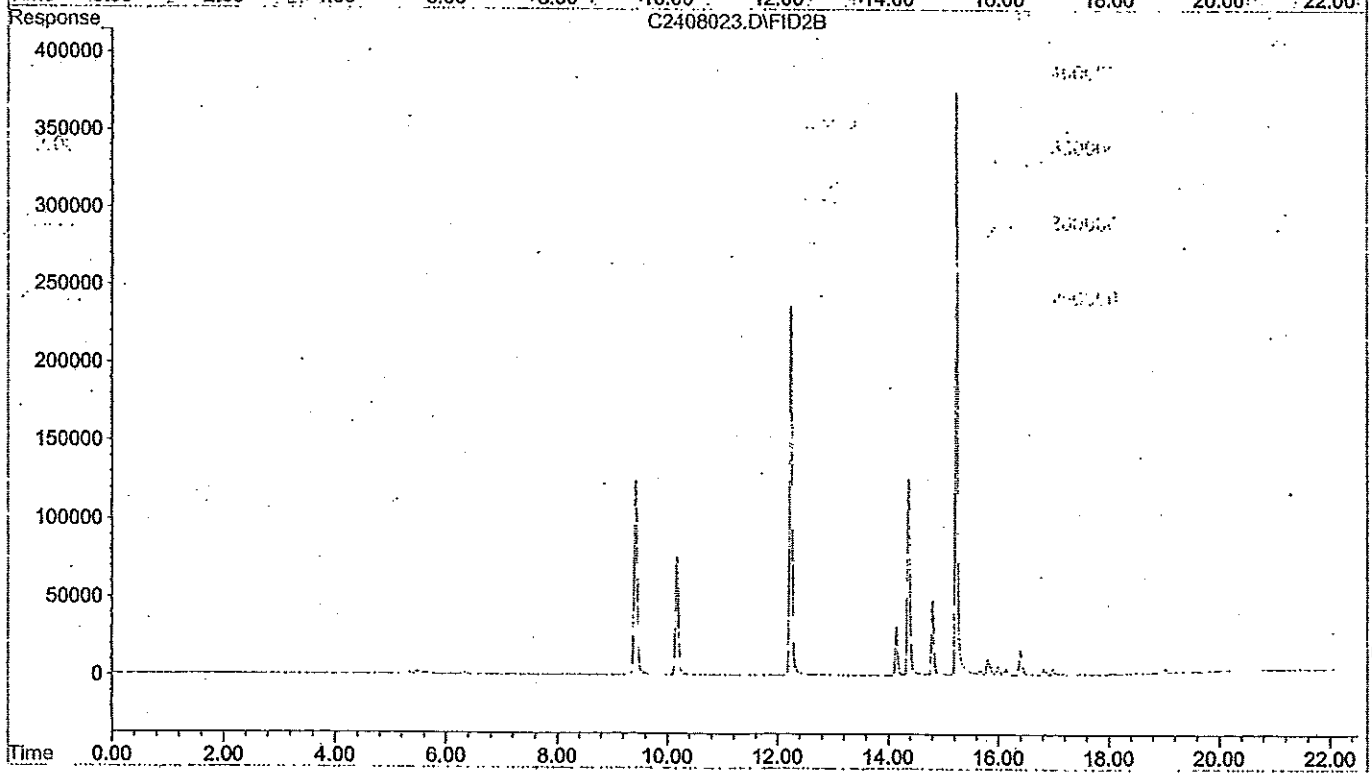


File : O:\HPCHEM\1\DATA\C2108\C2108036.D
Operator : edw
Acquired : 22 Mar 2008 6:36 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-06
Misc Info : 100x 50uL
Vial Number: 32

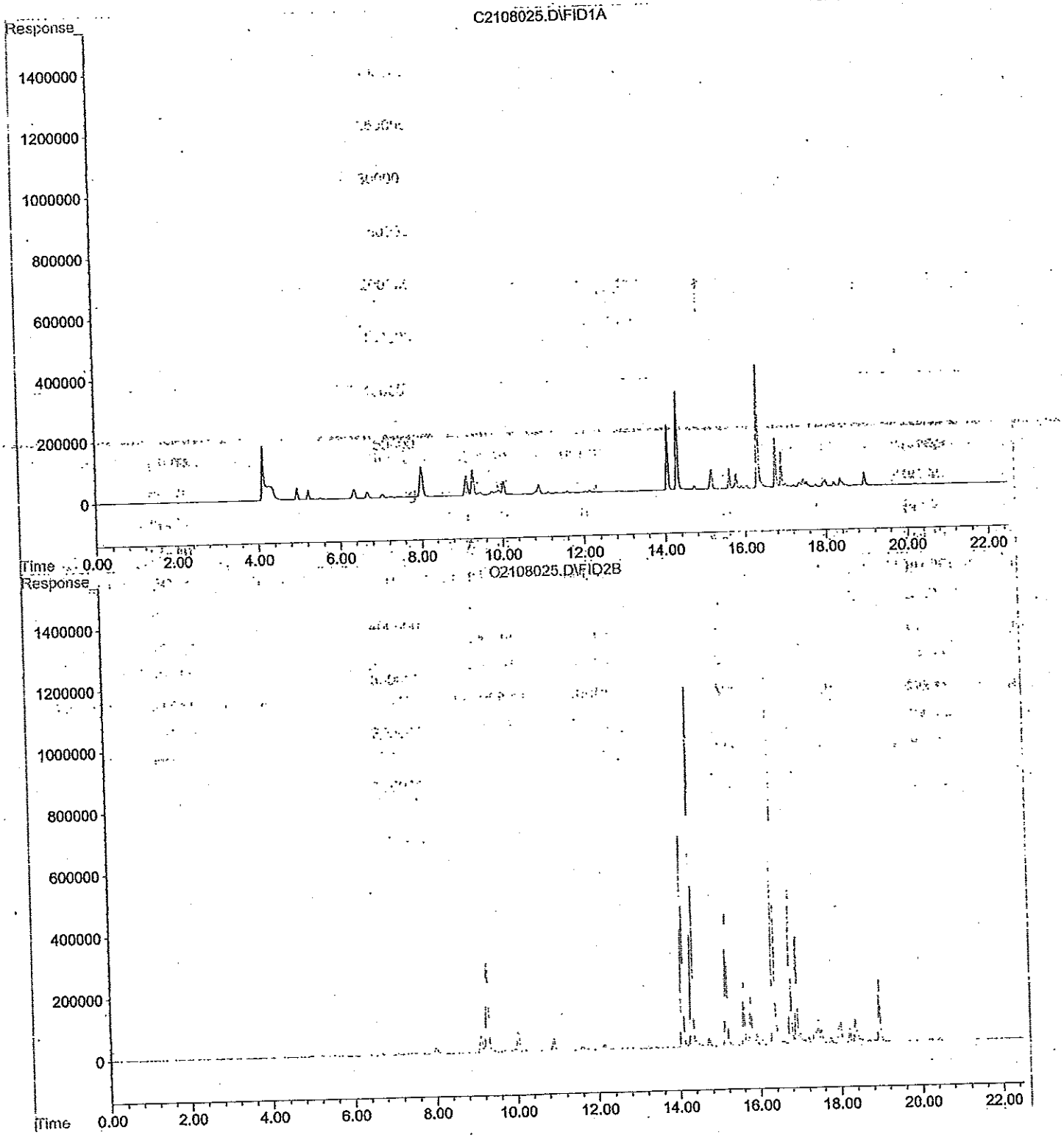


File : O:\HPCHEM\1\DATA\C2408\C2408023.D
Operator : edw
Acquired : 24 Mar 2008 23:37 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-06RE1
Misc Info : 500x 10uL
Vial Number: 21

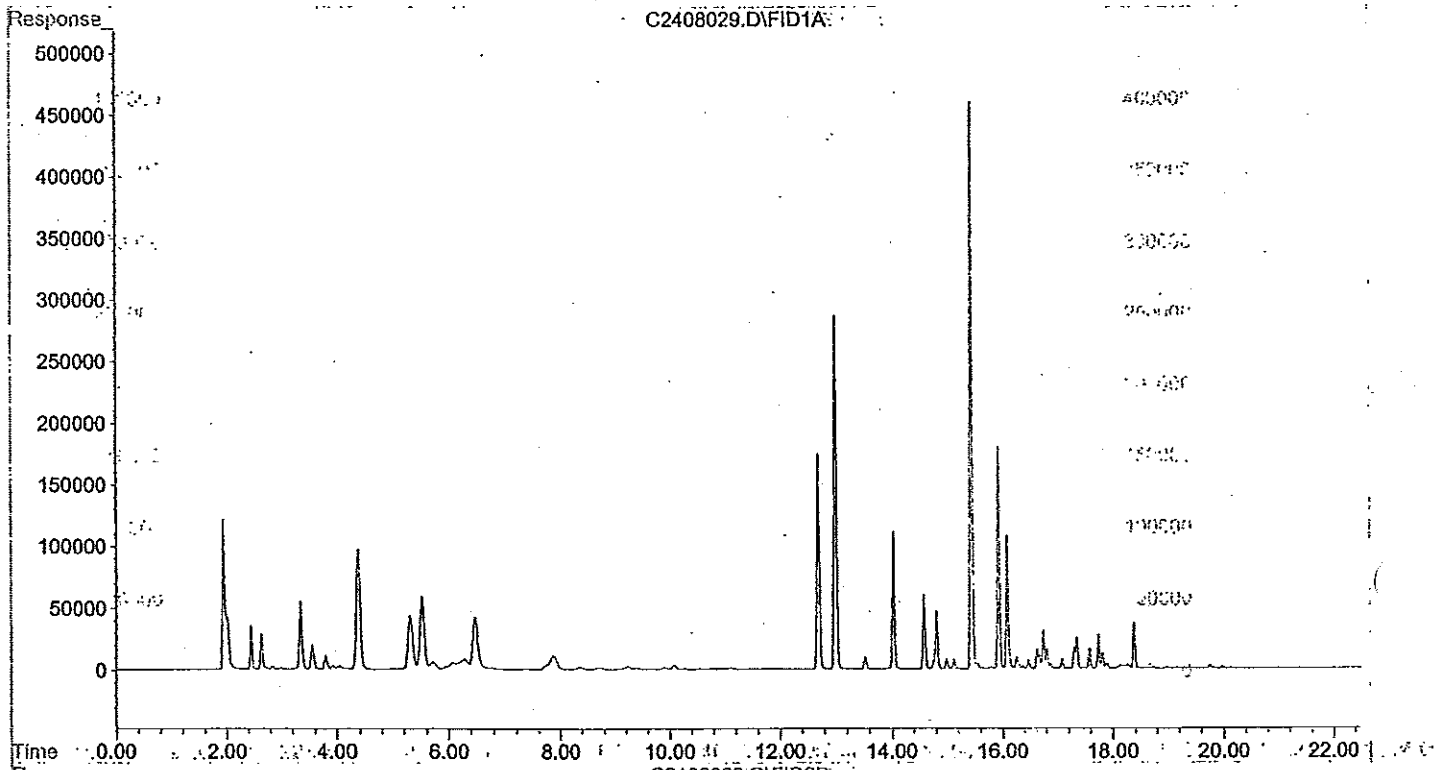


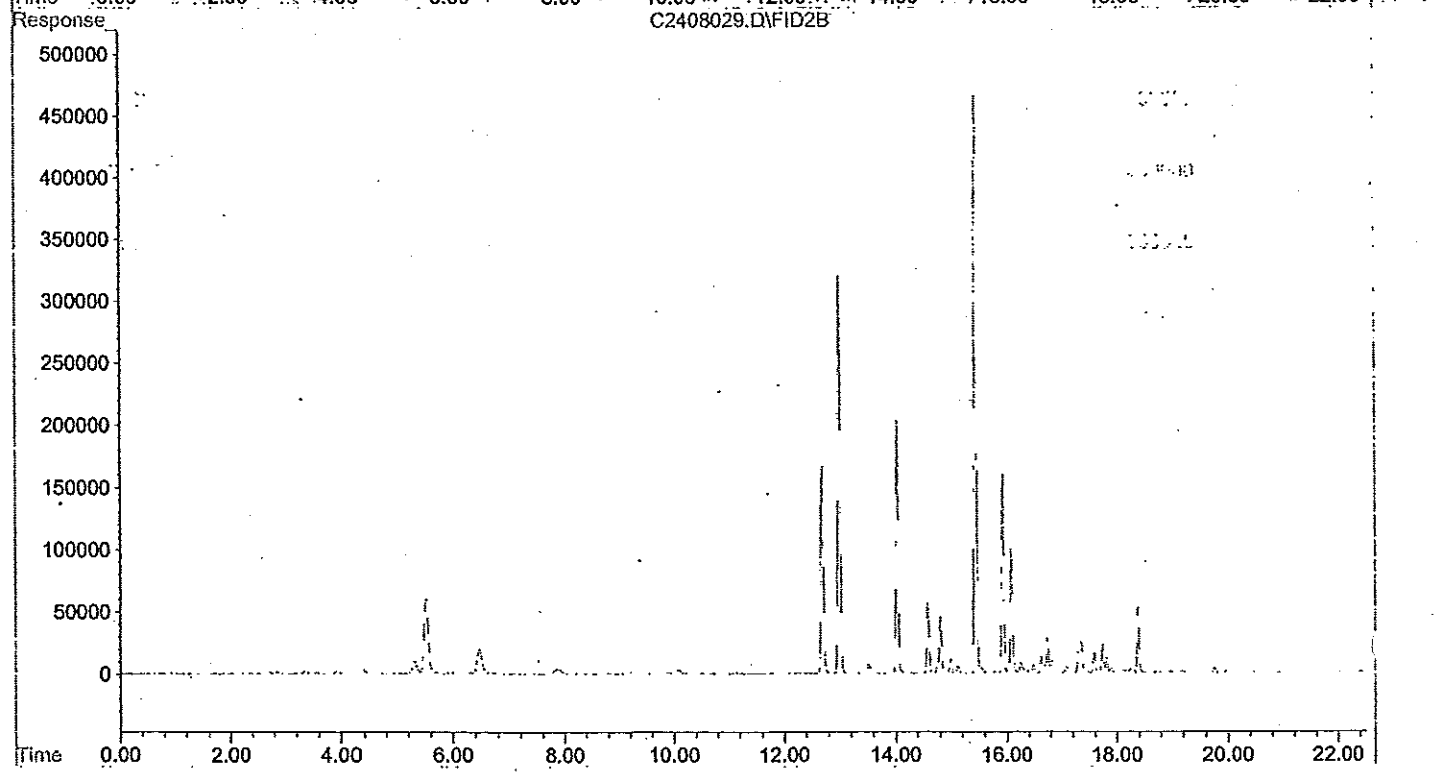


File : O:\HPCHEM\1\DATA\C2108\C2108025.D
Operator : edw
Acquired : 22 Mar 2008 00:36 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-07
Misc Info : 5x 1mL
Vial Number: 21

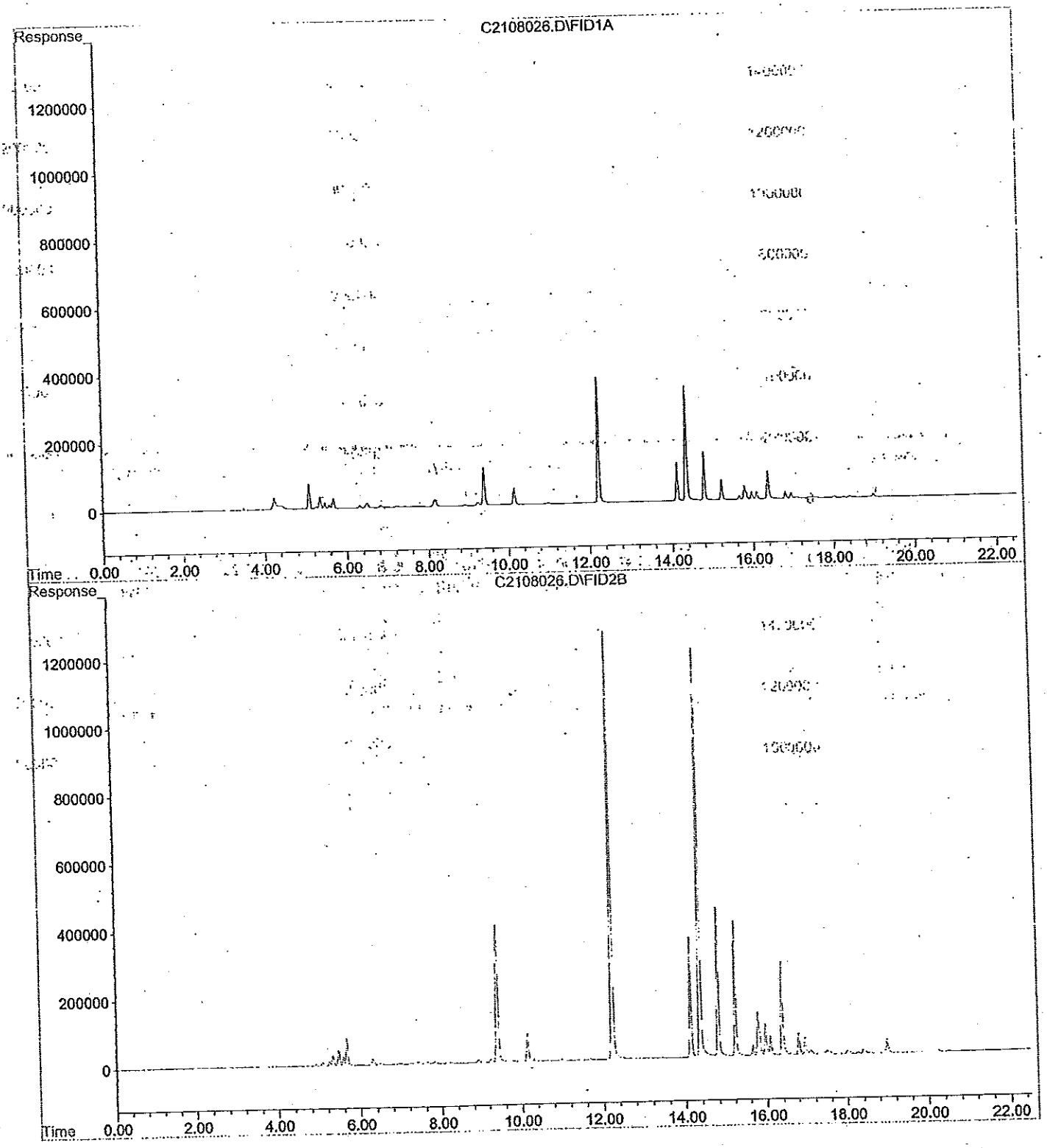


File : O:\HPCHEM\2\DATA\C2408\C2408029.D
Operator : edw
Acquired : 25 Mar 2008 5:59 using AcqMethod 8B2508.M
Instrument : GC-8
Sample Name: BRC0301-07RE1
Misc Info : 10x 500uL
Vial Number: 28

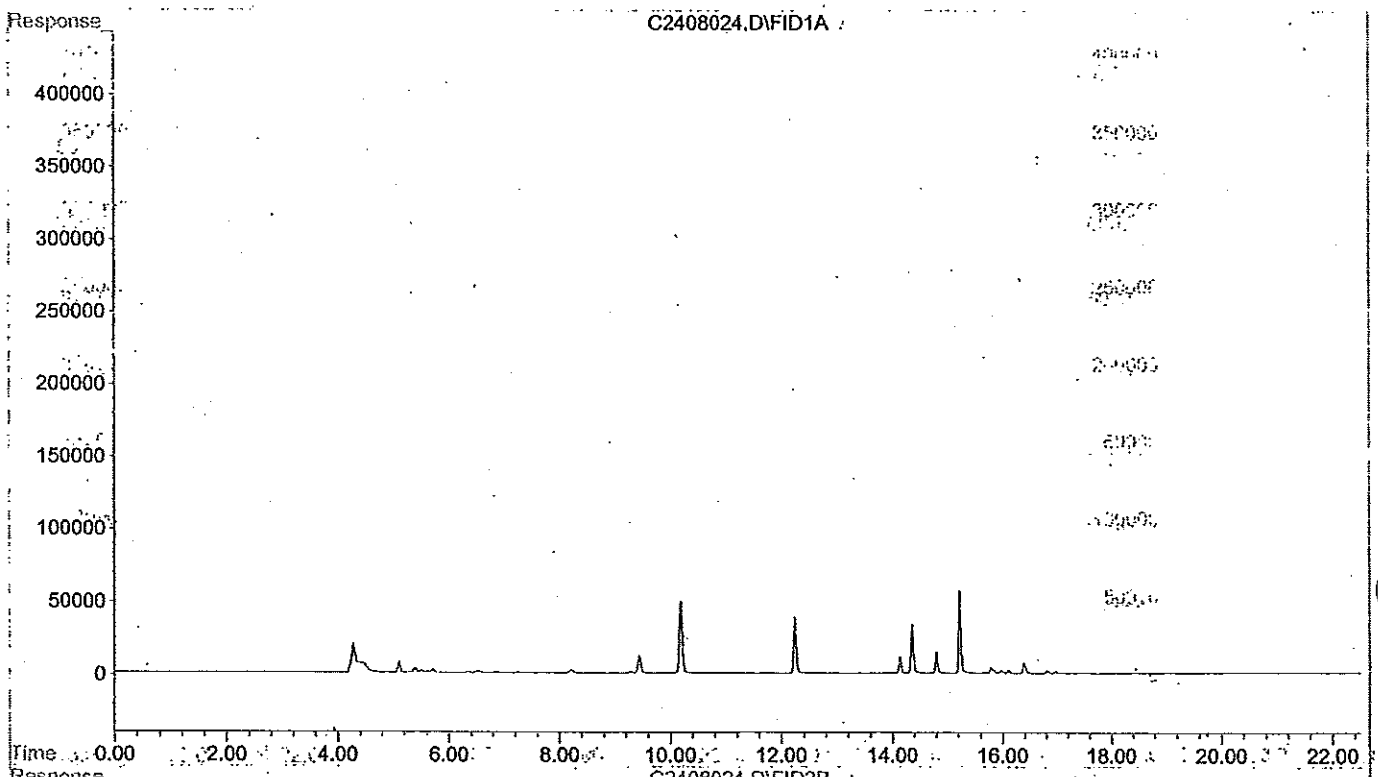


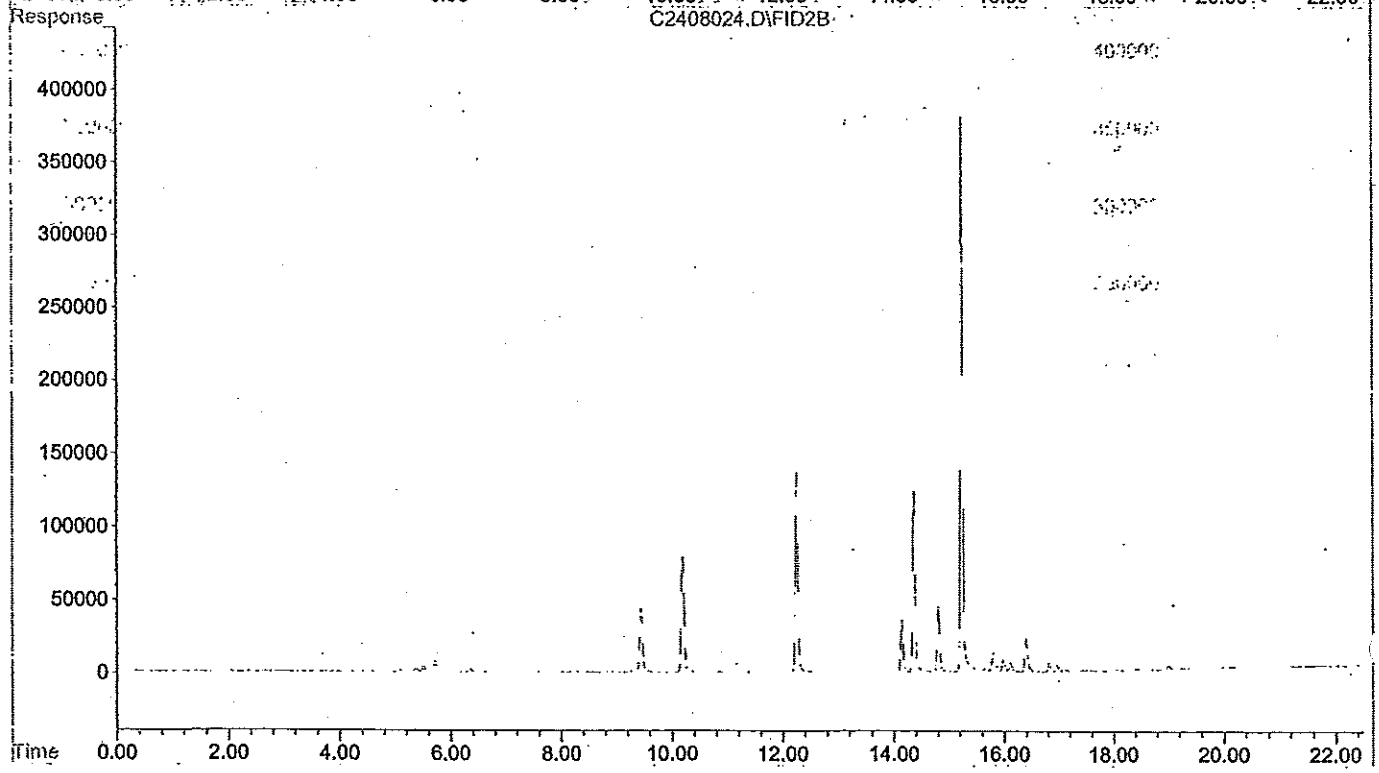


File : O:\HPCHEM\1\DATA\C2108\C2108026.D
Operator : edw
Acquired : 22 Mar 2008 1:08 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-08
Misc Info : 50x 100uL
Vial Number: 22

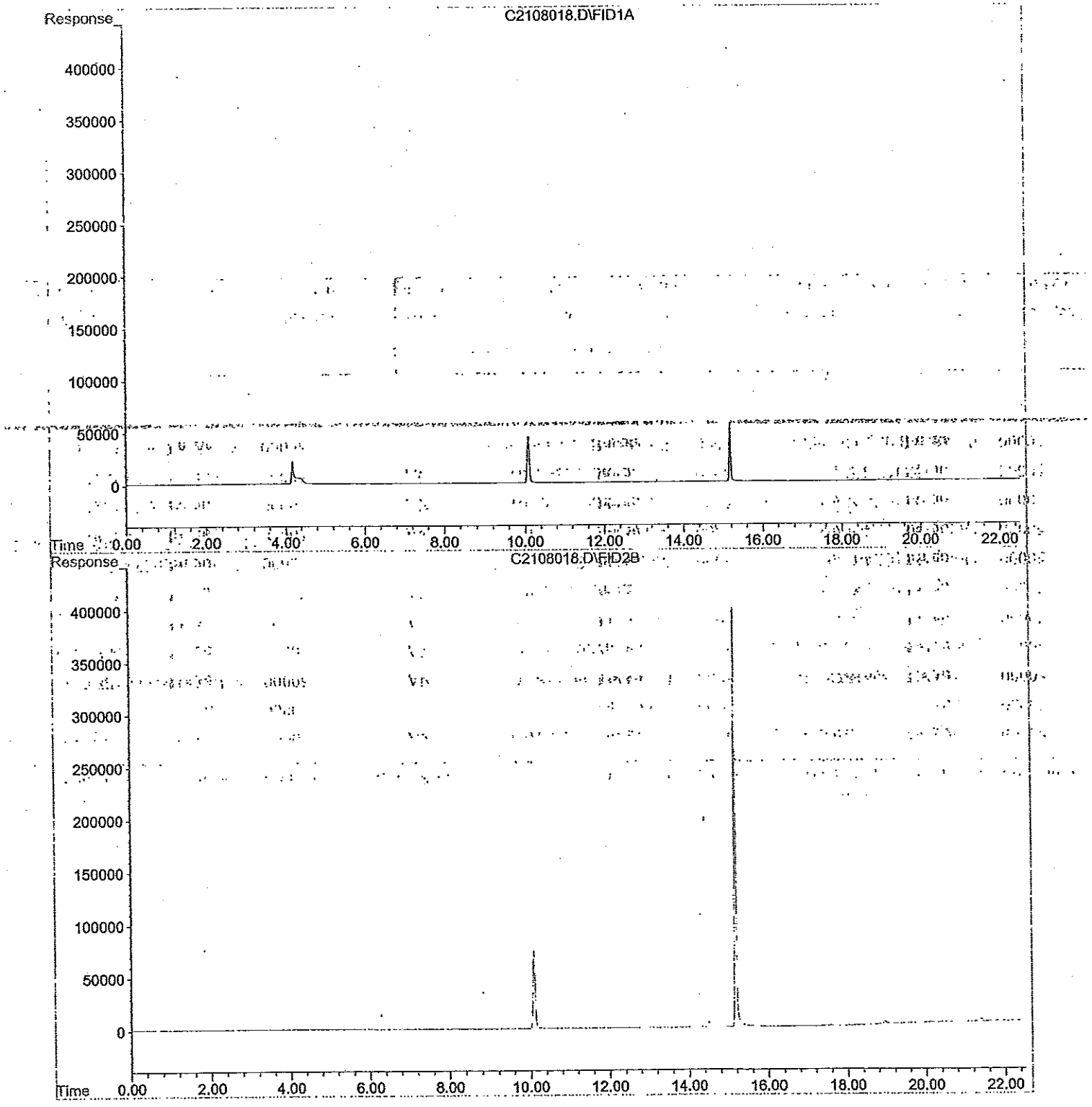


File : O:\HPCHEM\1\DATA\C2408\C2408024.D
Operator : edw
Acquired : 25 Mar 2008 00:10 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-08RE1
Misc Info : 500x 10uL
Vial Number: 22

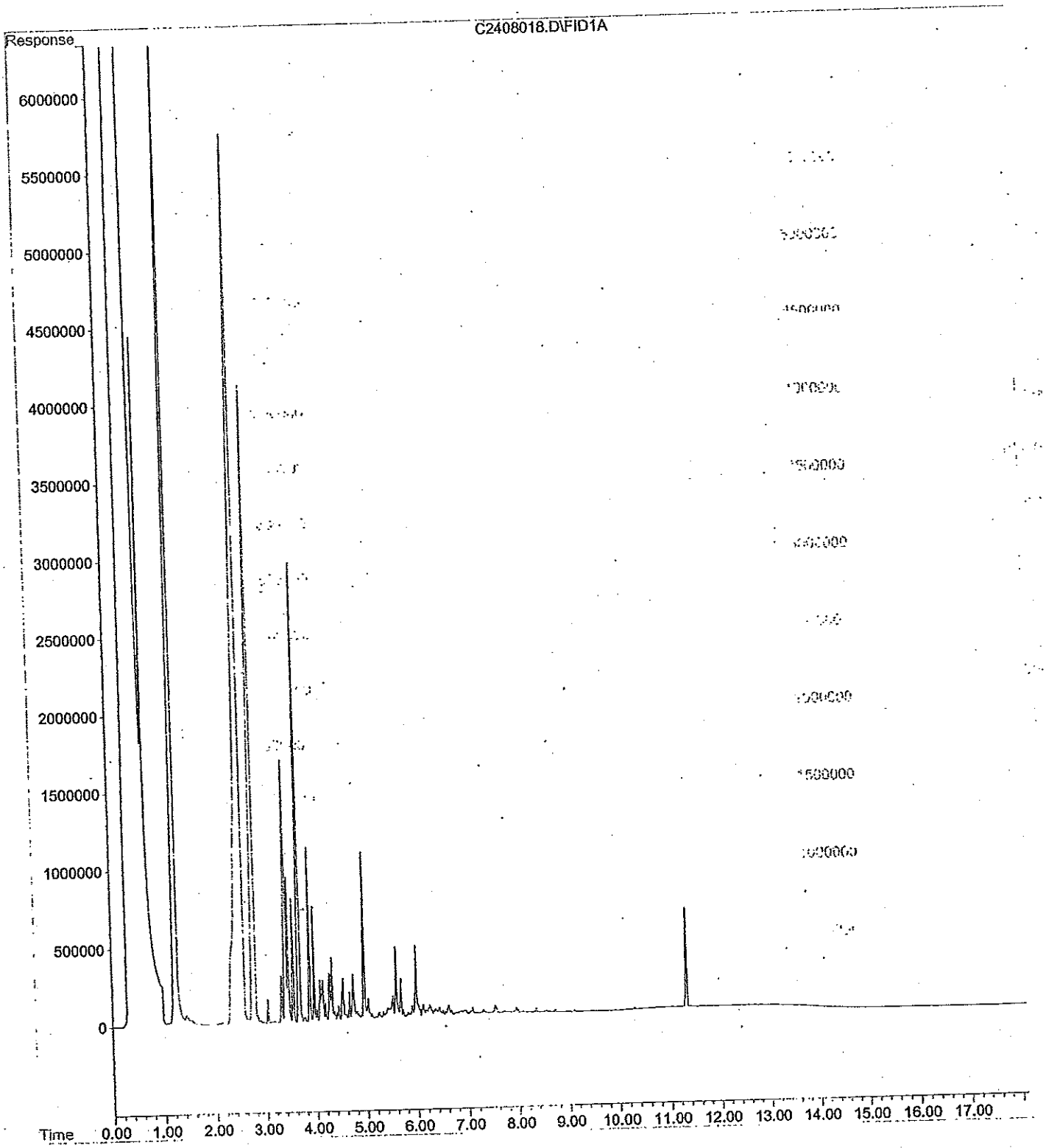




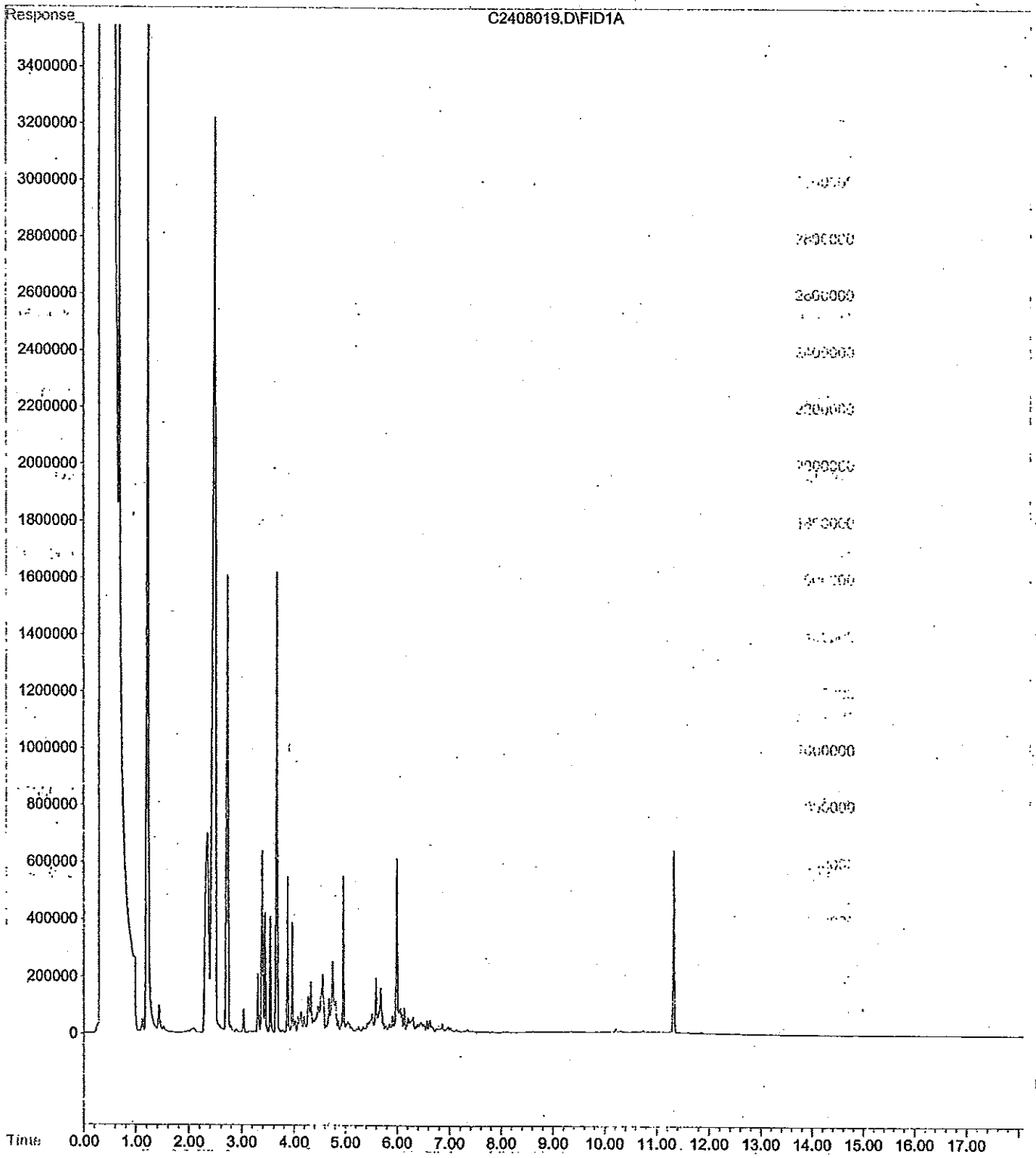
File : O:\HPCHEM\1\DATA\C2108\C2108018.D
Operator : edw
Acquired : 21 Mar 2008 20:46 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRC0301-09
Misc Info : 1x 5mL
Vial Number: 14



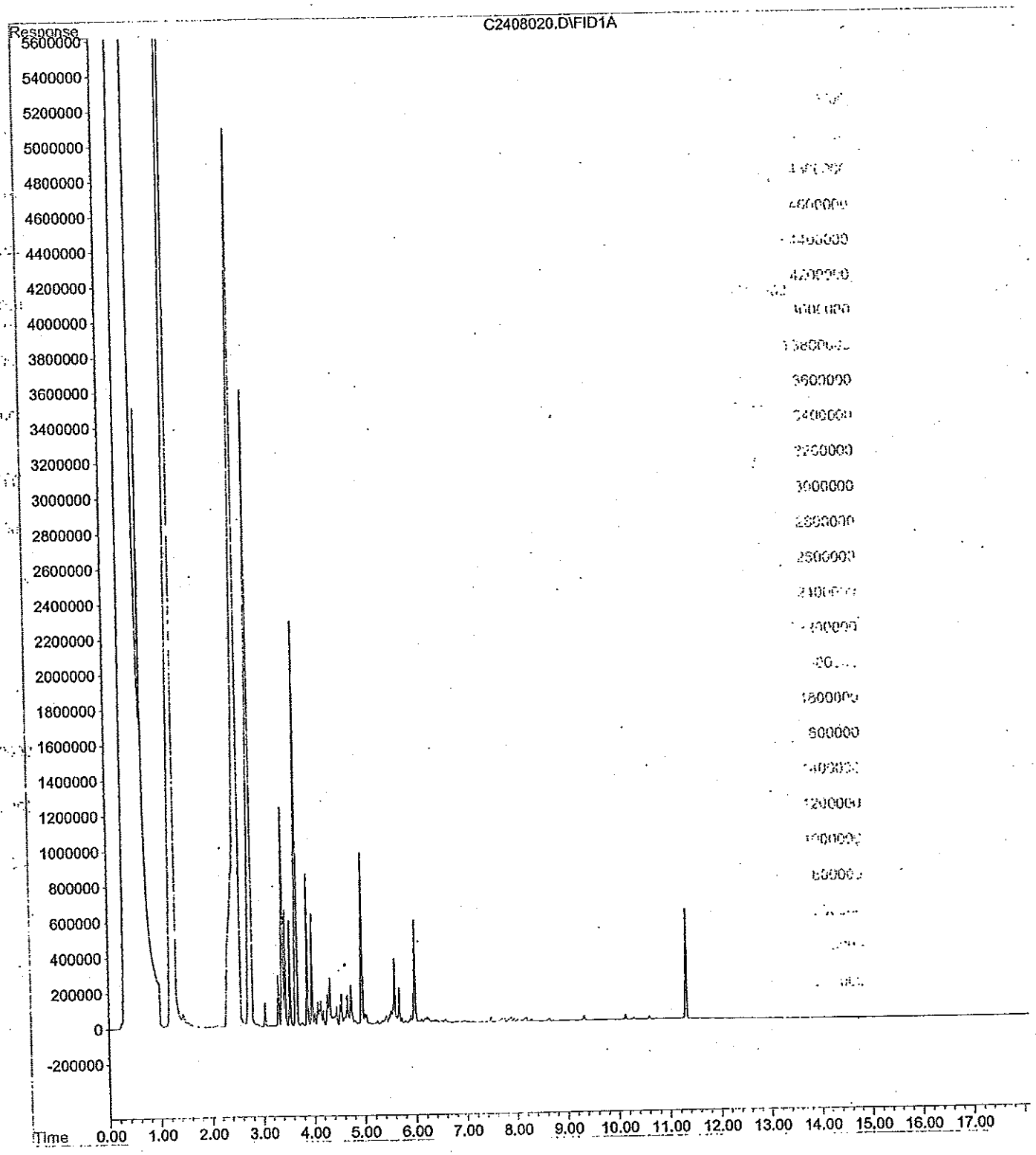
File : H:\HPCHEM\1\DATA\C2408\C2408018.D
Operator : EKK
Acquired : 24 Mar 2008 17:23 using AcqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRC0301-01
Misc Info : 1x NWTPH-Dx
Vial Number: 17



