TASK 2 -FINAL REPORT

YAKIMA RAILROAD AREA REMEDIAL INVESTIGATION INTERIM ACTION SOIL REMOVAL/
GROUNDWATER INVESTIGATION
SOUTHGATE LAUNDRY
SOUTH THIRD AVENUE AND NOB HILL BLVD.
YAKIMA, WASHINGTON



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1.0 INTRODUCTION

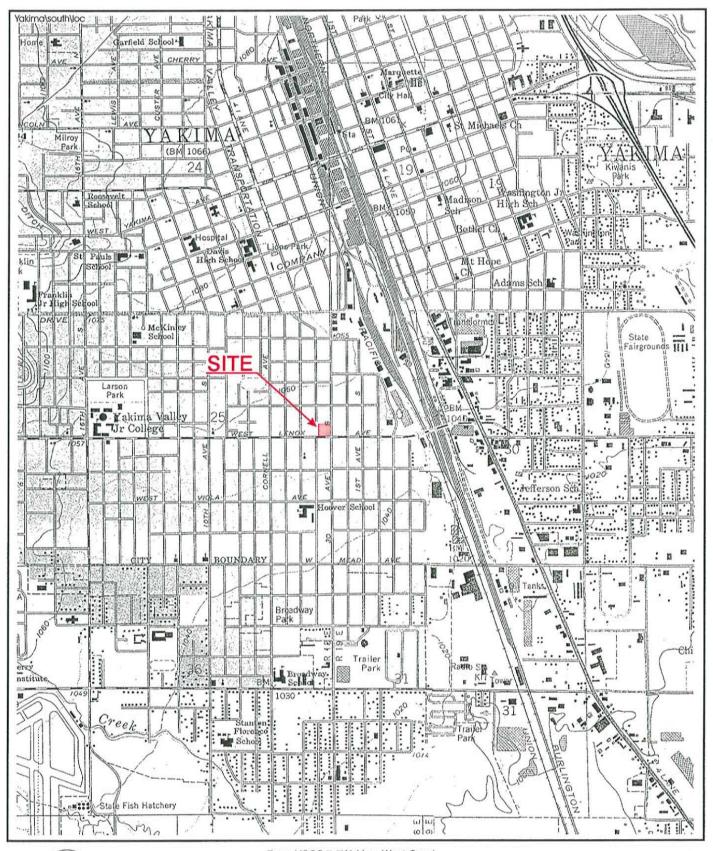
The Noel Corporation retained Maxim Technologies, Inc. (Maxim) to conduct investigation, remediation and monitoring activities at the Southgate Laundry facility in Yakima, Washington. The Southgate Laundry facility, owned by the Noel Corporation, is located within the Yakima Railroad Area (YRRA) which was established by the Washington State Department of Ecology (Ecology) in response to the discovery of tetrachloroethylene (PCE) in the groundwater beneath the area. Ecology has identified the Southgate Laundry facility as a Potential Liable Party (PLP) because of the presence of PCE at the site soil (Ecology, 1996). The Noel Corporation entered into an Agreed Order with Ecology to conduct Remedial Investigations (RI) at the site. Maxim personnel conducted these activities according to our proposal dated November 29, 1995 and requirements of Ecology's YRRA Remedial Investigation (RI) Work Plan, (Ecology, no date). A Draft Report summarizing these activities was submitted to Ecology in February 1997 (Maxim, 1997). This Final RI Report summarizes all activities conducted at the site and fulfills Ecology's requirements in accordance with the Agreed Order.

1.1 SITE DESCRIPTION

The Southgate Laundry facility is one of several businesses occupying the Southgate Shopping Center. The shopping center is located on the northwest corner at the intersection of South Third Avenue and West Nob Hill Boulevard in the southeast portion of Yakima, Washington (Figure 1). The Southgate Shopping Center is located approximately two miles west of the Yakima River and is situated on an irregularly shaped parcel approximately 4.5 acres in size. Eight businesses, a bank, and a paved parking lot are located within the parcel. The shopping center occupies most of the northern and western portions of the parcel and contains the following businesses: Some Bagels, Crawford and Company, Farmers Insurance, Northwest Rent-to-Own, Ring 4 Video, H & R Block, Southgate Cleaners and Self Service Laundry, and Wray's Thriftway grocery store (Figure 2). Several dry wells exist on the shopping center property to collect precipitation runoff from the buildings and parking lot. The site is served by city water, sewer, and other public utilities (Slagle, 1996).

Groundwater depths beneath the site range between approximately 21 and 35 ft below ground surface and groundwater generally flows to the east-southeast. Leakage from irrigation waters in the Yakima Valley influences depth and flow direction in the area. However, results of monitoring events conducted at the Southgate Laundry facility did not indicate definite effects of the irrigation system on groundwater in the area of the facility.

The facility is underlain by the Yakima Gravels which consist of unconsolidated silty and sandy gravel mixtures (approximately 50% boulders, cobbles and pebbles and 50% fines). The soils are classified as GW, GM and SM in the Unified Soil Classification System (USCS). Basalt boulders, cobbles and pebbles dominate the gravel fraction. The color of the gravels is mostly brown to black.

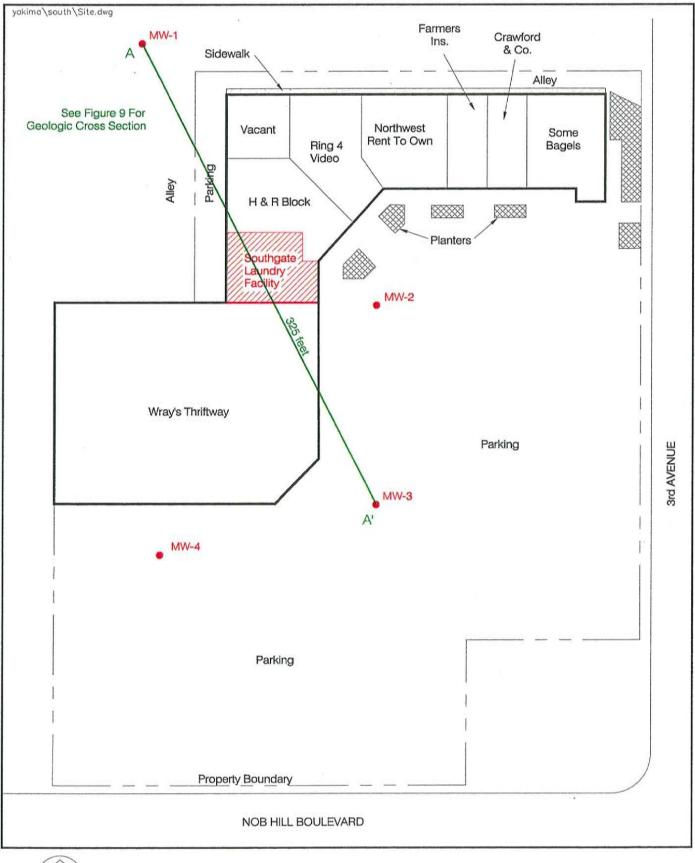


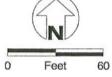


From USGS 7.5' Yakima West Quad



Location Map Southgate Laundry Yakima, Washington FIGURE 1





Monitoring Well

Site Map Southgate Laundry Yakima, Washington FIGURE 2

1.2 SITE HISTORY

The Southgate Laundry facility and the Southgate shopping center were constructed in 1978. Prior to that time, the site was within a residential area composed of single family houses and empty lots. A Sanborn Fire Insurance map from 1920 shows a single-family dwelling near the northeast corner of the site and an irrigation canal on the east side of the parcel.

The Southgate Laundry facility has been in the dry cleaning business since 1978. In 1978, release of PCE near the self-serve dry cleaning machine was recorded. The Southgate Laundry site has been under consideration by the U.S. EPA and Ecology since January 1989. A summary of site investigations and regulatory actions is presented in Table 1.

1.3 PROJECT OBJECTIVES

Maxim developed the objectives of this investigation in accordance with the Ecology's YRRA RI Work Plan (Ecology, no date). The scope of the investigation was based on the findings of previous investigations and the requirements under of the Agreed Order for Remedial Investigations issued by Ecology (Ecology, 1996). These objectives include the following:

- research the past history of the site to identify any past practices or site features which could potentially cause adverse impacts to the environment;
- conduct a soil vapor assessment to determine the extent of PCE contamination in the vadose zone;
- evaluate the general hydrogeologic characteristics of the site including direction and gradient of groundwater flow;
- characterize PCE in soil and groundwater beneath the site;
- · remediate potential sources of contamination to soil and/or groundwater remaining at the site; and,
- provide recommendations for additional investigation, remediation or monitoring activities at the site, if necessary.

TABLE 1 SUMMARY OF SITE INVESTIGATIONS AND REGULATORY ACTIONS SOUTHGATE LAUNDRY FACILITY

DATE	INVESTIGATION/COMPLIANCE ACTION
January 1989	EPA conducts a site assessment to determine hazard ranking of the Southgate Laundry Site
November 1989	EPA Screening Site Inspection Report concludes that evidence of past on-site releases have no been identified and all waste appears to be managed properly.
January 1990	EPA notifies Southgate Laundry that the site will not be considered for the EPA Superfund Program and is referred to the State of Washington for further consideration.
February 1991	Ecology notifies Southgate Laundry that the site has been selected for a site hazard assessme
August 1991	Ecology site hazard assessment of the Southgate Laundry facility is completed and receives a ranking of 3 out of 5.
November 1992	Ecology conducts a site investigation and soil sampling event at Southgate Laundry.
February 1993	Ecology issues a Notice of Potential Liability for the Release of Hazardous Substances to Noel Canning Corporation for the Southgate Laundry site.
May 1994	Ecology conducts a site investigation and soil sampling event at Southgate Laundry. PCE contamination is reported in soil samples.
August 1994	Ecology reissues a Notice of Potential Liability for the Release of Hazardous Substances to No Canning Corporation for the Southgate Laundry site based on findings from the 1994 site investigation and soil sampling.
January 1996	Ecology issues an Agreed Order to Noel Corporation to conduct a Remedial Investigation (RI). The Noel Corporation retains Maxim to conduct an RI.
March 1996	Maxim prepares a site history and conducts a soil vapor/soil material assessment. The assessment discovered PCE contamination in soil and vapor underlying Southgate Laundry and in front and back of the facility.
April 1996	Four groundwater monitoring wells are installed. Groundwater is encountered at approx. 34 ft below surface. Quarterly groundwater monitoring is commenced. PCE contamination is measured in two down-gradient monitoring wells (MW-2 and MW-3).
July 1996	Maxim completes RI Task 1 Report of Yakima Railroad Area Investigation Site History/Soil Vap Assessment.
February 1997	Maxim completes RI Task 2 draft Report of Yakima Railroad Area Investigations Soil/Groundwater Investigation and Analysis
July 1997	Maxim conducts soil sampling and interim action soil removal in the back of Southgate Laundr
September 1997	Maxim conducts soil sampling and interim action soil removal at the two "hot spots" inside Southgate Laundry.

2.0 METHODS

Requirements for Remedial Investigation of PCE and other hazardous substances (as defined by RCW 70.105D.020(3)) are outlined in Ecology's YRRA RI Work Plan ("Work Plan"). This Work Plan dictated the overall approach, methods and procedures used for this project. Components of the Work Plan which were met by work completed at the site by Maxim personnel during the past approximately 12 month period include the following:

- Completion of Task 1 Site History/Soil Vapor Assessment (Maxim, 1996) and submittal to Ecology in July 1996;
- · Characterization of soil by collection and analysis of soil samples from borings;
- · Characterization of groundwater by installation of four groundwater monitoring wells at the site;
- Groundwater monitoring, four rounds of quarterly sampling in April 1996, July 1996, October 1996 and February 1997. The samples were analyzed for VOCs;
- Preparation of Task 2 Draft Report (Maxim, 1997) integrating all data collected between February 1996 and February 1997;
- Further soil characterization and Interim Action in contaminated areas described in Tasks 1 and 2. This
 characterization was possible only subsequent to the closure of Southgate Laundry operation and
 included the collection of soil samples and soil removal both from the back of the facility and "hot spots"
 beneath the floor inside the facility.
- The collection of two additional quarterly groundwater sampling rounds in September 1997 and December 1997, subsequent to soil removal at the Southgate Laundry facility.
- Preparation of this Task 2 Final Report summarizing all remedial investigations/interim action soil removal and groundwater sampling conducted throughout the investigation

This section describes the methods and procedures used to conduct the Southgate Laundry soil investigation and interim action soil removal. All work conducted during the Soil Investigation was completed in accordance with the Yakima Railroad Area (YRRA) Work Plan for remedial investigation activities (Ecology, no date) and Maxim's standard operating procedures included in Appendix G.

To achieve objectives listed in Section 1.3 of this report, Maxim personnel conducted soil investigations in March and August 1996, installed four monitoring wells in April 1996, and conducted four rounds of groundwater monitoring in April, July, October 1996 and February 1997. Investigations were extended in 1997 when Maxim personnel collected 16 samples from soil in the back of Southgate Laundry facility in July 1997, and 22 soil samples from beneath the floor inside Southgate Laundry facility in September 1997.

Additionally, Maxim personnel conducted two additional rounds of quarterly groundwater sampling at the site in September 1997 and December 1997.

The methods used by Maxim personnel to complete the majority of the aforementioned tasks are described in the following sections.

2.1 REMEDIAL INVESTIGATIONS SOIL SAMPLE COLLECTION AND ANALYSIS

Maxim personnel directed the collection of 22 soil material samples for analysis at the site. Samples were collected beneath the concrete floor, in front beneath the side walk, in the asphalt parking lots in the front and back, and in soil along the property boundary to the west. There were two rounds of sampling beneath the concrete floor. The first round was conducted in March 1996 and the second round was conducted in August 1996. Prior to each round, holes were cut in the concrete floor. Soil material samples were collected from depths of 0.5 to 8.5 feet below ground surface.

2.1.1 Borehole and Sample Location Rationale

Soil sample locations were selected to achieve four goals: (1) to comply with the sampling analysis sampling plan (SAP) developed by Ecology (Ecology, 1995); (2) to delineate the lateral and vertical extent of target volatile organic compounds (VOCs) in the vadose zone; (3) to confirm the analysis results from the soil vapor assessment, and (4) identify potential source areas. Soil samples collected in March 1996 were concurrent with the soil vapor assessment and were analyzed on-site to facilitate selection of appropriate soil boring locations. Soil samples collected in August 1996 were analyzed off-site. These soil samples were collected after analyzing the data from the March 1996 sampling event.

To accomplish these objectives, Maxim personnel directed the collection of 22 soil samples from locations plotted on a 20-foot grid system throughout the facility and adjacent parking areas. The grid system would adequately characterize the soil in accordance with Ecology's SAP described in *Guidelines on Sampling and data Analysis Methods* (Ecology, 1995). Soil samples were collected beneath the floor of Southgate Laundry facility, H&R Block and Wray's Thriftway, from material underlying the asphalt parking lot and concrete sidewalk east of the facility, and from soil underlying the asphalt parking lot west of the facility (Table 2). Soil sample collection locations and depths and sample PCE concentrations are shown on Figure 3.

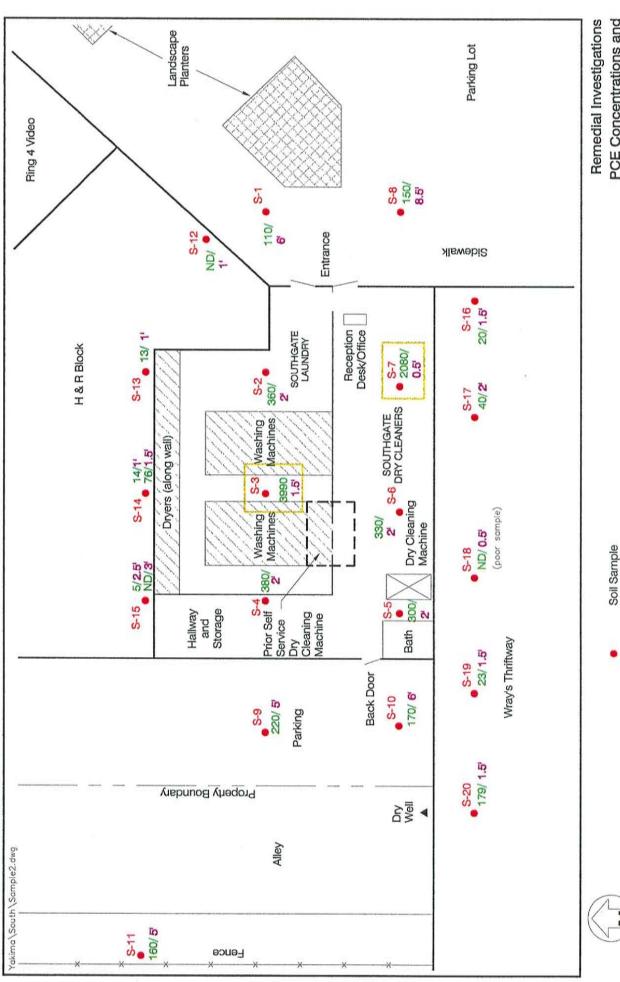
2.1.2 Sample Depth and Soil Sampling Rationale

Sample collection depths for soil both in March 1996 and August 1996 were determined by the depth-of-refusal for the sample drive point. Soil samples were collected at depths ranging from 0.5 feet to eight feet below ground surface. Soil sample S-7 was collected in the confined space between two concrete slabs.

The 11 soil samples collected in March 1996 were collected to facilitate comparison with soil vapor sample results. Both soil material and soil vapor samples were collected from the same drill hole at locations that were drilled through an indoor concrete floor. Soil material samples at these boreholes were collected via

TABLE 2 REMEDIAL INVESTIGATION SUMMARY OF BOREHOLE AND SOIL SAMPLE COLLECTION DATA SOUTHGATE LAUNDRY FACILITY

Sample ID	Sample Depth	Borehole Location	Sample Medium	
S-1	6.0	Sidewalk east of the Southgate Laundry	soil	
S-2	2.0	Inside Southgate Laundry facility	soil	
S-3	1.5	Inside Southgate Laundry facility	soil	
S-4	2.0	Inside Southgate Laundry facility	soil	
S-5	2.0	Inside Southgate Laundry facility	soil	
S-6	2.0	Inside Southgate Laundry facility	soil	
S-7	0.5	Inside Southgate Laundry facility	soil	
S-8	8.5	Parking lot east of the Southgate Laundry	soil	
S-9	5.0	Parking area west of the Southgate Laundry	soil	
S-10	6.0	Parking area west of the Southgate Laundry	soil	
S-11	5.0	Background sample approx. 45 feet west of Southgate Laundry	soil	
S-12	1.0	Inside H&R Block	soil	
S-13	1.0	Inside H&R Block	soil	
S-14	S-14 1.0 Inside H&R Block 1.5 Inside H&R Block		soil soil	
S-15	S-15 2.5 Inside H&R Block 3.0 Inside H&R Block		soil	
S-16	1.5	Inside Wray's Thriftway	soil	
S-17	The state of the s	Inside Wray's Thriftway	soil	
S-18	0.5	Inside Wray's Thriftway	soil	
S-19	1.5	Inside Wray's Thriftway	soil	
S-20	1.5	Inside Wray's Thriftway	soil	



PCE Concentrations and Sample Depths Yakima, Washington FIGURE 3 Southgate Laundry

PCE Concentration (ppb)/ Sample Collection Depth (ft)

PCE "Hot Spots" 40/2

MAXM 9732804.100

Feet

angle-drilling from the original borehole to obtain an undisturbed sample. The rationale for collecting soil material samples in addition to the soil vapor samples was to determine:

- 1) potential existence of a correlation between soil material and soil vapor at the site, and
- 2) additional information required for developing an appropriate sampling and analysis plan to conduct a YRRA Soil/Groundwater Investigation and Analysis.

Laboratory analysis results of the 11 soil samples collected in March 1996 reported PCE contamination at the boundaries of facility. Because PCE contamination was present in soil at the boundaries of the facility, additional soil sampling was necessary to determine the extent of PCE contamination at the adjacent businesses (H&R Block and Wray's Thriftway). In August 1996, additional 11 soil samples were collected from H&R Block and Wray's Thriftway. Soil material sample depths ranged from 0.5 to 3.0 feet below ground surface.

2.1.3 Soil Sampling Procedures

March 1996 Soil Sampling Event (Samples 1-11). Soil samples were collected using a small-diameter drive point. Sample collection was conducted using a Transglobal Environmental Geosampling (TEG) Strataprobe™ unit. The Strataprobe is a direct-push hydraulic and percussion drive-point sampling system. Discrete soil samples were collected using a retractable piston sampler with a split spoon. A two-inch diameter coring tube was driven to depth-of-refusal. Samples were collected in 4 oz. glass jars, were immediately capped, sealed and hand delivered to the on-site mobile laboratory for analysis.

August 1996 Soil Sampling Event (Samples 12-20). Soil samples were collected using a hand-auger. The hand auger is a direct-push manual drive-point sampler. Discrete soil samples were collected with a two-inch diameter coring tube driven to depth of refusal. In two locations inside H&R Block (S-14 and S-15) soil samples were collected from two depths intervals. The field decision to collect soil samples from two depth intervals at S-14 and S-15 was in response to the relatively soft soil material encountered in these two locations, enabling the collection of additional soil samples. Samples were collected in 4 oz. glass jars. The jars were immediately capped and placed in an ice-filled cooler. The samples were shipped to Maxim's Billings laboratory for analysis.

Decontamination procedures were followed before sample collection at each location. All external probe/auger parts, drive rod and samplers were cleaned of excess dirt and moisture before sampling. Non-disposable soil samplers and drive rods were washed before reuse.

2.1.4 Soil Analytical Procedures

March 1996 Soil Sampling Event (Samples 1-11). Sample analysis was conducted in TEG's stationary laboratory in Lacey, Washington. Soil material samples were analyzed for a suite of 15 halogenated hydrocarbons by a gas chromatograph (GC) using EPA Method 8010 plus BTEX using EPA Method 8020.

Reporting limits in soil by EPA Methods 8010/8020 are 50 ppb. All constituents of analysis are listed in Appendix G.

August 1996 Soil Sampling Event (Samples 12-20). Sample analysis was conducted in Maxim's laboratory in Billings, Montana. The laboratory is certified by Washington Department of Ecology to analyze volatile organic compounds by a gas chromatograph/mass spectrometer (GC/MS) using EPA Method 8260. Soil samples were analyzed for the full VOCs suite reported by EPA Method 8260. Reporting limits in soil by EPA Method 8260 are 5 ppb.

2.1.5 Applicability and Limitations of Equipment Used

Strataprobe. The percussion-driven, small diameter drive point of the Strataprobe is designed to collect soil, groundwater and soil vapor samples to depths of fifty feet in most types of soil. Compared to conventional boring methods, the use of a small-diameter drive point unit such as the Strataprobe significantly reduces cost, time, and hazardous waste associated with subsurface site investigations. The advantages of using the Strataprobe include: reduced cuttings, continuous coring, ability to sample discrete intervals for soil vapor, disposable split spoon liners, easy decontamination procedures, and more flexibility in choice of sample locations. The limitations of using the smaller drive-point unit include: less driving capacity than a conventional drill rig so depth of borehole is limited by the nature of the subsurface material, and the sample interval is longer (less discrete) due to a smaller diameter borehole sampler.

<u>Hand-Auger.</u> The hand-auger used is designed to collect soil samples to ten feet in most types of soil. Compared to the StrataProbe, the use of a hand-auger reduces cost and there is no need to mobilize a unit. The limitations of using the hand-auger include: increased cuttings, non disposable coring device, less driving capacity than a StrataProbe so depth of borehole is limited by the nature of the subsurface material, and the sample interval is longer (less discrete) due to a smaller diameter borehole sampler compared to a conventional drill rig.

2.1.6 Quality Assurance/Quality Control

Field and sample handling procedures were conducted in accordance with the Yakima Railroad Area Work Plan (Ecology, no date) and Maxim SOPs (Appendix D). Three Quality Assurance/Quality Control (QA/QC) samples were collected for soil analysis: two duplicates and one method blank. A chain-of-custody was maintained from sample collection to laboratory analysis and is included in Appendix B.

All soil samples analyzed are described in Section 3.1. of this document. Soil samples analyzed by EPA Method 8010 (by TEG) were analyzed to an MDL of 0.05 mg/kg (50 ppb). Soil samples analyzed by EPA Method 8260 (by Maxim's Laboratory)were analyzed to an MDL of 0.005 mg/kg (5 ppb). A complete list of sample analytes are provided in the laboratory reports (Appendix B). Maxim's and TEG Northwest laboratories quality assurance and quality control procedures are conducted following guidelines and objectives which meet or exceed certification/accreditation requirements of Washington Department of Ecology. The Quality Control Program is a consistent set of procedures which assures data quality though

the use of appropriate blanks, replicate analyses, surrogate spikes, and matrix spikes and the use of reference standards that meet or exceed EPA standards.

2.2 SITE SAFETY PROCEDURES

Before initiating investigative activities at the site, Maxim personnel developed a site safety plan that addressed all safety aspects of potential contaminants and site operations. The plan contained information concerning known or suspected hazards, routine and special safety procedures to be followed, and other instructions for safeguarding the health of field personnel. A utility survey was conducted prior to beginning work at the site. All on-site personnel were required to wear appropriate personal protective equipment including hard hats, hearing protection, safety glasses, disposable nitrile gloves and a half-mask respirator with a high-efficiency particulate air (HEPA) and solvent filter during the initial part of the investigation and during exposure to contents in the concrete vault.

All field personnel had received the OSHA 40-hour Hazardous Material Protection Training and an 8-hour refresher course within 12 months of the site investigation and were briefed concerning potential site-specific hazards before field work began. Individuals in the work area were cleared for respirator use and fit tested for a respirator on-site and in accordance with OSHA requirements. Hand and face washing was required prior to eating, drinking, or smoking after entering an area containing suspected hazardous substances.