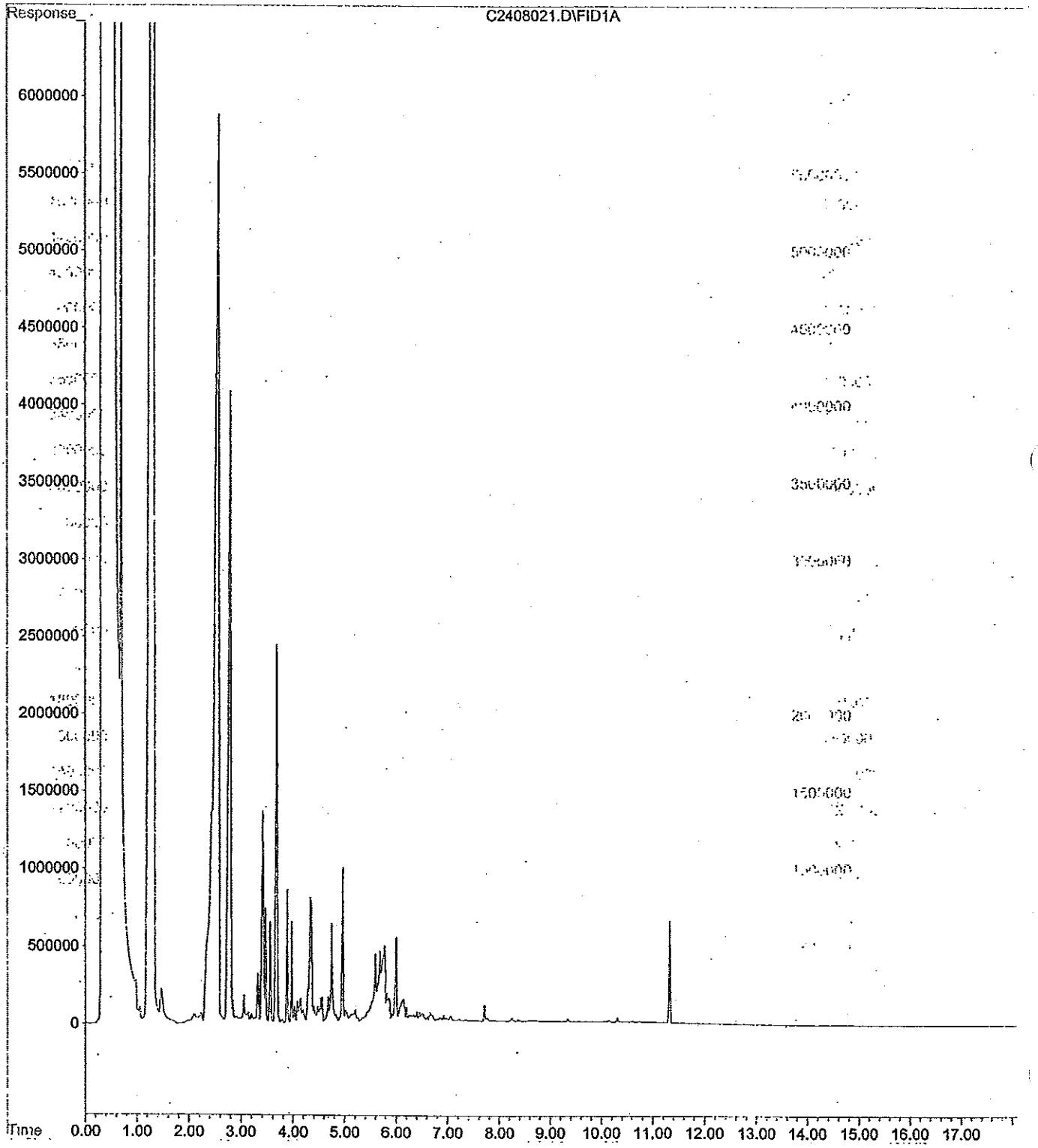
File : H:\HPCHEM\1\DATA\C2408\C2408019.D
Operator : EKK
Acquired : 24 Mar 2008 17:53 using AcqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRC0301-02
Misc Info : 1x NWTPH-Dx
Vial Number: 18



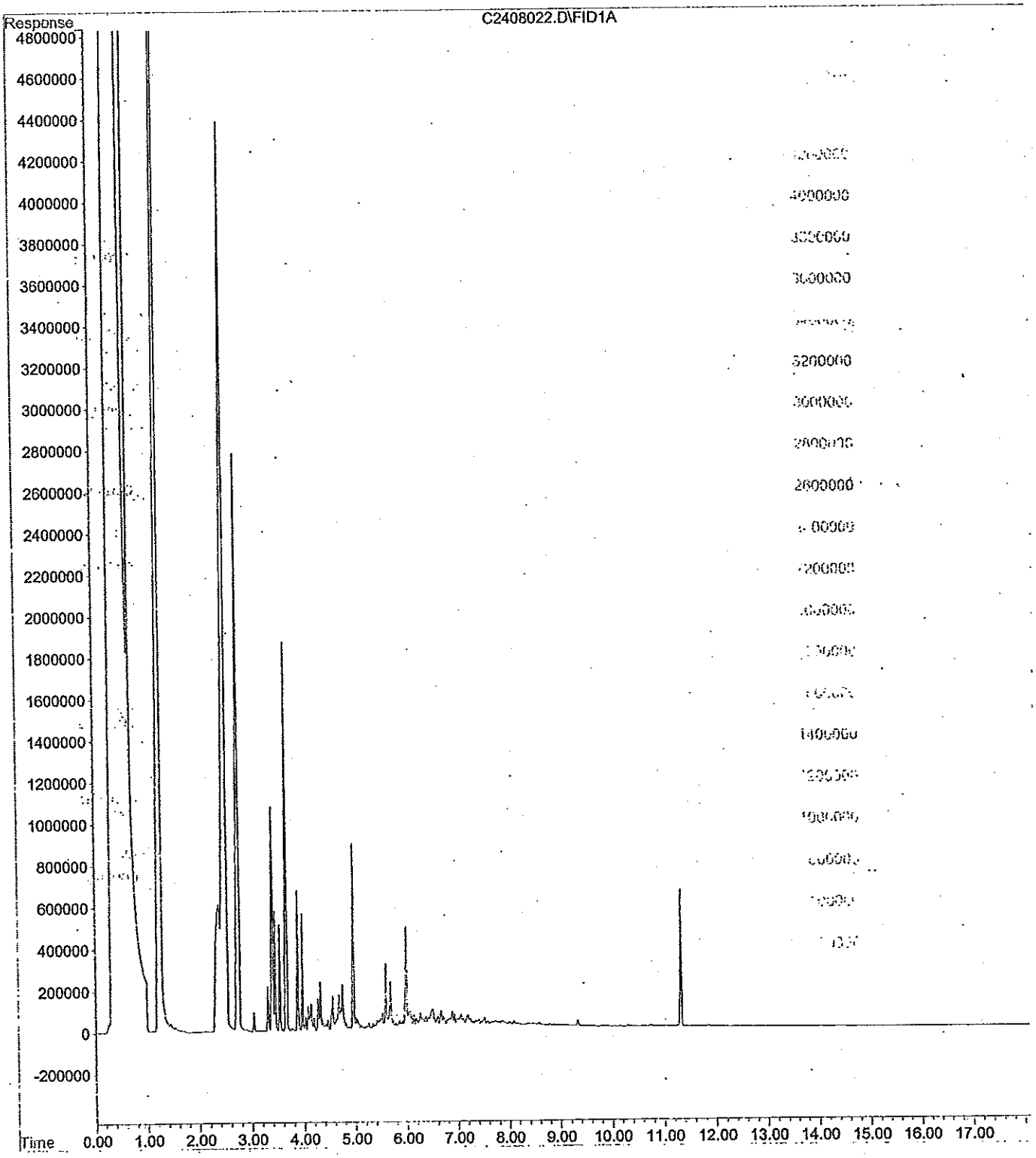
File : H:\HPCHEM\1\DATA\C2408\C2408020.D
Operator : EKK
Acquired : 24 Mar 2008 18:22 using AcqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRC0301-03
Misc Info : 1x NWTPH-Dx
Vial Number: 19



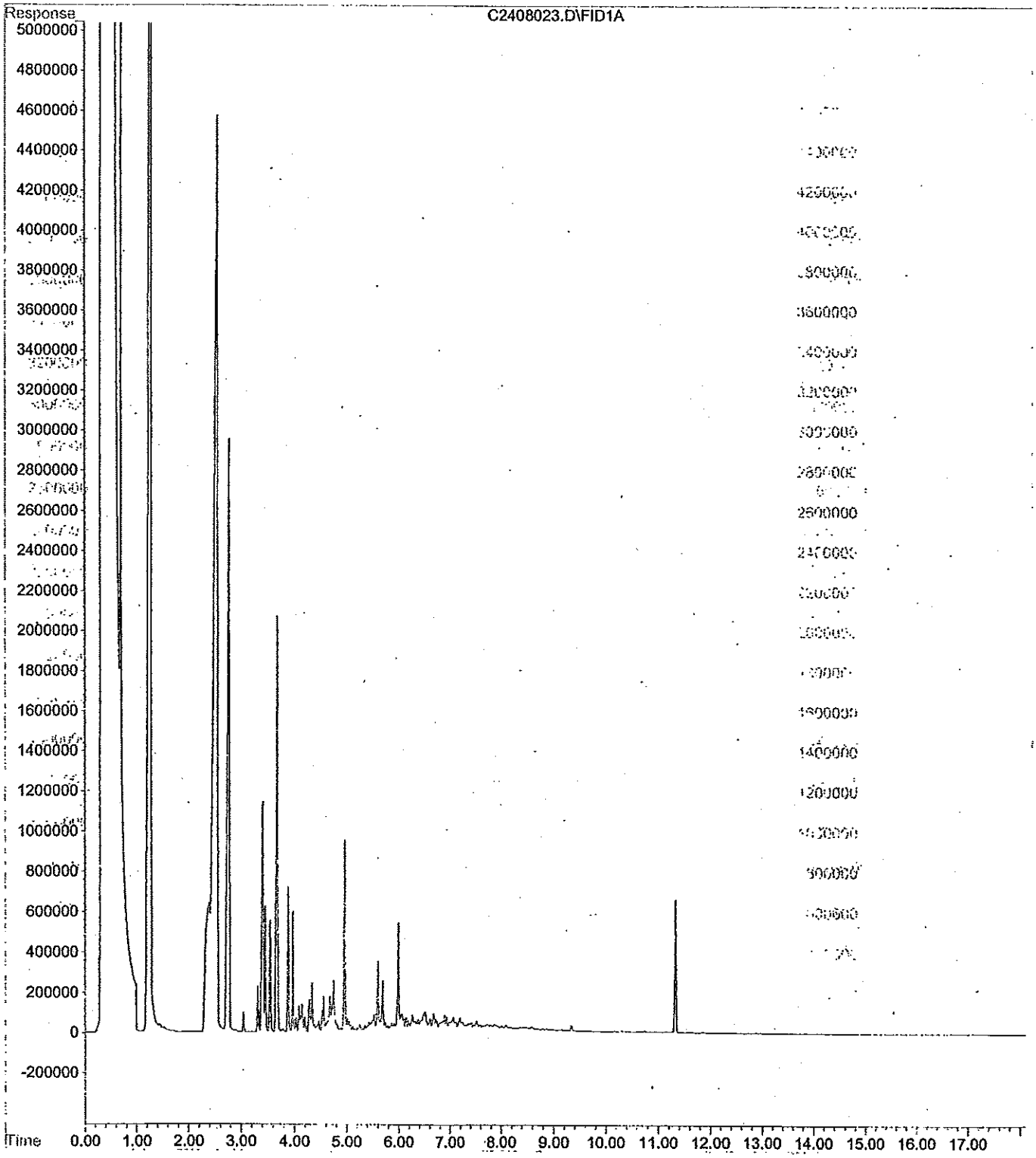
File : H:\HPCHEM\1\DATA\C2408\C2408021.D
Operator : EKK
Acquired : 24 Mar 2008 18:51 using AcqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRC0301-04
Misc Info : 1x NWTPH-Dx
Vial Number: 20



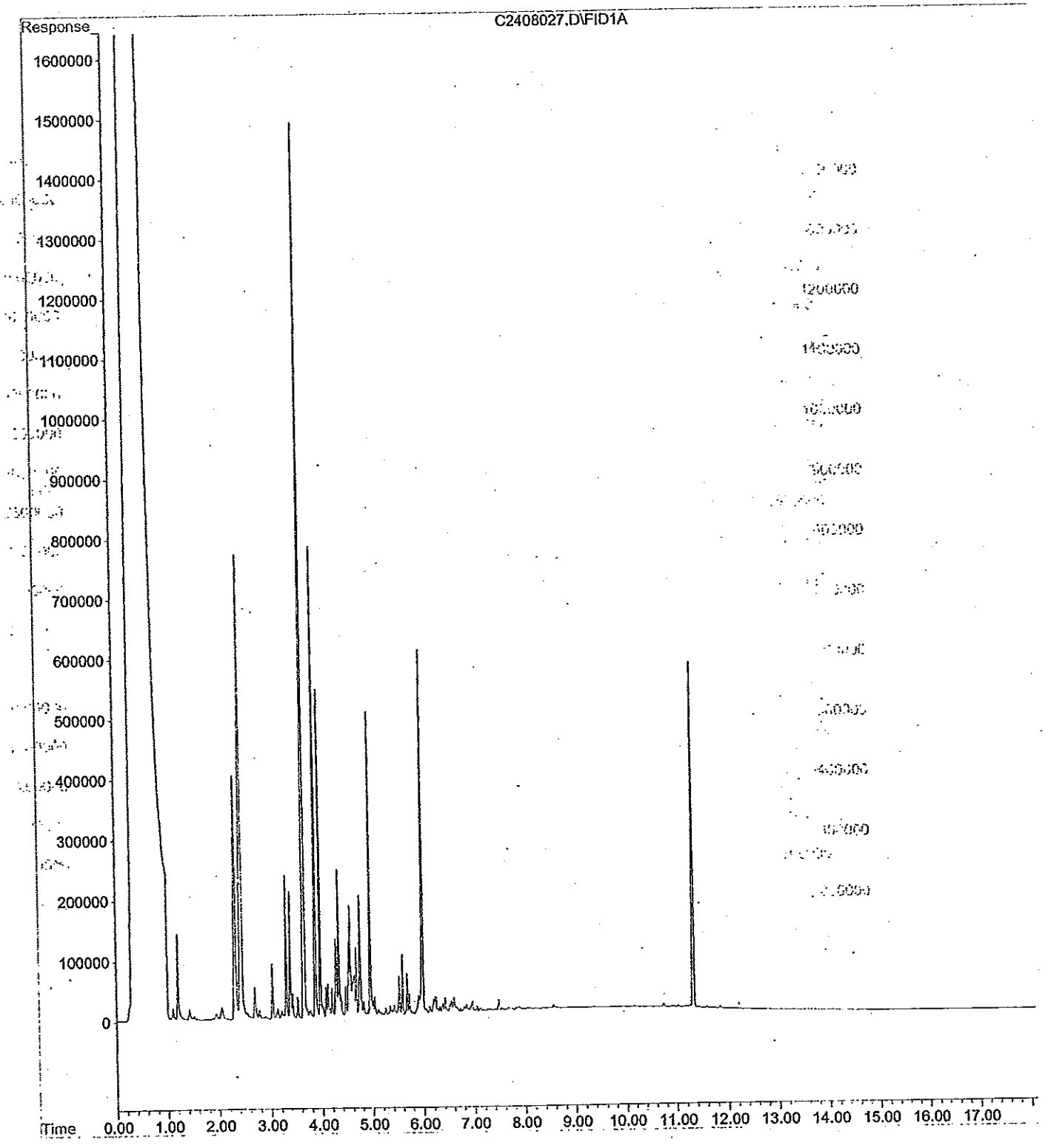
File : H:\HPCHEM\1\DATA\C2408\C2408022.D
Operator : EKK
Acquired : 24 Mar 2008 19:21 using AcqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRC0301-05
Misc Info : 1x NWTPH-Dx
Vial Number: 21



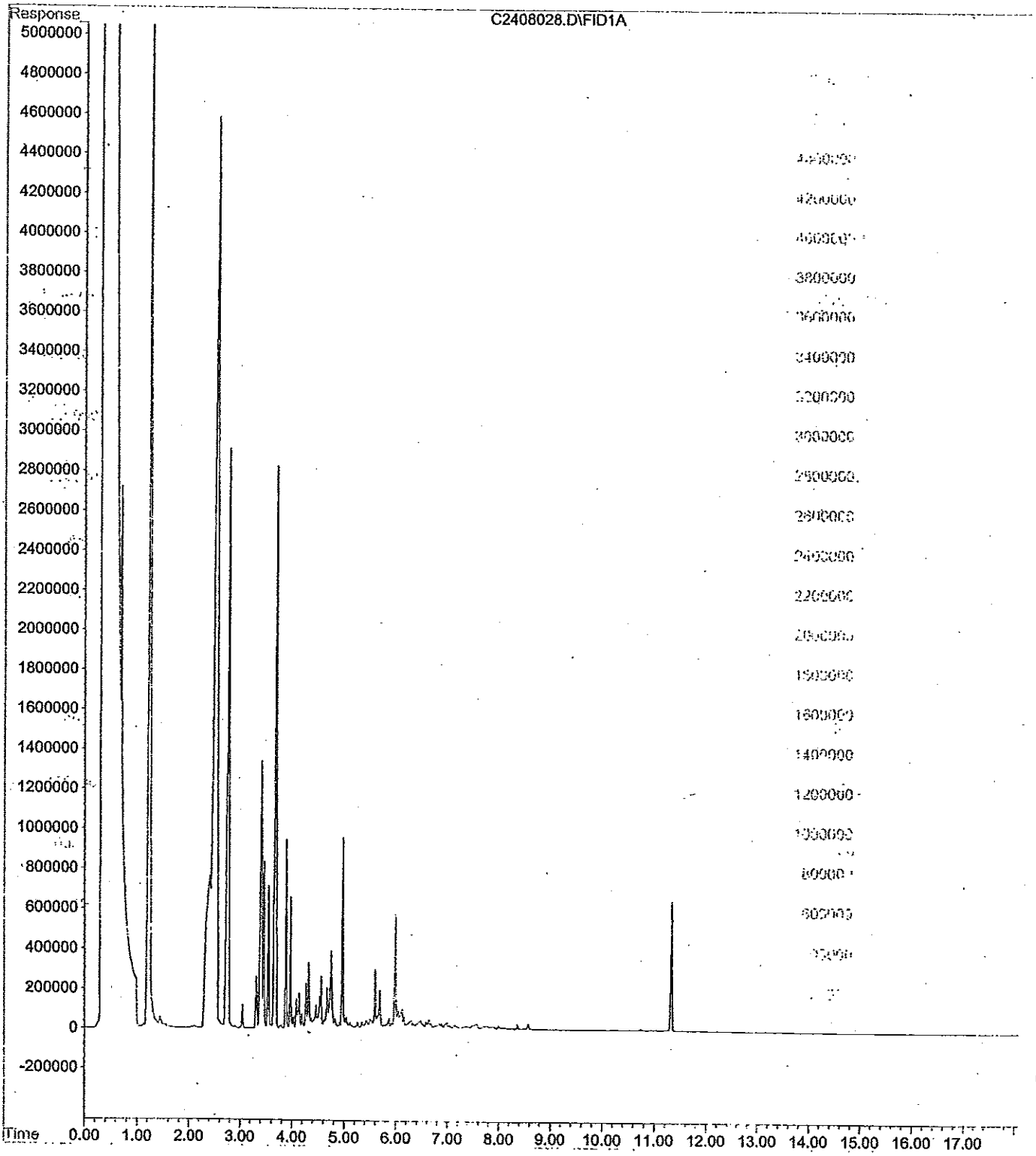
File : H:\HPCHEM\1\DATA\C2408\C2408023.D
Operator : EKK
Acquired : 24 Mar 2008 19:50 using AcqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRC0301-06
Misc Info : 1x NWTPH-Dx
Vial Number: 22



File : H:\HPCHEM\1\DATA\C2408\C2408027.D
Operator : EKK
Acquired : 24 Mar 2008 21:44 using AcqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRC0301-07
Misc Info : 1x NWTPH-Dx
Vial Number: 23



File : H:\HPCHEM\1\DATA\C2408\C2408028.D
Operator : EKK
Acquired : 24 Mar 2008 22:12 using AcqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRC0301-08
Misc Info : 1x NWTPH-Dx
Vial Number: 24



TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

April 16, 2008

Jil Frain
EA Engineering, Science and Technology
12011 NE 1st Street, Suite 100
Bellevue, WA/USA 98005

RE: Tiki Carwash

Enclosed are the results of analyses for samples received by the laboratory on 04/09/08 14:35. The following list is a summary of the Work Orders contained in this report, generated on 04/16/08 17:40.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
BRD0135	Tiki Carwash	61994.01

Kate Haney, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	04/16/08 17:40

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TK-MW29	BRD0135-01	Water	04/09/08 10:30	04/09/08 14:35
TK-MW32	BRD0135-02	Water	04/09/08 11:25	04/09/08 14:35
TK-TB040908	BRD0135-03	Water	04/09/08 14:35	04/09/08 14:35

TestAmerica Seattle

Kate Haney, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	04/16/08 17:40

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRD0135-01 (TK-MW29)		**Water**				**Sampled: 04/09/08 10:30**				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	99700	----	10000	ug/l	200x	8D10019	04/10/08 09:44	04/11/08 11:19	
Benzene	"	4450	----	100	"	"	"	"	"	
Toluene	"	9090	----	100	"	"	"	"	"	
Ethylbenzene	"	3000	----	100	"	"	"	"	"	
Xylenes (total)	"	19500	----	200	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*91.0%*		*58 - 144 %*		*1x*			"	
4-BFB (PID)		*103%*		*68 - 140 %*		"			"	
BRD0135-02 (TK-MW32)		**Water**				**Sampled: 04/09/08 11:25**				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	174000	----	10000	ug/l	200x	8D10019	04/10/08 09:44	04/11/08 11:51	
Ethylbenzene	"	2950	----	100	"	"	"	"	"	
Xylenes (total)	"	17300	----	200	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*90.9%*		*58 - 144 %*		*1x*			"	
4-BFB (PID)		*102%*		*68 - 140 %*		"			"	
BRD0135-02RE1 (TK-MW32)		**Water**				**Sampled: 04/09/08 11:25**				
Benzene	NWTPH-Gx/802 1B	21300	----	250	ug/l	500x	8D13010	04/13/08 10:33	04/14/08 06:24	
Toluene	"	32200	----	250	"	"	"	"	"	
Surrogate(s): 4-BFB (PID)		*99.6%*		*68 - 140 %*		*1x*			"	
BRD0135-03 (TK-TB040908)		**Water**				**Sampled: 04/09/08 14:35**				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	ND	----	50.0	ug/l	1x	8D10019	04/10/08 09:44	04/11/08 01:31	
Benzene	"	ND	----	0.500	"	"	"	"	"	
Toluene	"	ND	----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*88.6%*		*58 - 144 %*		"			"	
4-BFB (PID)		*101%*		*68 - 140 %*		"			"	

TestAmerica Seattle

Kate Haney, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

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EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	04/16/08 17:40

Semivolatile Petroleum Products by NWTPH-Dx (w/o Acid/Silica Gel Clean-up)

TestAmerica Seattle

Analyte	Method	Result	MDL[A]	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRD0135-01 (TK-MW29)		**Water**			**Sampled: 04/09/08 10:30**					
Diesel Range Hydrocarbons	NWTPH-Dx	5.19	----	0.243	mg/l	1x	8D14012	04/14/08 09:18	04/16/08 07:34	Q5
Lube Oil Range Hydrocarbons	"	0.759	----	0.485	"	"	"	"	"	Q7
Surrogate(s): 2-FBP			*137%*		*53 - 125 %*	"			"	ZX
Octacosane			*103%*		*68 - 125 %*	"			"	
BRD0135-02 (TK-MW32)		**Water**			**Sampled: 04/09/08 11:25**					
Diesel Range Hydrocarbons	NWTPH-Dx	6.57	----	0.240	mg/l	1x	8D14012	04/14/08 09:18	04/16/08 11:53	Q5
Lube Oil Range Hydrocarbons	"	0.900	----	0.481	"	"	"	"	"	Q7
Surrogate(s): 2-FBP			*114%*		*53 - 125 %*	"			"	
Octacosane			*99.4%*		*68 - 125 %*	"			"	

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12011 NE 1st Street, Suite 100
Bellevue, WA/USA 98005

Project Name: Tiki Carwash
Project Number: 61994.01
Project Manager: Jil Frain

Report Created: 04/16/08 17:40

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8D10019 Water Preparation Method: EPA 5030B (P/T)

Analyte	Method	Result	MDL[A]	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8D10019-BLK1)								Extracted: 04/10/08 09:44						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	--	--	--	--	--	--	04/10/08 17:53	
Benzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Xylenes (total)	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 88.5%*			*Limits: 58-144%*	"							*04/10/08 17:53*	
4-BFB (PID)		*102%*			*68-140%*	"							"	
LCS (8D10019-BS1)								Extracted: 04/10/08 09:44						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	920	---	50.0	ug/l	1x	--	1000	92.0%	(80-120)	--	--	04/10/08 18:26	
Surrogate(s): 4-BFB (FID)		*Recovery: 97.0%*			*Limits: 58-144%*	"							*04/10/08 18:26*	
LCS (8D10019-BS2)								Extracted: 04/10/08 09:44						
Benzene	NWTPH-Gx/ 8021B	29.5	---	0.500	ug/l	1x	--	30.0	98.4%	(80-120)	--	--	04/10/08 18:59	
Toluene	"	28.9	---	0.500	"	"	--	"	96.4%	"	--	--	"	
Ethylbenzene	"	28.9	---	0.500	"	"	--	"	96.4%	"	--	--	"	
Xylenes (total)	"	89.4	---	1.00	"	"	--	90.0	99.3%	"	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 99.1%*			*Limits: 68-140%*	"							*04/10/08 18:59*	
Duplicate (8D10019-DUP1)					QC Source: BRD0083-01			Extracted: 04/10/08 09:44						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	ND	--	--	--	NR	(25)	04/10/08 20:04	
Benzene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Toluene	"	ND	---	0.500	"	"	ND	--	--	--	20.1%	"	"	
Ethylbenzene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Xylenes (total)	"	ND	---	1.00	"	"	ND	--	--	--	NR	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 88.2%*			*Limits: 58-144%*	"							*04/10/08 20:04*	
4-BFB (PID)		*100%*			*68-140%*	"							"	
Duplicate (8D10019-DUP2)					QC Source: BRD0016-17			Extracted: 04/10/08 09:44						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	ND	--	--	--	NR	(25)	04/10/08 21:10	
Benzene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Toluene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Ethylbenzene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Xylenes (total)	"	ND	---	1.00	"	"	ND	--	--	--	NR	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 88.8%*			*Limits: 58-144%*	"							*04/10/08 21:10*	
4-BFB (PID)		*101%*			*68-140%*	"							"	

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Kate Haney, Project Manager

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EA Engineering, Science and Technology
12011 NE 1st Street, Suite 100
Bellevue, WA/USA 98005

Project Name: Tiki Carwash
Project Number: 61994.01
Project Manager: Jil Frain

Report Created: 04/16/08 17:40

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8D10019 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (8D10019-MS1)					QC Source: BRD0083-01				Extracted: 04/10/08 09:44					
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	1020	---	50.0	ug/l	1x	ND	1000	102%	(75-131)	--	--	04/10/08 21:43	
Surrogate(s): 4-BFB (FID)		*Recovery: 96.8%*			*Limits: 58-144%*	"							*04/10/08 21:43*	
Matrix Spike (8D10019-MS2)					QC Source: BRD0016-21				Extracted: 04/10/08 09:44					
Benzene	NWTPH-Gx/ 8021B	33.2	---	0.500	ug/l	1x	0.219	30.0	110%	(46-130)	--	--	04/10/08 22:15	
Toluene	"	31.9	---	0.500	"	"	ND	"	106%	(60-124)	--	--	"	
Ethylbenzene	"	32.6	---	0.500	"	"	0.267	"	108%	(56-141)	--	--	"	
Xylenes (total)	"	99.9	---	1.00	"	"	ND	90.0	111%	(66-132)	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 99.9%*			*Limits: 68-140%*	"							*04/10/08 22:15*	
Matrix Spike Dup (8D10019-MSD2)					QC Source: BRD0016-21				Extracted: 04/10/08 09:44					
Benzene	NWTPH-Gx/ 8021B	32.9	---	0.500	ug/l	1x	0.219	30.0	109%	(46-130)	1.05%	(40)	04/10/08 22:48	
Toluene	"	32.3	---	0.500	"	"	ND	"	108%	(60-124)	1.26%	"	"	
Ethylbenzene	"	32.7	---	0.500	"	"	0.267	"	108%	(56-141)	0.233%	"	"	
Xylenes (total)	"	98.0	---	1.00	"	"	ND	90.0	109%	(66-132)	1.89%	"	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 102%*			*Limits: 68-140%*	"							*04/10/08 22:48*	

QC Batch: 8D13010 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8D13010-BLK1)									Extracted: 04/13/08 10:33					
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	--	--	--	--	--	--	04/13/08 12:50	
Benzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Xylenes (total)	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 91.9%*			*Limits: 58-144%*	"							*04/13/08 12:50*	
4-BFB (PID)		*101%*			*68-140%*	"							"	
LCS (8D13010-BS1)									Extracted: 04/13/08 10:33					
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	891	---	50.0	ug/l	1x	--	1000	89.1%	(80-120)	--	--	04/13/08 13:23	
Surrogate(s): 4-BFB (FID)		*Recovery: 100%*			*Limits: 58-144%*	"							*04/13/08 13:23*	

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Kate Haney, Project Manager

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EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	04/16/08 17:40

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8D13010 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL^A	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (8D13010-BS2)								Extracted: 04/13/08 10:33						
Benzene	NWTPH-Gx/ 8021B	28.5	---	0.500	ug/l	1x	--	30.0	95.0%	(80-120)	--	--	04/13/08 13:56	
Toluene	"	29.2	---	0.500	"	"	--	"	97.3%	"	--	--	"	
Ethylbenzene	"	29.5	---	0.500	"	"	--	"	98.3%	"	--	--	"	
Xylenes (total)	"	87.5	---	1.00	"	"	--	90.0	97.2%	"	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 103%*			*Limits: 68-140%*	"							*04/13/08 13:56*	
Duplicate (8D13010-DUP1)					QC Source: BRD0093-04			Extracted: 04/13/08 10:33						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	1530	---	50.0	ug/l	1x	1590	--	--	--	3.96%	(25)	04/13/08 15:03	
Benzene	"	9.14	---	0.500	"	"	9.40	--	--	--	2.84%	"	"	
Toluene	"	1.31	---	0.500	"	"	1.38	--	--	--	5.58%	"	"	
Ethylbenzene	"	55.1	---	0.500	"	"	57.0	--	--	--	3.46%	"	"	
Xylenes (total)	"	5.46	---	1.00	"	"	6.13	--	--	--	11.5%	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 121%*			*Limits: 58-144%*	"							*04/13/08 15:03*	
4-BFB (PID)		*113%*			*68-140%*	"							"	
Duplicate (8D13010-DUP2)					QC Source: BRD0093-02RE1			Extracted: 04/13/08 10:33						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	2050	---	500	ug/l	10x	2090	--	--	--	2.19%	(25)	04/14/08 10:05	
Benzene	"	166	---	5.00	"	"	168	--	--	--	1.61%	"	"	
Toluene	"	ND	---	5.00	"	"	ND	--	--	--	3.99%	"	"	
Ethylbenzene	"	247	---	5.00	"	"	249	--	--	--	0.870%	"	"	
Xylenes (total)	"	13.6	---	10.0	"	"	13.8	--	--	--	1.24%	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 94.0%*			*Limits: 58-144%*	*1x*							*04/14/08 10:05*	
4-BFB (PID)		*106%*			*68-140%*	"							"	
Matrix Spike (8D13010-MS1)					QC Source: BRD0093-04			Extracted: 04/13/08 10:33						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	2400	---	50.0	ug/l	1x	1590	1000	80.6%	(75-131)	--	--	04/13/08 16:09	
Surrogate(s): 4-BFB (FID)		*Recovery: 128%*			*Limits: 58-144%*	"							*04/13/08 16:09*	
Matrix Spike (8D13010-MS2)					QC Source: BRD0093-04			Extracted: 04/13/08 10:33						
Benzene	NWTPH-Gx/ 8021B	38.7	---	0.500	ug/l	1x	9.40	30.0	97.6%	(46-130)	--	--	04/13/08 17:15	
Toluene	"	31.4	---	0.500	"	"	1.38	"	100%	(60-124)	--	--	"	
Ethylbenzene	"	72.8	---	0.500	"	"	57.0	"	52.6%	(56-141)	--	--	"	M2
Xylenes (total)	"	91.9	---	1.00	"	"	6.13	90.0	95.3%	(66-132)	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 109%*			*Limits: 68-140%*	"							*04/13/08 17:15*	

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Kate Haney, Project Manager

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EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	04/16/08 17:40

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8D13010 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike Dup (8D13010-MSD1)					QC Source: BRD0093-04				Extracted: 04/13/08 10:33					
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	2400	---	50.0	ug/l	1x	1590	1000	80.6%	(75-131)	0.0236%	(25)	04/13/08 16:42	
Surrogate(s): 4-BFB (FID)		*Recovery: 129%*			*Limits: 58-144%*	"							*04/13/08 16:42*	
Matrix Spike Dup (8D13010-MSD2)					QC Source: BRD0093-04				Extracted: 04/13/08 10:33					
Benzene	NWTPH-Gx/ 8021B	37.9	---	0.500	ug/l	1x	9.40	30.0	94.8%	(46-130)	2.16%	(40)	04/13/08 17:48	
Toluene	"	30.8	---	0.500	"	"	1.38	"	97.9%	(60-124)	2.13%	"	"	
Ethylbenzene	"	70.1	---	0.500	"	"	57.0	"	43.7%	(56-141)	3.73%	"	"	
Xylenes (total)	"	91.4	---	1.00	"	"	6.13	90.0	94.8%	(66-132)	0.468%	"	"	M2
Surrogate(s): 4-BFB (PID)		*Recovery: 108%*			*Limits: 68-140%*	"							*04/13/08 17:48*	

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Kate Haney, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

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EA Engineering, Science and Technology	Project Name:	Tiki Carwash	Report Created:
12011 NE 1st Street, Suite 100	Project Number:	61994.01	04/16/08 17:40
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	

Semivolatile Petroleum Products by NWTPH-Dx (w/o Acid/Silica Gel Clean-up) - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8D14012 **Water Preparation Method: EPA 3520C**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8D14012-BLK1)								Extracted: 04/14/08 09:18						
Diesel Range Hydrocarbons	NWTPH-Dx	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	04/15/08 22:32	
Lube Oil Range Hydrocarbons	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 2-FBP		*Recovery: 87.1%*			*Limits: 53-125%*	"							*04/15/08 22:32*	
Octacosane		*92.5%*			*68-125%*	"							"	
Blank (8D14012-BLK2)								Extracted: 04/14/08 09:18						
Diesel Range Hydrocarbons	NWTPH-Dx	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	04/15/08 22:57	
Lube Oil Range Hydrocarbons	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 2-FBP		*Recovery: 78.8%*			*Limits: 53-125%*	"							*04/15/08 22:57*	
Octacosane		*68.1%*			*68-125%*	"							"	
LCS (8D14012-BS1)								Extracted: 04/14/08 09:18						
Diesel Range Hydrocarbons	NWTPH-Dx	1.77	---	0.250	mg/l	1x	--	2.00	88.6%	(61-132)	--	--	04/15/08 23:23	
Surrogate(s): 2-FBP		*Recovery: 91.1%*			*Limits: 53-125%*	"							*04/15/08 23:23*	
Octacosane		*94.8%*			*68-125%*	"							"	
LCS Dup (8D14012-BSD1)								Extracted: 04/14/08 09:18						
Diesel Range Hydrocarbons	NWTPH-Dx	1.70	---	0.250	mg/l	1x	--	2.00	85.1%	(61-132)	4.07%	(40)	04/15/08 23:49	
Surrogate(s): 2-FBP		*Recovery: 85.9%*			*Limits: 53-125%*	"							*04/15/08 23:49*	
Octacosane		*82.9%*			*68-125%*	"							"	

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EA Engineering, Science and Technology	Project Name:	**Tiki Carwash**	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	04/16/08 17:40

Notes and Definitions

Report Specific Notes:

M2	-	The MS and/or MSD were below the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
Q4	-	The hydrocarbons present are a complex mixture of diesel range and heavy oil range organics.
Q5	-	Results in the diesel organics range are primarily due to overlap from a gasoline range product.
Q7	-	The heavy oil range organics present are due to hydrocarbons eluting primarily in the diesel range.
ZX	-	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy.* Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Seattle

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ANALYTICAL TESTING CORPORATION

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210 [X]
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290
9405 SW Nimbus Ave, Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: BRD0135

CLIENT: WA Dept. of Ecology

REPORT TO: EA Engineering - Jil Frain
ADDRESS: 11201 NE 1st Street, Suite 100
Bellevue, WA 98005

PHONE: 425-451-7800 FAX: 425-451-7800

INVOICE TO: WA Dept of Ecology / NWRO
Attn: Roger Nye
3190 160th Ave SE
Bellevue, WA 98008

P.O. NUMBER: Field order # : PF313180

PROJECT NAME: Tiki Carwash

PROJECT NUMBER: 61994.01

SAMPLED BY: AJ, KB

TURNAROUND REQUEST
In Business Days *
Organic & Inorganic Analyses: 10 STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1
Petroleum Hydrocarbon Analyses: [X] STD. | 4 | 3 | 2 | 1 | <1
OTHER Specify:
* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE		REQUESTED ANALYSES		MATRIX (W, S, O)	# OF CONT.	LOCATION / COMMENTS	TA WO ID
			HCL	HCL	NWTPH G/BTEX	NWTPH DX				
1	TK-MW29	4/9/08 1030			X	X	W	5	sheen observed	-01
2	TK-MW 32	4/9/08 1125			X	X	W	5		-02
3	TK-TB040908	4/9/08 —			X		W	1		-03
4										
5										
6										
7										
8										
9										
10										

RELEASED BY: KB DATE: TIME:
PRINT NAME: FIRM:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