3.0 REMEDIAL INVESTIGATION RESULTS

This section presents the results of our soil material assessment of the Southgate Laundry site. Analytical results from this investigation and comparison between soil vapor assessment and soil sample analysis results are presented. The estimated lateral extent of soil contamination is also described.

3.1 SOIL ASSESSMENT

Results of soil material analysis collected in March 1996 and August 1996 are provided in Table 3. One constituent of analysis (PCE) was detected in all except three soil material samples collected from the site and adjoining properties. Concentrations of PCE ranged from approximately 300 to 3,990 μ g/kg in material samples collected from soil underlying the facility at depths of 1.5 to 2.0 feet below the concrete floor. A high concentration of PCE (2,080 μ g/kg) was measured in sample S-7 collected from soil material in the dry-cleaners side of the building. Soil material samples containing the highest concentrations of PCE were collected from soil underlying the center of the facility. Soil material samples containing the lowest concentrations of PCE were found in soil underlying H&R Block and Wray's Thriftway.

PCE concentrations at H&R Block and Wray's Thriftway, adjoining Southgate Laundry facility, range from below detection limits (ND) to 179 μ g/kg. The highest PCE concentration (179 μ g/kg) was measured at S-20 at Wray's Thriftway. Soil sample S-20 is located directly south of the dry well at the back of Southgate Laundry. Except for S-20 all other soil samples collected at Wray Thriftway were well below 50 μ g/kg (Method B/protective of groundwater cleanup levels). At H&R Block the highest PCE concentration (76 μ g/kg) was measured in S-14 at 1.5 foot below ground surface. All other soil samples analysis results at H&R Block reported PCE concentrations ranging between below detection limits (ND) and 14 μ g/kg, well below cleanup levels.

3.2 CORRELATION BETWEEN SOIL VAPOR AND SOIL MATERIAL SAMPLE RESULTS

Soil material samples collected and analyzed in the March 1996 sampling event were compared to the soil vapor samples to determine if there was a correlation in PCE concentration between soil vapor and soil material. Results of both soil vapor and soil material analysis are discussed in our Task 1 Report. Vapor and material sample results did not closely correlate in that the concentration of PCE in one phase could not be used to accurately predict the concentration in another phase. However, the soil vapor survey, a qualitative tool, was useful to help guide our soil sampling program. In all locations where soil vapor contained a concentration of PCE greater than 50 μ g/L, the soil also contained higher concentrations of PCE (greater than 250 μ g/kg).

3.3 LATERAL AND VERTICAL EXTENT OF PCE CONTAMINATION IN SOIL

Most of the contamination is present beneath the floor or the Southgate Laundry facility. PCE contamination decreases laterally towards H&R Block and towards Wray's Thriftway. PCE contamination beneath H&R

TABLE 3 REMEDIAL INVESTIGATIONS PCE CONCENTRATIONS IN SOIL SAMPLES SOUTHGATE LAUNDRY FACILITY

Sample Number	Location	Depth beneath Concrete/ Asphalt (feet)	PCE Concentrations in Soil Material (µg/kg) ¹	Method of Collection	Date of Collection
S-1	Southgate front (ext.)	6.0	110	Strataprobe	3/22/96
S-2	Southgate laundry	2.0	360	Strataprobe	3/22/96
S-3	Southgate laundry	1.5	3,990	Strataprobe	3/22/96
S-4	Southgate laundry	2.0	380	Strataprobe	3/22/96
S-5	Southgate dry cleaners	2.0	300	Strataprobe	3/22/96
S-6	Southgate dry cleaners	2.0	330	Strataprobe	3/22/96
S-7	Southgate dry cleaners	0.5	2,080	Strataprobe	3/22/96
S-8	Southgate front	8.5	150	Strataprobe	3/22/96
S-9	Southgate back	5.0	220	Strataprobe	3/22/96
S-10	Southgate back	6.0	170	Strataprobe	3/22/96
S-11	Southgate back	5.0	160	Strataprobe	3/22/96
S-12	H&R	1.0	ND²	Hand-auger	8/13/96
S-13	H&R	1.0	13	Hand-auger	8/13/96
S-14 S-14	H&R	1.0 1.5	14 76	Hand-auger	8/13/96
S-15 S-15	H&R	2.5 3.0	5 ND	Hand-auger	8/13/96
S-16	Wray	1.5	20	Hand-auger	8/13/96
S-17	Wray	2.0	40	Hand-auger	8/13/96
S-18	Wray	0.5	ND	Hand-auger	8/13/96
S-19	Wray	1.5	23	Hand-auger	8/13/96
S-20	Wray	1.5	179	Hand-auger	8/13/96

Samples analyzed by EPA Methods 8010 with laboratory detection limit of $50\mu g/kg$ (ppb) or 8260 with laboratory detection limit of $5\mu g/kg$ (ppb).

Block was measured in S-14, directly north of S-3 (in Southgate Laundry). S-3 is located adjacent to the PCE release that occurred in 1978. PCE contamination in Wray's Thriftway was measured in S-20 located directly south of the dry well. This dry well at the back of Southgate Laundry may have received discarded PCE in the past.

Because an active dry cleaning operation was present at the Southgate Laundry during our Remedial Investigation, soil sampling activities were limited. It was not possible to excavate inside the facility to determine the vertical extent of PCE contamination. Therefore, additional soil sampling occurred during the Interim Action activities.

3.4 SUMMARY OF SOIL REMEDIAL INVESTIGATION RESULTS

Based on environmental data collected at the Southgate Laundry facility from March 1996 through August 1996, the following findings are evident:

- Soil beneath the Southgate Laundry facility and surrounding area is contaminated with PCE to at least
 two feet below ground surface. PCE contamination decreases laterally towards the adjacent businesses,
 H&R Block and Wray's Thriftway. PCE contamination is present in front and back of the Southgate
 Laundry facility. The highest concentrations of PCE in soil vapor and soil material were measured in two
 "Hot Spot"samples collected at the center of the facility, near the removed self-service dry cleaning
 machines, and between two concrete slabs inside Southgate dry cleaners.
- Soil material sample analysis indicates that the source of PCE contamination in soil vapor underlying the Southgate Laundry facility is likely to be from the ground surface and that areas having higher PCE concentrations in soil vapor correspond roughly with areas of higher PCE concentrations in soil material. A potential source of PCE contamination is historic uncontrolled solvent release(s) from dry cleaning operations at the Southgate Laundry facility. The PCE releases penetrated the concrete floor and contaminated the underlying soil. "Source control" activities will be necessary to reduce PCE contamination in the site soil.
- One soil gas sample (SG-7) reported low but detectable concentrations TCE, carbon tetrachloride, and cis-1,2 dichloroethene in addition to PCE. These potential contaminants need to be addressed as well through remedial action.
- Due to access difficulties during Remedial Investigations, the vertical profile determining distribution of PCE with depth was not satisfactorily addressed and needed to be addressed concurrently with interim action soil removal activities.
- At least one of the sampling events conducted at the site reported concentrations PCE above EPA drinking water standards in each of the monitoring wells (see Chapter 6.0 of this report). The presence of PCE contamination in the upgradient well indicates an off-site source of contamination contributing to the PCE problem. However, the higher concentration of PCE in down-gradient wells MW-2 and MW-3 indicates that on-site sources also contributed to PCE contamination at the site.

4.0 EVALUATION OF REMEDIAL ACTION OPTIONS AND IMPLEMENTATION

Upon receipt of soil and groundwater laboratory analytical results, Mr. Slagle, Noel Corporation Project Coordinator, Messrs. Weigand and Gilbert, Noel Corporation Corporate attorneys, Mr. Sam Kim, Southgate Laundry tenant, Rachel Tauman (Maxim) and Mr. Rick Roeder, Ecology Site Manager, conducted a series of meetings and phone consultations to discuss the results and available options. Laboratory analyses results confirmed PCE contamination in soil and groundwater underlying the Southgate Laundry facility. Laboratory analyses results are presented in Tables 3 and 7 and on Figures 3 and 10. The laboratory results confirmed the PCE contamination under the building. In addition, low but detectable PCE contamination was measured in soil samples from the front and back of the facility and the adjoining properties. The meeting parties concluded that additional soil sampling to determine the vertical distribution of PCE and Interim Action would be necessary to address remediation of PCE contaminated soil. Since the most highly contaminated soil was measured under the concrete floor inside the building, any Interim Action at the site would include the interior of the property. Site areas selected for remediation were based on the results of the investigation as presented in Section 3.0 of this report and on the above described meetings with Ecology.

Maxim personnel evaluated remediation alternatives consistent with MTCA criteria (WAC 173-340-360(4)(a)) which include the following:

- (i) Overall protectiveness of human health and the environment;
- (ii) Long term effectiveness;
- (iii) Short term effectiveness;
- (iv) Permanent reduction of toxicity, mobility and volume;
- (v) Ability to implement;
- (vi) Cleanup costs; and,
- (vii) Community concerns.

These criteria, along with the existing and proposed site use, were considered during evaluation of remediation alternatives. Alternatives evaluated by Maxim personnel included the following:

- 1. Excavation of contaminated soil and off-site disposal (landfill);
- Soil Vapor Extraction, a vapor phase, in-situ system; and.
- 3. C-Sparger, an ozone sparging system for treating contaminated groundwater.

The treatment method involving soil vapor extraction was considered less feasible for the project conditions. First, soil removal options with treatment or disposal are preferable over in-situ treatment methods where operations at the site and adjoining businesses will be disrupted during installation and operation of the system. Second, soil vapor extraction would have a incomplete impact on the soil "Hot Spots". Third, the time required to complete the alternative in-situ soil vapor extraction methods did not meet the project timetable.

The treatment method involving the ozone C-Sparger was also considered less feasible for the project conditions. First, the installation of a C-Sparger system did not appear warranted for the concentrations of PCE measured in groundwater underlying the site. Second, soil removal options with treatment or disposal are preferable over in-situ treatment methods where operations at the site and adjoining businesses will be disrupted during installation and operation. Third, the time required to complete the C-Sparger alternative method did not meet the project timetable for the following reason: the C-Sparger, a new technology, has been only recently installed (spring/summer, 1997) in one YRRA facility and has not had a long enough track record to determine its success in the YRRA. Therefore, a waiting time would have been required prior to installation of the C-Sparger system to insure its feasibility in this application. The Noel Corporation has already lost substantial revenue from this site and is attempting to lease the space. The Noel Corporation is not able to wait and find out whether the C-Sparger works in the YRRA and if it does, once again disrupt the businesses during installation.

The treatment method involving soil removal with disposal is preferable over in-situ treatment methods where business operations at the site will be disrupted during installation. Other advantages of soil removal are:

1) the time required to complete the treatment method involving soil removal meets the project time table;

2) this treatment method is the most commonly used and Ecology approved method for removing PCE sources in the YRRA; and 3) the soil removal and disposal method has been proven a successful remedial method in many other YRRA facilities. Therefore, the remediation method of excavation and disposal was chosen.

In order to accomplish soil removal beneath the building in a timely fashion, Mr. Kim, the tenant, was requested to temporarily vacate the property or endure the inconvenience of moving the dry cleaning operations from one side of the building to the other during Interim Action activities. The Noel Corporation did everything possible to ensure Interim Action activities would be implemented in accordance with the project time table. Unfortunately, lingering problems with the tenant resulted in approximately a one year delay in commencing the soil removal program at the site. The tenant finally vacated the property in late June, 1997, and the dry cleaners and laundry were shut down permanently.

On June 3, 1997, in a meeting between Mr. Slagle, Mr. Weigand, Mr. Gilbert, Ms. Tauman and Mr. Roeder, the parties agreed that the "Noel Corporation will begin cleanup of the PERC contamination on the property by excavating and removing the contaminated soils beneath the Southgate Cleaners....Upon completion of this process, the Noel Corporation will continue to monitor PERC levels from the existing test well sites." A copy of the agreement letter between the Noel Corporation and Ecology dated June 3, 1997, is contained in Appendix F.

Interim Action soil removal commenced on July 15, 1997, and was completed in September 1997.

5.0 INTERIM ACTION SOIL REMEDIATION ACTIVITIES AND RESULTS

Two areas were targeted for additional soil investigations and soil removal. The first area was located in the back of the facility and included the dry well. The second area was inside the building and included the two "Hot Spot" areas beneath the concrete floor. "Hot Spots" areas in this investigation are areas with PCE concentrations greater than 0.5 mg/kg (500 ppb). The first "Hot Spot" was located in the dry cleaners side. The second "Hot Spot" was located in the self-serve laundry side. The location of the excavated areas are shown on Figures 3,4,6 and are described below. The lateral and vertical extent of the excavations was determined by the physical constraints in each area.

This section summarizes additional test pit soil sampling conducted concurrently with soil remediation activities in July and September 1997. An outline of the excavated areas, confirmational soil sample locations, and stockpiled soil sample locations are presented in Figures 3-8. Laboratory analysis results of confirmational soil and stockpile samples are summarized in Tables 5-7. Laboratory reports of the soil sample analyses are contained in Appendix E.

Maxim's project manager supervised the excavation of the test pits inside and outside of the facility. The contractor, Speed Lewis (contracted directly with the Noel Corporation), excavated the test pits and transported PCE contaminated soil to Rabanco Landfill.

Because of the physical constraints at the site including the proximity to utility lines and the building foundation, it was not possible to remove all the contaminated soil from the site. As a result, the use of an on-site mobile laboratory to help guide the excavation, segregate the excavated stockpiles and ensure/confirm proper site remediation was not warranted. Sixteen soil samples were collected from the exterior and 26 soil samples were collected from inside the building. This extensive sampling was implemented to provide for a statistically sound sampling program. All soil sample jars were sealed, packed in ice and shipped in a cooler to Transglobal Environmental Geosciences (TEG). TEG analyzed the soil samples upon arrival to prevent VOC losses. The soil samples were analyzed for PCE using EPA Methods 8010/8020.

There was no attempt to segregate the stockpiles. All excavated soils were loaded onto a dump trucks and transported to Rabanco landfill for disposal. Detailed activities for each area are described below.

5.1 EXTERIOR AREA INVESTIGATION/REMEDIATION AND RESULTS

There were three reasons for conducting additional soil investigations concurrently with Interim Action and the deciding to dispose of excavated stockpile soils in this area:

PCE concentrations of 220 μg/kg, 170 μg/kg and 160 μg/kg were measured in soil samples S-9, S-10 and S-11 respectively during our Remedial Investigation activities (Figure 3).

- Due to access difficulties during the Remedial Investigation, the vertical profile of PCE with depth was not satisfactorily determined in the Remedial Investigation.
- 3) The dry well in the alley at the back of Southgate Laundry may have received discarded PCE in the past and therefore could have contributed to the PCE problem at the site. We decided that even if PCE contamination was not measured around and beneath the dry well, it should be excavated and removed. Good "house keeping" practices dictated that decision. The removal of the dry well would prevent "dumping" and other problems associated with the presence of a dry well.

Interim Action activities at the exterior occurred between July 15 and 17, 1997. Maxim Personnel directed the excavation of two test pits, TP-1 and TP-2. We collected fourteen samples from test pit TP-1 (and the associated stockpile) and two samples from TP-2. The location of the test pits and sample analysis results are shown on Figures 4 and 5. Laboratory analysis results are summarized in Table 4 and laboratory data sheets are found in Appendix E.

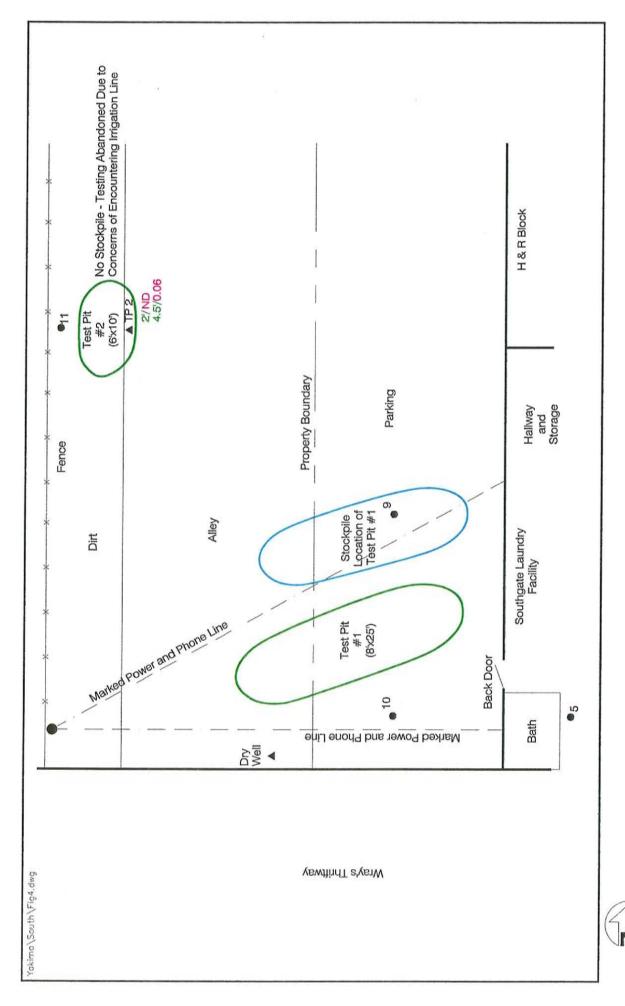
5.1.1 Exterior Test Pit TP-1 / Stockpile #1

The lateral and vertical extent of the excavated area from TP-1 included all soil from the area between the power lines, the dry well, soil from beyond the dry well and soil within 3.5 feet of the back door of the dry cleaners (Figure 4). All that was possible to excavate was removed. The dimensions of the resulting excavation were 25 feet by 8 feet ranging in depth from 7 feet to 13 feet. The top foot of the excavation consisted of asphalt and debris. From two feet below ground surface to 13 feet, the excavated material was well graded Yakima Gravels consisting primarily of dark and dry unconsolidated sands and silty sands (approximately 60%), cobbles and gravels (40%). A soil boring log from TP-1 is shown on Figure 5. Because the excavation was confined to the area between the power lines, it was not possible to expand the excavation laterally which resulted in steep side-walls and heavy sloughing into TP-1 throughout the operation.

Five of the 11 test pit samples contained PCE. Concentrations of PCE in samples of excavated soil ranged from 0.04 mg/kg (40 ppb), in Sample TP-1#2, to 0.05 mg/kg (50 ppb), in sample TP-1#2. The remaining six samples, including a soil sample collected beneath the dry well, did not contain measurable concentrations of PCE.

The excavated soil from TP-1 was placed in a stockpile adjacent to TP-1 (Figure 5). The stockpiled soil was placed on 6 mil black plastic ground cover. The stockpiled soil was also covered with the black plastic.

Laboratory analysis results of 3 stockpile samples reported low but detectable concentrations of PCE ranging from 0.06 mg/kg to 0.08 mg/kg. Laboratory analysis results of soil and stockpiled soil from TP-1 are summarized in Table 4 and contained in Appendix E.



Yakima, Washington Exterior Interim Action - July 1997 Location of Test Pits and Stockpile Areas Southgate Laundry

FIGURE 4

Sample Location

4.5/0.06 Depth/PCE in mg/kg (ppm)



Feet

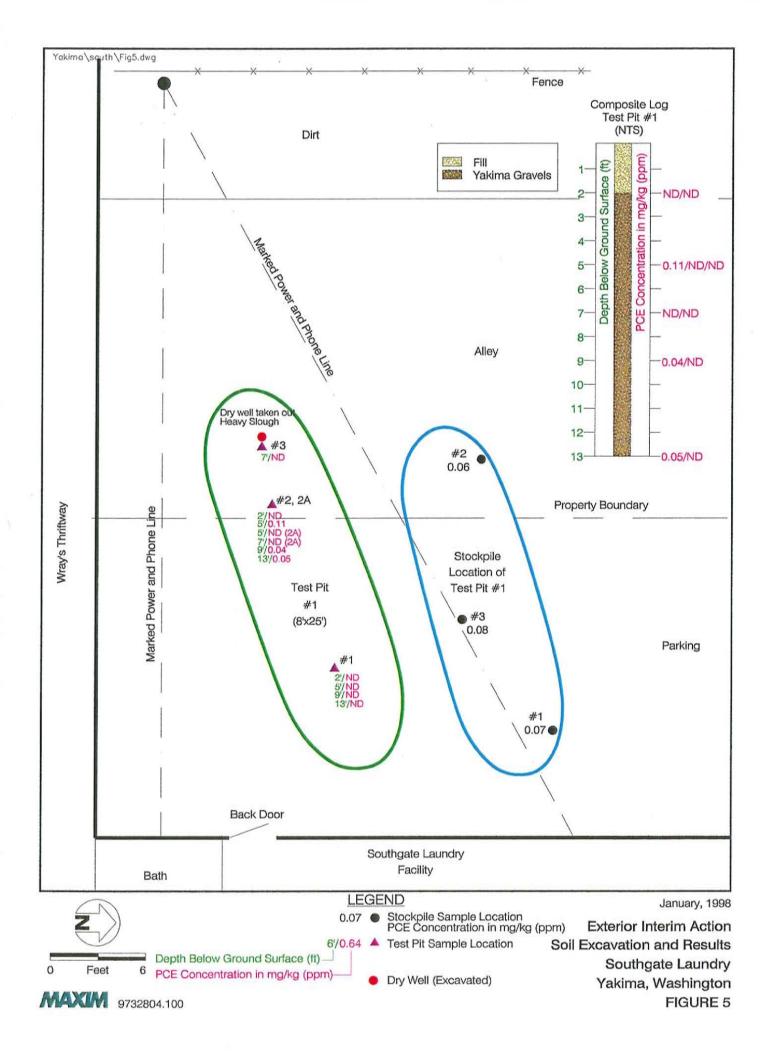


TABLE 4 EXTERIOR INTERIM ACTION PCE CONCENTRATIONS IN SOIL SAMPLES AND STOCKPILES SOUTHGATE LAUNDRY FACILITY

Sample Number	Depth in feet below ground Surface	Tetrachloroethene (PCE) in mg/kg (and ppb¹)	Date Collected
Test Pit-1 (TP-1)			
TP-1 #1	2	ND²	7/15/97
TP-1 #1	5	ND	7/15/97
TP-1 #1	9	ND	7/15/97
TP-1 #1	13	ND	7/15/97
TP-1 #2	2	ND	7/15/97
TP-1 #2	5	0.11 (110)	7/15/97
TP-1 #2	9	0.04 (40)	7/15/97
TP-1 #2	9 (duplicate)	0.05 (50)	7/15/97
TP-1 #2	13	0.05 (50)	7/15/97
TP-1 #2A	5	ND	7/17/97
TP-1 #2A	7	ND	7/17/97
TP-1 #2A	7 (duplicate)	ND	7/17/97
TP-1 #3	7	ND	7/15/97
Stockpile Samples from Test Pit-1 (TP-1)			
#1	composite	0.07 (70)	7/15/97
#2	composite	0.06 (60)	7/15/97
#3	composite	0.08 (80)	7/15/97
Test Pit-2 (TP-2)		W	
TP-2 #1	2	ND	7/15/97
TP-2 #2	4.5		7/15/97
TP-2 #2	4.5 (duplicate)		7/15/97

Samples analyzed by EPA Method 8010 with laboratory detection limit of 0.05 mg/kg (50 ppb)

ND - Not detected

Although the concentrations of PCE in TP-1 and the associated stockpile were at and below MTCA Method B/groundwater protection of 80 ppb, this soil was transported to Rabanco landfill for disposal on September 11, 1997. Drill cuttings from the monitoring wells previously installed at the site were added to the stockpile. There were approximately 12 drums filled with drill cuttings. Forty-three yards of soil from TP-1 and associated drill cuttings were disposed of at Rabanco Landfill. Central Pre-Mix supplied the Noel Corporation with native pit run gravel to backfill the excavation. Disposal and backfill documents are in Appendix B.

5.1.2 Exterior Test Pit TP-2

Maxim personnel directed the excavation of TP-2. TP-2 was located in the alley adjacent to the former S-11 sampling point (Figure 4). The dimensions of the resulting excavation were 10 feet by 8 feet and 4.5 feet deep. The excavated soils were similar in texture to soils in TP-1. The attempt and effort to excavate TP-2 was abandoned at 4.5 feet because the contractor was concerned about encountering the wood-stave irrigation line beneath the alley. Only two soil samples were collected from TP-2. Concentrations of PCE in the two samples were measured at below detection limits (at 2 feet) and 0.06 mg/kg at 4.5 feet. The excavated soil was placed back in the pit.

5.2 INTERIOR AREA "HOT SPOTS" INVESTIGATION/REMEDIATION AND RESULTS

Laboratory analysis results from the Remedial Investigation inside Southgate laundry and dry-cleaners reported PCE contamination in all soil samples collected beneath the concrete floor. The most highly contaminated areas inside the facility were the two "Hot Spots" (Figure 3). In the first "Hot Spot" (S-7), located on the dry-cleaners side, PCE concentration in soil was measured at 2.08 mg/kg (2080 ppb). In the second "Hot Spot" (S-3), located in the self-serve laundry area PCE concentration in soil was measured at 3.9 mg/kg (3990 ppb).

In both "Hot Spot" areas, PCE was also detected in soil gas samples collected during the soil gas survey (Maxim, Site History Report, 1996). In the first "Hot Spot" in the dry cleaners side, in addition to PCE soil gas, low but measurable amounts of trichloroethene (TCE), cis-1,2 dichloroethene and carbon tetrachloride were also reported. These constituents were found only in the soil gas survey in SG-7 and were not reported in any of the other soil-gas or soil samples.

There were two reasons for the additional investigations conducted concurrently with Interim Actions inside the facility:

- As per the above discussion, the presence of other constituents in addition to PCE in soil gas sample SG-7, required further investigation to confirm their presence or absence in the soil.
- 2) Due to access difficulties during the Remedial Investigation, the vertical profile of PCE with depth was not satisfactorily addressed in the Remedial Investigation.