RELEASED BY: Kristina Beaulieu DATE: 4/9/08
PRINT NAME: Kristina Beaulieu FIRM: EA Eng. TIME: 1200

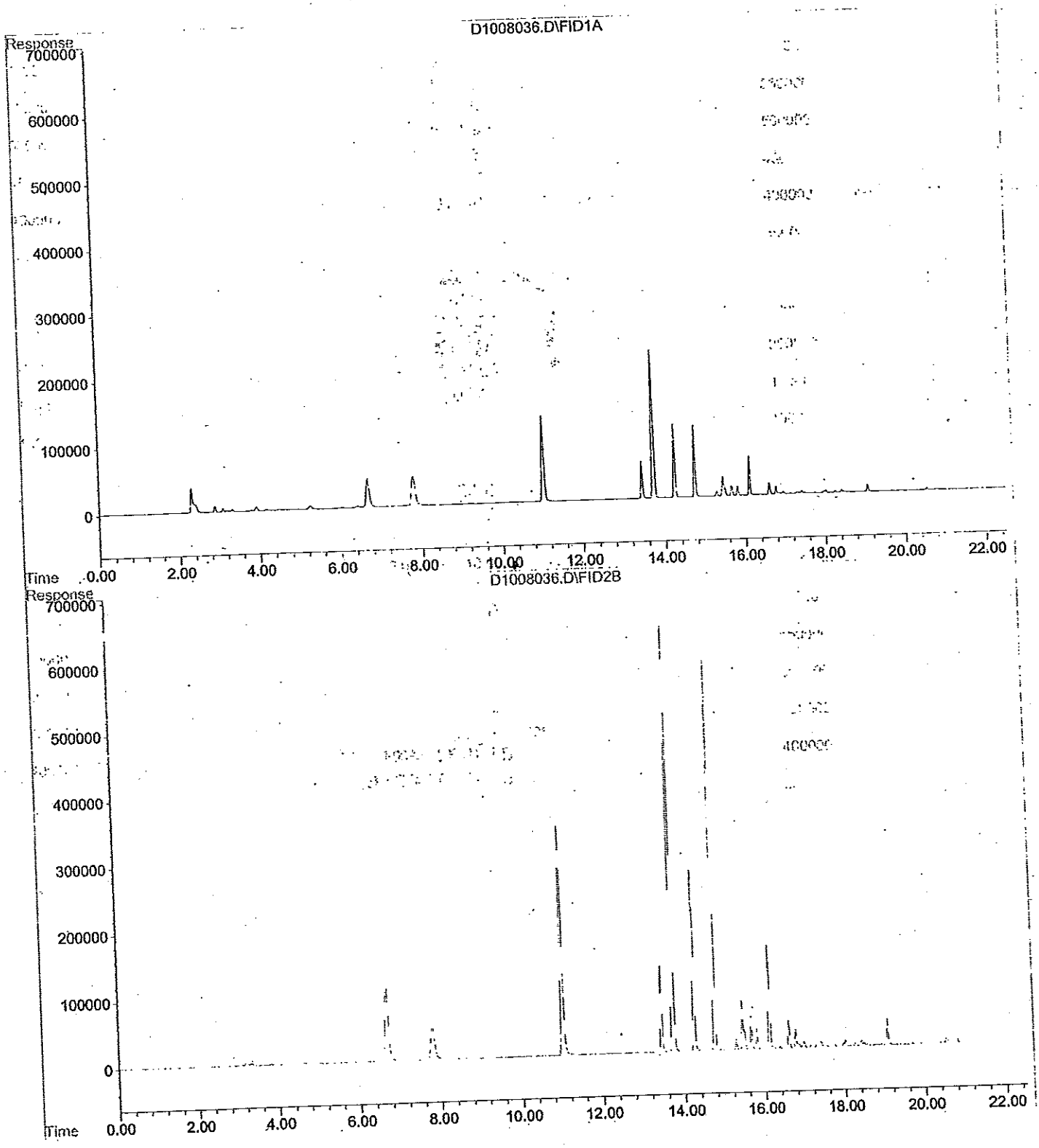
RECEIVED BY: DATE: 4/9/08
PRINT NAME: Francisco Luna, Jr FIRM: TA-SEA TIME: 1413

ADDITIONAL REMARKS: @Lab 1435 w/6 TEMP: 9.0°C PAGE 1 OF 1

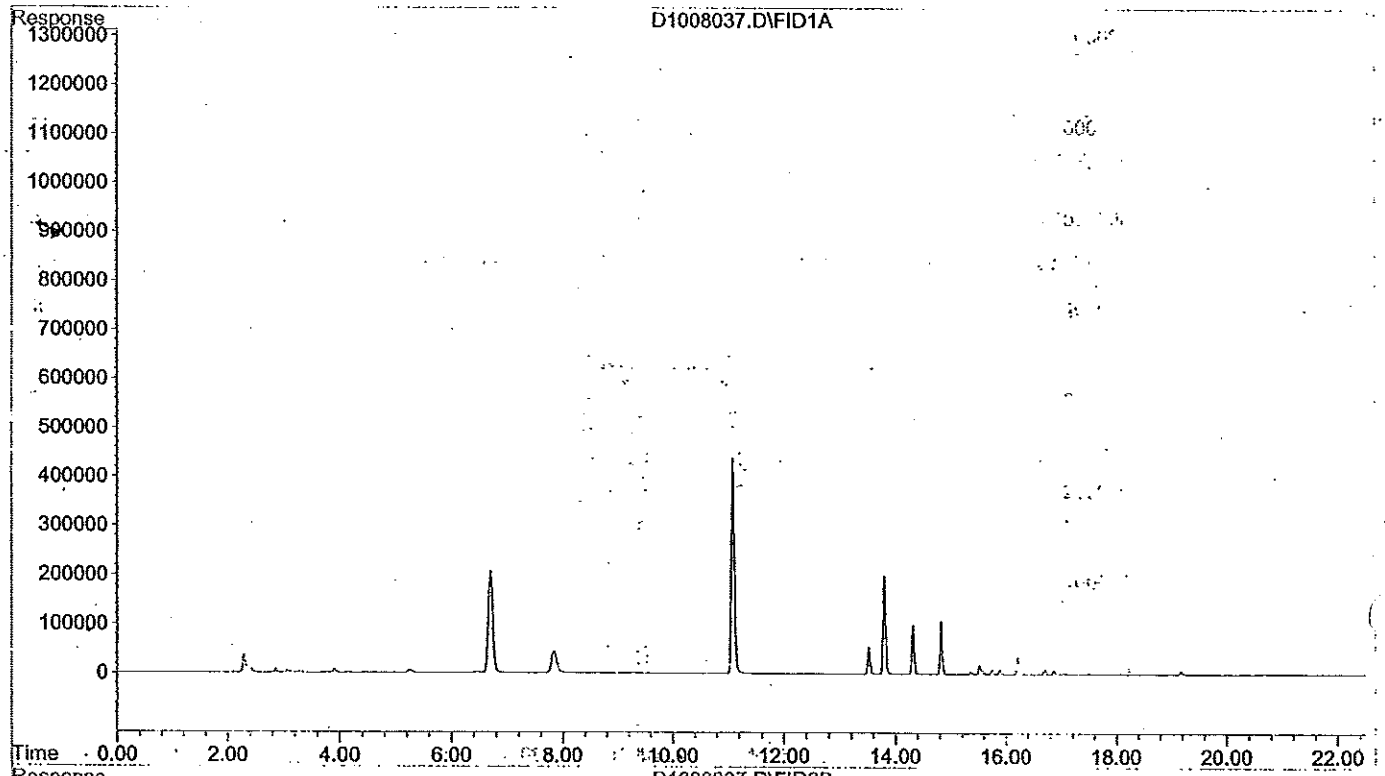
COC REV 05/2006

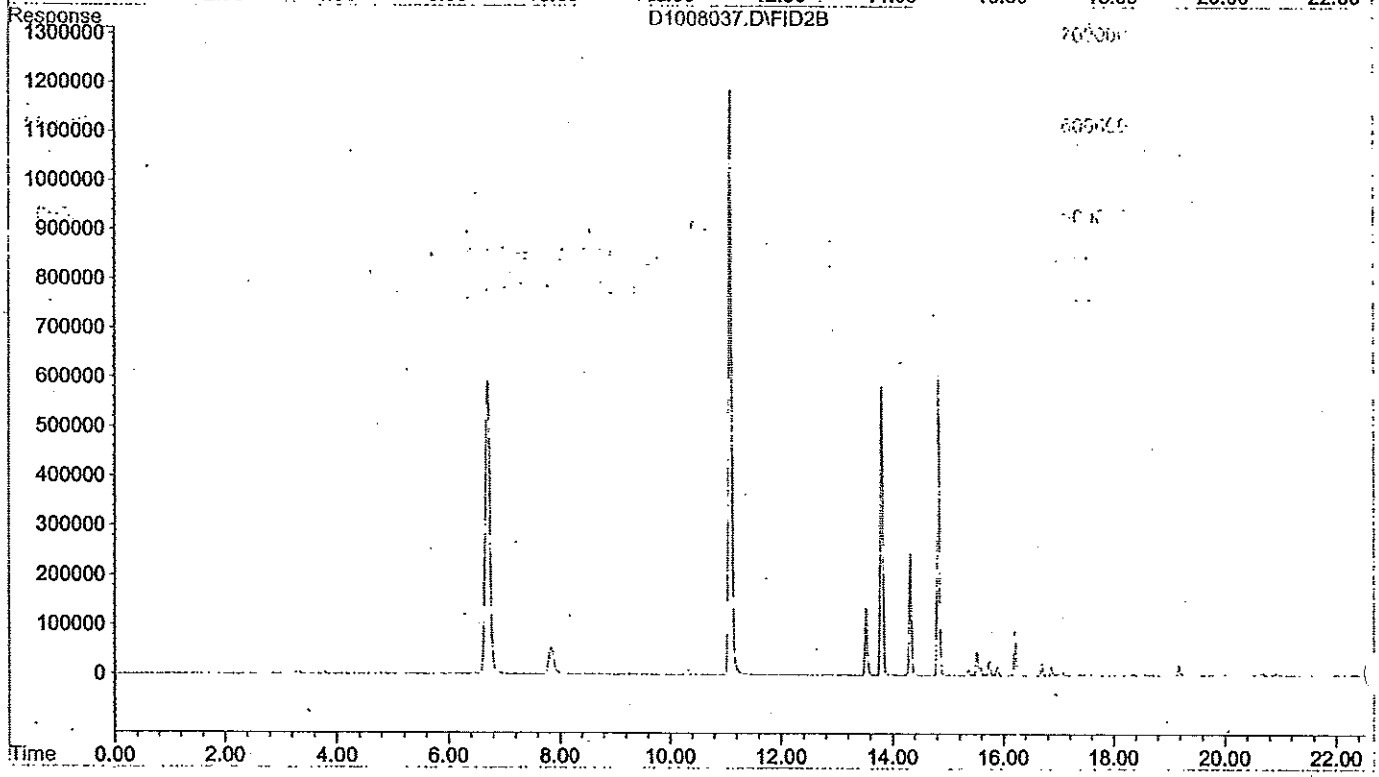
Note: By relinquishing samples to TestAmerica, client agrees to pay for the services requested on this chain of custody form and for any additional analyses performed on this project.
Payment for services is due within 30 days from the date of invoice unless otherwise contracted. Sample(s) will be disposed of after 30 days unless otherwise contracted.

File : O:\HPCHEM\2\DATA\D1008\D1008036.D
Operator : edw
Acquired : 11 Apr 2008 11:19 using AcqMethod 8D0408.M
Instrument : GC-8
Sample Name: BRD0135-01
Misc Info : 200x 25uL
Vial Number: 33

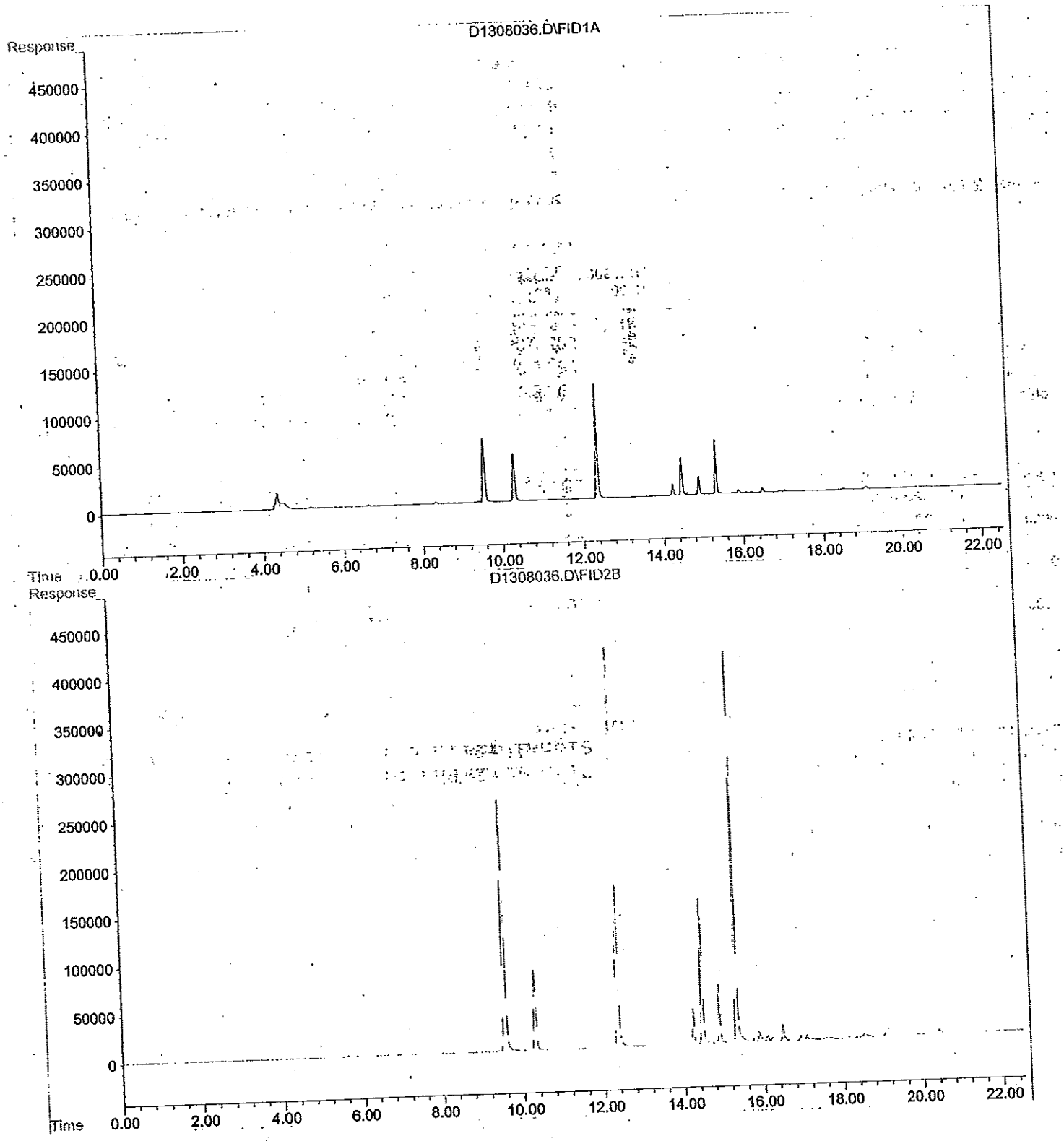


File : O:\HPCHEM\2\DATA\D1008\D1008037.D
Operator : edw
Acquired : 11 Apr 2008 11:51 using AcqMethod 8D0408.M
Instrument : GC-8
Sample Name: BRD0135-02
Misc Info : 200x 25uL
Vial Number: 34

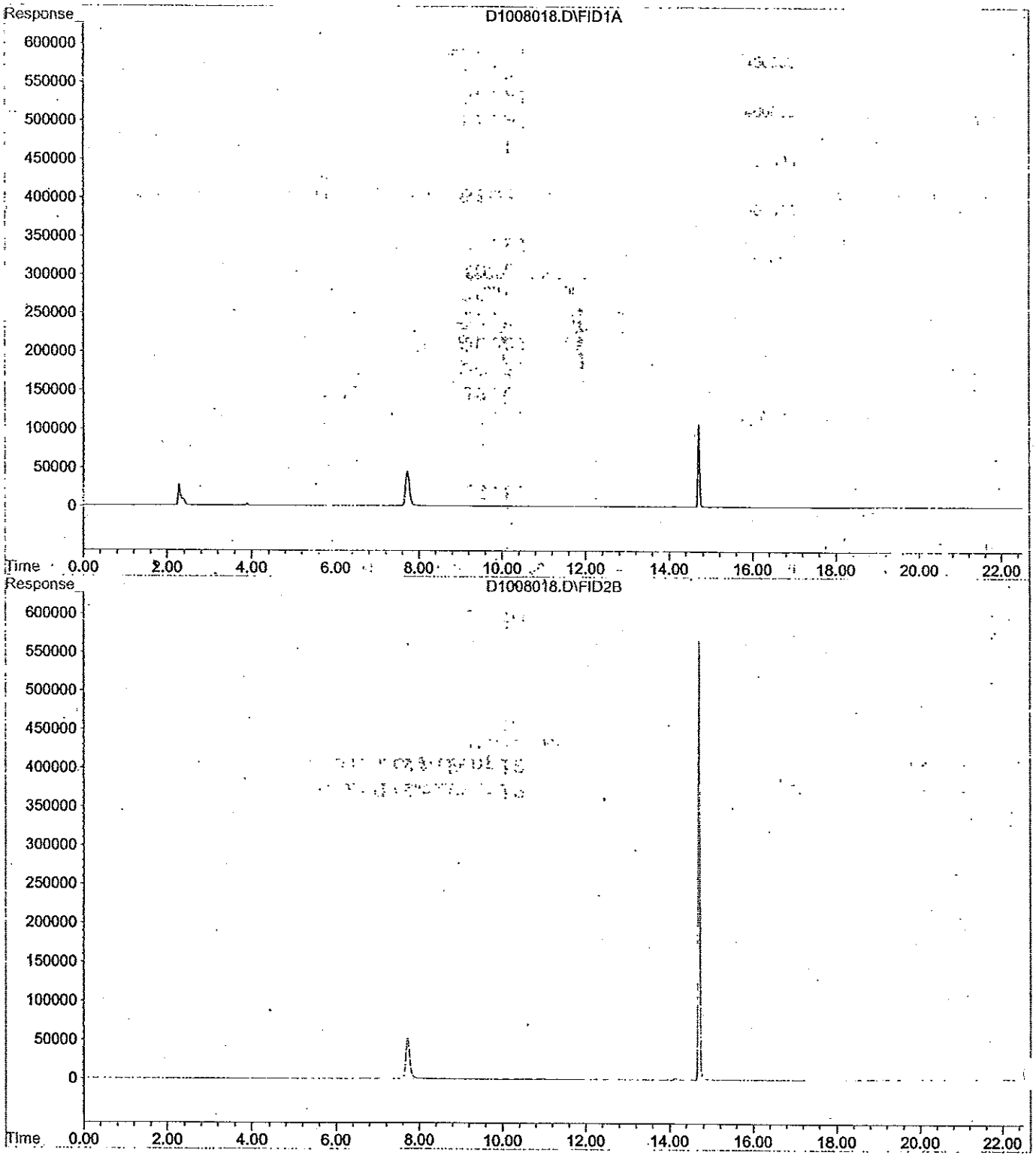




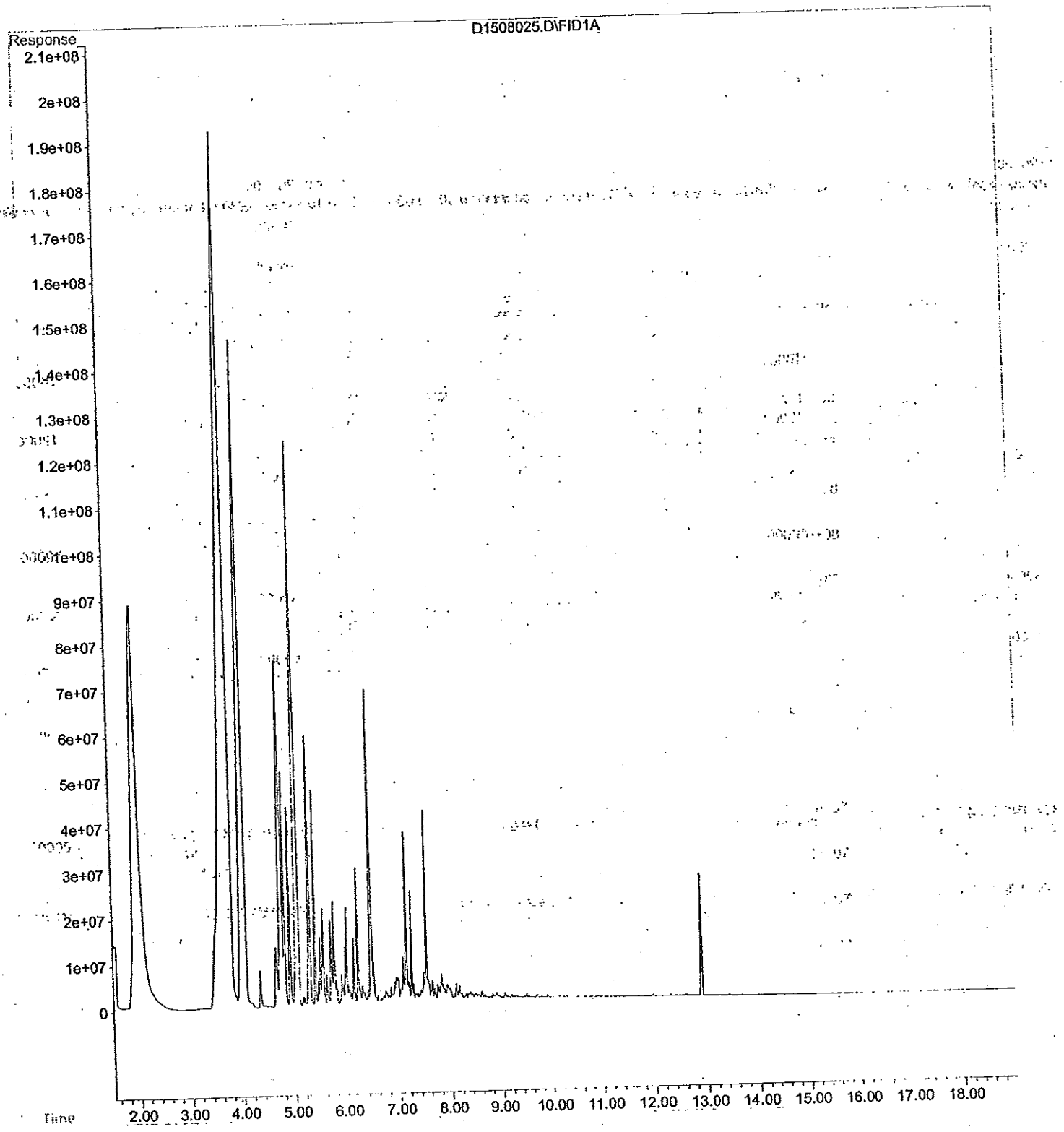
File : O:\HPCHEM\1\DATA\D1308\D1308036.D
Operator : edw
Acquired : 14 Apr 2008 6:24 using AcqMethod 6B2508.M
Instrument : GC-6
Sample Name: BRD0135-02RE1
Misc Info : 500x 10uL
Vial Number: 32



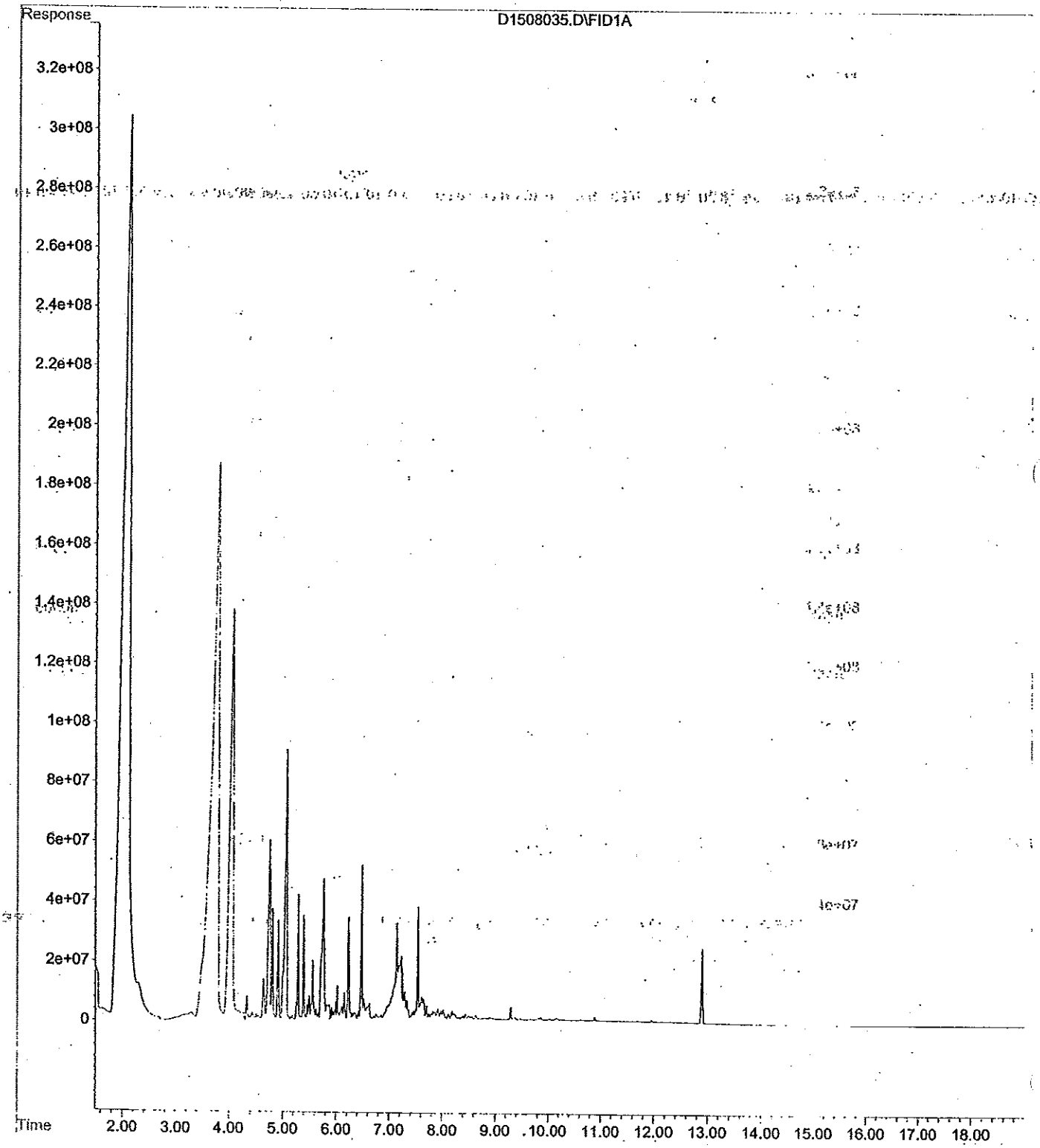
File : O:\HPCHEM\2\DATA\D1008\D1008018.D
Operator : edw
Acquired : 11 Apr 2008 1:31 using AcqMethod 8D0408.M
Instrument : GC-8
Sample Name: BRD0135-03
Misc Info : 1x 5mL
Vial Number: 15



File : M:\HPCHEM\1\DATA\D1508\D1508025.D
Operator : EKK
Acquired : 4-16-08 7:34:16 using AcqMethod TPHF.M
Instrument : GC9
Sample Name: BRD0135-01 r1
Misc Info : 1x NWDX H2O
Vial Number: 94



File : M:\HPCHEM\1\DATA\D1508\D1508035.D
Operator : EKK
Acquired : 4-16-08 11:53:56 using AcqMethod TPHF.M
Instrument : GC9
Sample Name: BRD0135-02 r2
Misc Info : 1x NWDX H2O
Vial Number: 95



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THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

May 07, 2008

Jil Frain
EA Engineering, Science and Technology
12011 NE 1st Street, Suite 100
Bellevue, WA/USA 98005

RE: Tiki Carwash

Enclosed are the results of analyses for samples received by the laboratory on 04/30/08 15:30. The following list is a summary of the Work Orders contained in this report, generated on 05/07/08 13:59.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
BRD0457	Tiki Carwash	61994.01

TestAmerica Seattle

Kate Haney, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name:	**Tiki Carwash**	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	05/07/08 13:59

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TK-TB42908	BRD0457-01	Water	04/29/08 17:00	04/30/08 15:30
TK-MW30	BRD0457-02	Water	04/29/08 09:50	04/30/08 15:30
TK-MW35	BRD0457-03	Water	04/29/08 10:20	04/30/08 15:30
TK-MW34	BRD0457-04	Water	04/29/08 11:00	04/30/08 15:30
TK-MW33	BRD0457-05	Water	04/29/08 12:10	04/30/08 15:30
TK-MW32	BRD0457-06	Water	04/29/08 12:58	04/30/08 15:30
TK-MW32D	BRD0457-07	Water	04/29/08 13:00	04/30/08 15:30
TK-MW31	BRD0457-08	Water	04/29/08 14:15	04/30/08 15:30
TK-MW29	BRD0457-09	Water	04/29/08 15:00	04/30/08 15:30

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Kate Haney, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	05/07/08 13:59

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRD0457-01 (TK-TB42908)		**Water**				**Sampled: 04/29/08 17:00**				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	ND	----	50.0	ug/l	1x	8E02021	05/02/08 11:03	05/02/08 22:56	
Benzene	"	ND	----	0.500	"	"	"	"	"	
Toluene	"	ND	----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*102%*		*58 - 144 %*	"				"	
4-BFB (PID)		*106%*		*68 - 140 %*	"				"	
BRD0457-02 (TK-MW30)		**Water**				**Sampled: 04/29/08 09:50**				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	65100	----	10000	ug/l	200x	8E02021	05/02/08 11:03	05/03/08 06:03	
Benzene	"	8240	----	100	"	"	"	"	"	
Toluene	"	4210	----	100	"	"	"	"	"	
Ethylbenzene	"	2370	----	100	"	"	"	"	"	
Xylenes (total)	"	7930	----	200	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*99.9%*		*58 - 144 %*	*1x*				"	
4-BFB (PID)		*106%*		*68 - 140 %*	"				"	
BRD0457-03 (TK-MW35)		**Water**				**Sampled: 04/29/08 10:20**				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	81800	----	10000	ug/l	200x	8E02021	05/02/08 11:03	05/03/08 06:36	
Benzene	"	1740	----	100	"	"	"	"	"	
Toluene	"	7430	----	100	"	"	"	"	"	
Ethylbenzene	"	2890	----	100	"	"	"	"	"	
Xylenes (total)	"	13300	----	200	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*104%*		*58 - 144 %*	*1x*				"	
4-BFB (PID)		*107%*		*68 - 140 %*	"				"	
BRD0457-04 (TK-MW34)		**Water**				**Sampled: 04/29/08 11:00**				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	11900	----	500	ug/l	10x	8E02021	05/02/08 11:03	05/03/08 05:30	
Benzene	"	272	----	5.00	"	"	"	"	"	
Toluene	"	38.9	----	5.00	"	"	"	"	"	
Ethylbenzene	"	594	----	5.00	"	"	"	"	"	
Xylenes (total)	"	951	----	10.0	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*129%*		*58 - 144 %*	*1x*				"	
4-BFB (PID)		*114%*		*68 - 140 %*	"				"	

TestAmerica Seattle

Kate Haney, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name: Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number: 61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager: Jil Frain	05/07/08 13:59

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

TestAmerica Seattle

Analyte	Method	Result	MDL[A]	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRD0457-05 (TK-MW33)		**Water**			**Sampled: 04/29/08 12:10**					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	86400	----	10000	ug/l	200x	8E02021	05/02/08 11:03	05/03/08 07:09	
Benzene	"	2490	----	100	"	"	"	"	"	
Toluene	"	9860	----	100	"	"	"	"	"	
Ethylbenzene	"	2780	----	100	"	"	"	"	"	
Xylenes (total)	"	15500	----	200	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*104%*			*58 - 144 %*	*1x*			"	
4-BFB (PID)		*105%*			*68 - 140 %*	"			"	
BRD0457-06 (TK-MW32)		**Water**			**Sampled: 04/29/08 12:58**					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	167000	----	25000	ug/l	500x	8E02021	05/02/08 11:03	05/03/08 07:41	
Benzene	"	18400	----	250	"	"	"	"	"	
Toluene	"	29700	----	250	"	"	"	"	"	
Ethylbenzene	"	2490	----	250	"	"	"	"	"	
Xylenes (total)	"	15400	----	500	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*102%*			*58 - 144 %*	*1x*			"	
4-BFB (PID)		*103%*			*68 - 140 %*	"			"	
BRD0457-07 (TK-MW32D)		**Water**			**Sampled: 04/29/08 13:00**					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	172000	----	10000	ug/l	200x	8E02021	05/02/08 11:03	05/03/08 09:20	
Benzene	"	19600	----	100	"	"	"	"	"	
Ethylbenzene	"	2620	----	100	"	"	"	"	"	
Xylenes (total)	"	16500	----	200	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*102%*			*58 - 144 %*	*1x*			"	
4-BFB (PID)		*103%*			*68 - 140 %*	"			"	
BRD0457-07RE1 (TK-MW32D)		**Water**			**Sampled: 04/29/08 13:00**					
Toluene	NWTPH-Gx/802 1B	28400	----	500	ug/l	1000x	8E04004	05/04/08 10:27	05/05/08 05:08	
Surrogate(s): 4-BFB (PID)		*101%*			*68 - 140 %*	*1x*			"	
BRD0457-08 (TK-MW31)		**Water**			**Sampled: 04/29/08 14:15**					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	150000	----	10000	ug/l	200x	8E02021	05/02/08 11:03	05/03/08 08:14	
Benzene	"	5080	----	100	"	"	"	"	"	
Ethylbenzene	"	3580	----	100	"	"	"	"	"	
Xylenes (total)	"	22600	----	200	"	"	"	"	"	

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Kate Haney, Project Manager

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SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	Report Created:
12011 NE 1st Street, Suite 100	Project Number:	61994.01	05/07/08 13:59
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

TestAmerica Seattle

Analyte	Method	Result	MDL[A]	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRD0457-08 (TK-MW31)		**Water**			**Sampled: 04/29/08 14:15**					
Surrogate(s): 4-BFB (FID)			*104%*		*58 - 144 %*	*1x*			*05/03/08 08:14*	
4-BFB (PID)			*104%*		*68 - 140 %*	"			"	
BRD0457-08RE1 (TK-MW31)		**Water**			**Sampled: 04/29/08 14:15**					
Toluene	NWTPH-Gx/802 1B	**25000**	----	500	ug/l	1000x	8E04004	05/04/08 10:27	05/05/08 05:41	
Surrogate(s): 4-BFB (PID)			*106%*		*68 - 140 %*	*1x*			"	
BRD0457-09 (TK-MW29)		**Water**			**Sampled: 04/29/08 15:00**					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	**111000**	----	10000	ug/l	200x	8E02021	05/02/08 11:03	05/03/08 08:47	
Benzene	"	**5810**	----	100	"	"	"	"	"	
Toluene	"	**10600**	----	100	"	"	"	"	"	
Ethylbenzene	"	**3230**	----	100	"	"	"	"	"	
Xylenes (total)	"	**20100**	----	200	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			*104%*		*58 - 144 %*	*1x*			"	
4-BFB (PID)			*107%*		*68 - 140 %*	"			"	

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EA Engineering, Science and Technology	Project Name:	Tiki Carwash
12011 NE 1st Street, Suite 100	Project Number:	61994.01
Bellevue, WA/USA 98005	Project Manager:	Jil Frain
		Report Created: 05/07/08 13:59

Semivolatile Petroleum Products by NWTPH-Dx (w/o Acid/Silica Gel Clean-up)

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRD0457-02 (TK-MW30)			**Water**		**Sampled: 04/29/08 09:50**					
Diesel Range Hydrocarbons	NWTPH-Dx	2.60	----	0.240	mg/l	1x	8E01011	05/01/08 08:55	05/05/08 18:39	Q5
Lube Oil Range Hydrocarbons	"	ND	----	0.481	"	"	"	"	"	
Surrogate(s): 2-FBP			*84.1%*		*53 - 125 %*	"			"	
Octacosane			*105%*		*68 - 125 %*	"			"	
BRD0457-03 (TK-MW35)			**Water**		**Sampled: 04/29/08 10:20**					
Diesel Range Hydrocarbons	NWTPH-Dx	2.56	----	0.236	mg/l	1x	8E01011	05/01/08 08:55	05/05/08 19:08	Q5
Lube Oil Range Hydrocarbons	"	ND	----	0.472	"	"	"	"	"	
Surrogate(s): 2-FBP			*94.1%*		*53 - 125 %*	"			"	
Octacosane			*109%*		*68 - 125 %*	"			"	
BRD0457-04 (TK-MW34)			**Water**		**Sampled: 04/29/08 11:00**					
Diesel Range Hydrocarbons	NWTPH-Dx	1.42	----	0.238	mg/l	1x	8E01011	05/01/08 08:55	05/05/08 19:37	Q5
Lube Oil Range Hydrocarbons	"	0.601	----	0.476	"	"	"	"	"	
Surrogate(s): 2-FBP			*93.2%*		*53 - 125 %*	"			"	
Octacosane			*109%*		*68 - 125 %*	"			"	
BRD0457-05 (TK-MW33)			**Water**		**Sampled: 04/29/08 12:10**					
Diesel Range Hydrocarbons	NWTPH-Dx	4.32	----	0.238	mg/l	1x	8E01011	05/01/08 08:55	05/05/08 20:06	Q5
Lube Oil Range Hydrocarbons	"	0.480	----	0.476	"	"	"	"	"	
Surrogate(s): 2-FBP			*97.9%*		*53 - 125 %*	"			"	
Octacosane			*111%*		*68 - 125 %*	"			"	
BRD0457-06 (TK-MW32)			**Water**		**Sampled: 04/29/08 12:58**					
Diesel Range Hydrocarbons	NWTPH-Dx	6.50	----	1.19	mg/l	5x	8E01011	05/01/08 08:55	05/05/08 20:36	Q5
Lube Oil Range Hydrocarbons	"	ND	----	2.38	"	"	"	"	"	
Surrogate(s): 2-FBP			*136%*		*53 - 125 %*	"			"	ZX
Octacosane			*114%*		*68 - 125 %*	"			"	
BRD0457-07 (TK-MW32D)			**Water**		**Sampled: 04/29/08 13:00**					
Diesel Range Hydrocarbons	NWTPH-Dx	5.97	----	1.19	mg/l	5x	8E01011	05/01/08 08:55	05/05/08 21:04	Q5
Lube Oil Range Hydrocarbons	"	ND	----	2.38	"	"	"	"	"	
Surrogate(s): 2-FBP			*133%*		*53 - 125 %*	"			"	ZX
Octacosane			*106%*		*68 - 125 %*	"			"	

TestAmerica Seattle

Kate Haney, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	05/07/08 13:59

Semivolatile Petroleum Products by NWTPH-Dx (w/o Acid/Silica Gel Clean-up)