Prior to Interim Action activities, the Noel Corporation gutted the entire interior so that excavating equipment could enter and operate inside the building. Because of concerns to the integrity of the building foundation and adjoining businesses soil removal inside the building was limited to the two "Hot Spots" (Figure 4). Prior to excavating the test pits beneath the "Hot Spots", contractors cut out approximately a 7 foot square concrete slab floor above each "Hot Spot" area. The two areas are shown on Figure 6. The size of the concrete floor slab removed from each "Hot Spot" was dictated by the distance from load bearing walls, building foundation and the ability to accommodate the bucket of a small excavator.

Interim Action inside the building occurred on September 9, 1997. The contractor, Speed Lewis, provided personnel and equipment for the operation. Maxim personnel directed the excavation of the two test pits beneath the "Hot Spot" areas.

5.2.1 "Hot Spot" TP-1/Stockpile #1 (dry-cleaners side)

The lateral and vertical extent of the excavated area of TP-1 is shown on Figure 7. The excavation included all soil from a 6.7 foot by 6.7 foot square area. The excavation depth ranged in depth from 4 feet to 8.5 feet. The top two feet of the excavation consisted of concrete debris and clay. From 2 feet below ground surface to 8.5 feet the Yakima Gravels were encountered consisting primarily of black-brown dry unconsolidated sands (approximately 70%), cobbles and gravels (30%). PCE odor was present at around 5.5 feet. A soil boring log from TP-1 is shown on Figure 7. Because the excavation was confined, it was not possible to expand the excavation laterally which resulted in steep side walls and heavy sloughing into TP-1 throughout the operation. The heavy sloughing prevented collection of samples with the back hoe beneath 7 feet. A hand-auger was used to collect the deepest soil sample at 8.5 feet.

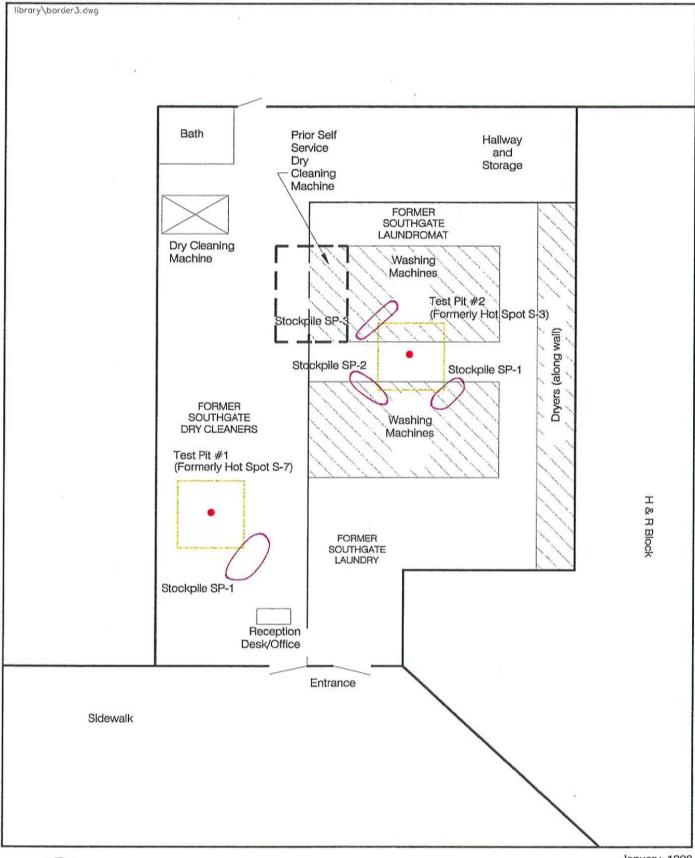
All seven samples collected in TP-1 contained PCE. Concentrations of PCE in samples of excavated soil ranged from 0.61 mg/kg (610 ppb), in the east area at 5 feet, to 1.15 mg/kg (1150 ppb), in the center area at 7 feet. No PCE breakdown products or other constituents of concern were reported. This sampling program confirmed the absence of any other constituents of concern reported from soil gas sample SG-7 collected from the site in our prior investigation.

The excavated soil from TP-1 was placed in a stockpile adjacent to TP-1 (Figure 7). Laboratory analysis results of three stockpile samples reported PCE in all stockpile samples ranging from 0.85 mg/kg to 0.91 mg/kg. Laboratory analysis results of soil and stockpiled soil samples from TP-1 are summarized in Table 5 and laboratory data sheets are contained in Appendix E.

5.2.2 "Hot Spot" TP-2 /Stockpiles (laundry side)

The lateral and vertical extent of the excavated area from TP-2 is shown on Figure 8. The excavation included all soil from a 7 foot by 8 foot area. The excavation depth ranged from 3 feet to 8.5 feet. The top 2.5 feet of the excavation consisted of clay mixed with sand and gravel. From 2.5 feet to 8.5 feet the Yakima Gravels consisted primarily of dark and moist sands (approximately 65%), cobbles and gravels (35%) and clay (5%). There was no PCE odor. A soil boring log from TP-2 is shown on Figure 8. As in TP-1, because

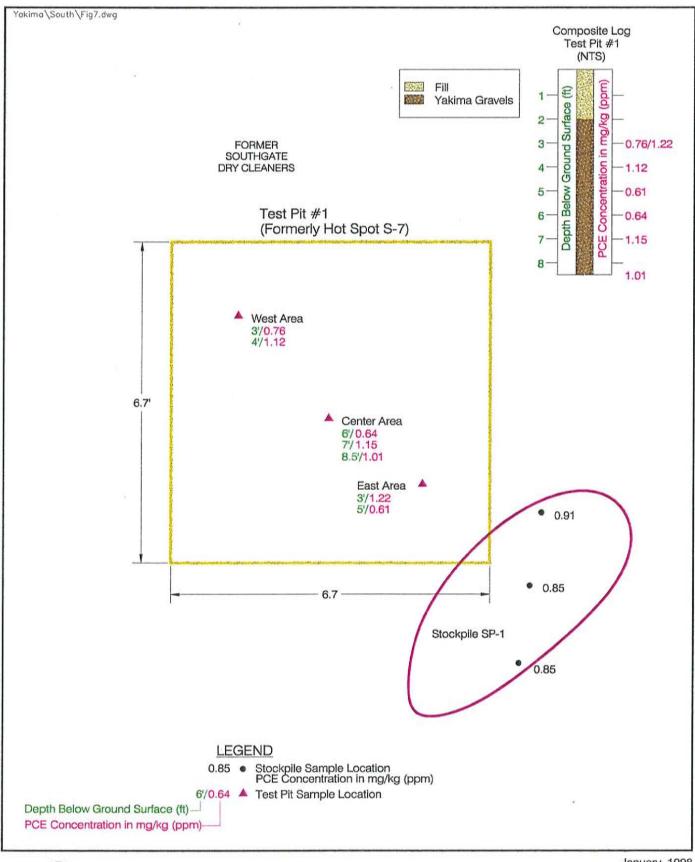
figure 6



January, 1998

Interior Interim Action (Sept. 1997) Location of Test Pits and Stockpiles Southgate Laundry Yakinma, Washington FIGURE 6







January, 1998

Interior Interim Action Confirmation Soil Sample Analysis
Results of Test Pit-1 and Associated Stockpile SP-1
Southgate Laundry
Yakima, Washington
FIGURE 7

TABLE 5 INTERIOR INTERIM ACTION PCE CONCENTRATIONS IN TEST PIT-1 SOIL AND STOCKPILES SOUTHGATE LAUNDRY FACILITY

Sample Number ¹	Depth in feet below ground Surface	Tetrachloroethene (PCE) in mg/kg (and ppb ₂)	Date Collected
Test Pit-1 (TP-1) dry cleaners side		4	
TP-1 east area	3	1.22 (1220)	9/9/97
TP-1 west area	3	0.76 (760)	9/9/97
TP-1 west area	4	1.12 (1120)	9/9/97
TP-1 east area	5	0.61 (610)	9/9/97
TP-1 center area	6	0.64 (640)	9/9/97
TP-1 center area	7	1.15 (1150)	9/9/97
TP-1 center area	8.5	1.01 (1010)	9/9/97
Stockpile Samples (SP) from Test Pit TP-1			
SP-1 #1	composite	0.85 (850)	9/9/97
SP-1 #2	composite	0.85 (850)	9/9/97
SP-1 #3	composite	0.91 (910)	9/9/97

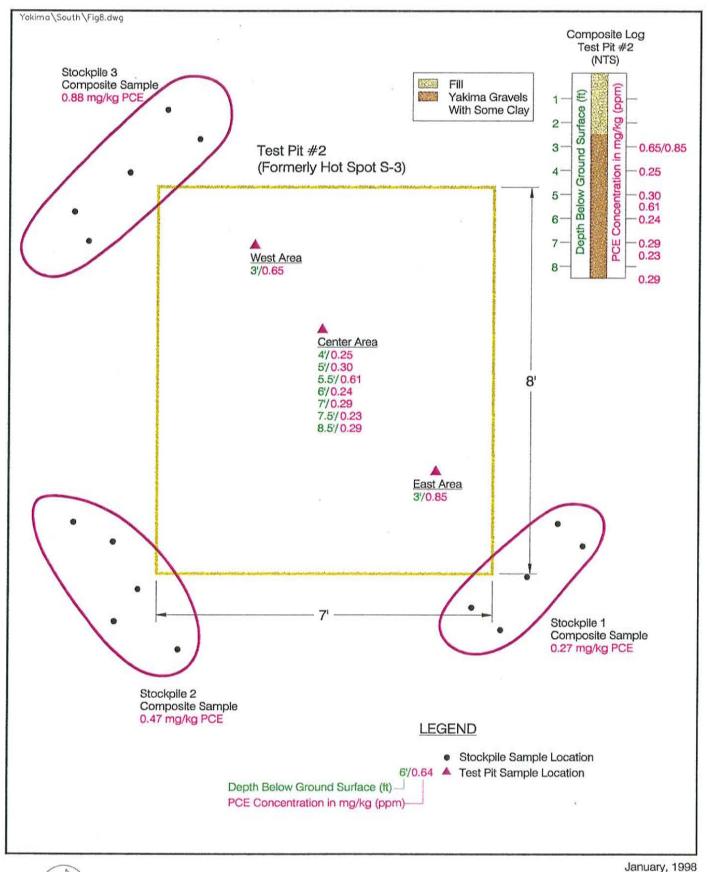
samples are reported in the order collected

the excavation was confined, it was not possible to expand the excavation laterally. There was a lot less sloughing in comparison to TP-1. Also, in TP-2 sloughing began at a deeper level (at 7 feet) allowing us to collect soil samples with relative ease in comparison to TP-1 and without utilizing the hand-auger.

All eight samples collected in TP-2 contained PCE. Concentrations of PCE in samples of excavated soil ranged from 0.23 mg/kg (230 ppb) in the center area at 7.5 feet, to 0.85 mg/kg (850 ppb) in the east area at 3 feet. PCE concentrations decreased with depth. No PCE breakdown products or other constituents of concern were reported. This sampling program confirmed the absence of any other constituents of concern reported from soil gas sample SG-7 collected from the site in our prior investigation.

The excavated soil from TP-2 was placed in three stockpiles adjacent to the TP-2 (Figure 8). Three stockpile areas were constructed because of the difficulty of maneuvering the back hoe in this tight area. Three

Samples analyzed by EPA Method 8010 with laboratory detection limit of 0.05 mg/kg (50 ppb)





Interior Interim Action Confirmation Soil Sample Analysis
Results of Test Pit TP-2 and Associated Stockpiles

Southgate Laundry Yakima, Washington

FIGURE 8

composite stockpile samples were collected, one composite sample from each stockpile. Laboratory analysis results of three stockpile samples reported PCE in all samples ranging from 0.27 mg/kg to 0.88 mg/kg. Laboratory analysis results of soil and stockpiled soil from TP-2 are summarized in Table 6 and laboratory data sheets are found in Appendix E.

The stockpiled soil was transported to Rabanco Landfill for disposal on September 11-12, 1997. Thirty yards of PCE contaminated soil from the interior of Southgate Laundry was disposed of at Rabanco Landfill. Central Pre-Mix supplied the Noel Corporation with native pit run gravel to backfill the excavation. Disposal and backfill documents are contained in Appendix B.

TABLE 6 INTERIOR INTERIM ACTION PCE CONCENTRATIONS IN TEST PIT-2 SOIL AND STOCKPILES SOUTHGATE LAUNDRY FACILITY

Sample Number ¹	Depth in feet below ground Surface	Tetrachloroethene (PCE) in mg/kg (and ppb ₂)	Date Collected
Test Pit-2 (TP-2) laundry side		t	
TP-2 east area	3	0.85 (850)	9/9/97
TP-2 west area	3	0.65 (650)	9/9/97
TP-2 center area	4	0.25 (250)	9/9/97
TP-2 center area	5	0.30 (300)	9/9/97
TP-2 center area	5 (duplicate)	0.39 (390)	9/9/97
TP-2 center area	5.5	0.61 (610)	9/9/97
TP-2 center area	5.5 (duplicate)	0.83 (830)	9/9/97
TP-2 center area	6	0.24 (240)	9/9/97
TP-2 center area	7	0.29 (290)	9/9/97
TP-2 center area	7.5	0.23 (230)	9/9/97
TP-2 center area	8.5	0.29 (290)	9/9/97
Stockpile Samples from test Pit-2 (TP-2)			
SP#1	composite	0.27 (270)	9/9/97
SP#2	composite	0.47 (470)	9/9/97
SP#2	composite (duplicate)	0.56 (560)	9/9/97
SP#3	composite	0.88 (880)	9/9/97

samples are reported in the order collected

Samples analyzed by EPA Method 8010 with laboratory detection limit of 0.05 mg/kg (50 ppb)

6.0 GROUNDWATER INVESTIGATIONS

Maxim installed four groundwater monitoring wells at the Southgate Laundry Facility in April 1996. The wells were installed to provide information necessary to evaluate groundwater quality and groundwater flow direction and can be used to determine hydraulic properties of saturated subsurface sediments.

6.1 WELL INSTALLATION

Maxim's personnel supervised the drilling and installation of the four groundwater monitoring wells in April 1996 at the Southgate Laundry facility. The four groundwater monitoring wells are located so that one well (MW-1) is located hydraulically up-gradient and three (MW-2, MW-3 and MW-4) are located hydraulically down-gradient from the site (Figure 2). Maxim personnel directed the drilling contractor, R&R drilling, to install the wells using an ODEX air rotary drill rig. Drill cuttings were examined and lithologic characteristics were recorded on borehole logs during drilling (Appendix A). The wells were drilled to 45 ft below ground surface in accordance with YRRA work plan requirements. Groundwater was encountered at 34 feet below ground surface. Installation of the four groundwater monitoring wells enabled Maxim personnel to evaluate groundwater chemistry and flow beneath the site in accordance with requirements of the Work Plan.

Drill cuttings were examined continuously while drilling each well and lithologic characteristics were recorded on borehole logs (Appendix A). A total of three soil samples were also collected with a split-spoon sampler while drilling MW-1 and MW-4. These samples were submitted for laboratory analysis of volatile organic compounds using EPA Method 8260. Recovery of split spoon samples while drilling the monitoring wells was relatively poor and VOCs which might have been present in cuttings samples were suspected of being volatilized by the air rotary system. Laboratory analysis results for these three soil samples are contained in Appendix . (ALL 3 FIRE ND)

Borings MW-1, MW-2, MW-3 and MW-4 were advanced until approximately 10 feet of groundwater was penetrated (total depth of 45 feet below ground surface) and were completed as monitoring wells. The monitoring wells were constructed of two-inch diameter flush-threaded PVC. A 30 foot section of factory slotted PVC screen (0.020 inch slots) was incorporated into the lower section of the casing column in each monitoring well. The annular space between the borehole and the screened section was backfilled with inert silica sand. The annular space above the sand filter pack was backfilled with granular bentonite. The well was completed at the surface by concreting a flush mount well protector around the well casing. After completion, the wells were developed using a polyethylene disposable bailer to remove drilling debris and ensure adequate hydraulic communication between the water bearing formation and well bore.

Following completion and development activities, a site survey was prepared. The survey was conducted by PLSA Engineering under the direction of the Noel Corporation. Ecology's requirements for the survey as outlined in the workplan were provided to PLSA Engineering by the Noel Corporation. The well elevations are used along with the static water level measurements to calculate groundwater elevations and gain hydrogeologic information for the site.

6.2 SAMPLE COLLECTION AND ANALYSIS

Six rounds of groundwater sampling were completed during April 1996, July 1996, October 1996, February 1997, September 1997 and December 1997. Maxim personnel measured the static water level in the wells using a decontaminated electric well probe during each event. Three bore volumes of groundwater were then removed from each well to ensure that the water being sampled was representative of the formation water. Groundwater samples were collected using disposable bailers. The water samples were immediately transferred to 40 milliliter vials. The samples were placed in an ice-filled cooler and shipped to a laboratory for analysis. Groundwater sampling field forms are contained in Appendix C.

6.2.1 Groundwater Sample Analysis

Maxim's Billings analytical laboratory analyzed the groundwater samples collected in April 1996, and July 1996. Samples collected from all four wells were analyzed for contaminants of concern (COCs) including VOCs according to EPA Method 8260. The full GC/MS VOCs scan used in EPA Method 8260 analyzes a wide range of potential contaminants in addition to PCE with a PCE reporting limit of 1 part per billion (ppb). Because PCE was the only measured contaminant of concern in both sampling rounds, in subsequent groundwater sampling rounds EPA Method 8010 was used to analyze the groundwater. EPA Method 8010 analyzes a shorter list of constituents but does include all previously identified contaminants of concern. The reporting limits for EPA Method 8010 is also 1 ppb. The October 1996, February 1997, September 1997 and December 1997 groundwater samples were analyzed by Transglobal Environmental Geosciences (TEG) laboratory.

6.2.2 Quality Assurance/Quality Control

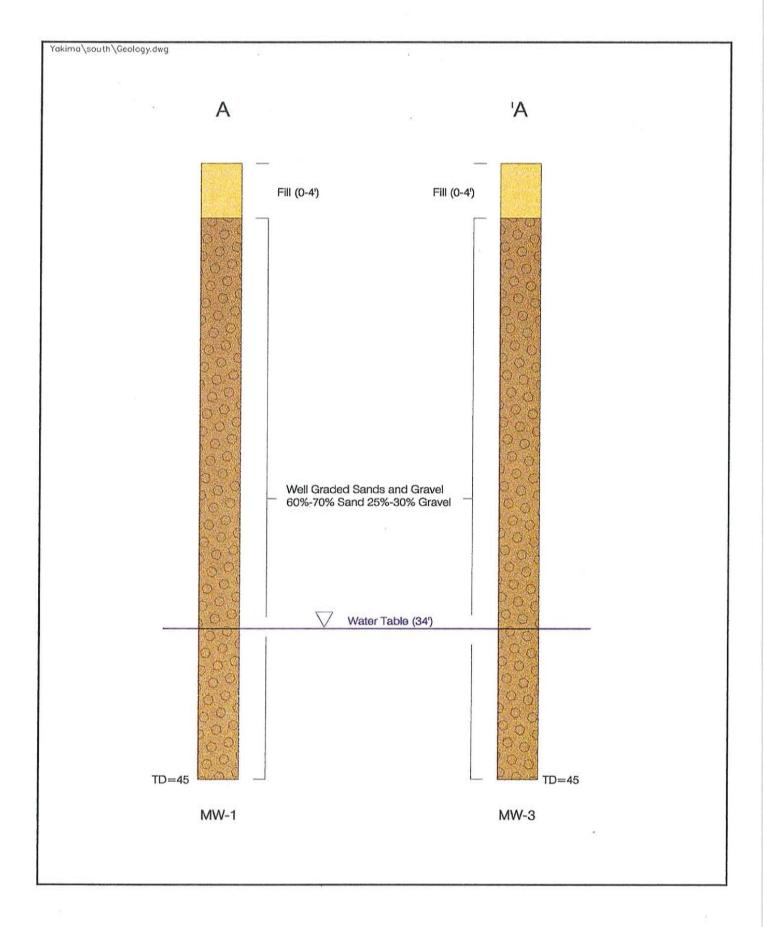
In each sampling event, a duplicate groundwater sample (blind duplicate) and a travel blank were provided to the analytical laboratory for the purpose of quality assurance/quality control (QA/QC).

Chain-of custody forms were completed prior to sample shipment. Information including station identification number, well depth, pH, conductance, temperature, static water level, and date and time of sample collection was recorded on the field forms (Appendix).

6.3 RESULTS OF GROUNDWATER INVESTIGATIONS

6.3.1 Results of Well Borehole Investigation

The four borings drilled for monitoring well installation encountered a relatively permeable unit from approximately four feet below ground surface to the total depth. The top four feet is primarily fill consisting of silty clay and sand. The fill is underlain by silty and sandy gravels, approximately 60%-70% sands, 20%-30% gravels, pebbles and some cobbles. Groundwater was intercepted at approximately 34 feet below ground surface during April 1996. Monitoring well logs are presented in Appendix A. Cross-section, A-A showing sub-surface site conditions is presented in Figure 9.



6.3.2 Results of Monitoring Well Soil Sample Analysis

Maxim personnel attempted to collect soil samples every five feet while drilling MW-1, M-2, MW-3 and MW-4. A split spoon was placed in the hole every five feet from five to 30 feet below ground surface. Of 24 split spoons, only three split spoons had any soil recovery because of poor sample recovery. The three samples were analyzed for VOCs using EPA Method 8260. Concentrations of VOCs in all soil samples collected during monitoring well drilling were below laboratory detection limits (ND). Laboratory analysis results for these three split spoon samples are contained in Appendix A

6.3.3 Results of Static Water Level Measurements

Static water level measurements were recorded in all four monitoring wells during each quarterly sampling event Table 7. Groundwater contour maps of each event are presented in Figure 10 and a hydrograph of all four wells is presented in Figure 11.

The static water level measurements indicated that groundwater elevations range from 21 to 34 ft below ground surface. The hydrographs show that the highest water levels occur during the spring and summer time and the lowest water levels occur during the winter. Groundwater flow direction is consistently to the southeast throughout the year. Groundwater gradients vary from 0.2 to 0.6 percent depending upon season.

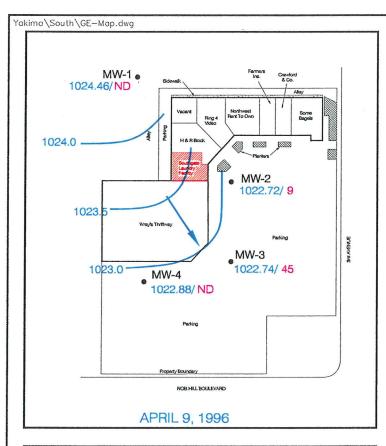
6.3.4 Results of Groundwater Quality Investigation

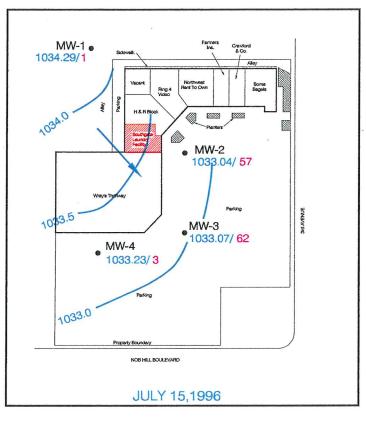
Groundwater quality analysis results for the four sampling events conducted at the Southgate Laundry facility are presented in Figure 10 and Figure 11 and summarized in Table 7. Laboratory analysis reports for the water samples are contained in Appendix C.

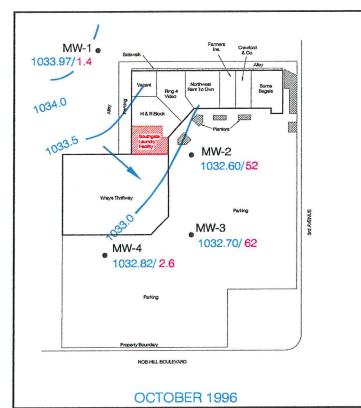
Detectable levels of PCE were reported in water samples collected from the six groundwater sampling rounds. All monitoring wells reported detectable levels of PCE. PCE concentrations of 9 parts per billion (ppb), 57 ppb, 52 ppb, 11.9 ppb 20 ppb and 16 ppb were reported from MW-2 in April, July, October 1996, February 1997, September 1997 and December 1997 respectively. MW-2 is located adjacent to and downgradient from Southgate Laundry. PCE concentrations of 45 ppb, 62 ppb, 62 ppb and 107 ppb were reported from MW-3, also a down-gradient monitoring well, in April, July, October 1996 and February 1997 respectively. In September 1997 and December 1997 PCE concentrations in MW-3 were 31 ppb and 8.2 ppb respectively, substantially lower than the concentrations from the first four sampling events. PCE concentrations ranging from below detection limits (ND) to 6.3 ppb were reported in MW-4. MW-4 was installed as a down-gradient well in accordance with the Work Plan. At this site, however, groundwater flow direction during our quarterly sampling events did not shift throughout the year, and the flow was consistently to the southeast. As a result, MW-4 was a cross-gradient well instead of a down-gradient well. The concentrations measured in MW-4 are generally below the U.S EPA drinking water standard of 5 ppb. The hydraulically up-gradient monitoring well MW-1 reported PCE concentrations between below detection limits (ND) and 9.5 ppb, and were generally below the EPA drinking water standard.