TestAmerica Seattle

Analyte	Method	Result	MDL[A]	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRD0457-08 (TK-MW31)		**Water**			**Sampled: 04/29/08 14:15**					
Surrogate(s): 2-FBP			*107%*		*Limits: 53 - 125 %*	*5x*			*05/05/08 21:33*	
Octacosane			*111%*		*68 - 125 %*	"			"	
BRD0457-08RE1 (TK-MW31)		**Water**			**Sampled: 04/29/08 14:15**					
Diesel Range Hydrocarbons	NWTPH-Dx	**3.78**	----	0.238	mg/l	1x	8E01011	05/01/08 08:55	05/06/08 10:11	Q5
Lube Oil Range Hydrocarbons	"	ND	----	0.476	"	"	"	"	"	
Surrogate(s): 2-FBP			*107%*		*53 - 125 %*	"			"	
Octacosane			*103%*		*68 - 125 %*	"			"	
BRD0457-09 (TK-MW29)		**Water**			**Sampled: 04/29/08 15:00**					
Diesel Range Hydrocarbons	NWTPH-Dx	**5.22**	----	1.18	mg/l	5x	8E01011	05/01/08 08:55	05/05/08 22:03	Q5
Lube Oil Range Hydrocarbons	"	ND	----	2.36	"	"	"	"	"	
Surrogate(s): 2-FBP			*143%*		*53 - 125 %*	"			"	ZX
Octacosane			*110%*		*68 - 125 %*	"			"	

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Kate Haney, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	05/07/08 13:59

OTHER RSK175

TestAmerica BUFFALO

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRD0457-06 (TK-MW32)		**Water**				**Sampled: 04/29/08 12:58**				
Butane	RSK175	78	---	50	UG/L	5x	05RSK17	05/05/08 00:00	05/05/08 00:00	
BRD0457-08 (TK-MW31)		**Water**				**Sampled: 04/29/08 14:15**				
Butane	RSK175	63	---	10	UG/L	1x	05RSK17	05/05/08 00:00	05/05/08 00:00	
BRD0457-09 (TK-MW29)		**Water**				**Sampled: 04/29/08 15:00**				
Butane	RSK175	160	---	100	UG/L	10x	05RSK17	05/05/08 00:00	05/05/08 00:00	

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12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	05/07/08 13:59

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8E02021 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL[A]	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E02021-BLK1)							Extracted: 05/02/08 11:03							
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	--	--	--	--	--	--	05/02/08 14:53	
Benzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Xylenes (total)	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 97.7%*			*Limits: 58-144%*	"							*05/02/08 14:53*	
4-BFB (PID)		*103%*			*68-140%*	"							"	
LCS (8E02021-BS1)							Extracted: 05/02/08 11:03							
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	979	---	50.0	ug/l	1x	--	1000	97.9%	(80-120)	--	--	05/02/08 15:26	
Surrogate(s): 4-BFB (FID)		*Recovery: 110%*			*Limits: 58-144%*	"							*05/02/08 15:26*	
LCS (8E02021-BS2)							Extracted: 05/02/08 11:03							
Benzene	NWTPH-Gx/ 8021B	30.2	---	0.500	ug/l	1x	--	30.0	101%	(80-120)	--	--	05/02/08 15:59	
Toluene	"	30.4	---	0.500	"	"	--	"	101%	"	--	--	"	
Ethylbenzene	"	30.7	---	0.500	"	"	--	"	102%	"	--	--	"	
Xylenes (total)	"	91.5	---	1.00	"	"	--	90.0	102%	"	--	--	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 105%*			*Limits: 58-144%*	"							*05/02/08 15:59*	
4-BFB (PID)		*104%*			*68-140%*	"							"	
Duplicate (8E02021-DUP1)					QC Source: BRD0447-14RE1		Extracted: 05/02/08 11:03							
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	526	---	50.0	ug/l	1x	565	--	--	--	7.16%	(25)	05/02/08 17:25	
Benzene	"	119	---	0.500	"	"	126	--	--	--	5.86%	"	"	E
Toluene	"	0.535	---	0.500	"	"	0.610	--	--	--	13.1%	"	"	
Ethylbenzene	"	21.0	---	0.500	"	"	20.9	--	--	--	0.698%	"	"	
Xylenes (total)	"	21.6	---	1.00	"	"	21.5	--	--	--	0.793%	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 103%*			*Limits: 58-144%*	"							*05/02/08 17:25*	
4-BFB (PID)		*108%*			*68-140%*	"							"	
Duplicate (8E02021-DUP2)					QC Source: BRD0470-03		Extracted: 05/02/08 11:03							
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	ND	--	--	--	0.849%	(25)	05/03/08 02:13	
Benzene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Toluene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Ethylbenzene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Xylenes (total)	"	ND	---	1.00	"	"	ND	--	--	--	NR	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 100%*			*Limits: 58-144%*	"							*05/03/08 02:13*	
4-BFB (PID)		*103%*			*68-140%*	"							"	

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EA Engineering, Science and Technology	Project Name:	**Tiki Carwash**	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	05/07/08 13:59

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8E02021 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (8E02021-MS1)				QC Source: BRD0458-01				Extracted: 05/02/08 11:03						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	1500	---	50.0	ug/l	1x	318	1000	118%	(75-131)	--	--	05/02/08 19:37	
Surrogate(s): 4-BFB (FID)		*Recovery: 124%*			*Limits: 58-144%*	"							*05/02/08 19:37*	
Matrix Spike (8E02021-MS2)				QC Source: BRD0470-03				Extracted: 05/02/08 11:03						
Benzene	NWTPH-Gx/ 8021B	31.8	---	0.500	ug/l	1x	ND	30.0	106%	(46-130)	--	--	05/03/08 02:46	
Toluene	"	31.7	---	0.500	"	"	ND	"	106%	(60-124)	--	--	"	
Ethylbenzene	"	32.1	---	0.500	"	"	ND	"	107%	(56-141)	--	--	"	
Xylenes (total)	"	96.0	---	1.00	"	"	ND	90.0	107%	(66-132)	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 104%*			*Limits: 68-140%*	"							*05/03/08 02:46*	
Matrix Spike Dup (8E02021-MSD1)				QC Source: BRD0458-01				Extracted: 05/02/08 11:03						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	1420	---	50.0	ug/l	1x	318	1000	111%	(75-131)	4.95%	(25)	05/02/08 20:11	
Surrogate(s): 4-BFB (FID)		*Recovery: 121%*			*Limits: 58-144%*	"							*05/02/08 20:11*	
Matrix Spike Dup (8E02021-MSD2)				QC Source: BRD0470-03				Extracted: 05/02/08 11:03						
Benzene	NWTPH-Gx/ 8021B	31.4	---	0.500	ug/l	1x	ND	30.0	105%	(46-130)	1.12%	(40)	05/03/08 03:19	
Toluene	"	31.4	---	0.500	"	"	ND	"	105%	(60-124)	0.982%	"	"	
Ethylbenzene	"	31.6	---	0.500	"	"	ND	"	105%	(56-141)	1.44%	"	"	
Xylenes (total)	"	94.8	---	1.00	"	"	ND	90.0	105%	(66-132)	1.29%	"	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 105%*			*Limits: 68-140%*	"							*05/03/08 03:19*	

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EA Engineering, Science and Technology	Project Name:	Tiki Carwash	Report Created:
12011 NE 1st Street, Suite 100	Project Number:	61994.01	05/07/08 13:59
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8E04004 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL[A]	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E04004-BLK1)							Extracted: 05/04/08 10:27							
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	--	--	--	--	--	--	05/04/08 14:49	
Benzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Xylenes (total)	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 102%*			*Limits: 58-144%*	"							*05/04/08 14:49*	
4-BFB (PID)		*103%*			*68-140%*	"							"	
LCS (8E04004-BS1)							Extracted: 05/04/08 10:27							
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	1050	---	50.0	ug/l	1x	--	1000	105%	(80-120)	--	--	05/04/08 15:22	
Surrogate(s): 4-BFB (FID)		*Recovery: 115%*			*Limits: 58-144%*	"							*05/04/08 15:22*	
LCS (8E04004-BS2)							Extracted: 05/04/08 10:27							
Benzene	NWTPH-Gx/ 8021B	27.1	---	0.500	ug/l	1x	--	30.0	90.3%	(80-120)	--	--	05/04/08 15:56	
Toluene	"	29.0	---	0.500	"	"	--	"	96.8%	"	--	--	"	
Ethylbenzene	"	29.6	---	0.500	"	"	--	"	98.8%	"	--	--	"	
Xylenes (total)	"	89.2	---	1.00	"	"	--	90.0	99.2%	"	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 105%*			*Limits: 68-140%*	"							*05/04/08 15:56*	
Duplicate (8E04004-DUP1)					QC Source: BRE0011-25		Extracted: 05/04/08 10:27							
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	3260	---	50.0	ug/l	1x	3300	--	--	--	1.09%	(25)	05/04/08 17:02	
Benzene	"	173	---	0.500	"	"	180	--	--	--	3.86%	"	"	E
Toluene	"	9.04	---	0.500	"	"	9.04	--	--	--	0.0885%	"	"	
Ethylbenzene	"	123	---	0.500	"	"	121	--	--	--	2.29%	"	"	E
Xylenes (total)	"	61.3	---	1.00	"	"	59.3	--	--	--	3.21%	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 190%*			*Limits: 58-144%*	"							*05/04/08 17:02*	*ZX*
4-BFB (PID)		*133%*			*68-140%*	"							"	
Duplicate (8E04004-DUP2)					QC Source: BRE0011-27		Extracted: 05/04/08 10:27							
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	3060	---	50.0	ug/l	1x	3060	--	--	--	0.0518%	(25)	05/04/08 18:08	
Benzene	"	70.4	---	0.500	"	"	70.9	--	--	--	0.678%	"	"	
Toluene	"	1.18	---	0.500	"	"	1.19	--	--	--	1.09%	"	"	
Ethylbenzene	"	6.04	---	0.500	"	"	6.24	--	--	--	3.42%	"	"	
Xylenes (total)	"	7.48	---	1.00	"	"	8.28	--	--	--	10.1%	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 241%*			*Limits: 58-144%*	"							*05/04/08 18:08*	*ZX*
4-BFB (PID)		*155%*			*68-140%*	"							"	*ZX*

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EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	05/07/08 13:59

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8E04004 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (8E04004-MS1)				QC Source: BRE0011-25				Extracted: 05/04/08 10:27						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	4350	---	50.0	ug/l	1x	3300	1000	105%	(75-131)	--	--	05/04/08 19:14	
Surrogate(s): 4-BFB (FID)		*Recovery: 206%*		*Limits: 58-144%*	"								*05/04/08 19:14*	ZX
Matrix Spike (8E04004-MS2)				QC Source: BRE0011-27				Extracted: 05/04/08 10:27						
Benzene	NWTPH-Gx/ 8021B	94.5	---	0.500	ug/l	1x	70.9	30.0	79.0%	(46-130)	--	--	05/04/08 19:48	
Toluene	"	33.3	---	0.500	"	"	1.19	"	107%	(60-124)	--	--	"	
Ethylbenzene	"	39.1	---	0.500	"	"	6.24	"	110%	(56-141)	--	--	"	
Xylenes (total)	"	106	---	1.00	"	"	8.28	90.0	109%	(66-132)	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 152%*		*Limits: 68-140%*	"								*05/04/08 19:48*	ZX

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Bellevue, WA/USA 98005	Project Manager:	Jil Frain	

Semivolatile Petroleum Products by NWTPH-Dx (w/o Acid/Silica Gel Clean-up) - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8E01011 **Water Preparation Method: EPA 3520C**

Analyte	Method	Result	MDL[A]	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8E01011-BLK1)								Extracted: 05/01/08 08:55						
Diesel Range Hydrocarbons	NWTPH-Dx	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	05/05/08 14:17	
Lube Oil Range Hydrocarbons	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 2-FBP		*Recovery: 70.8%*			*Limits: 53-125%*	"							*05/05/08 14:17*	
Octacosane		*97.1%*			*68-125%*	"							"	
LCS (8E01011-BS1)								Extracted: 05/01/08 08:55						
Diesel Range Hydrocarbons	NWTPH-Dx	1.84	---	0.250	mg/l	1x	--	2.00	92.2%	(61-132)	--	--	05/05/08 14:45	
Surrogate(s): 2-FBP		*Recovery: 76.2%*			*Limits: 53-125%*	"							*05/05/08 14:45*	
Octacosane		*99.5%*			*68-125%*	"							"	
LCS Dup (8E01011-BSD1)								Extracted: 05/01/08 08:55						
Diesel Range Hydrocarbons	NWTPH-Dx	1.96	---	0.250	mg/l	1x	--	2.00	97.9%	(61-132)	5.93%	(40)	05/05/08 15:15	
Surrogate(s): 2-FBP		*Recovery: 83.1%*			*Limits: 53-125%*	"							*05/05/08 15:15*	
Octacosane		*104%*			*68-125%*	"							"	

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EA Engineering, Science and Technology	Project Name:	Tiki Carwash
12011 NE 1st Street, Suite 100	Project Number:	61994.01
Bellevue, WA/USA 98005	Project Manager:	Jil Frain
		Report Created: 05/07/08 13:59

OTHER RSK175 - Laboratory Quality Control Results

TestAmerica BUFFALO

QC Batch: 05RSK17 **WATER Preparation Method: SW5030**

Analyte	Method	Result	MDL^A	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (A8488503MS)					QC Source: BRD0457-09			Extracted: 05/05/08 00:00						
Butane	RSK175	390	---	100	UG/L	10x	160	139	162%	(35-165)	--	--	05/05/08 00:00	
Matrix Spike Dup (A8488503SD)					QC Source: BRD0457-09			Extracted: 05/05/08 00:00						
Butane	RSK175	310	---	100	UG/L	10x	160	139	104%	(35-165)	44%	(50)	05/05/08 00:00	
Blank Spike (A8B1468101)					QC Source: A8B1468102			Extracted: 05/05/08 00:00						
Butane	RSK175	16	---	10	UG/L	1x	--	--	---	--	--	--	05/05/08 00:00	
Blank (A8B1468102)					QC Source:			Extracted: 05/05/08 00:00						
Butane	RSK175	ND	---	10	UG/L	1x	--	--	--	--	--	--	05/05/08 00:00	U

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12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	05/07/08 13:59

Notes and Definitions

Report Specific Notes:

E	-	Concentration exceeds the calibration range and therefore result is semi-quantitative.
Q5	-	Results in the diesel organics range are primarily due to overlap from a gasoline range product.
U	-	Indicates compound was analyzed for, but not detected
ZX	-	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy.* Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Seattle

Kate Haney

Kate Haney, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

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CHAIN OF CUSTODY REPORT

Work Order #: BRD0457

CLIENT: WA Dept. of Ecology

REPORT TO: EA Engineering - Jill Fain
ADDRESS: 12011 NE 1st Street, Suite 100
Bellevue, WA 98005
PHONE: 425-451-7460 FAX: 425-451-7800

INVOICE TO: WA Dept. of Ecology
Attn: Roger Nye
3190 160th Ave SE
Bellevue, WA 98008

P.O. NUMBER: Field Order # PF 322544

PROJECT NAME: Tiki Carwash

PROJECT NUMBER: 619940.01

SAMPLED BY: MBB

TURNAROUND REQUEST

In Business Days *

Organic & Inorganic Analyses: [10] STD. [7] [5] [4] [3] [2] [1] [<1]

Petroleum Hydrocarbon Analyses: [X] STD. [4] [3] [2] [1] [<1]

[OTHER] Specify:

* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE: HCl	REQUESTED ANALYSES: NWTPH-Gx/BTEX (8021)	NWTPH-Dx	Butane by RSK	Work	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	TK-TB42908	4/29/08 —		2							-01
2	TK-MW30	4/29/08 0950		3	2						-02
3	TK-MW35	4/29/08 1020		3	2						-03
4	TK-MW34	4/29/08 1100		3	2						-04
5	TK-MW33	4/29/08 1210		3	2						-05
6	TK-MW32	4/29/08 1258		3	2	3					-06
7	TK-MW32D	4/29/08 1300		3	2						-07
8	TK-MW31	4/29/08 1415		3	2	3					-08
9	TK-MW29	4/29/08 1500		3	2	3					-09
10											

RELEASED BY: Mark Blinstrub
PRINT NAME: Mark Blinstrub FIRM: EA Eng. DATE: 4/29/08 TIME: 1800

RECEIVED BY:
PRINT NAME: Francisco Luna, Jr FIRM: TA-SEA DATE: 4/30/08 TIME: 1500

RELEASED BY:
PRINT NAME: FIRM: DATE: TIME:

RECEIVED BY:
PRINT NAME: FIRM: DATE: TIME:

ADDITIONAL REMARKS:

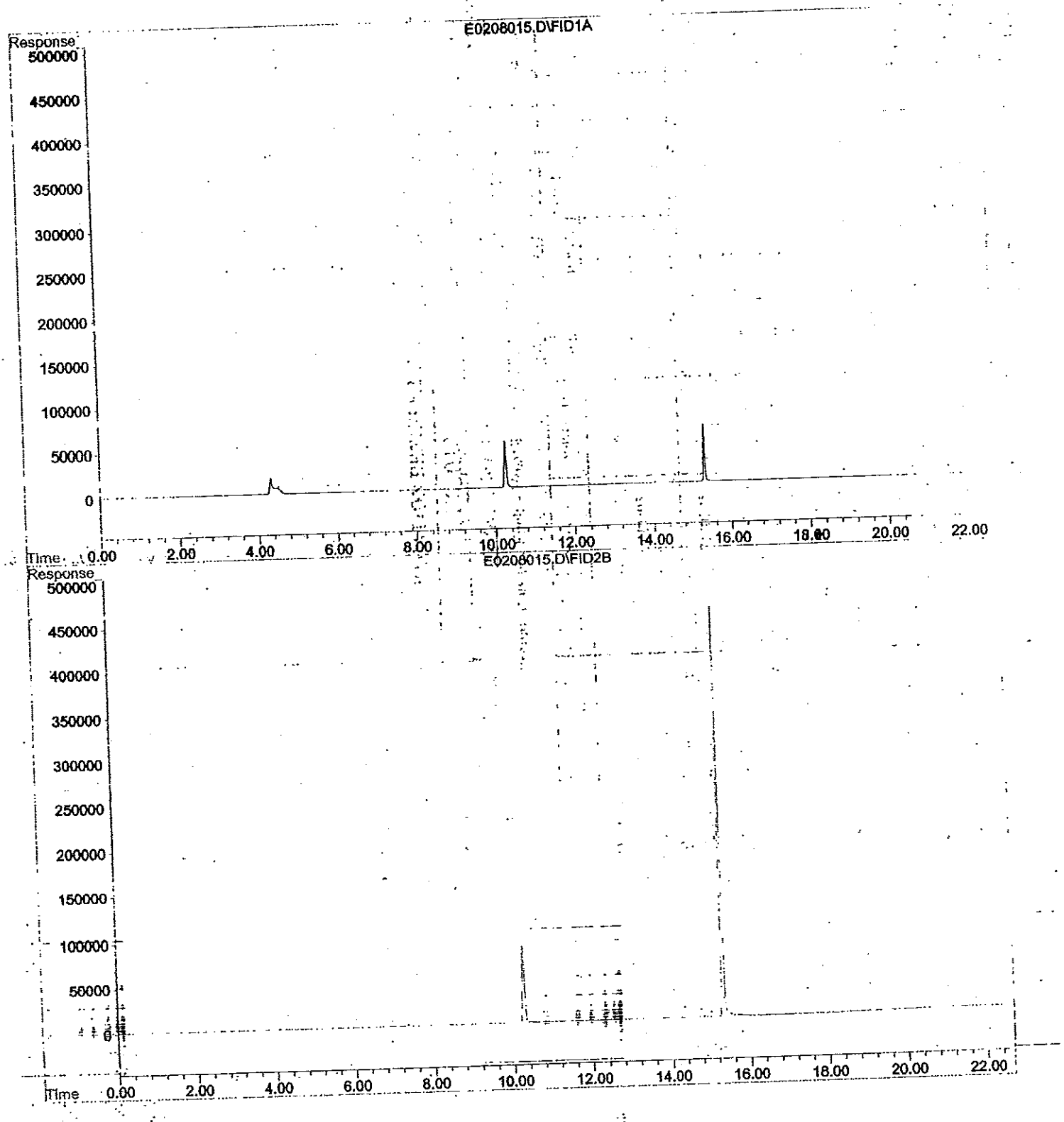
@Lab 1530 w/cs

TEMP: 7.8°C

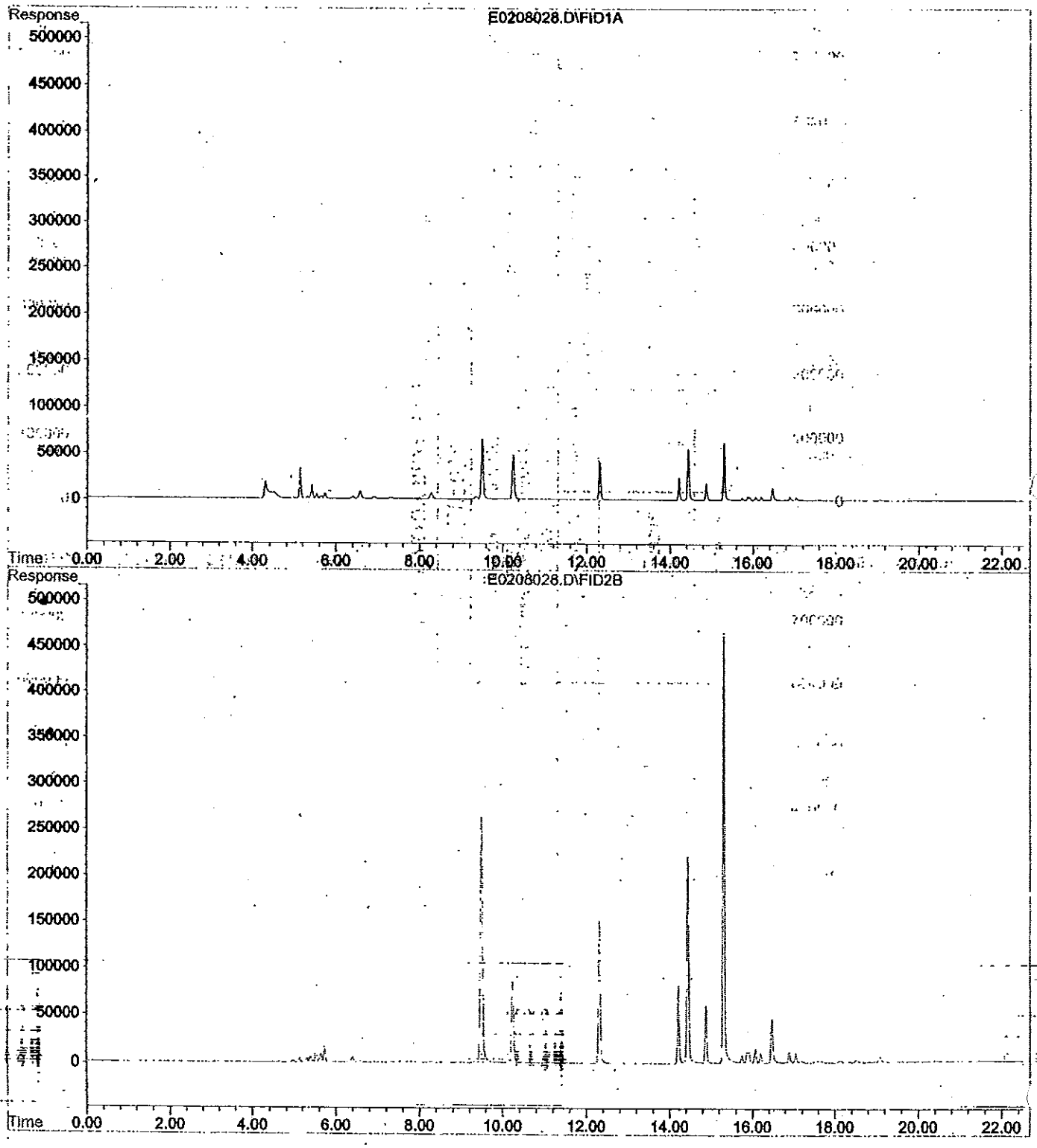
PAGE 1 OF

TAL-1000(0108)

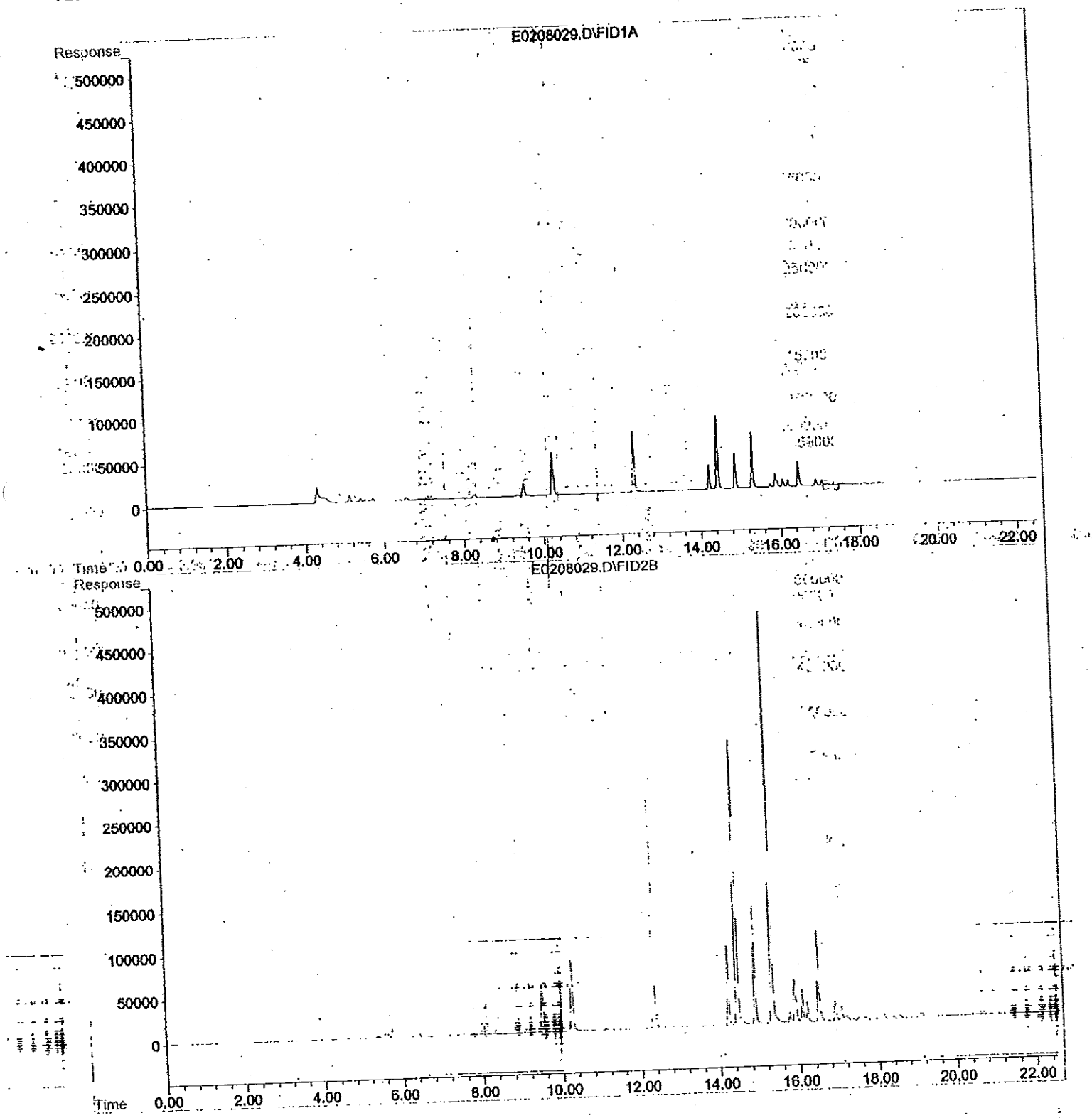
File : O:\HPCHEM\1\DATA\E0208\E0208015.D
Operator : kmt
Acquired : 2 May 2008 22:56 using AcqMethod 6B2508A.M
Instrument : GC-6
Sample Name: BRD0457-01
Misc Info : 1x 5mL
Vial Number: 13



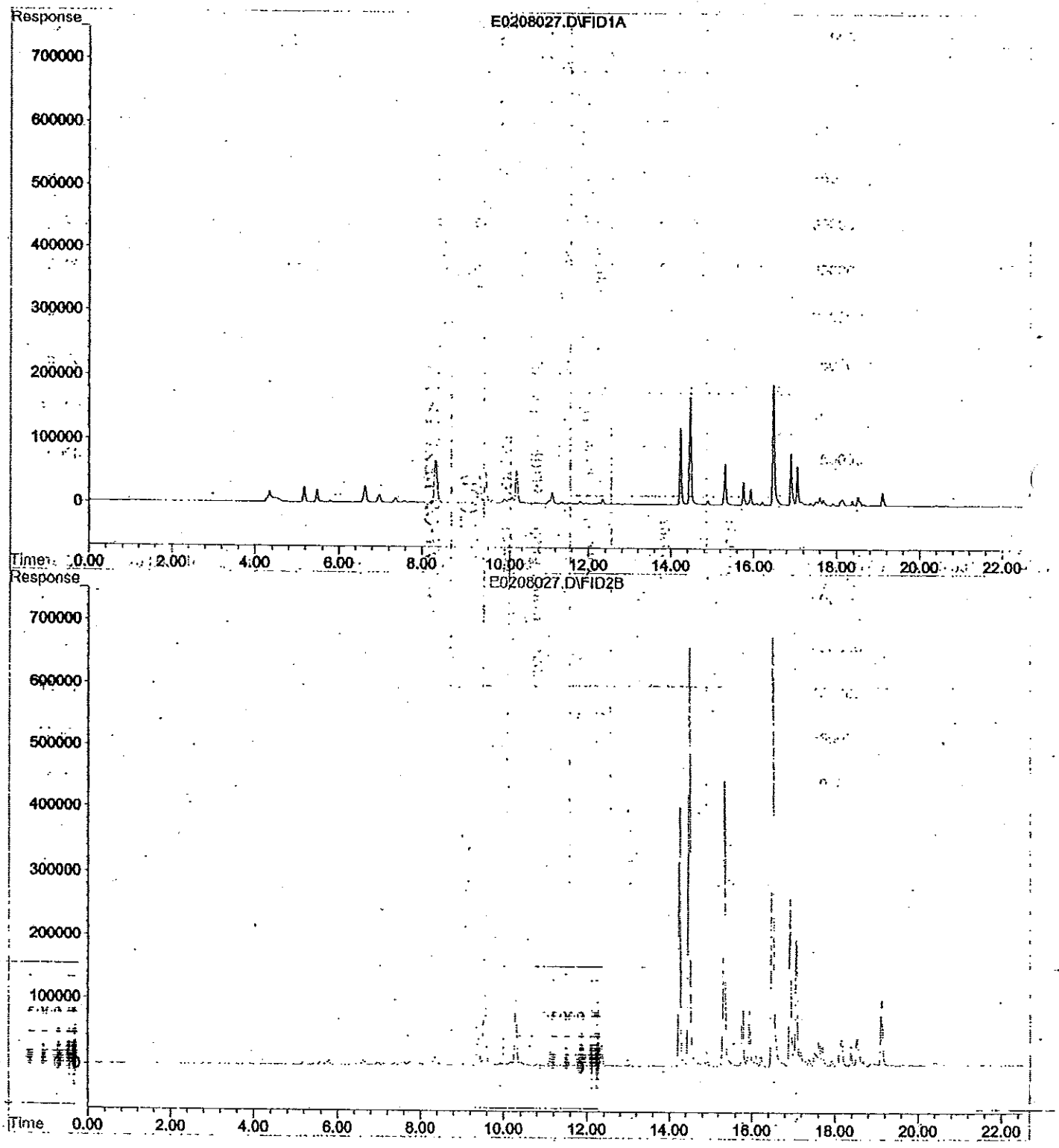
File : O:\HPCHEM\1\DATA\E0208\E0208028.D
Operator : kmt
Acquired : 3 May 2008 6:03 using AcqMethod 6B2508A.M
Instrument : GC-6
Sample Name: BRD0457-02
Misc Info : 200x 25uL
Vial Number: 24



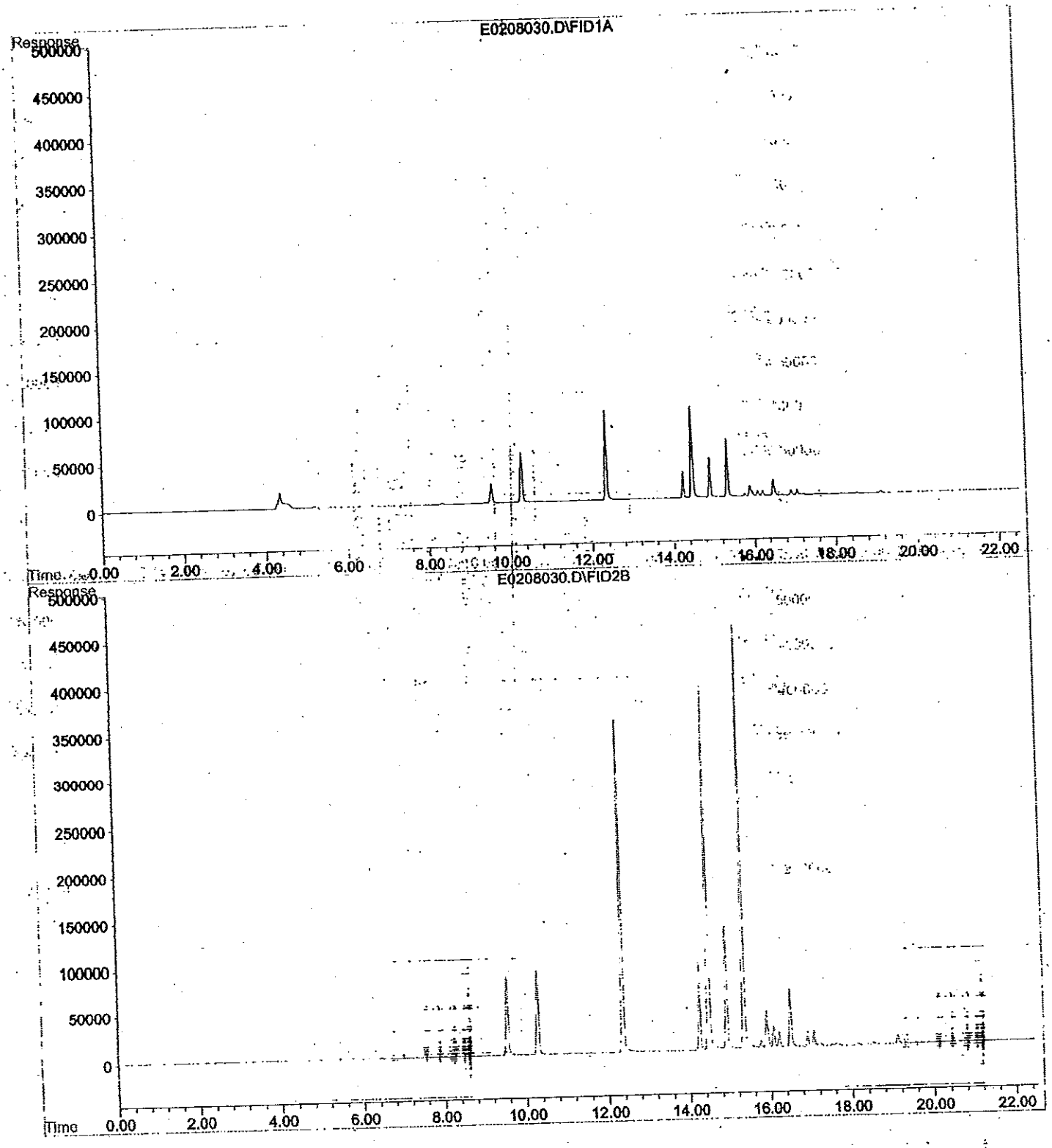
File : O:\HPCHEM\1\DATA\E0208\E0208029.D
Operator : kmt
Acquired : 3 May 2008 6:36 using AcqMethod 6B2508A.M
Instrument : GC-6
Sample Name: BRD0457-03
Misc. Info : 200x 25uL
Vial Number: 25



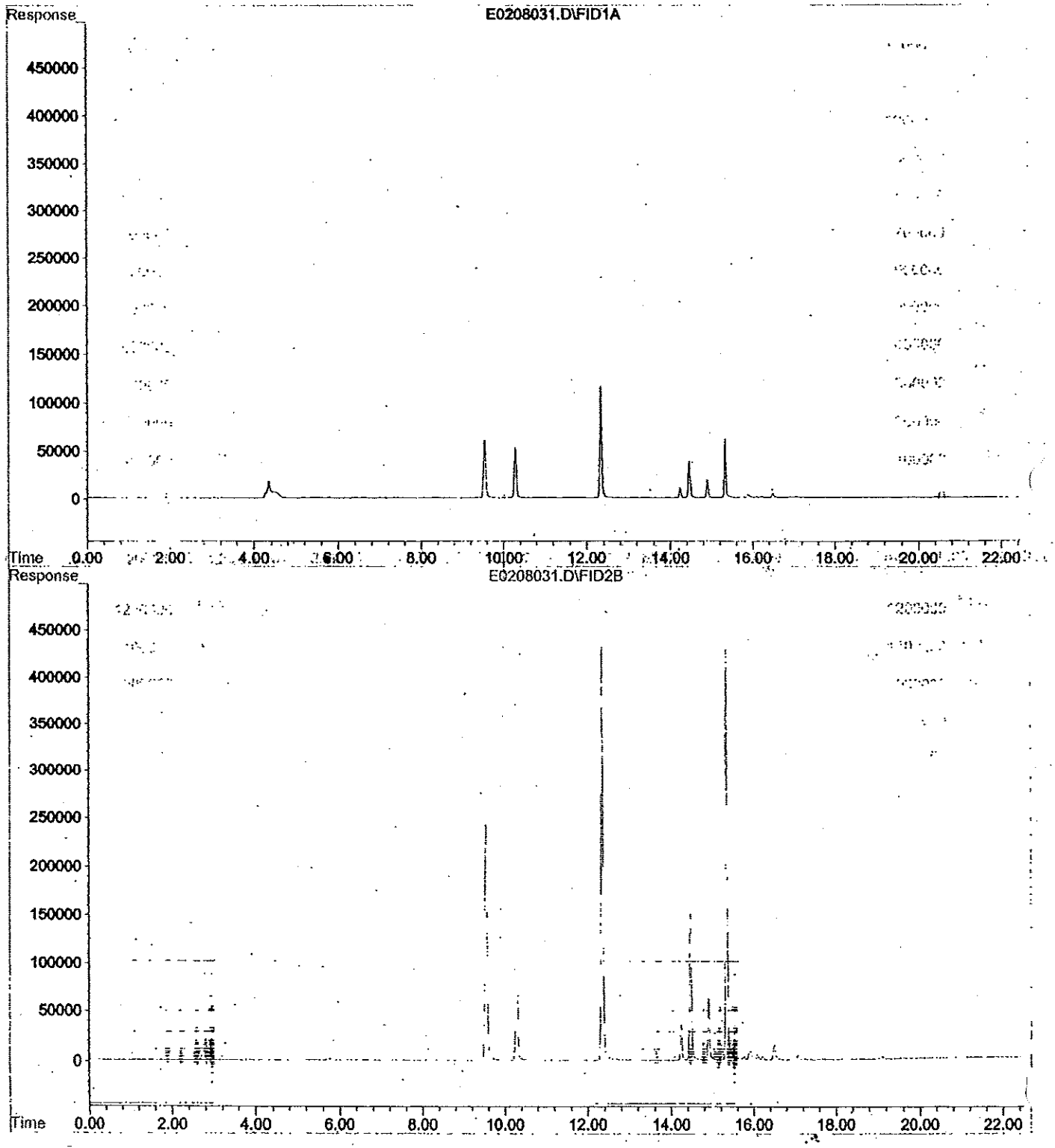
File : O:\HPCHEM\1\DATA\E0208\E0208027.D
Operator : kmt
Acquired : 3 May 2008 5:30 using AcqMethod 6B2508A.M
Instrument : GC-6
Sample Name: BRD0457-04
Misc Info : 10x 500uL
Vial Number: 23