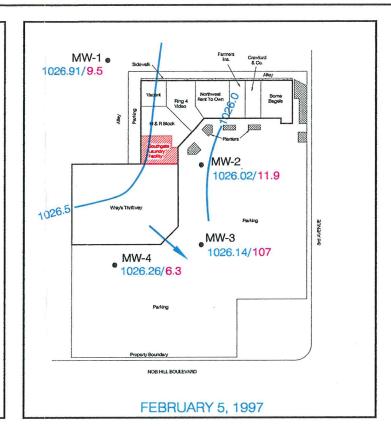
TABLE 7 QUARTERLY GROUNDWATER MONITORING AND ANALYSIS RESULTS SOUTHGATE LAUNDRY FACILITY

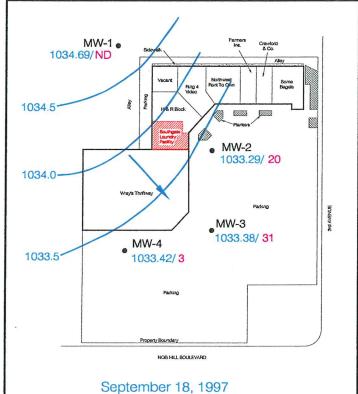
Well No.	Ground Elevation (ft)	DTW	Water Table Elevation (ft)	PCE (ppb)	Date Collected
MW-1	1056.90	32.44	1024.46	ND	4/9/96
		22.61	1034.29	1	7/15/96
		22.93	1033.97	1.4 (1.2 blind dup)	10/10/96
		29.99	1026.91	9.5	2/5/97
		22.21	1034.69	ND -	9/18/97
		29.82	1027.08	1.7	12/3/97
MW-2	1056.47	33.75	1022.72	9 (10 blind dup.)	4/9/96
		23.43	1033.04	57	7/15/96
		23.87	1032.60	52	10/10/96
		30.45	1026.02	11.9	2/5/97
		23.18	1033.29	20	9/18/97
		30.31	1026.16	16	12/3/97
MW-3	1054.77	32.03	1022.74	45	4/9/96
	110000000000000000000000000000000000000	21.70	1033.07	62 (53 blind dup.)	7/15/96
		22.07	1032.70	62 (54 blind dup.)	10/10/96
		28.63	1026.14	107 (106 blind)	2/5/97
		21.39	1033.38	31 (37 blind dup.)	9/18/97
		28.47	1026.30	8.2 (9 blind/split with Ecology)	12/3/97
MW-4	1055.31	32.43	1022.88	ND	4/9/96
	here to viviante en nes	22.08	1033.23	3.0	7/15/96
		22.49	1032.82	2.6	10/10/96
		29.05	1026.26	6.3	2/5/97
		21.89	1033.42	3.0	9/18/97
		29.00	1026.31	2.0	12/3/97

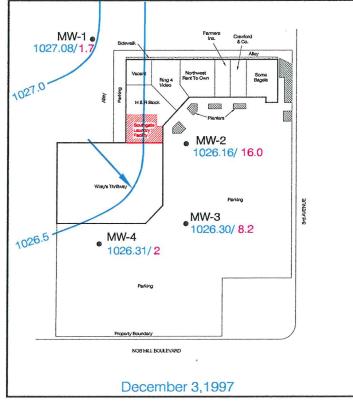


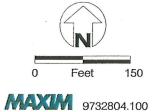












Groundwater Elevation Equipotential Line (ft.)

Groundwater Elevation (ft.)/ PCE Concentration In Groundwater (ppb)

Groundwater Flow Direction

Groundwater Elevation Map And PCE Concentrations In Groundwater Southgate Laundry Yakima, Washington FIGURE 10

946-04\Qpro.dwg

The presence of PCE contamination in the upgradient well indicates an off-site source of contamination contributing to the PCE problem. However, the higher concentration of PCE in down-gradient well MW-3 (up to 107 ppb) indicates that on-site sources also contributed to PCE contamination at the site. A substantial decline in PCE concentrations is reported in the two downgradient wells MW-2 and MW-3. A graph of PCE concentrations in samples taken from MW-2 and MW-3 is presented in Figure 12. PCE concentrations in MW-3 declined from 107 ppb in February 1997, to 31 ppb in September and 8.2 ppb in December 1997. This substantial decline in PCE contamination occurred subsequent to Interim Action soil removal activities (conducted in July and September 1997), suggesting "source control" activities have been successful in improving the groundwater quality beneath the site. Chloroform and dichlorodifluoromethane were also detected in the groundwater samples collected in April 1996 and July 1996, respectively. Dichlorodifluoromethane is not a regulated contaminant and chloroform concentrations did not exceed the U.S. EPA drinking water standard for trihalomethanes (100 µg/l).

The field QA/QC samples analyzed during the four sampling events have indicated that sample collection and handling was properly executed.

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7.0 SUMMARY AND CONCLUSIONS

Based on environmental data collected at the Southgate Laundry facility from March 1996 through December 1997, the following findings are evident:

- Soil samples collected during Remedial Investigation in the back exterior of the dry cleaners reported PCE contamination. A test pit (TP-1) excavated in the back concurrent with Interim Action activities reported PCE concentrations below detection limits (ND) in most samples and a few concentrations at or well below 80 ppb (Ecology's MTCA Method B/groundwater protection level). Although it was not possible to excavate a larger test pit to verify that the entire back exterior was not contaminated with PCE, the low concentrations of PCE measured in the "prime dumping suspect areas" of the dry well and the back door of the dry cleaners suggest that soil in back exterior of Southgate Laundry was not significantly impacted with PCE. Although the concentrations of PCE in TP-1 and the associated stockpile were at and well below 80 ppb, 43 cubic yards of exterior soil (including drill cuttings from monitor well installation) were transported to Rabanco Landfill for disposal.
- Additional soil samples collected during Interim Action confirmed the absence of TCE, carbon tetrachloride, and cis-1,2 dichloroethene measured in single soil gas sample (SG-7). The absence of these constituents confirms that PCE is the only contaminant of concern at the site.
- Interim Action activities have likely dissipated the vapor gasses trapped beneath the concrete floor.
- Interim Action soil removal activities were conducted beneath two "Hot Spot" areas inside the building. Thirty yards of PCE contaminated soil was transported to Rabanco Landfill. The vertical profile in the laundry area "Hot Spot" (TP-2) shows a decrease in PCE concentrations with depth, from 0.85 mg/kg at 3 feet down to 0.29 mg/kg at 8.5 feet. The "Hot Spot" area in the dry cleaners side (TP-1) reported PCE contamination to 8.5 feet. The vertical profile in this dry cleaners "Hot Spot" reported a more uniform distribution of PCE with an average of 0.93 mg/kg. PCE concentrations of 1.01 mg/kg were measured at 8.5 feet. PCE contamination decreases laterally towards the adjacent businesses, H&R Block and Wray's Thriftway. No PCE breakdown products (TCE, DCE, vinyl chloride) were reported in any of the soil samples.
- The Yakima Gravels, consisting of unconsolidated open-framework silty to cobbly sediments, underlie
 the site. Near-surface groundwater occurs in these sediments at depths fluctuating from 22 to 34 feet
 which is deeper than most of the other YRRA facilities. Groundwater flows consistently toward the
 southeast under a gradient which appears to vary between 0.2 and 0.6 percent.
- At least one of the six sampling events conducted at the site reported concentrations PCE above EPA drinking water standards of 5 ppb in each of the monitoring wells. The presence of PCE contamination in the upgradient well indicates an off-site source of contamination contributing to the PCE problem. However, the higher concentration of PCE in down-gradient well MW-3 (up to 107 ppb) indicates that on-site sources also contributed to PCE contamination at the site. A substantial decline in PCE

concentrations is reported in the two downgradient wells MW-2 and MW-3. PCE concentrations in MW-3 declined from 107 ppb in February 1997, down to 31 ppb in September and 8.2 ppb in December 1997. This substantial decline in PCE contamination occurred subsequent to Interim Action soil removal activities, suggesting "source control" activities have been successful in improving the groundwater quality beneath the site. Chloroform and dichlorodifluoromethane were also detected in the groundwater samples in April 1996 and July 1996, respectively. Dichlorodifluoromethane is not a regulated contaminant and chloroform concentrations did not exceed the U.S. EPA drinking water standard for trihalomethanes (100 μ g/l).

8.0 RECOMMENDATIONS

Contaminated soil associated with two former "Hot Spots" inside Southgate Laundry facility were identified and removed from the site. In addition, the dry cleaners operation at the site has been permanently shut down. Because of these "source control" activities, potential sources of groundwater contamination have been removed from the site. As a result of these activities the groundwater quality beneath the site has improved substantially. Based on these findings and conclusions, we provide the following recommendations for future activities and considerations at the site:

- Although PCE beneath the "Hot Spot" areas has been removed, inaccessible PCE contamination sources remain beneath the floor slab to depths greater than 8.5 feet. Unless groundwater quality shows significant deterioration we recommend leaving this contamination in place until the building is demolished.
- We recommend that the 1998 quarterly groundwater monitoring program currently in progress should be completed to confirm the groundwater quality improvement beneath the site.
- The owner should inform Ecology that there is off-site contamination that is affecting groundwater quality under the site and this additional source of contamination should be investigated by appropriate parties.

9.0 LIMITATIONS

This work was performed in accordance with the generally accepted practices of other consultants undertaking similar studies at this time and in the same geographical area. In completing this project, Maxim observed the degree of care and skill generally exercised by other consultants operating under similar circumstances and conditions. Maxim's findings and conclusions must be considered not as scientific certainties, but as opinions based on our professional judgement concerning the significance of the data gathered during the course of the evaluation. Other than this, no warranty is expressed or implied.

This study and report has been prepared on behalf of and for the exclusive use of Noel Corporation, solely for use in environmental evaluation of the Southgate Laundry site in Yakima, Washington. This report and the findings contained herein shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party in whole or in part, without the prior written consent of the Noel Corporation.

Report Prepared by:

Report Reviewed by:

Rachel Tauman Project Manager

Bill Bucher

Senior Hydrogeologist/Engineer

10.0 REFERENCES

- Ecology, 1996. Agreed Order No. DE 95TC-C239 to Roger Noel, President of Noel Corporation, and William L. Weigand, Jr., Attorney for Noel Corporation, by the State of Washington, Department of Ecology, January 5, 1996. Includes Yakima Railroad Area Work Plan by reference.
- Ecology, 1995. Guidance on Sampling and data Analysis Methods, Publication No. 94-49.
- Ecology, 1993. Model Toxics Control Act Soil Cleanup Standards WAC 173-340-740 (2) Table 2.
- Ecology, no date. Yakima Railroad Area (YRRA) Work Plan Remedial Investigation (RI).
- Maxim Technologies, 1996. Task 1 Yakima Railroad Area Remedial Investigation Site History/Soil Vapor Assessment, Southgate Laundry, Yakima, Washington.
- Maxim Technologies, 1997. Task 2 Draft Report Yakima Railroad Area Remedial Investigation Soil/Groundwater Investigations and Analysis, Southgate Laundry, Yakima, Washington.
- Slagle, Gary, 1996. Personal communication between Mr. Gary Slagle, Manager Noel Corporation, and Ms. Rachel Tauman, Maxim Technologies, Inc., Yakima, Washington.

APPENDIX A

BORING LOGS, GROUNDWATER MONITORING WELL CONSTRUCTION, WELL SURVEY

OB NO. 58	DB NO. 5809500946-04 PROJECT: SOUTHGATE LAUNDRY FACILITY		WELL NO. MW-1		
		LOGGED BY: Rachel Taun	nan		
	ATION: SE1/4 NE1/4	S 25, T 13	N, R 18 E	DRILLING CONTRACTOR:	R & R Drilling
	RTED/COMPLETED:			WELL CASING: 2-Inch, Sch	40, flush threaded PVC
4/7/96 -	4/7/96	DRILLING	METHOD: Air Rotary	WELL SCREEN:	
BOREHOLE	DIAMETER:	MEASURII	NG POINT: Top of PVC	SAND PACK: 10-20 mesh s	silica sand
TOTAL DEF			ative to Ground Surface: -0.26'	SEALANTS: Bentonite chip	os ·
	WATER: 32.44'	Elevation:	1056.47	WELL PROTECTOR: Flush	mounted
	nt Date: 4/9/96				
REMARKS:		HEAD			
DEPTH	SAMPLE	SPACE		1	
(feet)	INTERVAL	(ppm)	SUBSURFACE MATERIAL	DESCRIPTION	WELL CONSTRUCTION LOG
4-14-14-14-14-14-14-14-14-14-14-14-14-14					
0					Flush Mounted Cap
2			0-4 'Fill, silty clay, moist		Concrete 0-1' Bentonite chips, 1-13'
4			1		2" PVC, Schedule 40, 0-15'
	Split Spoon No. 1,		5-25' Well graded sand and g	gravels, 60-70% Sand.	
6	No recovery.		20-40% gravel. Rounded to	subrounded. Mostly basalt.	
8					
10	Split spoon No. 2,				
12	No recovery.		1		
					10-20 Silica Sand, 13-45'
14	Split spoon No. 3,		-		2" PVC screen, Schedule 40
16	Recovery.				15-45'
18					
20	Split spoon, No.4,				
770000	No recovery		1		
22		-	1		
24	Split spoon, No. 5		-		
26	Split spoon, No. 5, No Recovery		Į.		
28					
30	Split spoon, No. 6,				
- 250	No recovery.		and the process		
32			SWL 32.7' BGS		
34					
36					
38					
			1		
40					
42					
44				V	
			Total Depth Drilled 45'		