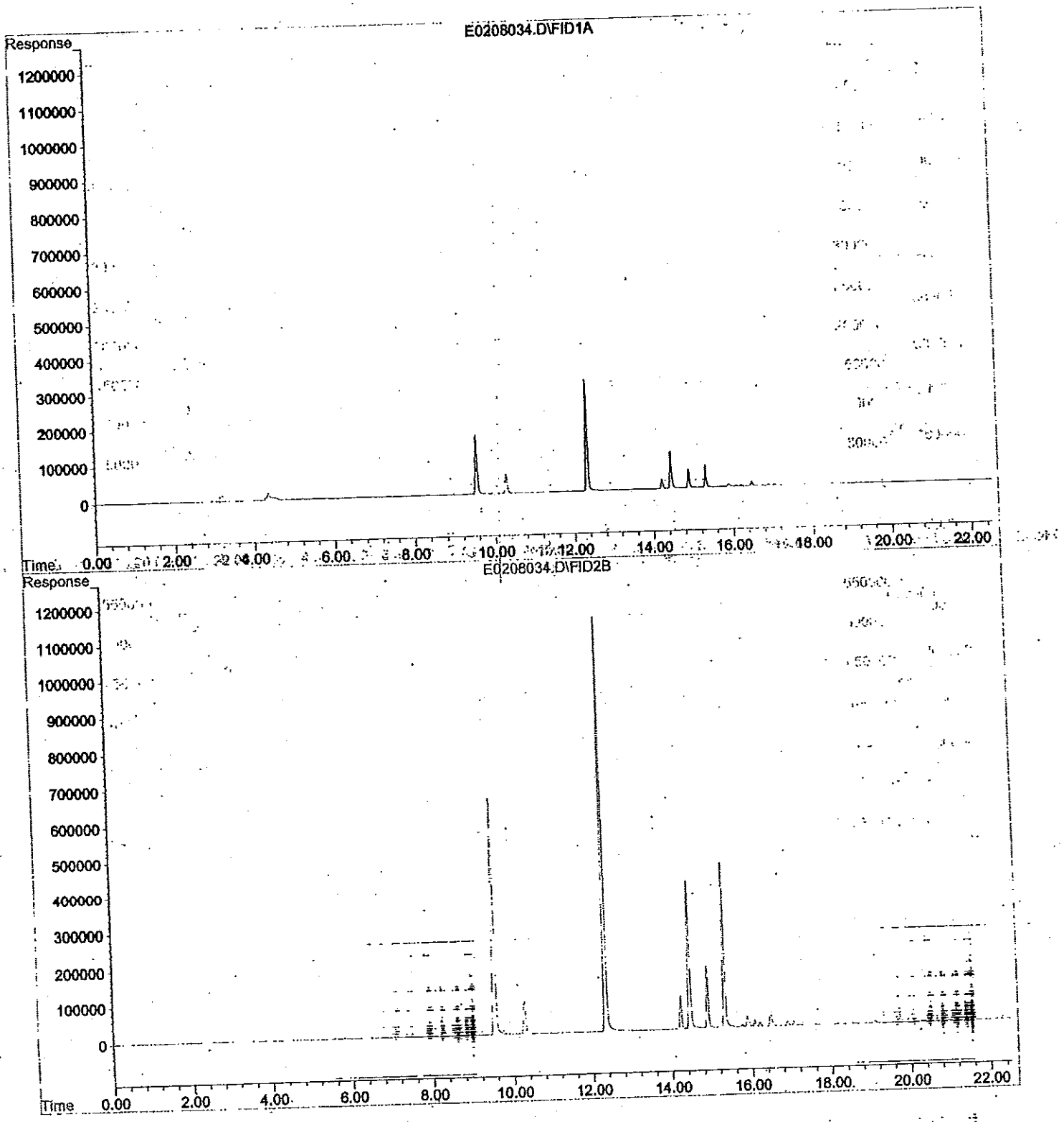
File : O:\HPCHEM\1\DATA\E0208\E0208030.D
Operator : kmt
Acquired : 3 May 2008 7:09 using AcqMethod 6B2508A.M
Instrument : GC-6
Sample Name: BRD0457-05
Misc Info : 200x 25uL
Vial Number: 26



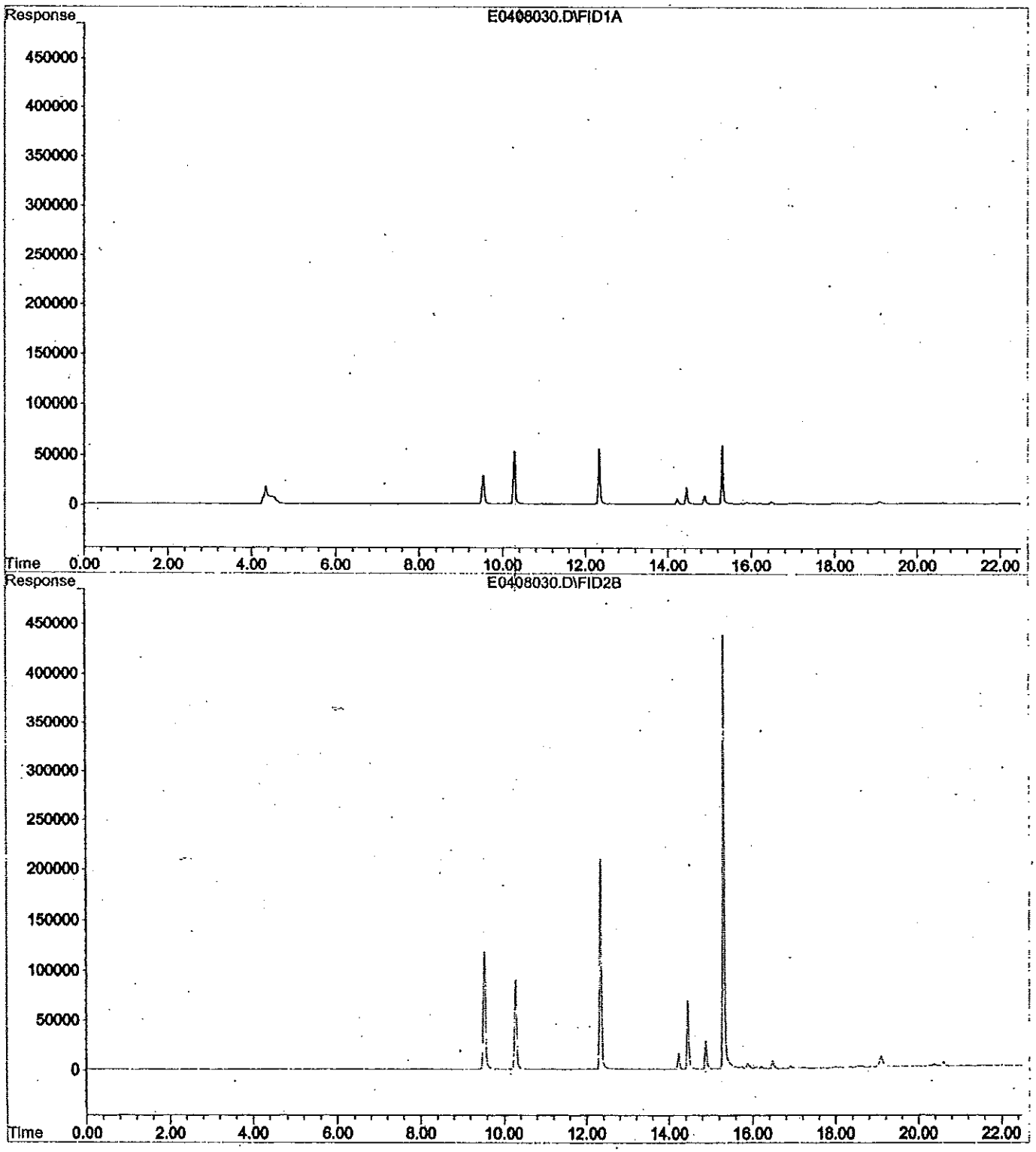
File : O:\HPCHEM\1\DATA\E0208\E0208031.D
Operator : kmt
Acquired : 3 May 2008 7:41 using AcqMethod 6B2508A.M
Instrument : GC-6
Sample Name: BRD0457-06
Misc Info : 500x 10uL
Vial Number: 27



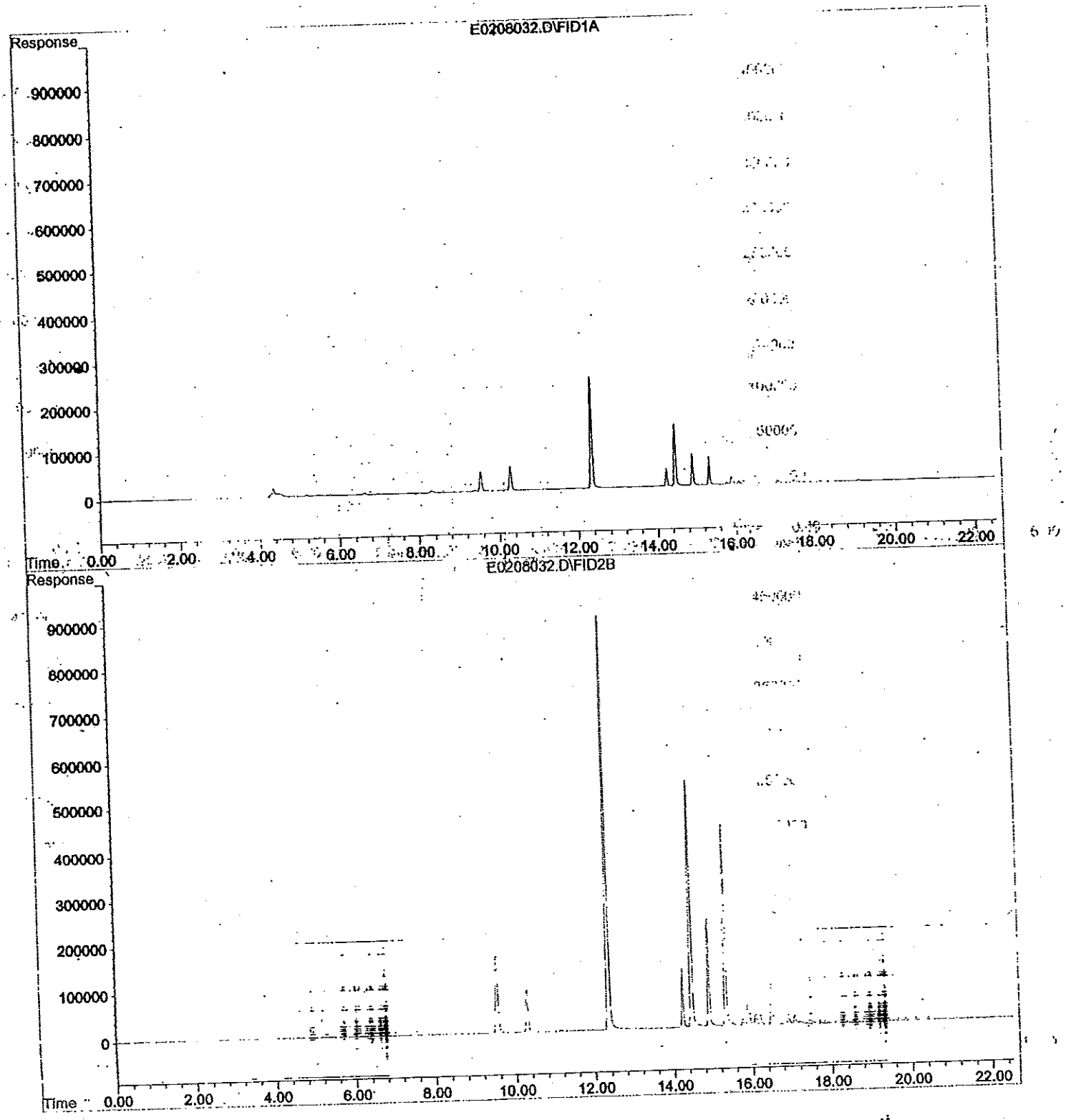
File : O:\HPCHEM\1\DATA\E0208\E0208034.D
Operator : kmt
Acquired : 3 May 2008 9:20 using AcqMethod 6B2508A.M
Instrument : GC-6
Sample Name: BRD0457-07
Misc Info : 200x 25uL
Vial Number: 30



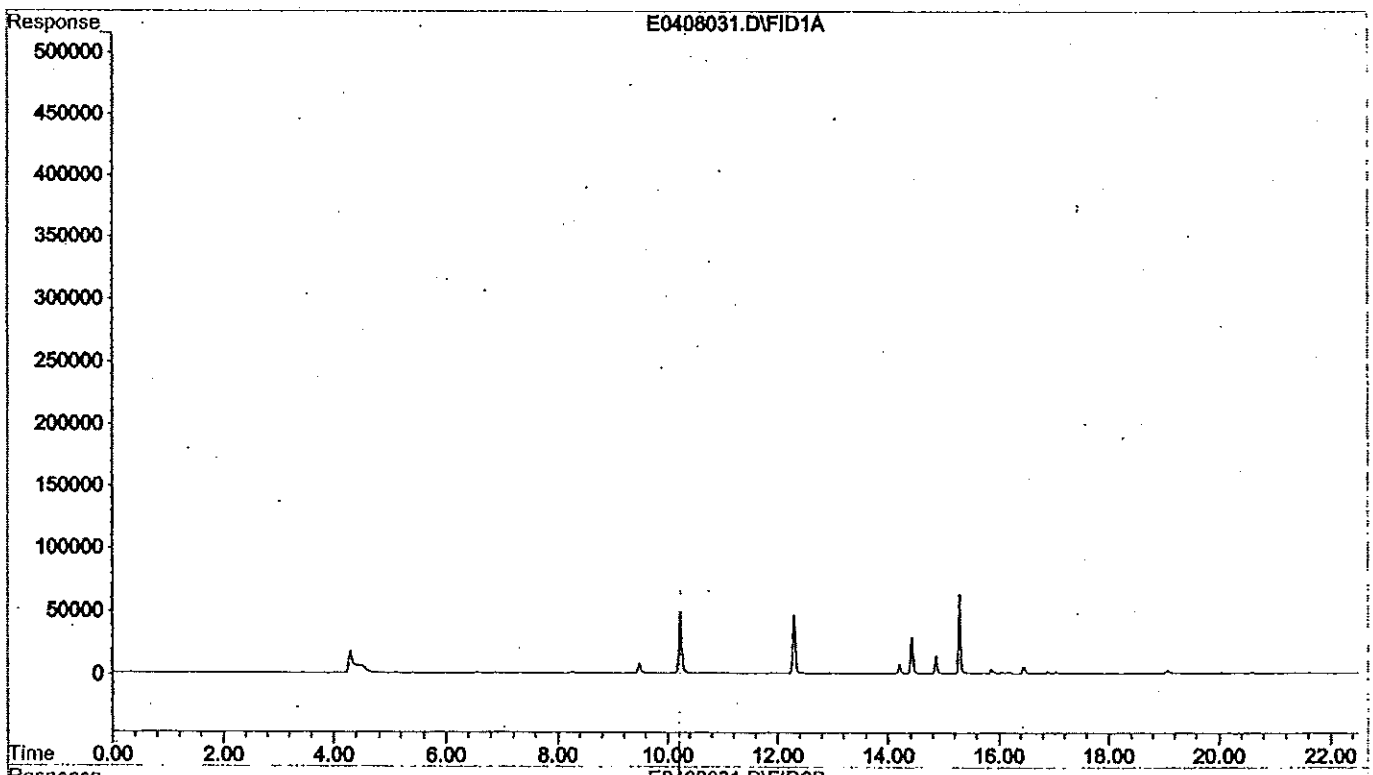
File : O:\HPCHEM\1\DATA\E0408\E0408030.D
Operator : edw
Acquired : 5 May 2008 5:08 using AcqMethod 6B2508A.M
Instrument : GC-6
Sample Name: BRD0457-07RE1
Misc Info : 1000x 5uL
Vial Number: 28

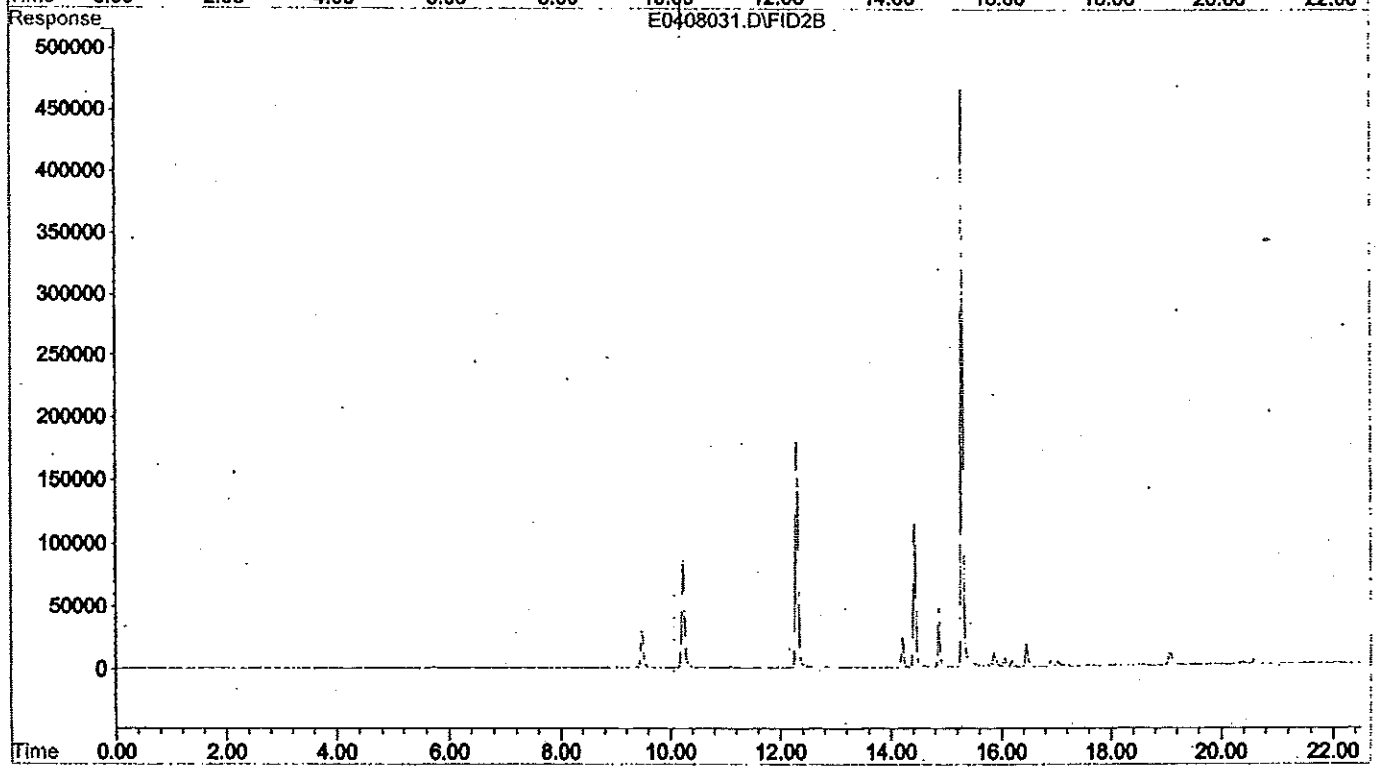


File : O:\HPCHEM\1\DATA\E0208\E0208032.D
Operator : kmt
Acquired : 3 May 2008 8:14 using AcqMethod 6B2508A.M
Instrument : GC-6
Sample Name: BRD0457-08
Misc Info : 200x 25uL
Vial Number: 28

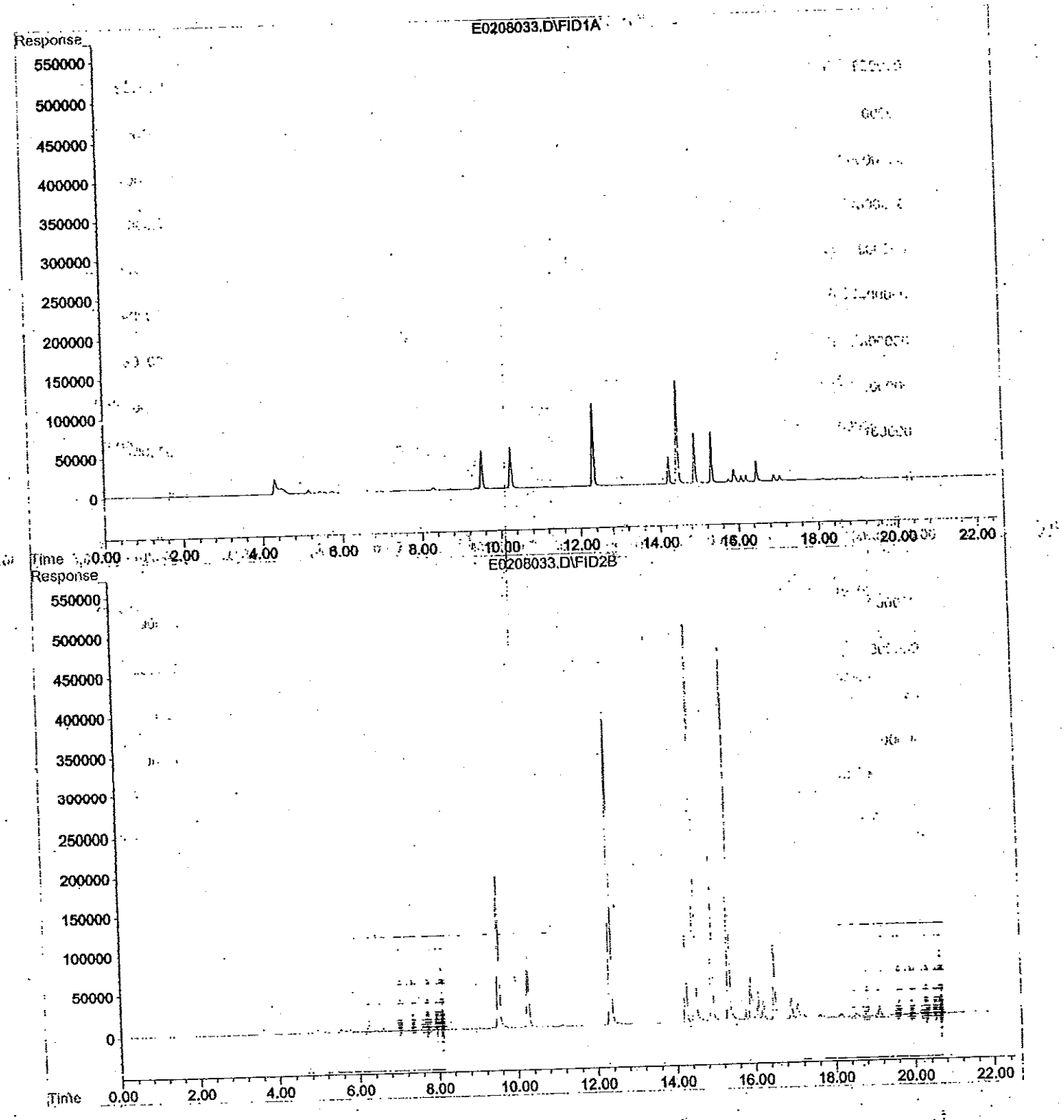


File : O:\HPCHEM\1\DATA\E0408\E0408031.D
Operator : edw
Acquired : 5 May 2008 5:41 using AcqMethod 6B2508A.M
Instrument : GC-6
Sample Name: BRD0457-08RE1
Misc Info : 1000x 5uL
Vial Number: 29

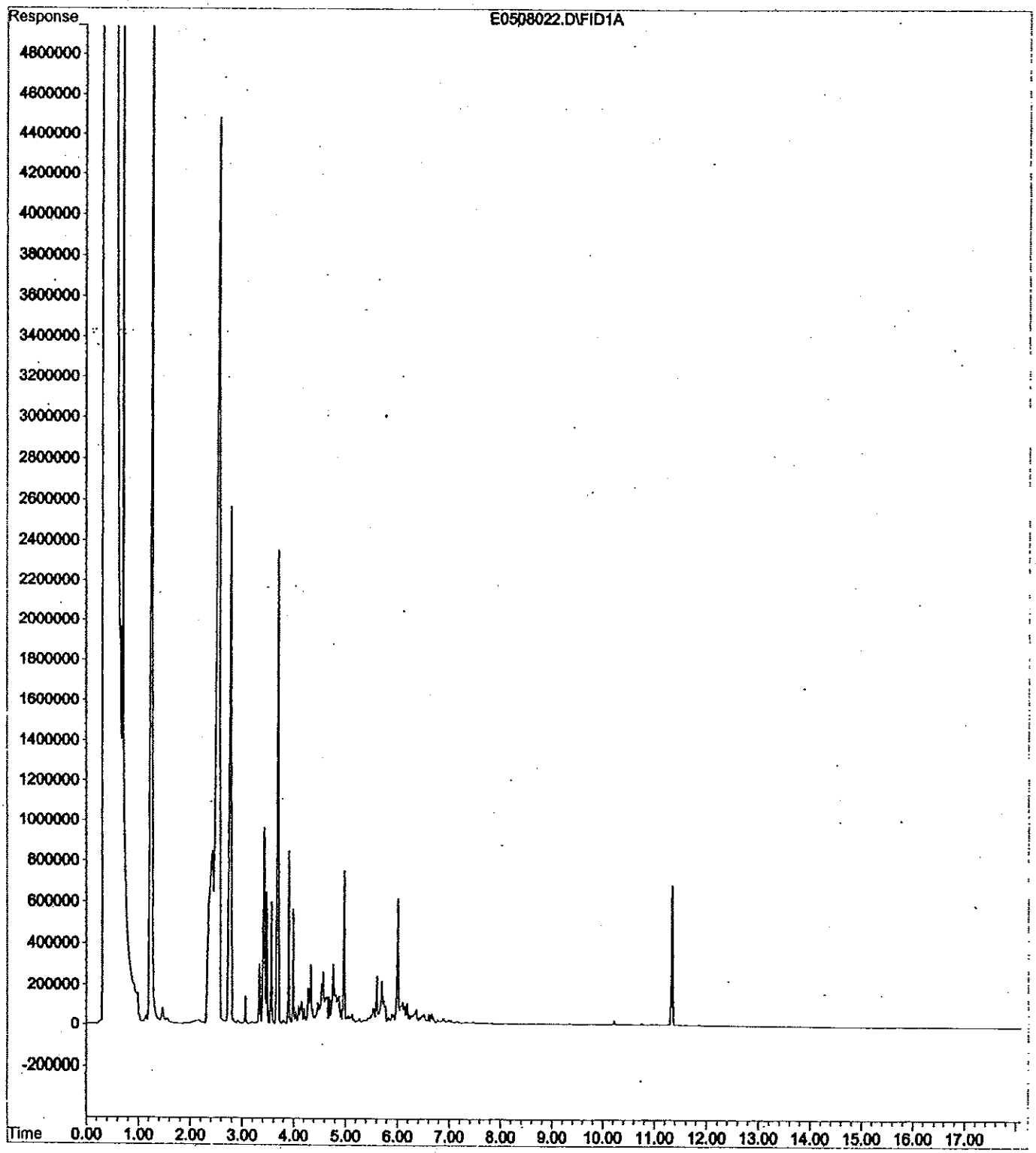




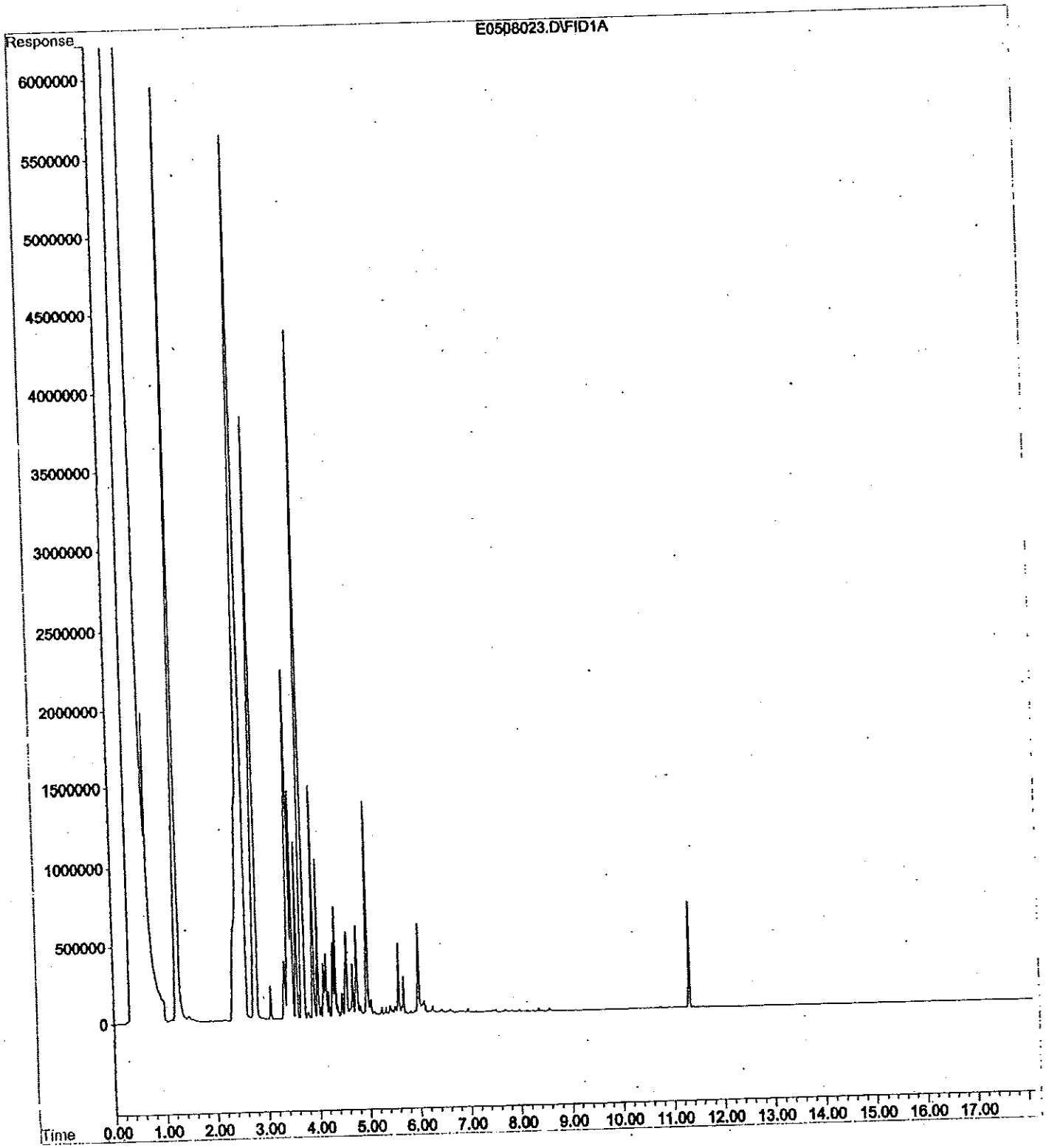
File : O:\HPCHEM\1\DATA\E0208\E0208033.D
Operator : kmt
Acquired : 3 May 2008 8:47 using AcqMethod 6B2508A.M
Instrument : GC-6
Sample Name: BRD0457-09
Misc Info : 200x 25uL
Vial Number: 29



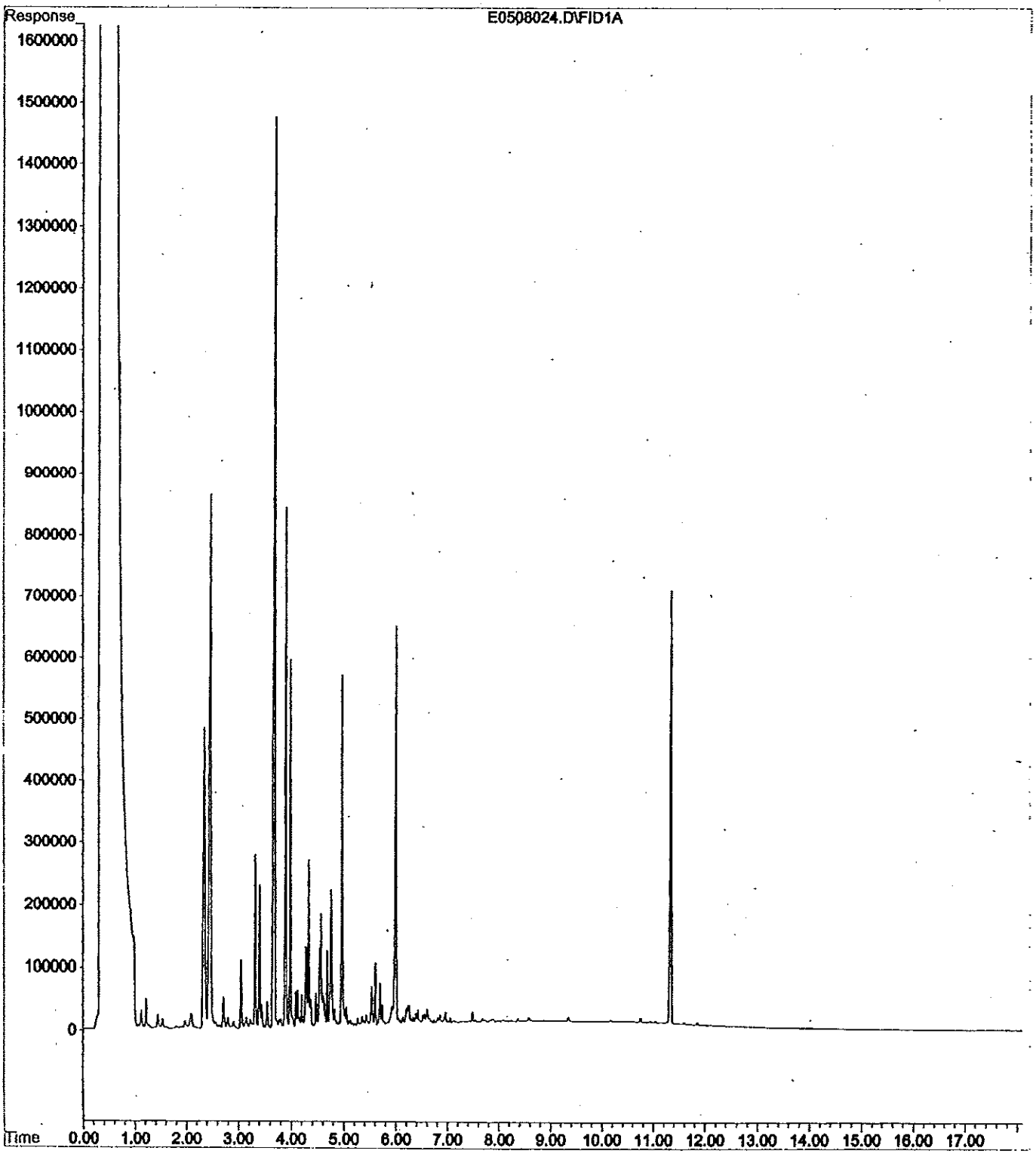
File : H:\HPCHEM\1\DATA\E0508\E0508022.D
Operator : EKK
Acquired : 5 May 2008 18:39 using AcqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRD0457-02
Misc Info : 1x NWTPH-Dx
Vial Number: 20



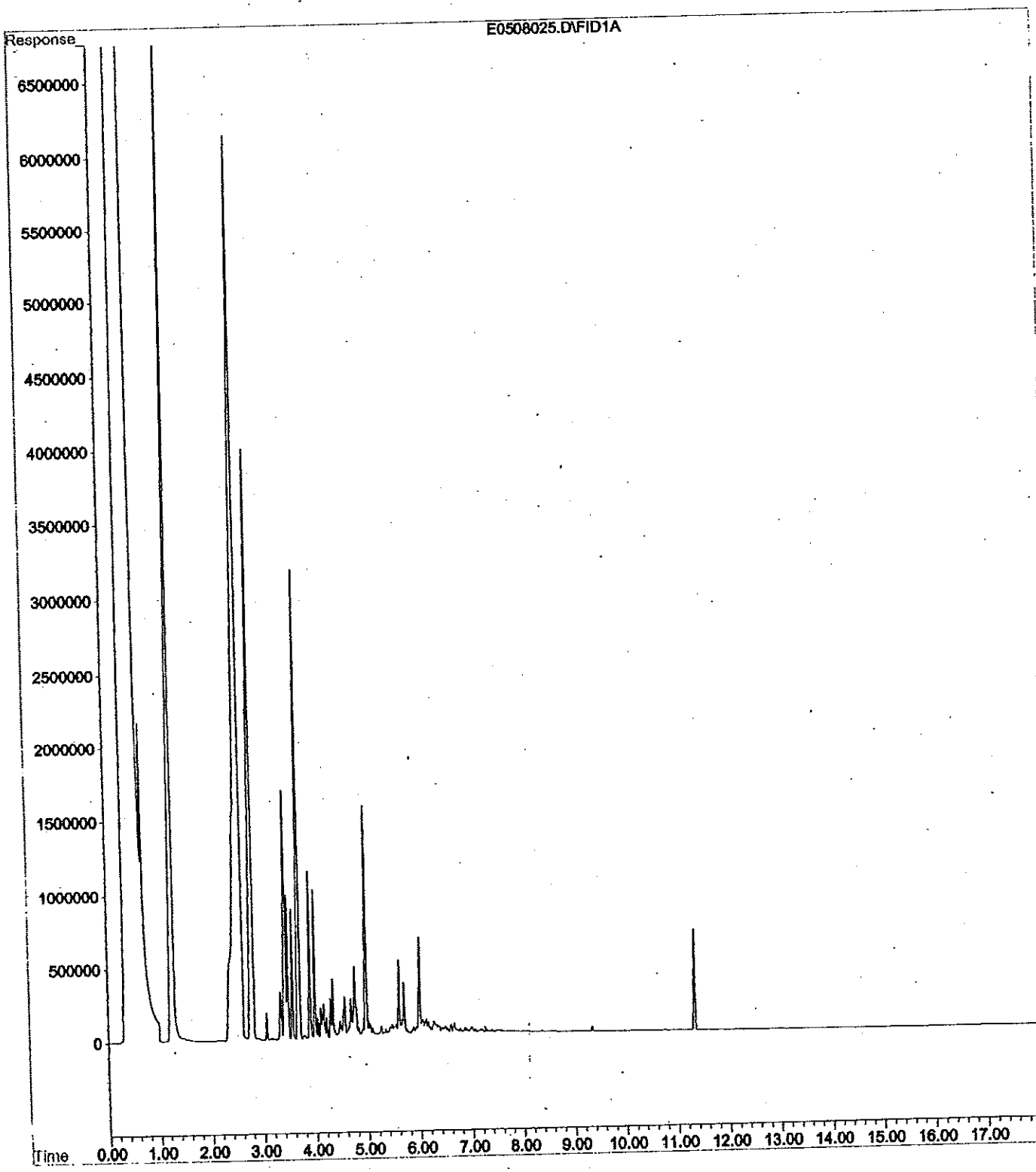
File : H:\HPCHEM\1\DATA\E0508\E0508023.D
Operator : EKK
Acquired : 5 May 2008 19:08 using AcqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRD0457-03
Misc Info : 1x NWTPH-Dx
Vial Number: 21



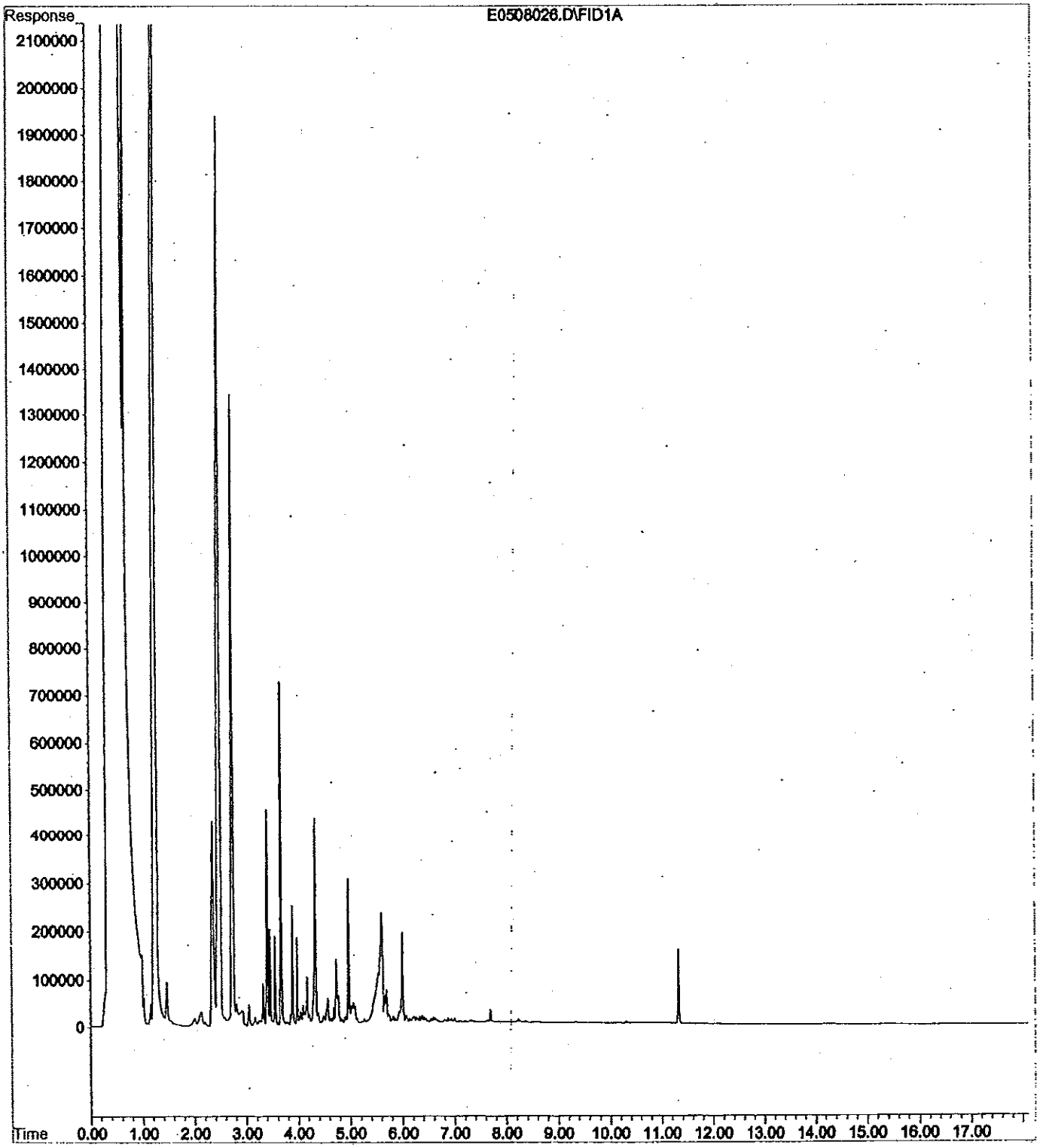
File : H:\HPCHEM\1\DATA\E0508\E0508024.D
Operator : EKK
Acquired : 5 May 2008 19:37 using AcqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRD0457-04
Misc Info : 1x NWTPH-Dx
Vial Number: 22



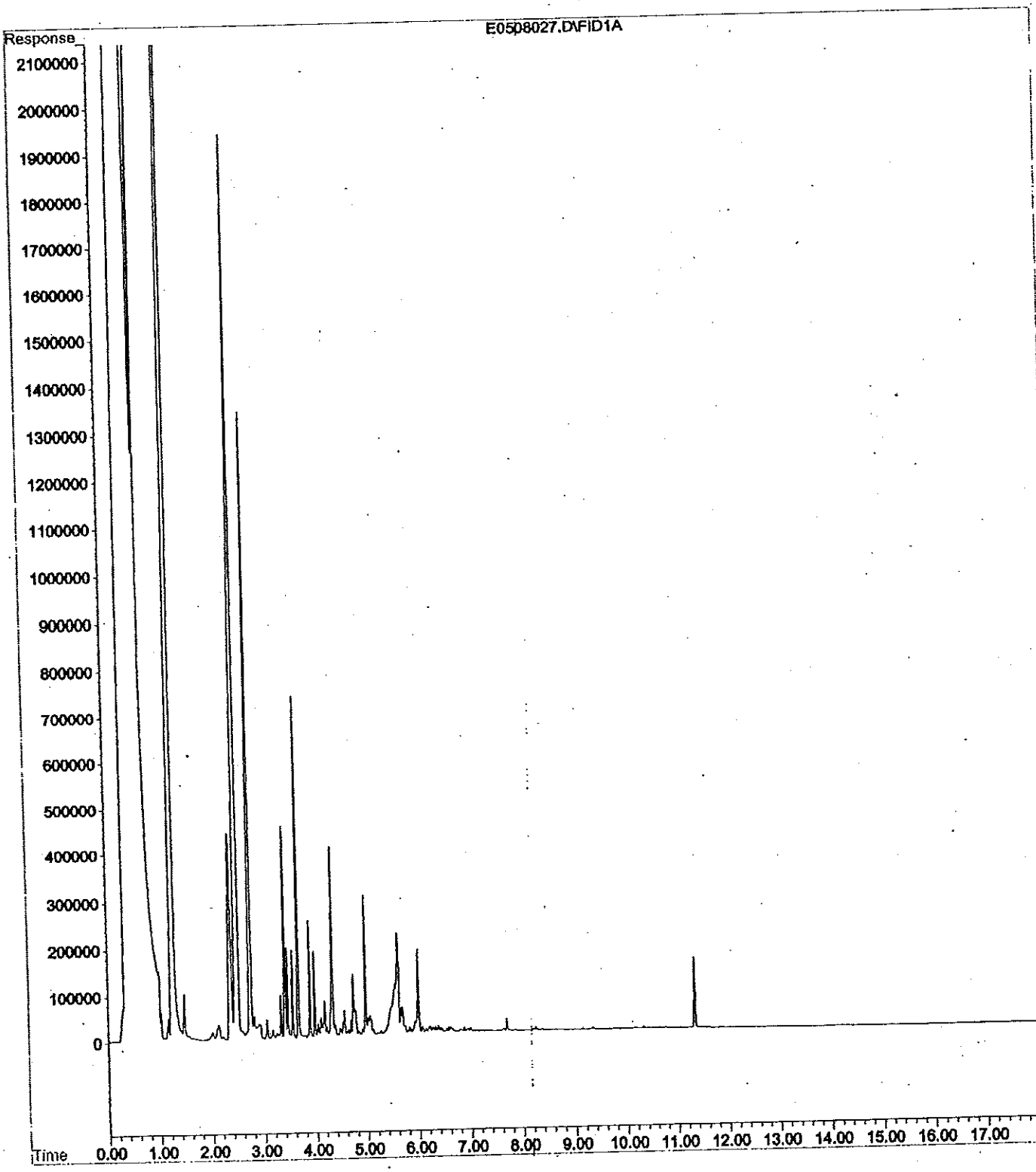
File : H:\HPCHEM\1\DATA\E0508\E0508025.D
Operator : EKK
Acquired : 5 May 2008 20:06 using AcqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRD0457-05
Misc Info : 1x NWTPH-Dx
Vial Number: 23



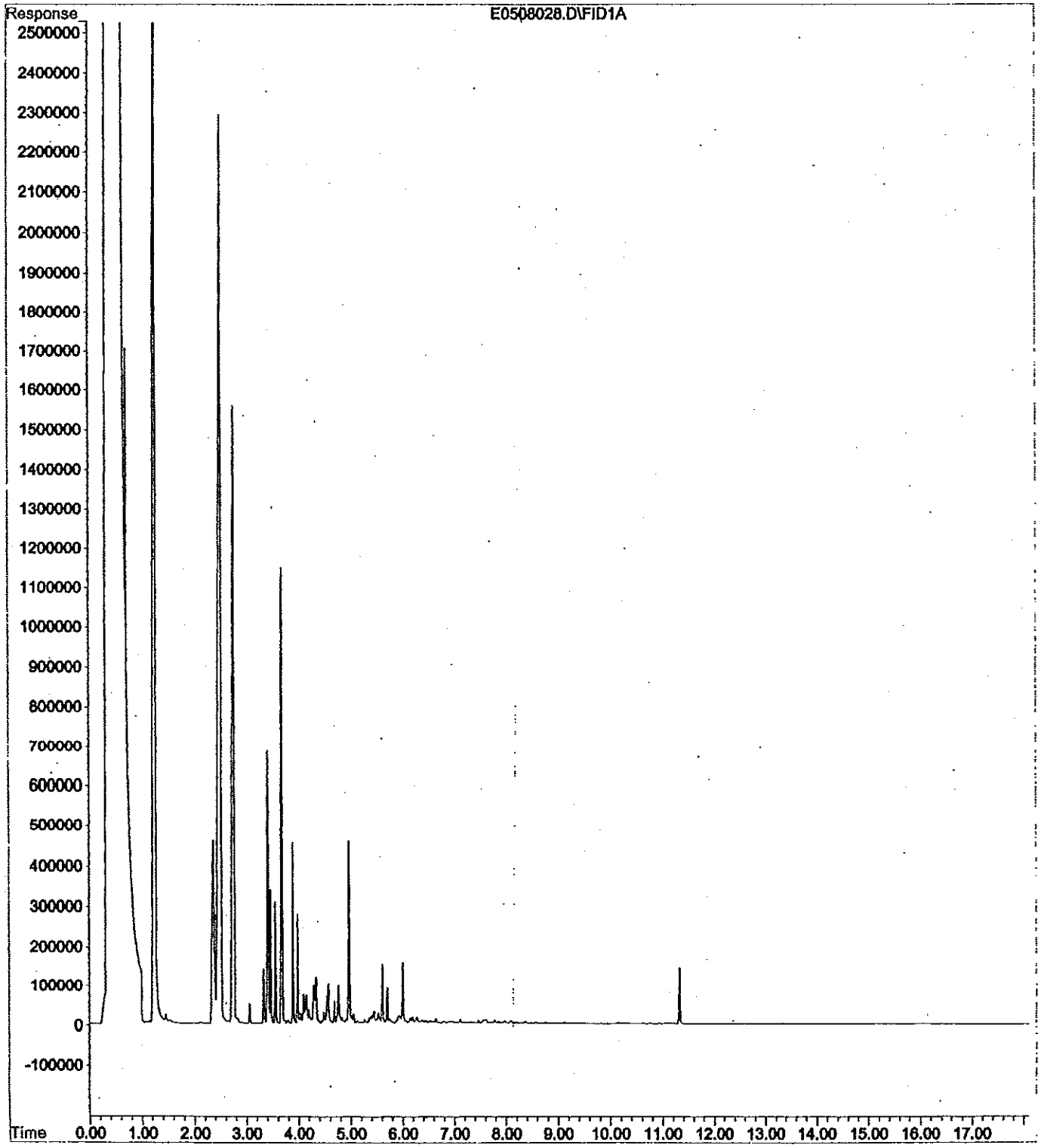
File : H:\HPCHEM\1\DATA\E0508\E0508026.D
Operator : EKK
Acquired : 5 May 2008 20:36 using AqqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRD0457-06
Misc Info : 5x NWTPH-Dx
Vial Number: 24



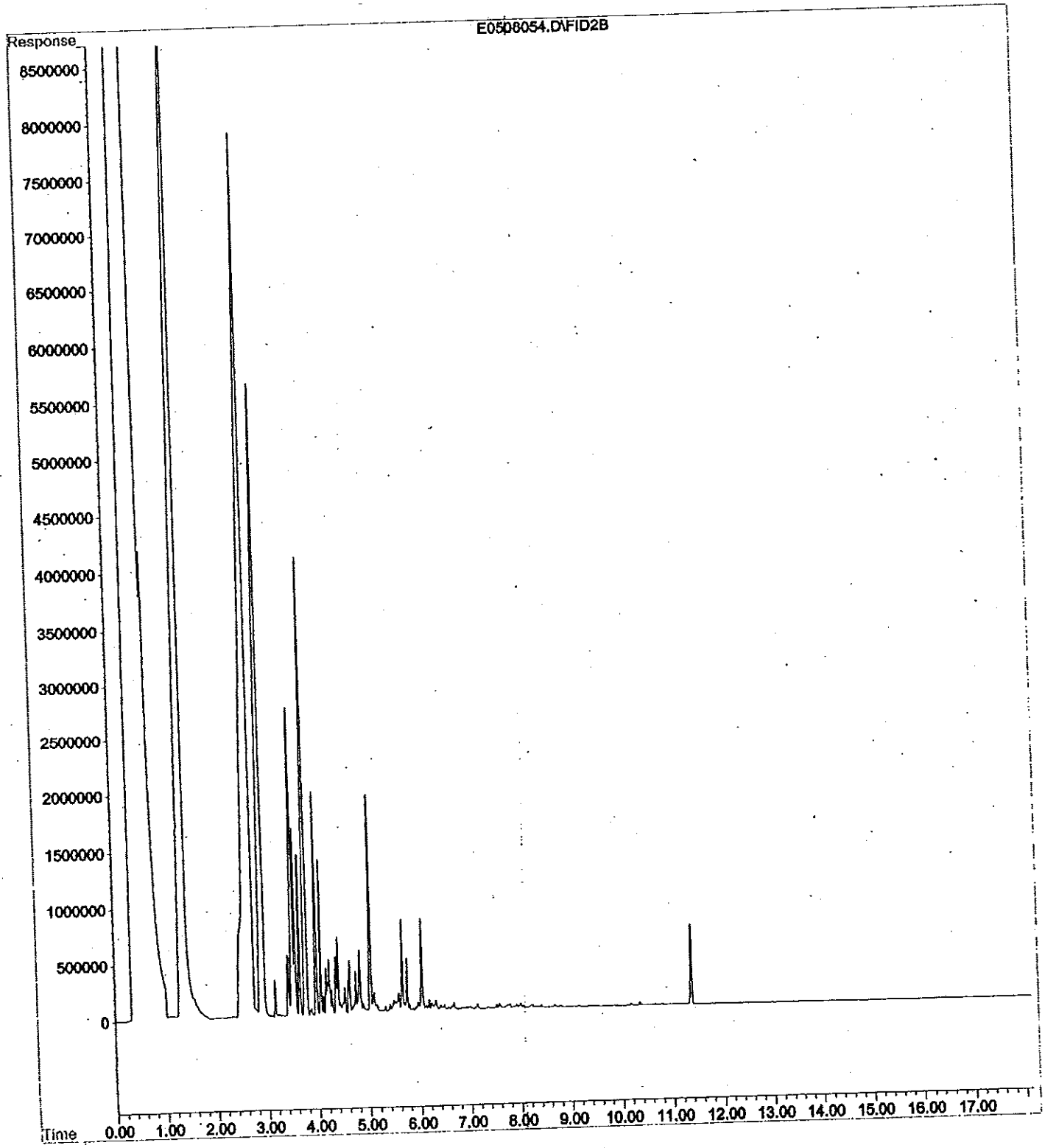
File : H:\HPCHEM\1\DATA\E0508\E0508027.D
Operator : EKK
Acquired : 5 May 2008 21:04 using AdqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRD0457-07
Misc Info : 5x NWTPH-Dx
Vial Number: 25



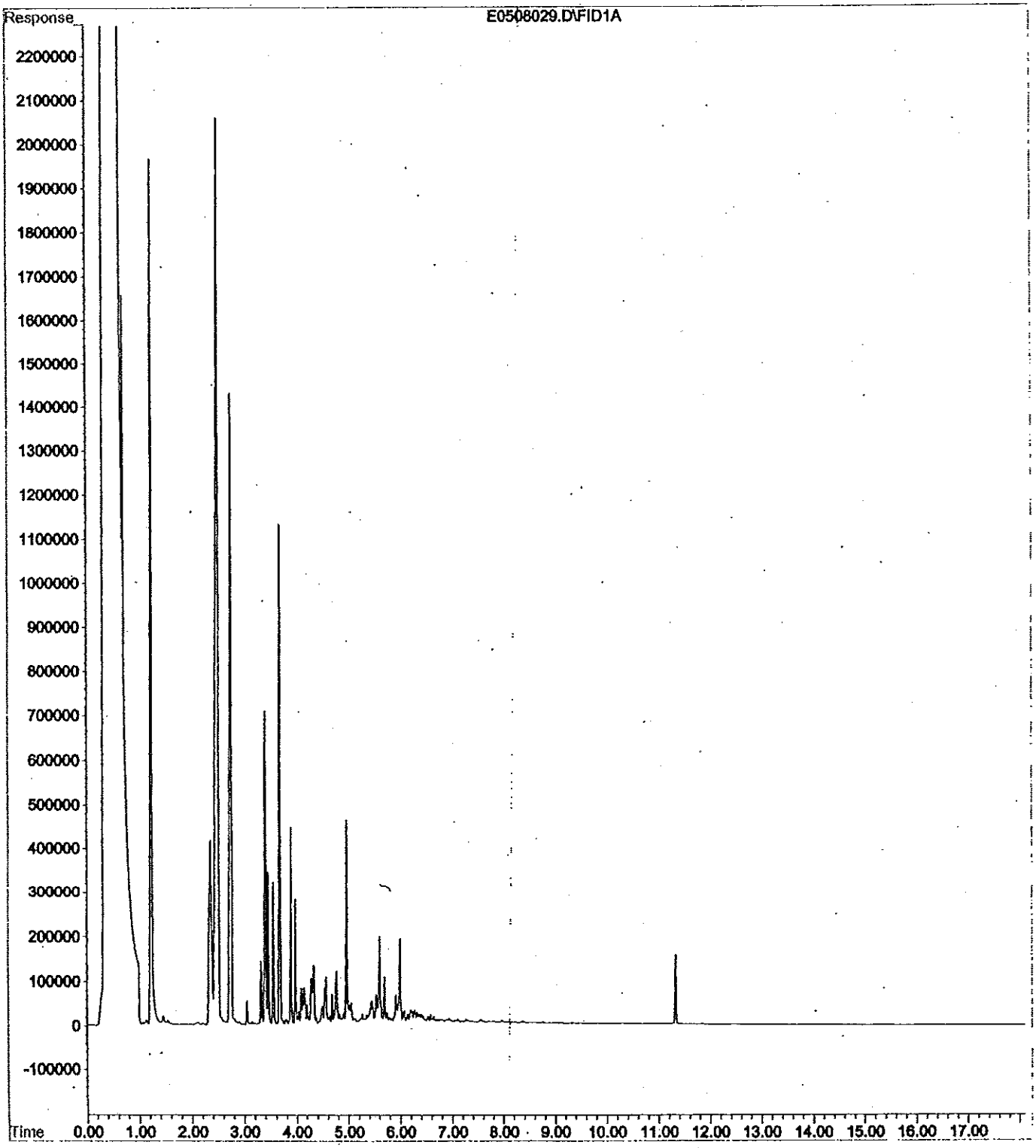
File : H:\HPCHEM\1\DATA\E0508\E0508028.D
Operator : EKK
Acquired : 5 May 2008 21:33 using AcqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRD0457-08
Misc Info : 5x NWTPH-Dx
Vial Number: 26



File : H:\HPCHEM\1\DATA\E0508.SEC\E0508054.D
Operator : EKK
Acquired : 6 May 2008 10:11 using AcqMethod TPH2707.M
Instrument : GC-1
Sample Name: brd0457-08re1
Misc Info : 1x NWTPH-Dx (L)
Vial Number: 95



File : H:\HPCHEM\1\DATA\E0508\E0508029.D
Operator : EKK
Acquired : 5 May 2008 22:03 using AcqMethod TPH2707.M
Instrument : GC-1
Sample Name: BRD0457-09
Misc Info : 5x NWTPH-Dx
Vial Number: 27



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

October 16, 2008

Jil Frain
EA Engineering, Science and Technology
12011 NE 1st Street, Suite 100
Bellevue, WA/USA 98005

RE: Tiki Carwash

Enclosed are the results of analyses for samples received by the laboratory on 10/09/08 14:40. The following list is a summary of the Work Orders contained in this report, generated on 10/16/08 16:15.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
BRJ0146	Tiki Carwash	61994.01

Curtis D. Armstrong For Kate Haney, Project Manager

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

EA Engineering, Science and Technology	Project Name:	**Tiki Carwash**	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	10/16/08 16:15

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TK-TB1	BRJ0146-01	Water	10/08/08 13:16	10/09/08 14:40
TK-MW29	BRJ0146-02	Water	10/08/08 09:45	10/09/08 14:40
TK-MW33	BRJ0146-03	Water	10/08/08 11:25	10/09/08 14:40
TK-MW35	BRJ0146-04	Water	10/08/08 12:05	10/09/08 14:40
TK-MW35D	BRJ0146-05	Water	10/08/08 12:10	10/09/08 14:40
TK-MW30	BRJ0146-06	Water	10/08/08 12:45	10/09/08 14:40

Curtis D. Armstrong For Kate Haney, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	10/16/08 16:15

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

TestAmerica Seattle

Analyte	Method	Result	MDL[A]	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRJ0146-01RE1 (TK-TB1)		Water			Sampled: 10/08/08 13:16					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	ND	----	50.0	ug/l	1x	8J12006	10/12/08 11:17	10/14/08 00:48	
Benzene	"	ND	----	0.500	"	"	"	"	"	
Toluene	"	ND	----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*84.9%*			*58 - 144 %*	"			"	
4-BFB (PID)		*105%*			*68 - 140 %*	"			"	
BRJ0146-02RE1 (TK-MW29)		Water			Sampled: 10/08/08 09:45					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	117000	----	10000	ug/l	200x	8J12006	10/12/08 11:17	10/14/08 02:25	
Benzene	"	12800	----	100	"	"	"	"	"	
Toluene	"	14600	----	100	"	"	"	"	"	
Ethylbenzene	"	3530	----	100	"	"	"	"	"	
Xylenes (total)	"	21000	----	200	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*88.6%*			*58 - 144 %*	*1x*			"	
4-BFB (PID)		*105%*			*68 - 140 %*	"			"	
BRJ0146-03RE1 (TK-MW33)		Water			Sampled: 10/08/08 11:25					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	56100	----	10000	ug/l	200x	8J12006	10/12/08 11:17	10/14/08 02:57	
Benzene	"	6670	----	100	"	"	"	"	"	
Toluene	"	4320	----	100	"	"	"	"	"	
Ethylbenzene	"	2070	----	100	"	"	"	"	"	
Xylenes (total)	"	11100	----	200	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*85.0%*			*58 - 144 %*	*1x*			"	
4-BFB (PID)		*105%*			*68 - 140 %*	"			"	
BRJ0146-04RE1 (TK-MW35)		Water			Sampled: 10/08/08 12:05					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	49500	----	5000	ug/l	100x	8J12006	10/12/08 11:17	10/14/08 01:20	
Toluene	"	1630	----	50.0	"	"	"	"	"	
Ethylbenzene	"	2500	----	50.0	"	"	"	"	"	
Xylenes (total)	"	5600	----	100	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*89.1%*			*58 - 144 %*	*1x*			"	
4-BFB (PID)		*104%*			*68 - 140 %*	"			"	

TestAmerica Seattle

Curtis D. Armstrong For Kate Haney, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	10/16/08 16:15

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRJ0146-04RE2 (TK-MW35)		**Water**			**Sampled: 10/08/08 12:05**					
Benzene	NWTPH-Gx/802 1B	10500	---	100	ug/l	200x	8J12006	10/12/08 11:17	10/14/08 11:27	
Surrogate(s): 4-BFB (PID)		*104%*		*68 - 140 %*		*1x*			"	
BRJ0146-05RE1 (TK-MW35D)		**Water**			**Sampled: 10/08/08 12:10**					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	48300	---	5000	ug/l	100x	8J12006	10/12/08 11:17	10/14/08 01:53	
Toluene	"	1600	---	50.0	"	"	"	"	"	
Ethylbenzene	"	2480	---	50.0	"	"	"	"	"	
Xylenes (total)	"	5480	---	100	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*87.6%*		*58 - 144 %*		*1x*			"	
4-BFB (PID)		*104%*		*68 - 140 %*		"			"	
BRJ0146-05RE2 (TK-MW35D)		**Water**			**Sampled: 10/08/08 12:10**					
Benzene	NWTPH-Gx/802 1B	10300	---	100	ug/l	200x	8J14036	10/14/08 13:28	10/14/08 17:20	
Surrogate(s): 4-BFB (PID)		*104%*		*68 - 140 %*		*1x*			"	
BRJ0146-06RE1 (TK-MW30)		**Water**			**Sampled: 10/08/08 12:45**					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	89400	---	25000	ug/l	500x	8J12006	10/12/08 11:17	10/14/08 03:30	
Benzene	"	18700	---	250	"	"	"	"	"	
Toluene	"	9300	---	250	"	"	"	"	"	
Ethylbenzene	"	2770	---	250	"	"	"	"	"	
Xylenes (total)	"	12400	---	500	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)		*81.3%*		*58 - 144 %*		*1x*			"	
4-BFB (PID)		*103%*		*68 - 140 %*		"			"	

Curtis D. Armstrong For Kate Haney, Project Manager

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	10/16/08 16:15

Semivolatile Petroleum Products by NWTPH-Dx (w/o Acid/Silica Gel Clean-up)

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BRJ0146-02 (TK-MW29)		**Water**			**Sampled: 10/08/08 09:45**					
Diesel Range Hydrocarbons	NWTPH-Dx	**3.74**	----	2.36	mg/l	10x	8J10031	10/10/08 14:29	10/13/08 21:43	Q5
Lube Oil Range Hydrocarbons	"	ND	----	4.72	"	"	"	"	"	
Surrogate(s): 2-FBP			*68.6%*		*53 - 125 %*	"			"	
Octacosane			*84.4%*		*68 - 125 %*	"			"	
BRJ0146-03 (TK-MW33)		**Water**			**Sampled: 10/08/08 11:25**					
Diesel Range Hydrocarbons	NWTPH-Dx	**3.03**	----	1.18	mg/l	5x	8J10031	10/10/08 14:29	10/13/08 22:06	Q5
Lube Oil Range Hydrocarbons	"	ND	----	2.36	"	"	"	"	"	
Surrogate(s): 2-FBP			*91.3%*		*53 - 125 %*	"			"	
Octacosane			*93.6%*		*68 - 125 %*	"			"	
BRJ0146-04 (TK-MW35)		**Water**			**Sampled: 10/08/08 12:05**					
Diesel Range Hydrocarbons	NWTPH-Dx	**1.35**	----	1.18	mg/l	5x	8J10031	10/10/08 14:29	10/13/08 22:29	Q5
Lube Oil Range Hydrocarbons	"	ND	----	2.36	"	"	"	"	"	
Surrogate(s): 2-FBP			*73.6%*		*53 - 125 %*	"			"	
Octacosane			*92.6%*		*68 - 125 %*	"			"	
BRJ0146-05 (TK-MW35D)		**Water**			**Sampled: 10/08/08 12:10**					
Diesel Range Hydrocarbons	NWTPH-Dx	**1.37**	----	1.18	mg/l	5x	8J10031	10/10/08 14:29	10/14/08 00:02	Q5
Lube Oil Range Hydrocarbons	"	ND	----	2.36	"	"	"	"	"	
Surrogate(s): 2-FBP			*74.1%*		*53 - 125 %*	"			"	
Octacosane			*91.1%*		*68 - 125 %*	"			"	
BRJ0146-06RE1 (TK-MW30)		**Water**			**Sampled: 10/08/08 12:45**					
Diesel Range Hydrocarbons	NWTPH-Dx	**2.98**	----	0.236	mg/l	1x	8J10031	10/10/08 14:29	10/14/08 16:56	Q5
Lube Oil Range Hydrocarbons	"	**1.85**	----	0.472	"	"	"	"	"	
Surrogate(s): 2-FBP			*112%*		*53 - 125 %*	"			"	
Octacosane			*96.3%*		*68 - 125 %*	"			"	

Curtis D. Armstrong For Kate Haney, Project Manager

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

EA Engineering, Science and Technology	Project Name:	**Tiki Carwash**	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	10/16/08 16:15

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8J10013 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL^A	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8J10013-BLK1)							Extracted: 10/10/08 10:53							
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	--	--	--	--	--	--	10/10/08 15:39	
Benzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Xylenes (total)	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 90.4%*			*Limits: 58-144%*	"							*10/10/08 15:39*	
4-BFB (PID)		*97.1%*			*68-140%*	"							"	
LCS (8J10013-BS1)							Extracted: 10/10/08 10:53							
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	1090	---	50.0	ug/l	1x	--	1000	109%	(80-120)	--	--	10/10/08 16:12	
Surrogate(s): 4-BFB (FID)		*Recovery: 99.1%*			*Limits: 58-144%*	"							*10/10/08 16:12*	
LCS (8J10013-BS2)							Extracted: 10/10/08 10:53							
Benzene	NWTPH-Gx/ 8021B	28.6	---	0.500	ug/l	1x	--	30.0	95.4%	(80-120)	--	--	10/10/08 16:44	
Toluene	"	27.4	---	0.500	"	"	--	"	91.3%	"	--	--	"	
Ethylbenzene	"	27.4	---	0.500	"	"	--	"	91.2%	"	--	--	"	
Xylenes (total)	"	77.6	---	1.00	"	"	--	90.0	86.2%	"	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 96.3%*			*Limits: 68-140%*	"							*10/10/08 16:44*	
Duplicate (8J10013-DUP1)					QC Source: BRJ0127-01		Extracted: 10/10/08 10:53							
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	78.7	--	--	--	109%	(25)	10/10/08 18:31	R4
Benzene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Toluene	"	ND	---	0.500	"	"	0.682	--	--	--	135%	"	"	R4
Ethylbenzene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Xylenes (total)	"	ND	---	1.00	"	"	2.84	--	--	--	130%	"	"	R4
Surrogate(s): 4-BFB (FID)		*Recovery: 90.8%*			*Limits: 58-144%*	"							*10/10/08 18:31*	
4-BFB (PID)		*99.5%*			*68-140%*	"							"	
Duplicate (8J10013-DUP2)					QC Source: BRJ0127-04		Extracted: 10/10/08 10:53							
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	300	---	50.0	ug/l	1x	336	--	--	--	11.5%	(25)	10/10/08 19:35	
Benzene	"	1.58	---	0.500	"	"	1.77	--	--	--	11.2%	"	"	
Toluene	"	ND	---	0.500	"	"	ND	--	--	--	11.3%	"	"	
Ethylbenzene	"	3.25	---	0.500	"	"	3.77	--	--	--	14.6%	"	"	
Xylenes (total)	"	ND	---	1.00	"	"	ND	--	--	--	13.4%	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 96.5%*			*Limits: 58-144%*	"							*10/10/08 19:35*	
4-BFB (PID)		*99.5%*			*68-140%*	"							"	

TestAmerica Seattle

Curtis D. Armstrong For Kate Haney, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

EA Engineering, Science and Technology	Project Name:	**Tiki Carwash**	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	10/16/08 16:15

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8J10013 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike (8J10013-MS1)				QC Source: BRJ0127-04				Extracted: 10/10/08 10:53						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	1190	---	50.0	ug/l	1x	336	1000	85.1%	(75-131)	--	--	10/10/08 20:08	
Surrogate(s): 4-BFB (FID)		*Recovery: 102%*			*Limits: 58-144%*	"							*10/10/08 20:08*	
Matrix Spike (8J10013-MS2)				QC Source: BRJ0127-04				Extracted: 10/10/08 10:53						
Benzene	NWTPH-Gx/ 8021B	34.0	---	0.500	ug/l	1x	1.77	30.0	107%	(46-130)	--	--	10/10/08 21:12	
Toluene	"	31.9	---	0.500	"	"	0.478	"	105%	(60-124)	--	--	"	
Ethylbenzene	"	34.8	---	0.500	"	"	3.77	"	103%	(56-141)	--	--	"	
Xylenes (total)	"	89.1	---	1.00	"	"	0.901	90.0	98.0%	(66-132)	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 100%*			*Limits: 68-140%*	"							*10/10/08 21:12*	
Matrix Spike Dup (8J10013-MSD1)				QC Source: BRJ0127-04				Extracted: 10/10/08 10:53						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	1100	---	50.0	ug/l	1x	336	1000	76.7%	(75-131)	7.25%	(25)	10/10/08 20:40	
Surrogate(s): 4-BFB (FID)		*Recovery: 101%*			*Limits: 58-144%*	"							*10/10/08 20:40*	

QC Batch: 8J12006 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8J12006-BLK1)								Extracted: 10/12/08 11:17						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	--	--	--	--	--	--	10/13/08 12:46	
Benzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Xylenes (total)	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 85.7%*			*Limits: 58-144%*	"							*10/13/08 12:46*	
4-BFB (PID)		*105%*			*68-140%*	"							"	
LCS (8J12006-BS1)								Extracted: 10/12/08 11:17						
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	963	---	50.0	ug/l	1x	--	1000	96.3%	(80-120)	--	--	10/13/08 13:18	
Surrogate(s): 4-BFB (FID)		*Recovery: 97.0%*			*Limits: 58-144%*	"							*10/13/08 13:18*	
LCS (8J12006-BS2)								Extracted: 10/12/08 11:17						
Benzene	NWTPH-Gx/ 8021B	31.8	---	0.500	ug/l	1x	--	30.0	106%	(80-120)	--	--	10/13/08 13:51	
Toluene	"	29.5	---	0.500	"	"	--	"	98.2%	"	--	--	"	
Ethylbenzene	"	31.0	---	0.500	"	"	--	"	103%	"	--	--	"	
Xylenes (total)	"	88.6	---	1.00	"	"	--	90.0	98.4%	"	--	--	"	

TestAmerica Seattle

Curtis D. Armstrong For Kate Haney, Project Manager

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

EA Engineering, Science and Technology	Project Name:	**Tiki Carwash**	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	10/16/08 16:15

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8J12006 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL[A]	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (8J12006-BS2)									Extracted: 10/12/08 11:17					
Surrogate(s): 4-BFB (PID)		*Recovery: 97.6%*			*Limits: 68-140%*	*1x*							*10/13/08 13:51*	
Duplicate (8J12006-DUP1)					QC Source: BRJ0167-01				Extracted: 10/12/08 11:17					
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	206	---	50.0	ug/l	1x	212	--	--	--	3.18%	(25)	10/13/08 14:56	
Benzene	"	2.67	---	0.500	"	"	2.86	--	--	--	6.87%	"	"	
Toluene	"	0.717	---	0.500	"	"	0.804	--	--	--	11.4%	"	"	
Ethylbenzene	"	ND	---	0.500	"	"	ND	--	--	--	23.0%	"	"	
Xylenes (total)	"	1.34	---	1.00	"	"	1.44	--	--	--	6.91%	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 89.8%*			*Limits: 58-144%*	"							*10/13/08 14:56*	
4-BFB (PID)		*106%*			*68-140%*	"							"	
Duplicate (8J12006-DUP2)					QC Source: BRJ0167-02				Extracted: 10/12/08 11:17					
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	ND	--	--	--	NR	(25)	10/13/08 16:01	
Benzene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Toluene	"	ND	---	0.500	"	"	ND	--	--	--	0.760%	"	"	
Ethylbenzene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"	
Xylenes (total)	"	ND	---	1.00	"	"	ND	--	--	--	NR	"	"	
Surrogate(s): 4-BFB (FID)		*Recovery: 88.3%*			*Limits: 58-144%*	"							*10/13/08 16:01*	
4-BFB (PID)		*105%*			*68-140%*	"							"	
Matrix Spike (8J12006-MS1)					QC Source: BRJ0167-03				Extracted: 10/12/08 11:17					
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	1120	---	50.0	ug/l	1x	96.7	1000	103%	(75-131)	--	--	10/13/08 17:12	
Surrogate(s): 4-BFB (FID)		*Recovery: 103%*			*Limits: 58-144%*	"							*10/13/08 17:12*	
Matrix Spike (8J12006-MS2)					QC Source: BRJ0167-04				Extracted: 10/12/08 11:17					
Benzene	NWTPH-Gx/ 8021B	37.8	---	0.500	ug/l	1x	ND	30.0	126%	(46-130)	--	--	10/13/08 22:05	
Toluene	"	34.6	---	0.500	"	"	ND	"	115%	(60-124)	--	--	"	
Ethylbenzene	"	36.1	---	0.500	"	"	ND	"	120%	(56-141)	--	--	"	
Xylenes (total)	"	104	---	1.00	"	"	ND	90.0	116%	(66-132)	--	--	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 105%*			*Limits: 68-140%*	"							*10/13/08 22:05*	
Matrix Spike Dup (8J12006-MSD1)					QC Source: BRJ0167-03				Extracted: 10/12/08 11:17					
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	1090	---	50.0	ug/l	1x	96.7	1000	99.7%	(75-131)	2.64%	(25)	10/13/08 17:45	
Surrogate(s): 4-BFB (FID)		*Recovery: 104%*			*Limits: 58-144%*	"							*10/13/08 17:45*	

Curtis D. Armstrong For Kate Haney, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

EA Engineering, Science and Technology	Project Name:	Tiki Carwash	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	10/16/08 16:15

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8J12006 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Matrix Spike Dup (8J12006-MSD2)					QC Source: BRJ0167-04				Extracted: 10/12/08 11:17					
Benzene	NWTPH-Gx/ 8021B	37.8	---	0.500	ug/l	1x	ND	30.0	126%	(46-130)	0.0370%	(40)	10/13/08 22:38	
Toluene	"	34.5	---	0.500	"	"	ND	"	115%	(60-124)	0.255%	"	"	
Ethylbenzene	"	36.0	---	0.500	"	"	ND	"	120%	(56-141)	0.272%	"	"	
Xylenes (total)	"	104	---	1.00	"	"	ND	90.0	116%	(66-132)	0.297%	"	"	
Surrogate(s): 4-BFB (PID)		*Recovery: 106%*			*Limits: 68-140%*	"							*10/13/08 22:38*	

QC Batch: 8J14036 **Water Preparation Method: EPA 5030B (P/T)**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8J14036-BLK1)									Extracted: 10/14/08 13:28					
Benzene	NWTPH-Gx/ 8021B	ND	---	0.500	ug/l	1x	--	--	--	--	--	--	10/14/08 16:15	
Surrogate(s): 4-BFB (PID)		*Recovery: 105%*			*Limits: 68-140%*	"							*10/14/08 16:15*	
LCS (8J14036-BS1)									Extracted: 10/14/08 13:28					
Benzene	NWTPH-Gx/ 8021B	34.8	---	0.500	ug/l	1x	--	30.0	116%	(80-120)	--	--	10/14/08 16:48	
Surrogate(s): 4-BFB (PID)		*Recovery: 105%*			*Limits: 68-140%*	"							*10/14/08 16:48*	
Duplicate (8J14036-DUP1)					QC Source: BRJ0146-05RE2				Extracted: 10/14/08 13:28					
Benzene	NWTPH-Gx/ 8021B	10300	---	100	ug/l	200x	10300	--	--	--	0.365%	(25)	10/14/08 17:53	
Surrogate(s): 4-BFB (PID)		*Recovery: 104%*			*Limits: 68-140%*	*1x*							*10/14/08 17:53*	
Matrix Spike (8J14036-MS1)					QC Source: BRJ0146-05RE2				Extracted: 10/14/08 13:28					
Benzene	NWTPH-Gx/ 8021B	17800	---	100	ug/l	200x	10300	6000	125%	(46-130)	--	--	10/14/08 18:25	
Surrogate(s): 4-BFB (PID)		*Recovery: 105%*			*Limits: 68-140%*	*1x*							*10/14/08 18:25*	

Curtis D. Armstrong For Kate Haney, Project Manager

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

EA Engineering, Science and Technology	Project Name:	**Tiki Carwash**	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	10/16/08 16:15

Semivolatile Petroleum Products by NWTPH-Dx (w/o Acid/Silica Gel Clean-up) - Laboratory Quality Control Results

TestAmerica Seattle

QC Batch: 8J10031 **Water Preparation Method: EPA 3520C**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8J10031-BLK1)								Extracted: 10/10/08 14:29						
Diesel Range Hydrocarbons	NWTPH-Dx	ND	---	0.250	mg/l	1x	--	--	--	--	--	--	10/13/08 19:26	
Lube Oil Range Hydrocarbons	"	ND	---	0.500	"	"	--	--	--	--	--	--	"	
Surrogate(s): 2-FBP		*Recovery: 76.3%*			*Limits: 53-125%*	"							*10/13/08 19:26*	
Octacosane		*90.9%*			*68-125%*	"							"	
LCS (8J10031-BS1)								Extracted: 10/10/08 14:29						
Diesel Range Hydrocarbons	NWTPH-Dx	1.74	---	0.250	mg/l	1x	--	2.00	86.8%	(61-132)	--	--	10/13/08 19:49	
Surrogate(s): 2-FBP		*Recovery: 69.1%*			*Limits: 53-125%*	"							*10/13/08 19:49*	
Octacosane		*95.5%*			*68-125%*	"							"	
Matrix Spike (8J10031-MS1)				QC Source: BRJ0149-01				Extracted: 10/10/08 14:29						
Diesel Range Hydrocarbons	NWTPH-Dx	18.4	---	1.18	mg/l	5x	12.5	1.89	312%	(32-143)	--	--	10/13/08 20:12	MHA
Surrogate(s): 2-FBP		*Recovery: 148%*			*Limits: 53-125%*	"							*10/13/08 20:12*	*ZX*
Octacosane		*96.6%*			*68-125%*	"							"	
Matrix Spike Dup (8J10031-MSD1)				QC Source: BRJ0149-01				Extracted: 10/10/08 14:29						
Diesel Range Hydrocarbons	NWTPH-Dx	17.0	---	1.18	mg/l	5x	12.5	1.89	241%	(32-143)	7.63%	(40)	10/13/08 20:34	MHA
Surrogate(s): 2-FBP		*Recovery: 136%*			*Limits: 53-125%*	"							*10/13/08 20:34*	*ZX*
Octacosane		*93.0%*			*68-125%*	"							"	

Curtis D. Armstrong For Kate Haney, Project Manager

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THE LEADER IN ENVIRONMENTAL TESTING

EA Engineering, Science and Technology	Project Name:	**Tiki Carwash**	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	10/16/08 16:15

CERTIFICATION SUMMARY

TestAmerica Seattle

Method	Matrix	Nelac	Washington
NWTPH-Dx	Water		X
NWTPH-Gx/8021B	Water		X

Any abnormalities or departures from sample acceptance policy shall be documented on the 'Sample Receipt and Temperature Log Form' and 'Sample Non-conformance Form' (if applicable) included with this report.

For information concerning certifications of this facility or another TestAmerica facility, please visit our website at www.TestAmericaInc.com

Samples collected by TestAmerica Field Services personnel are noted on the Chain of Custody (COC).

Curtis D. Armstrong For Kate Haney, Project Manager

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EA Engineering, Science and Technology	Project Name:	**Tiki Carwash**	
12011 NE 1st Street, Suite 100	Project Number:	61994.01	Report Created:
Bellevue, WA/USA 98005	Project Manager:	Jil Frain	10/16/08 16:15

Notes and Definitions

Report Specific Notes:

MHA	-	Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).
Q12	-	Detected hydrocarbons in the diesel range do not have a distinct diesel pattern and may be due to heavily weathered diesel or possibly biogenic interference.
Q5	-	Results in the diesel organics range are primarily due to overlap from a gasoline range product.
R4	-	Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
ZX	-	Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.

Curtis D. Armstrong For Kate Haney, Project Manager

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 425-420-9200 FAX 420-9210 [X]
11922 E. First Ave, Spokane, WA 99206-5302 509-924-9200 FAX 924-9290 [ ]
9405 SW Nimbus Ave,Beaverton, OR 97008-7145 503-906-9200 FAX 906-9210 [ ]
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119 907-563-9200 FAX 563-9210 [ ]

CHAIN OF CUSTODY REPORT

Work Order #: BRJ0146

CLIENT: WA Dept of Ecology

REPORT TO: EA Engineering - Jil Frain
ADDRESS: 12011 NE 1st street, Suite 100
Bellevue, WA 98005
PHONE: 425-451-7400 FAX: 425-451-7800

INVOICE TO: WA Dept of Ecology
Attn: Roger Nye
3190 160th Ave SE
Bellevue, WA 98008

P.O. NUMBER: Field Order # PF 3225441

PROJECT NAME: Tiki Carwash

PROJECT NUMBER: 61994.01

SAMPLED BY: AJ

TURNAROUND REQUEST in Business Days *

Organic & Inorganic Analyses: 10 STD. | 7 | 5 | 4 | 3 | 2 | 1 | <1

Petroleum Hydrocarbon Analyses: [X] STD. | 4 | 3 | 2 | 1 | <1

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

	CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PRESERVATIVE: HCl	PRESERVATIVE: HCl	REQUESTED ANALYSES: NWTPH-Gx BTEX	REQUESTED ANALYSES: NWTPH-Dx	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID
1	TK-TB1	10/8/08 —			X					-01
2	TK-MW29	0945			X	X				-02
3	TK-MW33	1125			X	X				-03
4	TK-MW35	1205			X	X				-04
5	TK-MW35D	1210			X	X				-05
6	TK-MW30	1245			X	X				-06
7										
8										
9										
10										

RELEASED BY: Alex Johnson DATE: 9 Oct 08
PRINT NAME: FIRM: EA TIME: 1316

RECEIVED BY: [signature] DATE: 10/9/08
PRINT NAME: Francisco [illegible], Jr FIRM: TA-SEA TIME: 1315

RELEASED BY: DATE:
PRINT NAME: FIRM: TIME:

RECEIVED BY: DATE:
PRINT NAME: FIRM: TIME:

ADDITIONAL REMARKS: Run on GC-6. use same scale as 4/29/08 sampling event. Provide chromatographs with analysis results, @Lab 1440 w/o

TEMP: 4.5 °C

PAGE 1 OF 1

TAL-1000(0408)

TAT: _____ *Paperwork to PM – Date:*_____ *Time:*_____ Non-Conformances?

Page Time & Initials:_____ Circle Y or N

(If Y, see other side)

TEST AMERICA SAMPLE RECEIPT CHECKLIST

Received By: (applies to temp at receipt)
Date: 10/9/08
Time: 1440
Initials: FL

Logged-in By:
Date: 10.09
Time: 1609
Initials: CW

Unpacked/Labeled By:
Date: 10.09
Time: 1820
Initials: CW

Cooler ID: 381, 319

Work Order No. BRJ0146
Client: EA Engineering, Science and Technology
Project: _____

Container Type:
X Cooler
___ Box
___ None/Other _____

COC Seals:
___ Ship Container
___ On Bottles
X None
_____ Sign By
_____ Date

Packing Material:
X Bubble Bags
___ Styrofoam
___ Foam Packs
___ None/Other _____

Refrigerant:
___ Gel Ice Pack _____
X Loose Ice _____
___ None/Other _____

Received Via: Bill# _____
___ Fed Ex
___ UPS
___ DHL
___ Senvoy
___ GS
___ Client
X TA Courier
___ Mid Valley
___ TDP
___ Other _____

Cooler Temperature (IR): ____°C Plastic Glass (circle one) (Frozen filters, Tedlars and aqueous Metals exempt)

Temperature Blank? 4.5, 1.6 4.5 °C or NA

Trip Blank? (Y) or N or NA

BP, OPLC,ARCO-Temperature monitoring every 15 minutes:
(initial/date/time):_____
Comments:_____

Sample Containers:		ID
Intact?	(Y) or N	
Provided by TA?	(Y) or N	
Correct Type?	(Y) or N	
#Containers match COC?	(Y) or N	
IDs/time/date match COC?	(Y) or N	
Hold Times in hold?	(Y) or N	

		ID
Metals Preserved?	Y or N or (NA)	
Client QAPP Preserved?	Y or N or (NA)	
Adequate Volume? (for tests requested)	(Y) or N	
Water VOAs: Headspace?	Y or (N) or NA	

Comments:_____

PROJECT MANAGEMENT

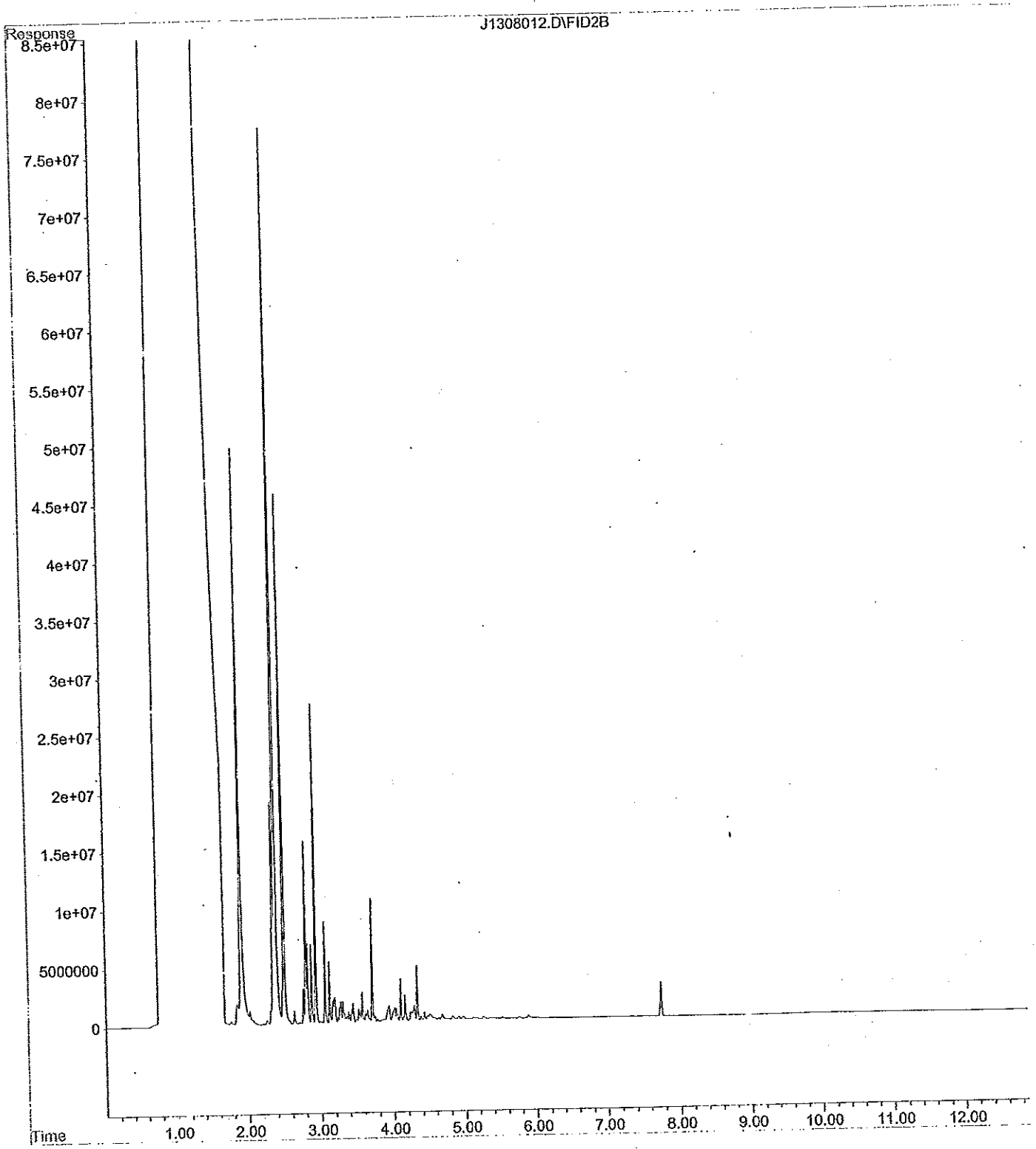
Is the Chain of Custody complete? Y or N if N, circle the items that were incomplete

Comments,Problems_____

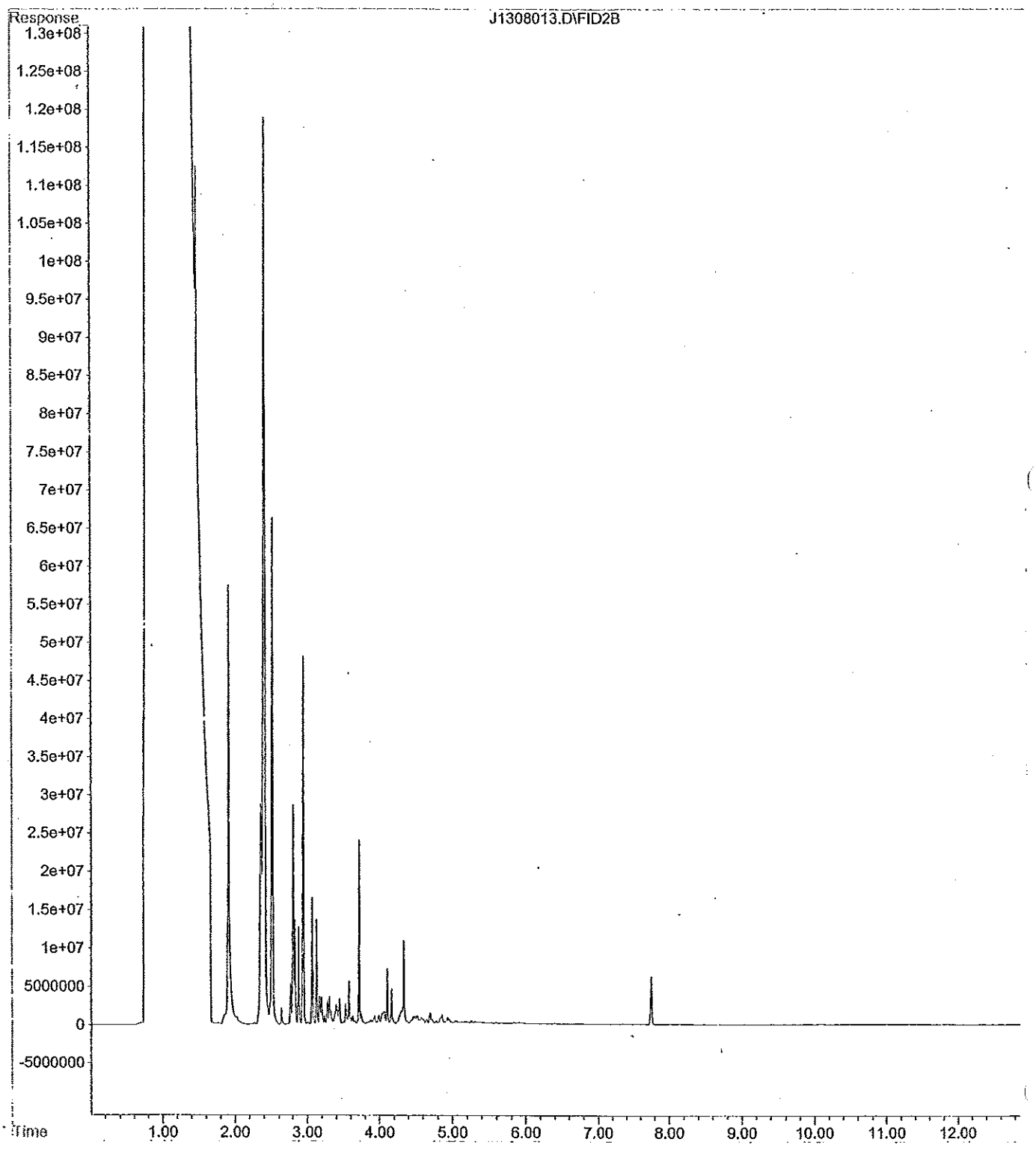
Total access set up? Y or N
Has client been contacted regarding non-conformances? Y or N If Y, ____/____ Date Time

PM Initials: _____ Date: _____ Time: _____

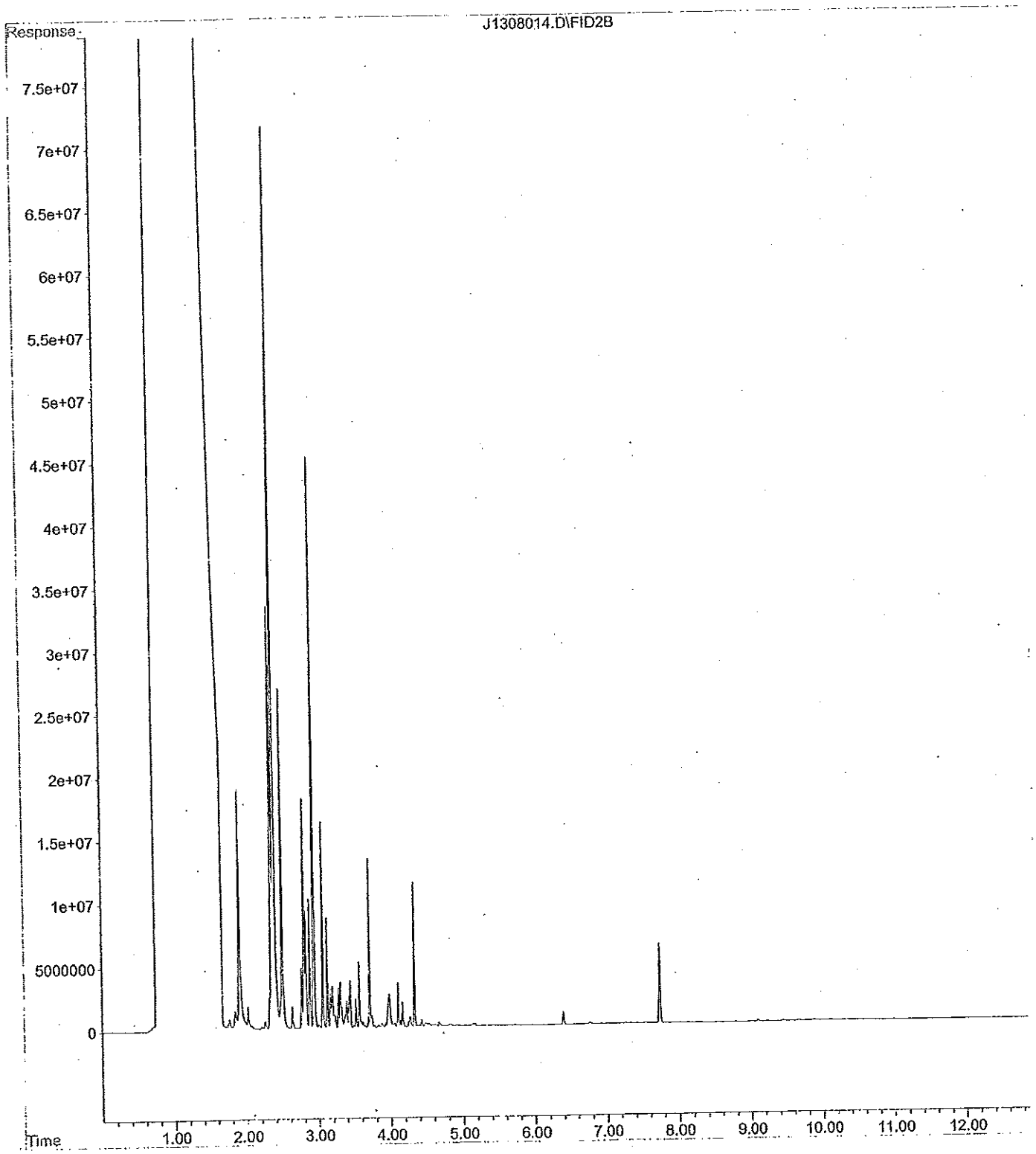
File : K:\3\DATA\J1308A.SEC\J1308012.D
Operator :
Acquired : 13 Oct 2008 9:43 pm using AcqMethod TPHI1808.M
Instrument : GC9
Sample Name: BRJ0146-02
Misc Info : 10x NWTPH-Dx H20
Vial Number: 63



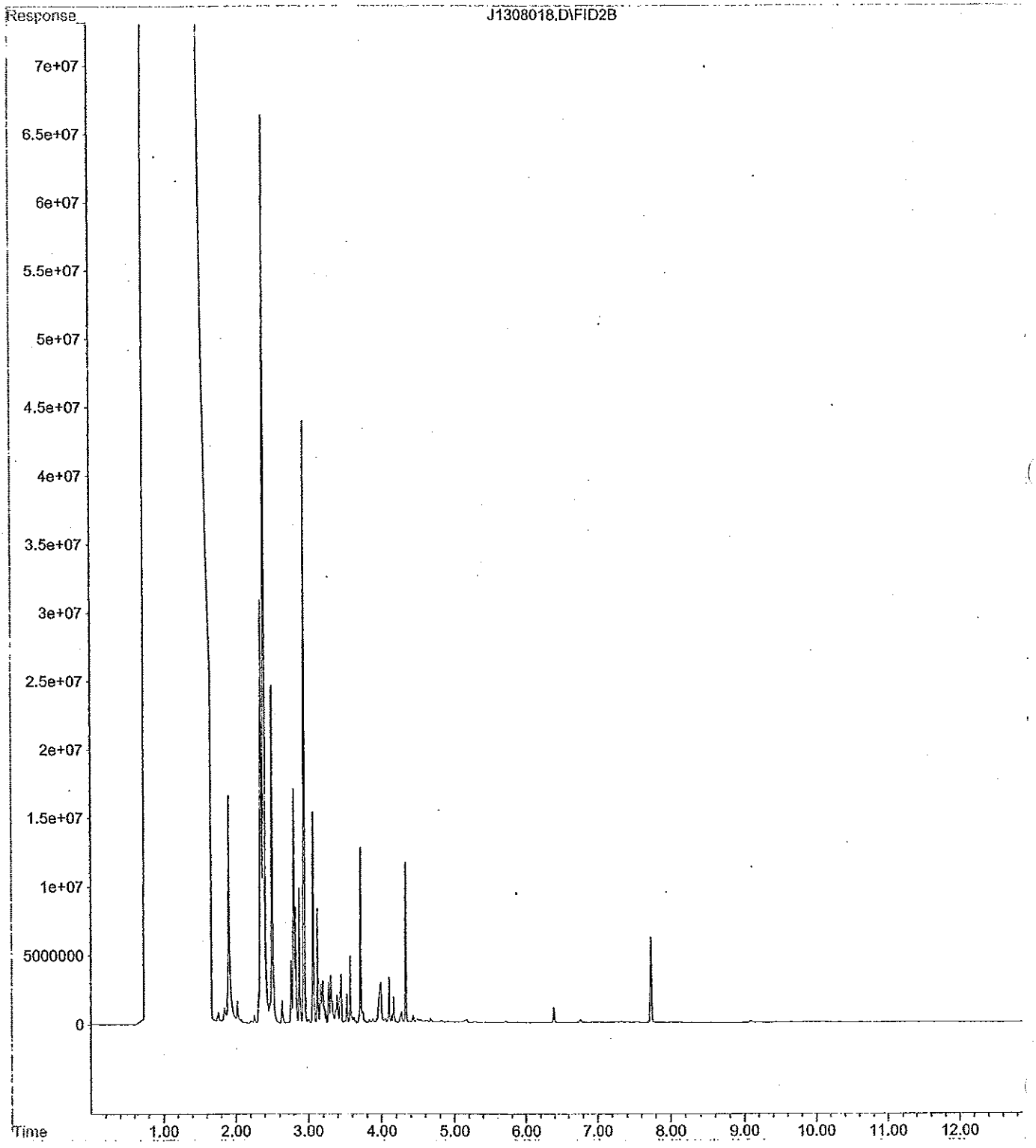
File : K:\3\DATA\J1308A.SEC\J1308013.D
Operator ;
Acquired : 13 Oct 2008 10:06 pm using AcqMethod TPHI1808.M
Instrument : GC9
Sample Name: BRJ0146-03
Misc Info : 5x NWTPH-Dx H20
Vial Number: 64



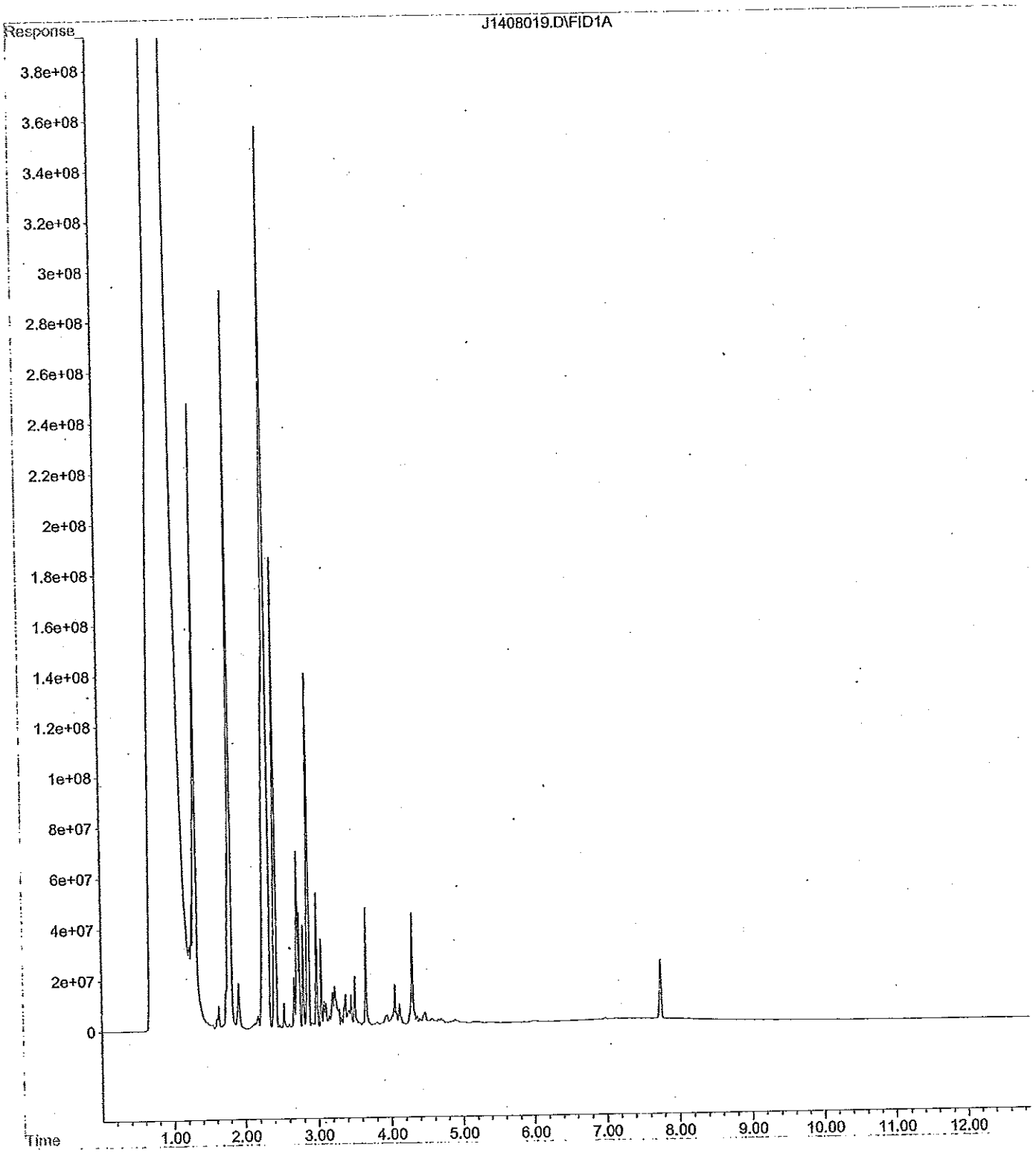
File : K:\3\DATA\J1308A.SEC\J1308014.D
Operator :
Acquired : 13 Oct 2008 10:29 pm using AcqMethod TPHI1808.M
Instrument : GC9
Sample Name: BRJ0146-04
Misc Info : 5x NWTPH-Dx H20
Vial Number: 65



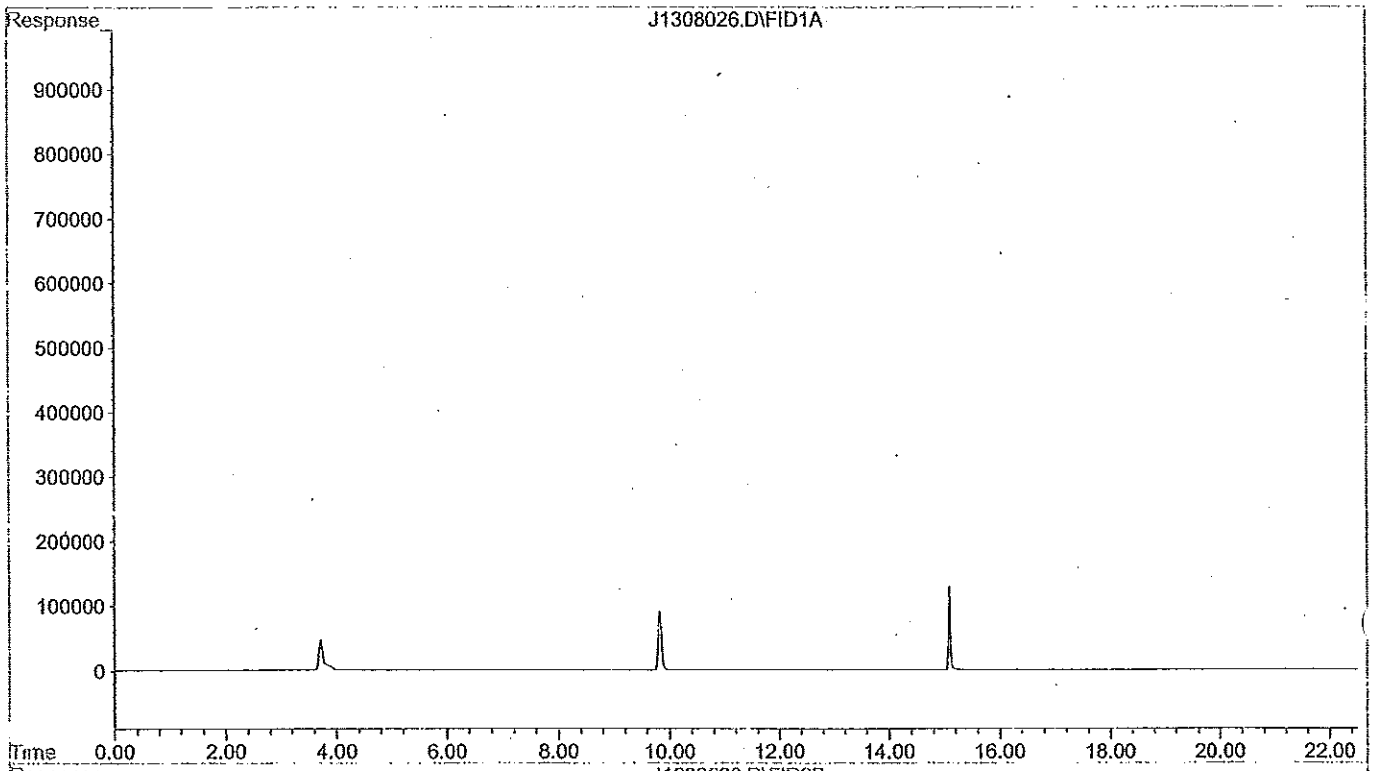
File : K:\3\DATA\J1308A.SEC\J1308018.D
Operator :
Acquired : 14 Oct 2008 12:02 am using AcqMethod TPHI1808.M
Instrument : GC9
Sample Name: BRJ0146-05
Misc Info : 5x NWTPH-Dx H20
Vial Number: 66

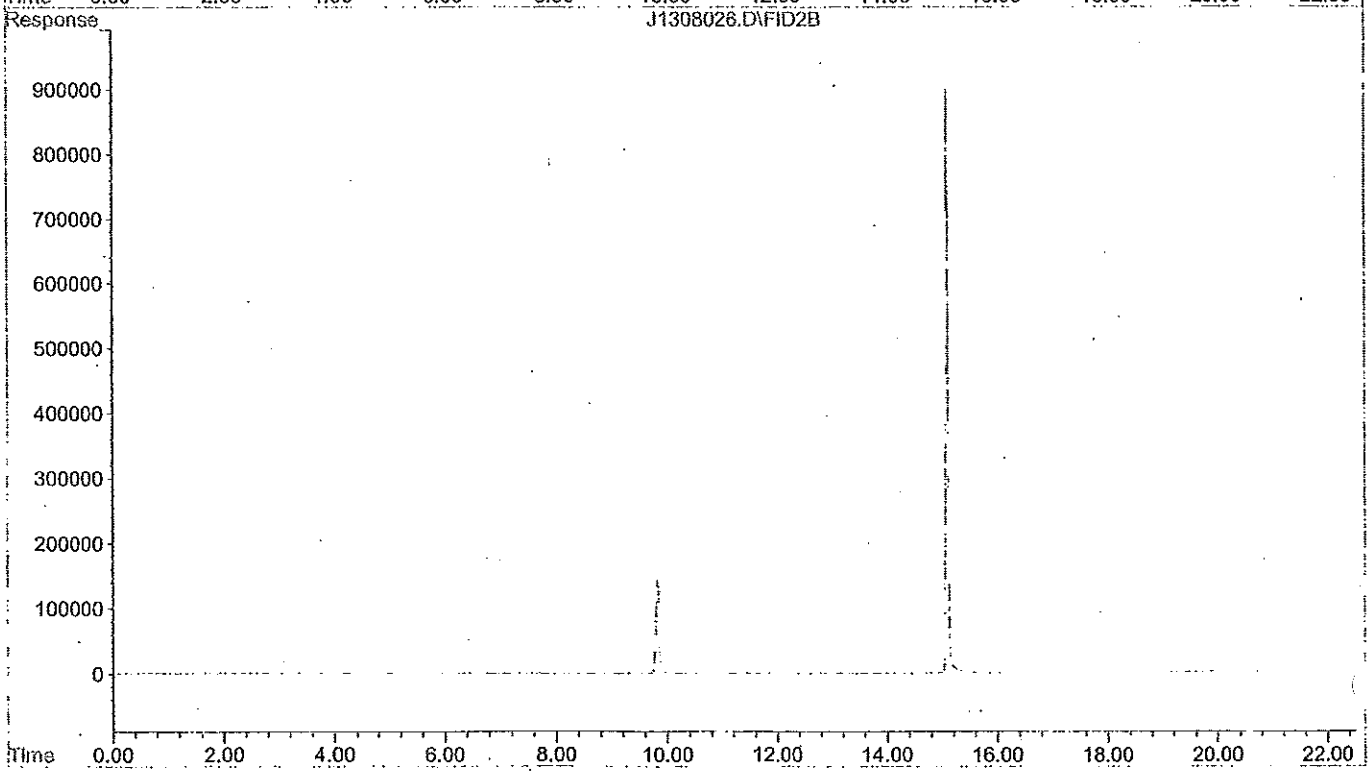


File : K:\3\DATA\J1408\J1408019.D
Operator : WAS
Acquired : 14 Oct 2008 4:56 pm using AcqMethod TPHI1808.M
Instrument : GC9
Sample Name: brj0146-06re1
Misc Info : 1x NWTPH-Dx h2o (D,L)
Vial Number: 19

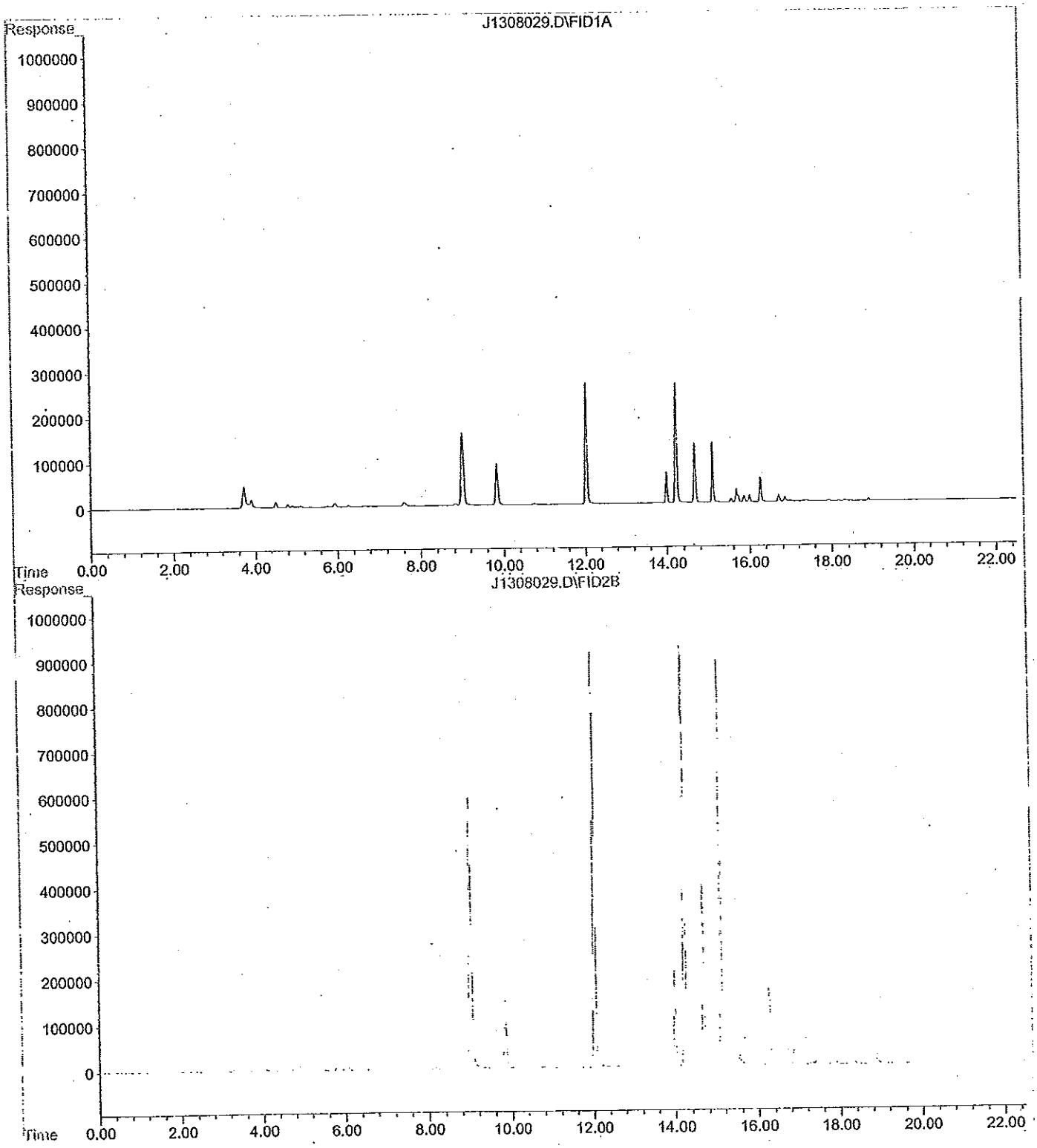


File : O:\HPCHEM\1\DATA\J1308\J1308026.D
Operator : VM
Acquired : 14 Oct 2008 00:48 using AcqMethod 6I1508C.M
Instrument : GC-6
Sample Name: BRJ0146-01re1
Misc Info : 1x 5ML
Vial Number: 21

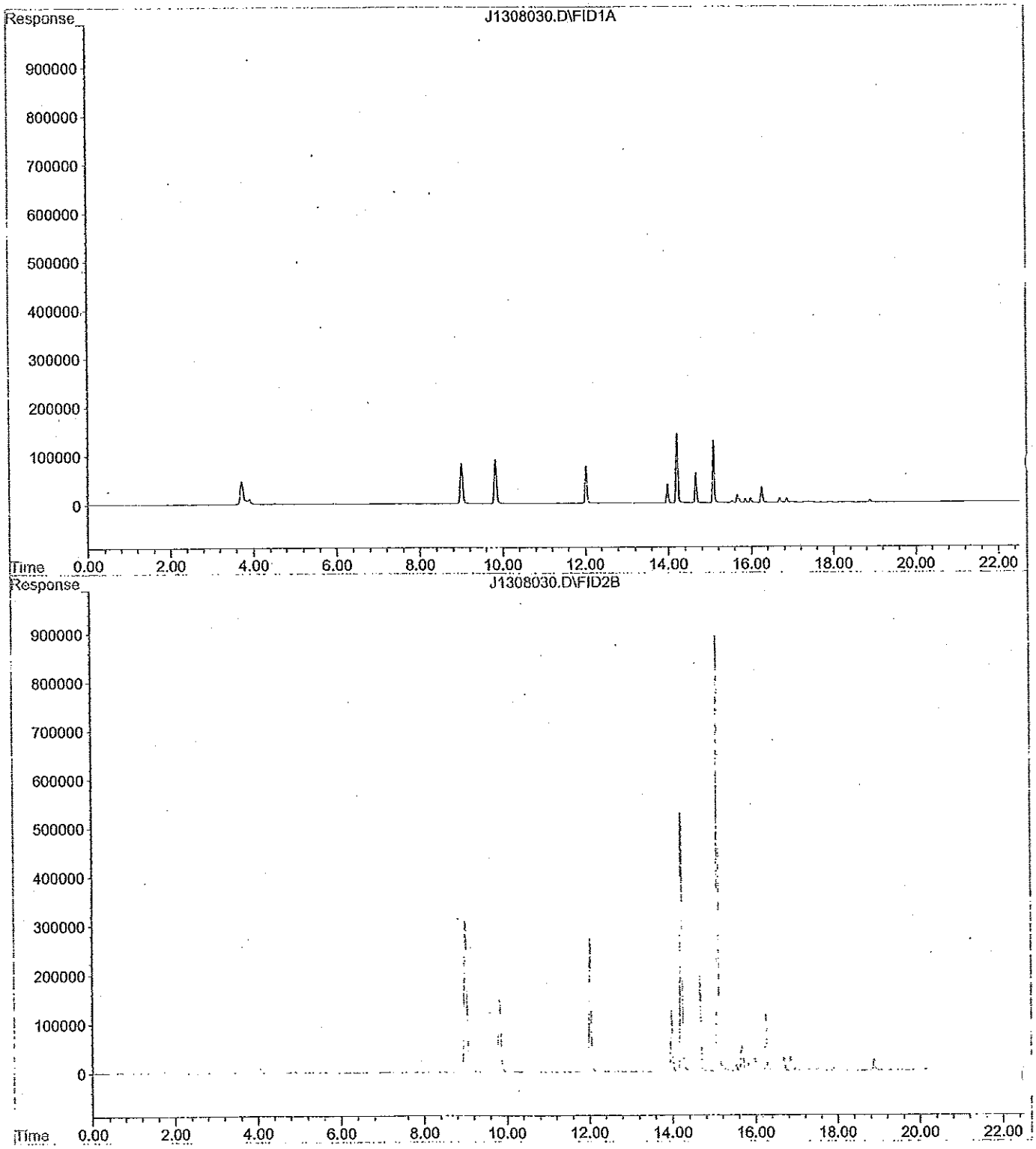




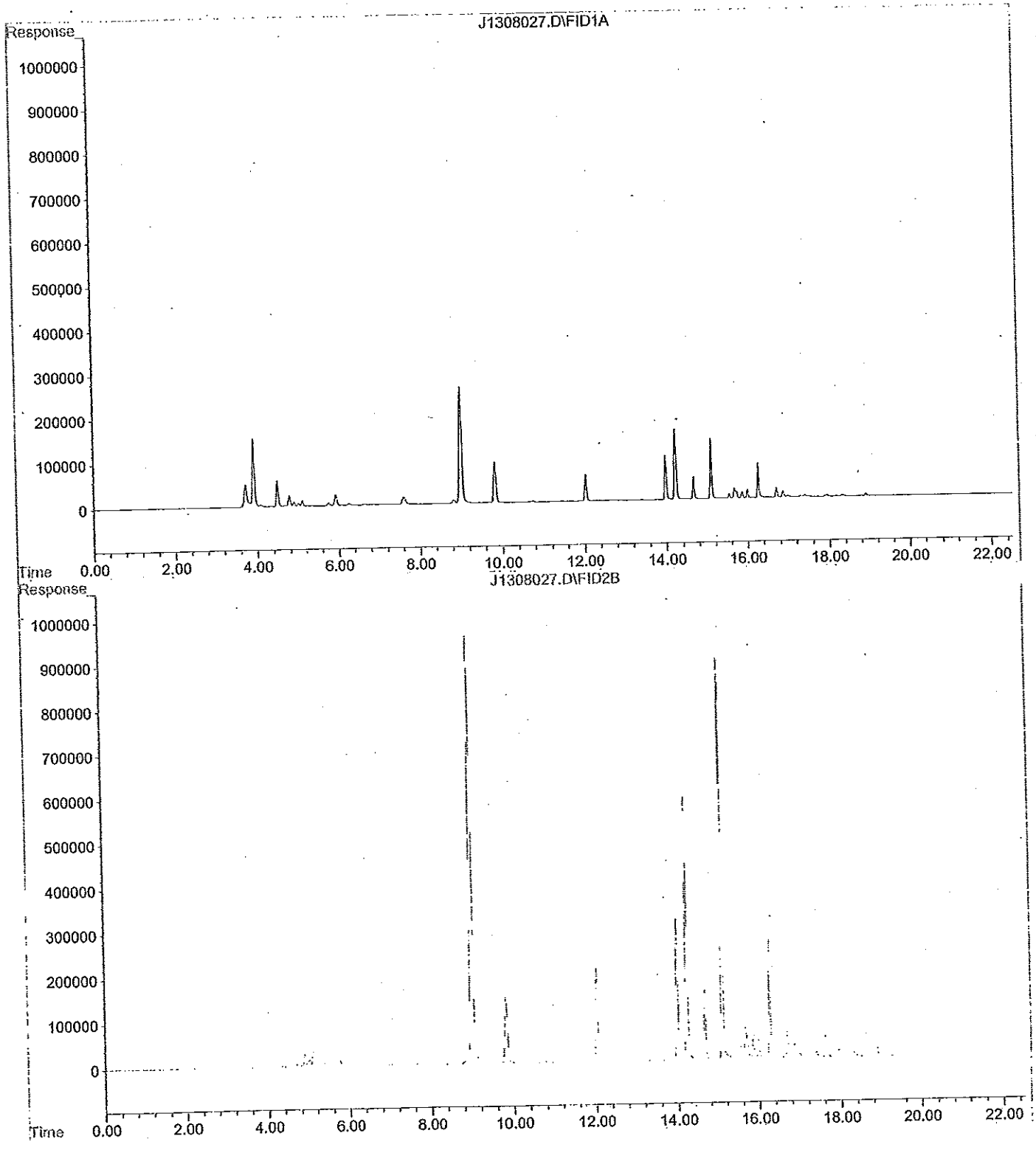
File : O:\HPCHEM\1\DATA\J1308\J1308029.D
Operator : VM
Acquired : 14 Oct 2008 2:25 using AcqMethod 6I1508C.M
Instrument : GC-6
Sample Name: BRJ0146-02re1
Misc Info : 200x 25uL
Vial Number: 24



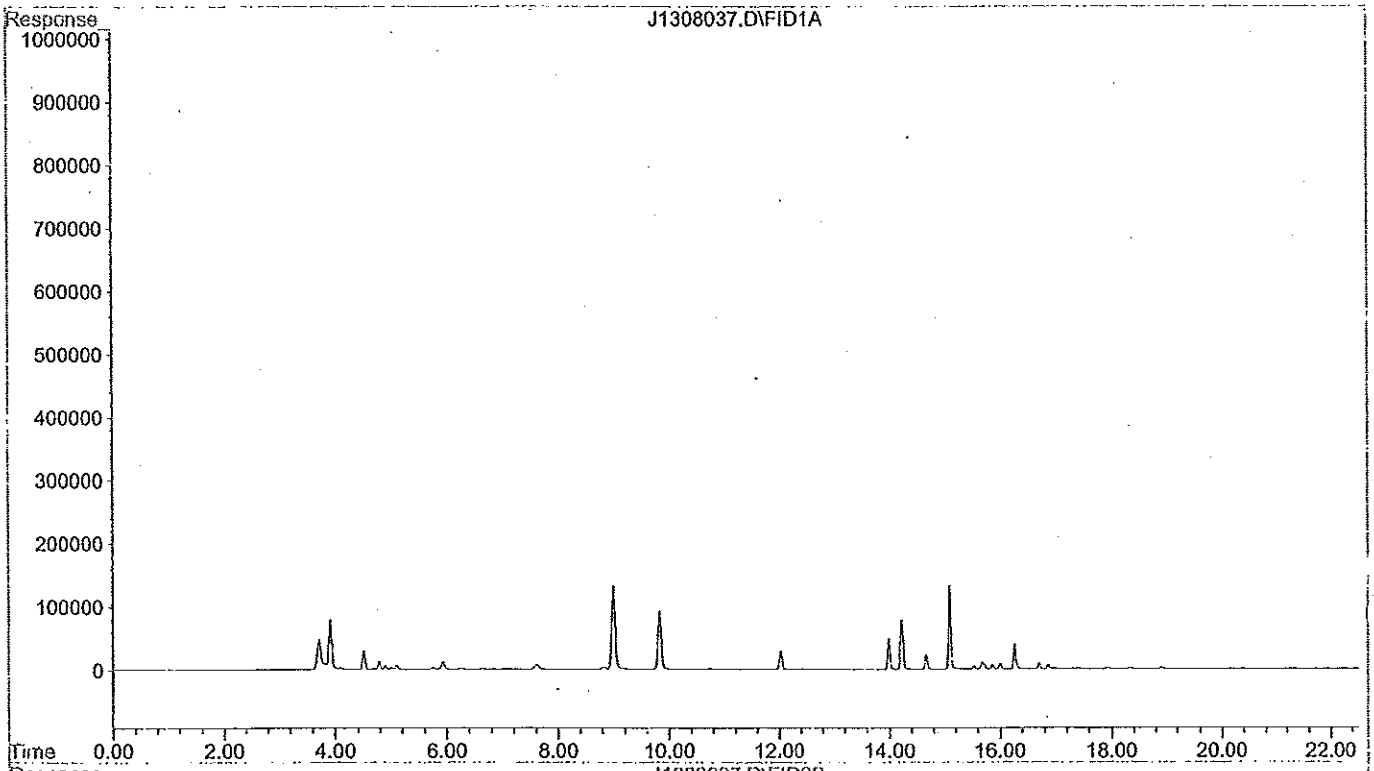
File : O:\HPCHEM\1\DATA\J1308\J1308030.D
Operator : VM
Acquired : 14 Oct 2008 2:57 using AcqMethod 6I1508C.M
Instrument : GC-6
Sample Name: BRJ0146-03re1
Misc Info : 200x 25uL
Vial Number: 25

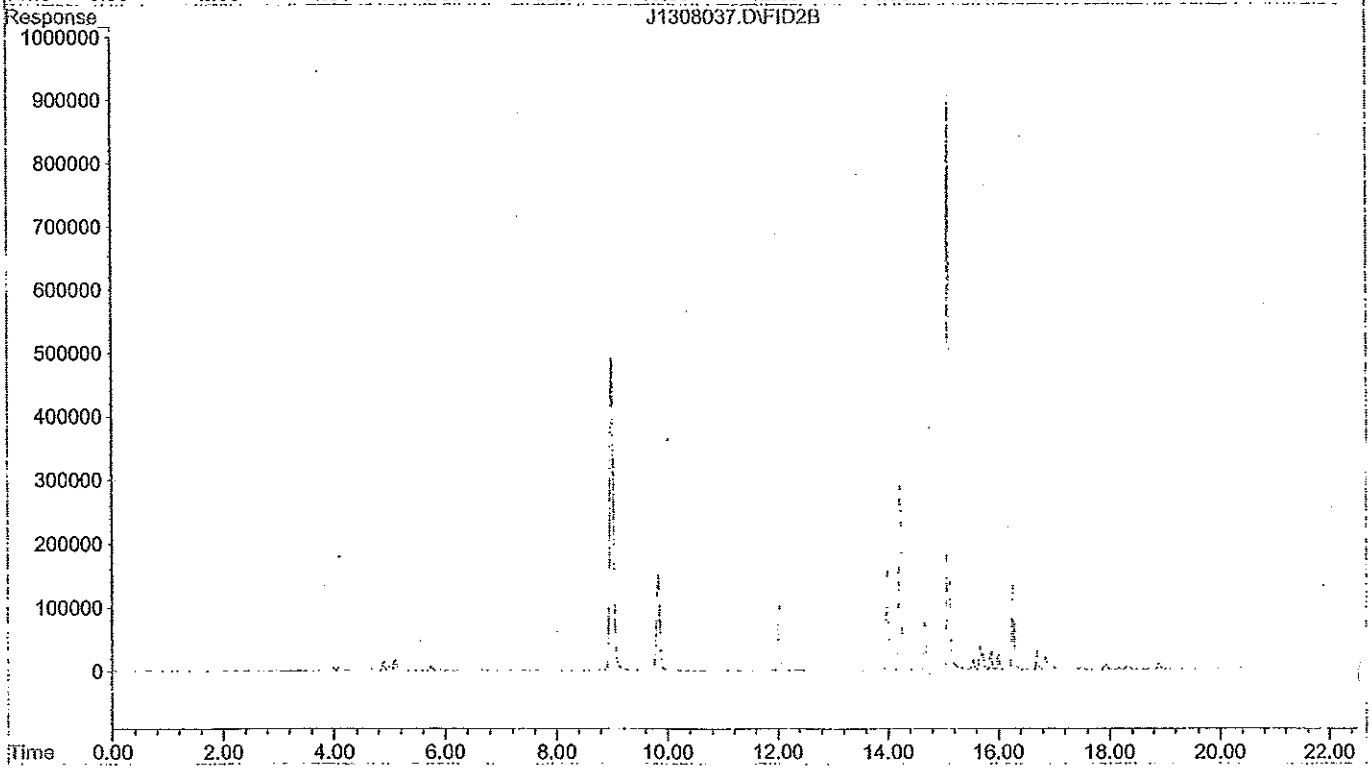


File : O:\HPCHEM\1\DATA\J1308\J1308027.D
Operator : VM
Acquired : 14 Oct 2008 1:20 using AcqMethod 6I1508C.M
Instrument : GC-6
Sample Name: BRJ0146-04re1
Misc Info : 100x 50uL
Vial Number: 22

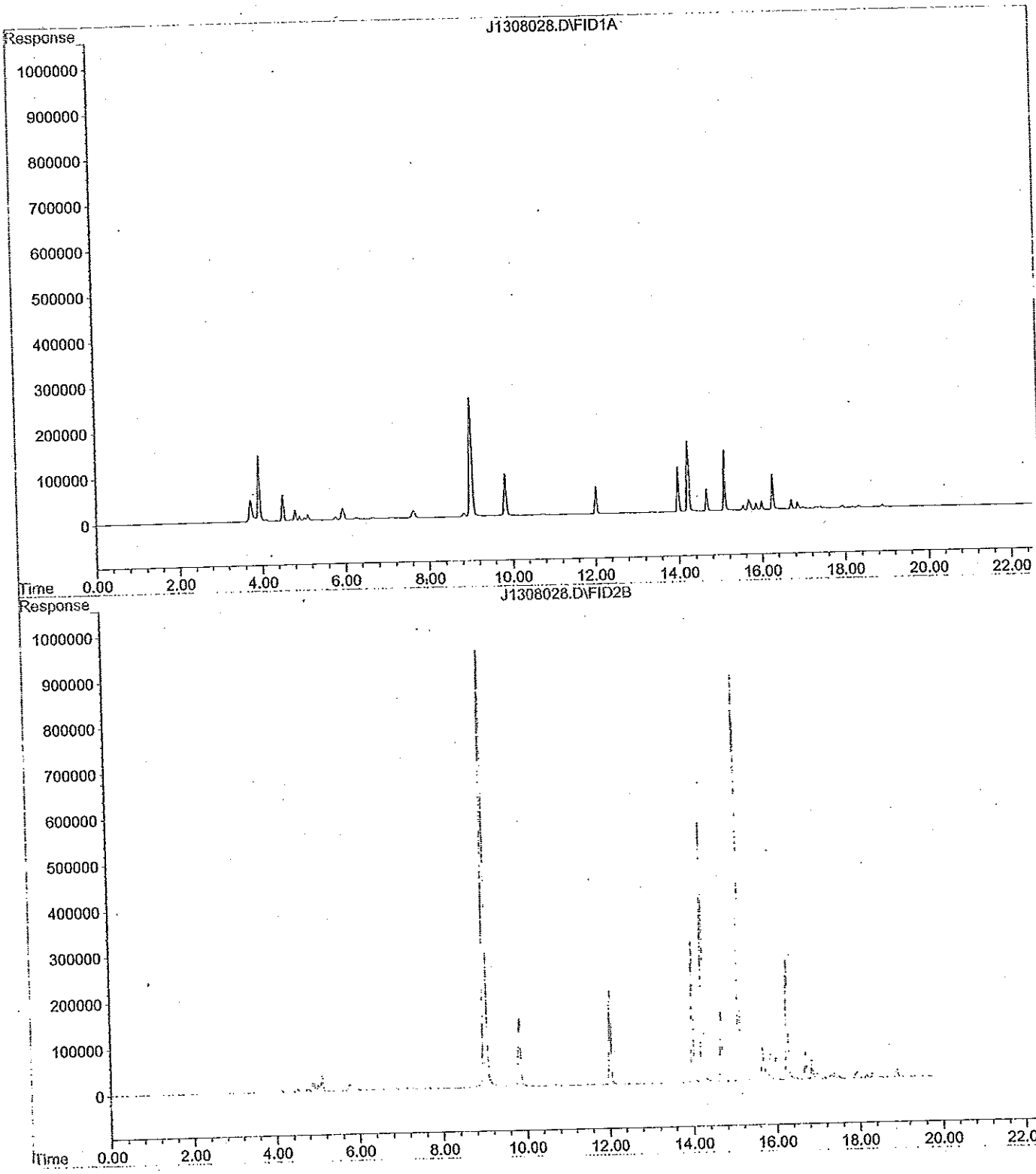


File : O:\HPCHEM\1\DATA\J1308\J1308037.D
Operator : VM
Acquired : 14 Oct 2008 11:27 using AcqMethod 6I1508C.M
Instrument : GC-6
Sample Name: BRJ0146-04RE2
Misc Info : 200x 25UL
Vial Number: 4

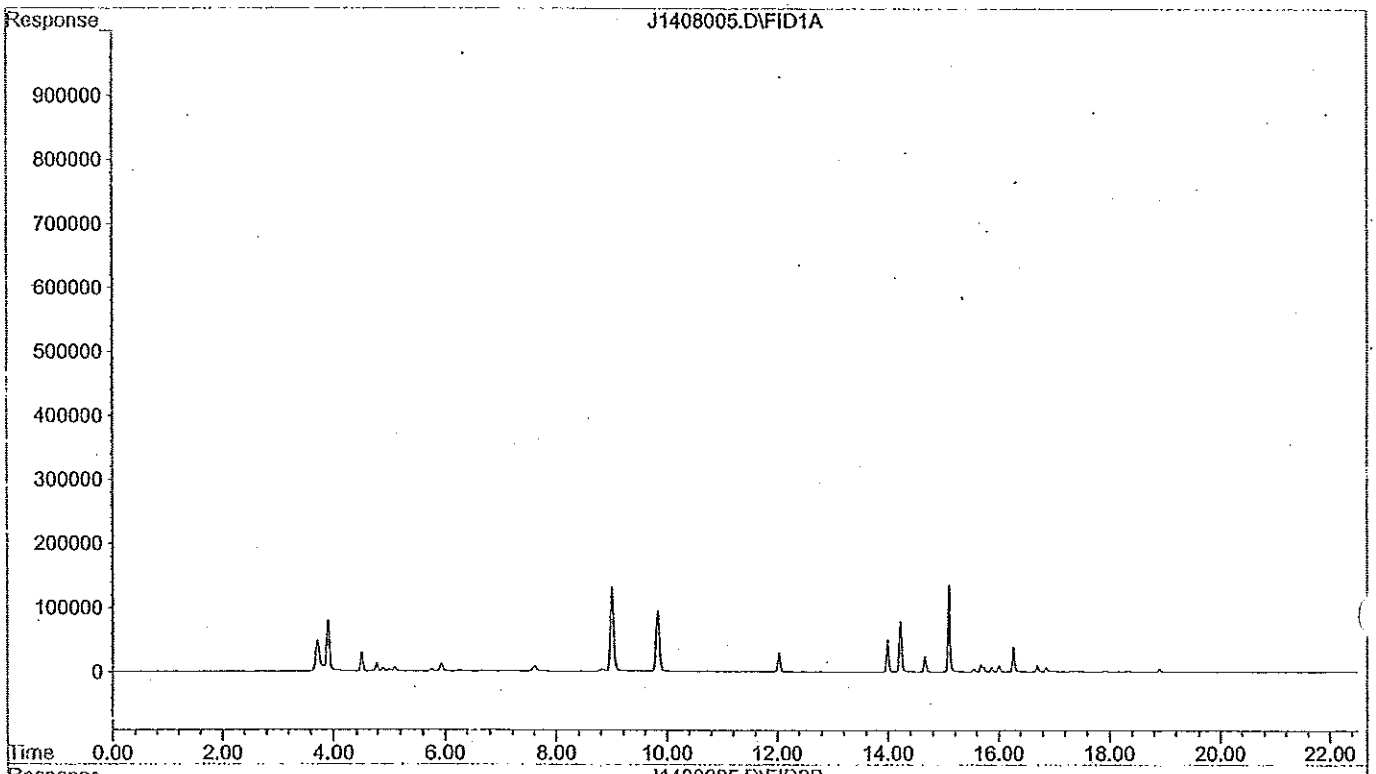


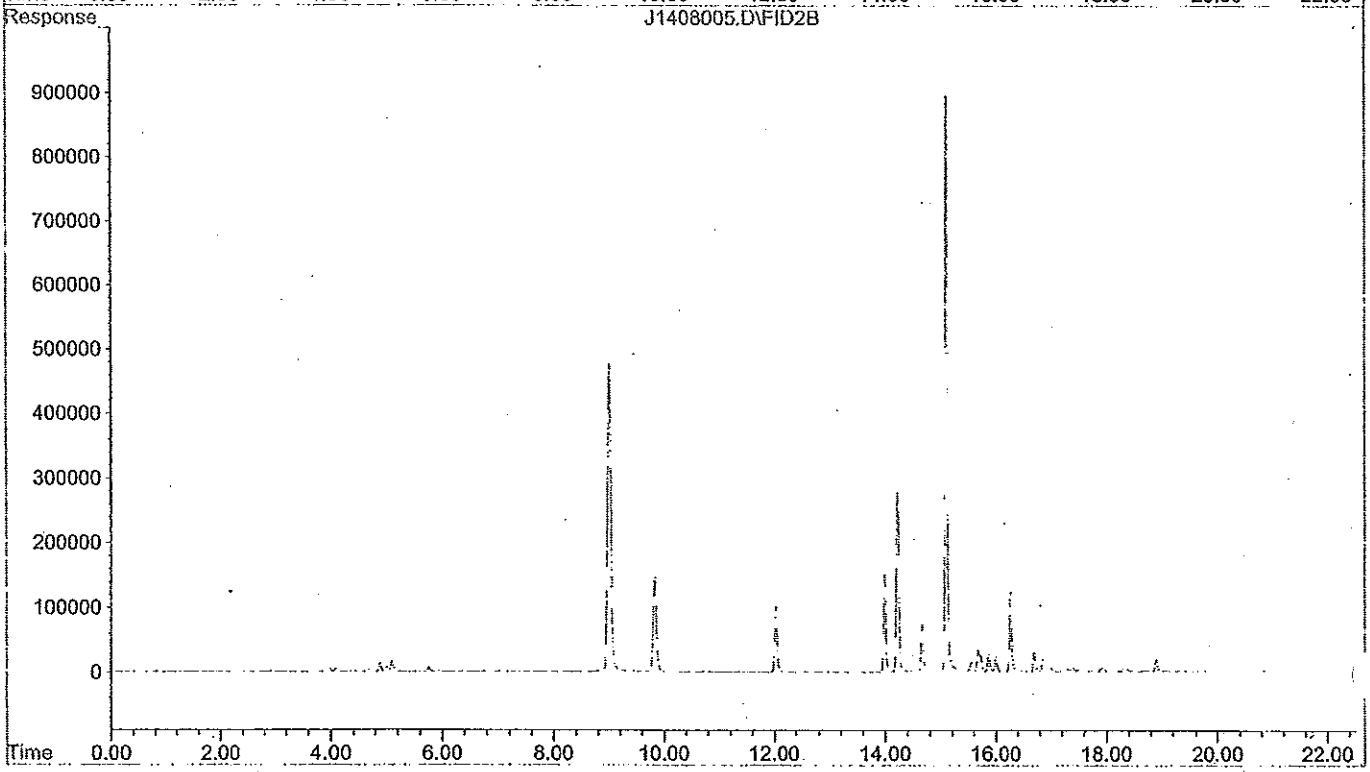


File : O:\HPCHEM\1\DATA\J1308\J1308028.D
Operator : VM
Acquired : 14 Oct 2008 1:53 using AcqMethod 6I1508C.M
Instrument : GC-6
Sample Name: BRJ0146-05re1
Misc Info : 100x 50uL
Vial Number: 23

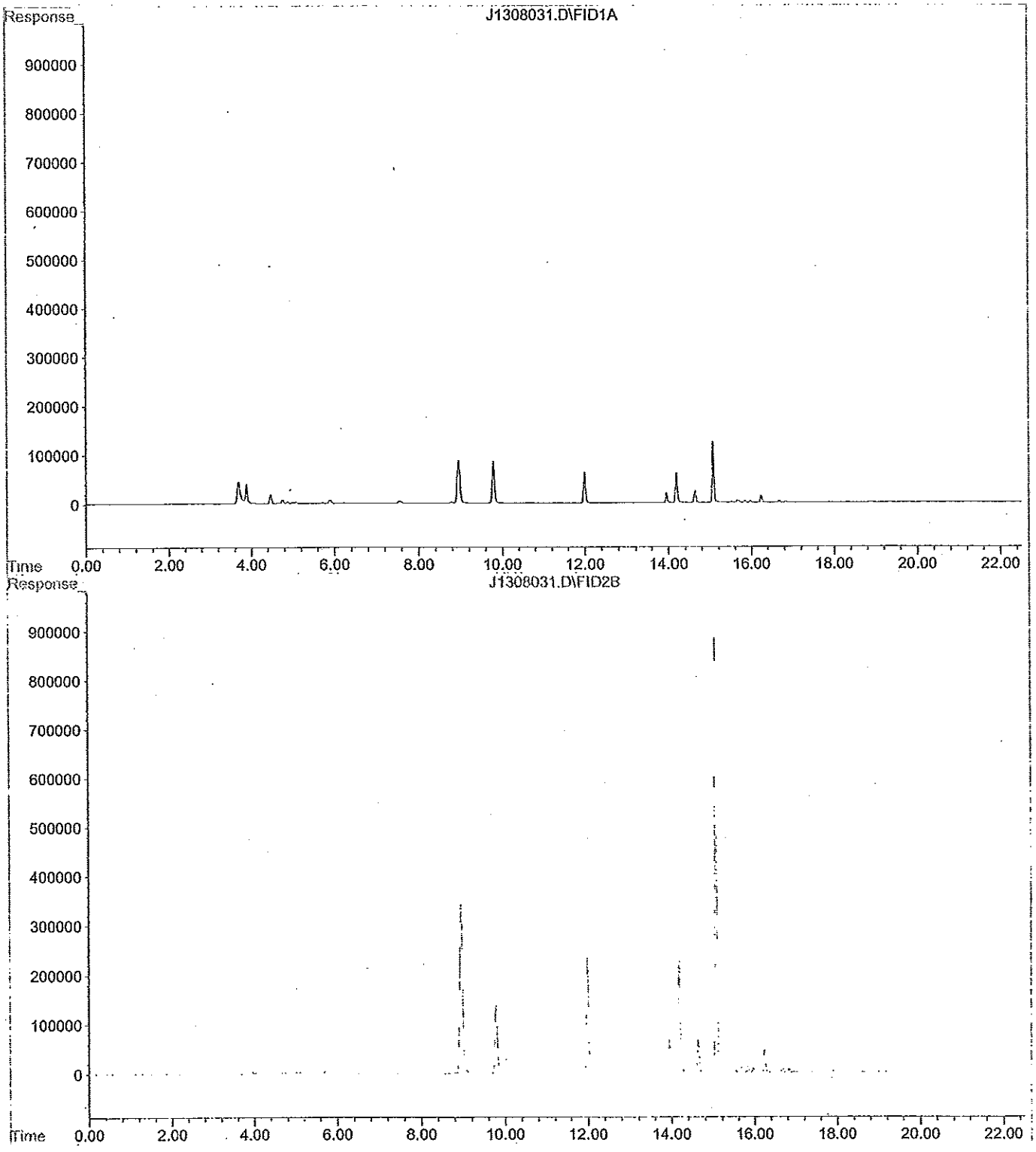


File : O:\HPCHEM\1\DATA\J1408\J1408005.D
Operator : MAT
Acquired : 14 Oct 2008 17:20 using AcqMethod 6I1508C.M
Instrument : GC-6
Sample Name: BRJ0146-05re2
Misc Info : 200x 25uL
Vial Number: 5





File : O:\HPCHEM\1\DATA\J1308\J1308031.D
Operator : VM
Acquired : 14 Oct 2008 3:30 using AcqMethod 6I1508C.M
Instrument : GC-6
Sample Name: BRJ0146-06re1
Misc Info : 500x 10uL
Vial Number: 26



APPENDIX C

ECOVAC FINAL REPORT

ECOVAC SERVICES
The World Leader in Mobile Dual-Phase/Multi-Phase Extraction

April 1, 2008

Ms. Jil Frain
EA Engineering, Science, and Technology, Inc.
12011 Bellevue-Redmond Road, Suite 200
Bellevue, Washington 98005
jfrain@eaest.com

Subject: **Enhanced Fluid Recovery (EFR®) Results**
Event No. 1
Tiki Car Wash
11909 NE 8th Street
Bellevue, Washington

Dear Ms. Frain:

Please find attached the data summary for the initial EFR® event conducted at the subject site on March 20, 2008. The following summarizes the results of this EFR® event.

SUMMARY OF RESULTS

Separate phase hydrocarbons (SPH) were not detected prior to, or upon completion of, this EFR® event. This EFR® event was performed for a duration of eight hours at five extraction points, consisting of monitor wells MW-29, MW-31, MW-32, MW-33, and MW-35. The initial six hours of extraction were conducted at MW-29, MW-31, MW-33, and MW-35. Individual, fifteen minute well tests were conducted at these wells during the ensuing one hour. The final hour of the event was conducted at MW-32. A calculated total of 103 pounds of petroleum hydrocarbons (approximately 17 equivalent gallons of gasoline) was removed during this EFR® event.

Vapor-phase hydrocarbon removal rates ranged from 0.6 to 45 pounds per hour. Removal rates changed throughout the event depending on the extraction array utilized, as shown below in order from highest to lowest removal rates:

Extraction Well Array	Removal Rate(s)
MW-32	26 to 45 pounds per hour
MW-29,31,33,35	9.0 to 19 pounds per hour
MW-31	6.8 pounds per hour
MW-29	2.7 pounds per hour
MW-33	0.6 pounds per hour
MW-35	0.6 pounds per hour

105 Weatherstone Drive, Suite 610 – Woodstock, Georgia 30188
(770) 592-1001 - Fax (770) 592-1801
www.ecovacservices.com

Offgas concentrations during this event ranged from 1,600 to 64,000 parts per million (ppm). Air flow rates to the atmosphere ranged from 12 to 98 cubic feet per minute (CFM). The range of vacuum readings recorded at the extraction wells during this EFR® event are detailed in the EFR® Field Data Sheet and summarized below:

Extraction Well Location	Vacuum Readings
MW-29	20 to 23 inches of mercury
MW-31	19 to 22 inches of mercury
MW-32	17 inches of mercury
MW-33	19 to 20 inches of mercury
MW-35	21 to 25 inches of mercury

Differential pressures were recorded at adjacent monitor wells to assess the vacuum influence induced by EFR® in the vadose zone. Low-level vacuum influence was detected at distances up to 70 feet from the extraction wells. The differential pressure data are detailed in the attached table and summarized below:

Monitor Well	Maximum Vacuum	Nearest Extraction Well (Approx. Distance)
MW-31	-0.09 inches of water	MW-29 (45 feet)
MW-32	-0.09 inches of water	MW-33 (50 feet)
MW-33	-0.06 inches of water	MW-32 (50 feet)
MW-34	-0.05 inches of water	MW-32 (70 feet)
MW-30	0.00 inches of water	MW-31 (75 feet)

Groundwater levels were also recorded during the event to determine drawdown of the aquifer. Downward inflections of the water table were detected at distances up to 75 feet from the extraction wells. The groundwater drawdown data are detailed in the attached data table and summarized below:

Monitor Well	Maximum Drawdown	Nearest Extraction Well (Approx. Distance)
MW-32	-0.15 feet	MW-33 (50 feet)
MW-34	-0.01 feet	MW-32 (70 feet)
MW-30	-0.11 feet	MW-31 (75 feet)

Approximately 809 gallons of liquid (including approximately 30 gallons of purge fluid evacuated from an onsite 55-gallon drum) were recovered during this EFR® event and transported to CRS's treatment facility (Tacoma, Washington) for disposal. SPH was not detected in the vacuum truck tank upon completion of the event.

Thank you for this opportunity to team with EA Engineering in serving the environmental needs of the Department of Ecology. We look forward to working with you again in the future to provide innovative and cost effective environmental solutions at this and other sites.

Sincerely,

EcoVac Services

Mark Patterson

EFR® FIELD DATA SHEET

Client: EA Engineering	Facility Name: Tiki Car Wash	Event #: 1
Facility Address: 11909 NE 8th Street - Bellevue, Washington	Technician: Mark Patterson	Date: 3/20/08

Extraction Well(s)	Time hh:mm	Extraction Well-head Vacuum (in. Hg)									Vacuum Truck Exhaust				
Start Time:	8:00	Inlet	MW-29	MW-31	MW-32	MW-33	MW-35				Concentration PPM	Offgas Velocity FT/MIN	Flow Rate CFM	Removal Rate LBS/HR	Interval Removal LBS
MW-29,31;	8:15	21	21	19	-	19	23				16,000	2,000	98	19	4.7
MW-33,35	8:30	22	20	20	-	20	22				18,000	1,750	86	18	4.6
"	9:00	23	20	20	-	20	22				16,000	1,600	78	15	7.4
"	9:30	23	20	20	-	20	22				15,000	1,450	71	13	6.3
"	10:00	23	20	20	-	19	22				14,000	1,400	69	11	5.7
"	11:00	23	20	20	-	19	22				13,000	1,400	69	11	11
"	12:00	23	20	20	-	19	21				12,000	1,450	71	10	10
"	13:00	23	20	20	-	19	21				12,000	1,400	69	9.8	9.8
"	14:00	23	20	20	-	19	21				11,000	1,400	69	9.0	9.0
MW-31	14:15	24	-	22	-	-	-				26,000	450	22	6.8	1.7
MW-33	14:30	24	-	-	-	19	-				1,600	600	29	0.6	0.1
MW-35	14:45	26	-	-	-	-	25				4,000	250	12	0.6	0.1
MW-29	15:00	25	23	-	-	-	-				9,400	500	25	2.7	0.7
MW-32	15:30	23	-	-	17	-	-				64,000	1,200	59	45	11
*note	15:45	23	-	-	17	-	-				50,000	1,100	54	32	8.0
"	16:15	23	-	-	17	-	-				40,000	1,100	54	26	13

Well Gauging Data:			Before EFR® Event			After EFR® Event			Corr. DTW
Well No.	Diam.	TD (ft)	DTS (ft)	DTW (ft)	SPH (ft)	DTS (ft)	DTW (ft)	SPH (ft)	Change (ft)
MW-29	2"	13.62	-	4.64	0.00	-	12.27	0.00	-7.63
MW-30	2"	13.30	-	4.40	0.00	-	4.51	0.00	-0.11
MW-31	4"	13.56	-	5.65	0.00	-	12.88	0.00	-7.23
MW-32	4"	13.28	-	5.65	0.00	-	12.42	0.00	-6.77
MW-33	4"	13.19	-	5.35	0.00	-	13.01	0.00	-7.66
MW-34	4"	13.73	-	6.37	0.00	-	6.38	0.00	-0.01
MW-35	4"	13.00	-	3.45	0.00	-	12.34	0.00	-8.89

Vacuum Truck Information	
Subcontractor:	AllVac
Truck Operator:	J. DeLaRosa
Truck No.:	9
Vacuum Pumps:	Becker
Pump Type:	LC-44
Tank Capacity (gal.):	3000
Stack I.D. (inches)	3.0

Well ID	Breather Port	Stinger Depth
MW-29	0(closed)	13 feet
MW-31	0(closed)	13 feet
MW-32	0(closed)	13 feet
MW-33	0(closed)	13 feet
MW-35	0(closed)	12 feet

Recovery/Disposal Information		
Hydrocarbons Removed (vapor):	103	pounds
Hydrocarbons Removed (liquid):	0	gallons
Total Hydrocarbons Removed:	17	equiv. gal.
Molecular Weight Utilized:	75	g/mole
Disposal Facility:	CRS	
Manifest Number:		
Total Liquids Removed:	809**	gallons

ECOVAC SERVICES

www.ecovacservices.com

888-4ECOVAC

Time:	8:00 to 16:00
# Pumps:	1
RPMs:	900
Time:	
# Pumps:	
RPMs:	
Time:	
# Pumps:	
RPMs:	

* Moved vacuum truck to MW-32 from 15:00 to 15:15

** Includes approximately 30 gallons of purge fluids evacuated from an onsite 55-gallon drum.

Differential Pressure and Groundwater Drawdown Data Recorded During EFR®
Event #: 1 Date: 3/20/08
Facility Name: Tiki Car Wash
Facility Address: 11909 NE 8th Street - Bellevue, Washington

DIFFERENTIAL PRESSURE DATA

		Well Designation:				
		MW-31	MW-32	MW-33	MW-34	MW-30
Nearest Extraction Well:		MW-29	MW-33	MW-32	MW-32	MW-31
Approximate Distance:		45 feet	50 feet	50 feet	70 feet	75 feet
Time	Elapsed Time	Differential Pressure Readings (inches of water):				
9:00	1 hr.	-	-0.03	-	0.00	0.00
10:00	2 hrs.	-	-0.05	-	0.00	0.00
11:00	3 hrs.	-	-0.05	-	0.00	0.00
12:00	4 hrs.	-	-0.04	-	0.00	0.00
13:00	5 hrs.	-	-0.05	-	0.00	0.00
14:00	6 hrs.	-	-0.05	-	0.00	0.00
14:15	6.25 hrs.	-	0.00	-	0.00	0.00
14:30	6.5 hrs.	-	-0.09	-	0.00	0.00
14:45	6.75 hrs.	-	0.00	-	0.00	0.00
15:00	7 hrs.	-	0.00	-	0.00	0.00
15:30	7.5 hrs.	-0.09	-	-0.06	-0.03	-
15:45	7.75 hrs.	-0.06	-	-0.06	-0.05	-
Maximum Change:		-0.09	-0.09	-0.06	-0.05	0.00

GROUNDWATER DRAWDOWN DATA

		Well Designation:				
			MW-32		MW-34	MW-30
Nearest Extraction Well:			MW-33		MW-32	MW-31
Approximate Distance:			50 feet		70 feet	75 feet
Time	Elapsed Time	Depth to Liquid (feet below top of casing):				
Prior to EFR®			5.65		6.37	4.40
14:00	6 hrs.		5.78		6.38	4.50
15:00	7 hrs.		5.80		6.38	4.51
16:00	8 hrs.		-		6.38	4.51
Maximum Change:			-0.15		-0.01	-0.11