OB NO. 58	109500946-04 PROJ	ECT: SOU	THGATE LAUNDRY FACILITY	WELL NO. MW-2	
				LOGGED BY: Rachel Taun	nan
EGAL LOC	ATION: SE1/4 NE1/4	S 25, T 13	N, R 18 E	DRILLING CONTRACTOR:	R & R Drilling
DATE STARTED/COMPLETED:		WELL CASING: 2-inch, Sch	40, flush threaded PVC		
4/7/96 -	4/7/96	DRILLING	METHOD: Air Rotary	WELL SCREEN:	
BOREHOLE	DIAMETER:	MEASURIN	NG POINT: Top of PVC	SAND PACK: 10-20 mesh s	silica sand
TOTAL DEP	TH: 45 ft	Height Rela	alive to Ground Surface: -0.35'	SEALANTS: Bentonite chip	os
DEPTH TO	WATER: 34.8 ft	Elevation:	1056.47'	WELL PROTECTOR: Flush	mounted
deasuremer	nt Date: 4/7/96				
REMARKS:			7-		
DEPTH	SAMPLE.	HEAD			
(feet)	SAMPLE INTERVAL	SPACE (ppm)	SUBSURFACE MATERIAL	DESCRIPTION	WELL CONSTRUCTION LOG
(icci)	INTERVAL	(ppin)	CODOCKI ACE IMATERIAL	DESCRIPTION	WELL CONSTRUCTION LOG
0					Flush Mounted Cap
			0-4 'Fill, silty clay, moist		Concrete 0-1'
22					Bentonite chips, 1-13' 2" PVC, Schedule 40, 0-15'
4	C-U C N- 1		E OF WEIL		
6	Split Spoon No. 1, No recovery.		5-25 Well graded sand and graded sand and gravel. Rounded to s	raveis, 60-70% Sand, ubrounded, Mostly basalts.	
8			GM		
	Language and resource state of the		1		
10	Split spoon No. 2. No recovery		-		
12	riorecovery		1		
14					10-20 Silica Sand, 13-45'
70.27	Split spoon No. 3,				2" PVC screen, Schedule 40
16	No recovery.		-1		15-45'
18			-		
20	Split spoon, No.4, No recovery				
22	No recovery				[] [] [] [] [] [] [] [] [] []
			1		
24	Split spoon, No. 5,		25-28' Sand. ML		
26	No Recovery				
28			28-45' Well-graded sand and Rounded to subrounded. Mos	gravel, some cobbles.	
30	Split spoon, No. 6,		Rounded to subrounded. Mo: 39'. GM	stly Basalt. Clay lense at	
	No recovery.				
32			1		
34			SWL 34.8 ft.		
36					
38					
				ą.	
40				,	
42					
44			Total Depth Drilled 45'	,	

JOB NO. 5	809500946-04 PRO	JECT: SOU	THGATE LAUNDRY FACILITY	WELL NO. MW-3		
			LOGGED BY: Rachel Taur	nan		
	CATION: SE1/4 NE1/4	S 25, T 13	N, R 18 E	DRILLING CONTRACTOR: R & R Drilling		
	RTED/COMPLETED:			WELL CASING: 2-inch, Sch	40, flush threaded PVC	
Samuel Control	- 4/7/96	Property and the second	METHOD: Air Rotary	WELL SCREEN:		
	E DIAMETER:		NG POINT: Top of PVC	SAND PACK: 10-20 mesh s	silica sand	
TOTAL DEF			ative to Ground Surface: -0.48	SEALANTS: Bentonite chip	95	
	WATER: 32.03 ft	Elevation:	1054.77'	WELL PROTECTOR: Flush	mounted	
	ent Date: 4/9/96	70.				
REMARKS:		HEAD	T			
DEPTH	SAMPLE	SPACE				
(feet)	INTERVAL	(ppm)	SUBSURFACE MATERIAL	DESCRIPTION	WELL CONSTRUCTION LOG	
					WELL GONOTICH LOG	
0					Flush Mounted Cap	
2			0-4 'Fill, silty clay, moist		Concrete 0-1'	
4			1		Bentonite chips, 1-13' 2" PVC, Schedule 40, 0-15'	
	Split Spoon No. 1,		5-25' Well graded sand and o	gravels 60-70% Sand		
6	No recovery.		5-25' Well graded sand and g 20-40% gravel. Rounded to GM	subrounded. Mostly basalt.	Table Tabl	
8			GW			
10	Split spagn No. 2		1		(44) (80)	
100000	Split spoon No. 2, No recovery.		1			
12			-		10-20 Silica Sand, 13-45'	
14	0					
16	Split spoon No. 3, No recovery.				2" PVC screen, Schedule 40	
18			1		10-40	
			1			
20	Split spoon, No.4, No recovery		-			
22	The federally					
24						
26	Split spoon, No. 5, No Recovery					
	NO RECOVERY					
28						
30	Split spoon, No. 6,					
32	No recovery.		SWL 32.51' BGS			
34						
36						
38						
40						
42						
44						
			Total Depth Drilled 45'		In It all the	

IOB NO. 5	809500946-04 PRO	ECT: SOU	THGATE LAUNDRY FACILITY	WELL NO. MW-4		
SUPPLEMENTAL DE POURSUIRE, AND CORNEL PROPERTY PROPERTY TRANSPORTED AND PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY AND ADDRESS OF THE PROPERTY ADDRESS OF THE PROPER		LOGGED BY: Rachel Tauman				
	CATION: SE1/4 NE1/4	S 25, T 13	N, R 18 E	DRILLING CONTRACTOR: R & R Drilling		
	RTED/COMPLETED:			WELL CASING: 2-inch, Sch	40, flush threaded PVC	
4/7/96 -			METHOD: Air Rotary	WELL SCREEN:		
	DIAMETER:		NG POINT: Top of PVC	SAND PACK: 10-20 mesh s	ilica sand	
TOTAL DEF			ative to Ground Surface: -0.26'	SEALANTS: Bentonite chip	s	
	WATER: 34.8 ft	Elevation:	1055.31'	WELL PROTECTOR: Flush	mounted	
	nt Date: 4/7/96					
REMARKS:		HEAD				
DEPTH	SAMPLE	SPACE				
(feet)	INTERVAL	(ppm)	SUBSURFACE MATERIAL	DESCRIPTION	WELL CONSTRUCTION LOG	
0			0-4 'Fill, clay and silt, most ora		Flush Mounted Cap	
2			O-4 Fill, Glay and silt, most ora	ange-brown	Concrete 0-1' Bentonite chips, 1-13'	
4			4-25' Well graded sand and a	ravels 80-70% Sand	2" PVC, Schedule 40, 0-15'	
6	Split Spoon No. 1, Recovery (poor).		4-25' Well graded sand and g 20-35% gravel. Some cobble	s. Rounded to subrounded.		
	Recovery (poor).		Mostly basalt, GM			
8						
10	Split spoon No. 2,					
12	Recovery (poor).					
14			1		10-20 Silica Sand, 13-45'	
	Split spoon No. 3,		-		2" PVC screen, Schedule 40	
16	Recovery (poor).		1		15-45'	
18						
20	Split spoon, No.4,					
22	No recovery		1			
24	Split spoon, No. 5,					
26	No Recovery					
28						
30	Split spoon, No. 6,					
32	No recovery.					
34			SWL 34.8'			
36			SVVL 34.0			
38	Prince of the second			V		
40						
42						
44						
7.7			Total Depth Drilled 45'			



NOTICE OF INTENT TO CONSTRUCT A MONITORING/RESOURCE PROTECTION WELL

This form <u>must</u> be received by the Department of Ecology with the required fees three days before your well(s) is constructed. Complete both sides of this form. Submit one form for each job site. Submit one check or money order for each form, payable to the Department of Ecology, P.O. Box 5128, Lacey, WA 98503-0210. <u>Do not send cash</u>. Instructions for filling out this form are printed on the back.

			The state of the s		n e e e e e e e e e e e e e e e e e e e
1. PROPERTY OWNER	NOEL COR	P	7 8 6 3 7 7	PHONE NO.	577-8-
2. ADDRESS: PO	Box 111	YNKIMA	, WA	98507	
3. AGENT (If different f	rom #1): MAXI	M TECHNOL	064	PHONE NO. (509)	577-85
4. ADDRESS: Po	Box 2887	YAKIN	n, un	98907	
5. JOB SITE/WELL LO	CATION: SE 4 of th	ne NE 4 Section	75 Township	3N Range 18	Or (circle one
6. STREET ADDRESS (if known): 300	& NOB IV	11 YA	Kima	w.wm
7. LOCATION OF WEL	L(S): (please check cour	nty)		•	
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7 040-22 (7/93)			A	Continued o	$n \ back \rightarrow$

RESOURCE PROTECTION WELL REPORT START CARD NO. P.2 760 COUNTY: YGK MA PROJECT NAME: 1/201 Carp. LOCATION: 5 E 14 WE14 Sec 25 Twn 134 R 1.8 E WELL IDENTIFICATION NO. A Lu-STREET ADDRESS OF WELL: 314 4- 4-DRILLING METHOD: Air Rutar DRILLER: RICK Hill Blv FIRM: RAR Drilling WATER LEVEL ELEVATION: _ GROUND SURFACE ELEVATION: INSTALLED: 4-7-56 2" PILC CONSULTING FIRM: MAX DEVELOPED: Bo 101 REPRESENTATIVE: Por FORMATION DESCRIPTION **WELL DATA** Monumena 1. Ft Top Soil 1 to 12 5 + Bentunite Sand & course Hole plug 3/8 10 1 SCHUC 2"PUC 12+0 45 Blank 1.5 110 420 1.5FT Silica Sand 20 Screen 25 0110 SIOT 337 PUC 35 SCALE: 1" =

RESOURCE PROTECTION WELL REPORT START CARD NO. P2 160 PROJECT NAME: 1001 COSTO COUNTY: YakimA WELL IDENTIFICATION NO. M to LOCATIONSEW WEW Sec 25 TWN BUR 1.8E DRILLING METHOD: Air Rutar STREET ADDRESS OF WELL: 314 4 with DRILLER: RICH COME 1111 Blv FIRM: Rap Drilling WATER LEVEL ELEVATION: __ GROUND SURFACE ELEVATION: INSTALLED: 4-7-76 2" PUC CONSULTING FIRM: MASK DEVELOPED: BO 1/5/ REPRESENTATIVE: **WELL DATA** FORMATION DESCRIPTION Monument 1. Ft Top Soil 5 + Bentunite Sand & course Hole plug 3/8 gravels 5dtuc 2"PUC 12+0 45 Blank 5 - 10 420 1.5FT Silica Sand Screen inter Level 0110 SIOT 2" PUC SCALE: 1" =

ECY 050-12 (Rev. 11/89)

RESOURCE PROTECTION WELL REPORT START CARD NO. P2 760 COUNTY: YakimA PROJECT NAME: 1051 CETP. LOCATION 5 E 14 NEVA Sec 25 Twn 13 4 R 1.8 E WELL IDENTIFICATION NO. MY STREET ADDRESS OF WELL: 311 4 wash DRILLING METHOD: Air Rutal DRILLER: RICK CORME WATER LEVEL ELEVATION: _ GROUND SURFACE ELEVATION: INSTALLED: 4-7-76 2" PVC CONSULTING FIRM: MAXIX DEVELOPED: Boiler REPRESENTATIVE: FORMATION DESCRIPTION **WELL DATA** AS-BUILT - MONUM eng 1. Ft Top 5011 110 12 5 + Bentunite Sand & course Hole plug 3/8 gravel's 10 1 SCHUC 2"PUC 12+0 45 Brenk 15 10 420 Silica Sand 30 20 Screen 0110 SIOT 33 35 SCALE: 1" = _

START CARD NO. 12 760 PROJECT NAME: NOEL COUNTY: YARIMA WELL IDENTIFICATION NO. MW -4 LOCATION: SEA NEW Sec 25 TWO/3N R 18E STREET ADDRESS OF WELL: 3Rd + NO D DRILLING METHOD: AIR, ROTARY DRILLER: RICK BULL BLUD FIRM: RYR ORILLING WATER LEVEL ELEVATION: SIGNATURE: Roclinau GROUND SURFACE ELEVATION: INSTALLED: 4-7-96 211 CONSULTING FIRM: MARTIM DEVELOPED: BAILER REPRESENTATIVE: RACHEI WELL DATA FORMATION DESCRIPTION MONLEMENT 1 FT TOP SOIL 5 - BENTONITE SANd & COURSE HOLE PLAG 3/8 GRAVEL'S 12to 45 5-1000 SILICA SAND 20 SCREEN WA FER LEVEL 0,70 33 FT SLOT SCALE: 1"=

RESOURCE PROTECTION WELL REPORT

Client Name: MAXIM - Yakima

ROB FARRELL

Project No.: 95-932 Laboratory No.: 173226 Sample Name: MW-1 15' Sample Date: 04/11/96

Time Sampled: 1535 Sample Type: SOIL

Maxim Technologies, Inc.

Collected by:

Mw-1 Soil from 15' (8010)

	MEASURE	D	METHOD	DATE
PARAMETER	VALUE		NUMBER	ANALYZE
EPA METHOD 8260				
Data File Number-Volatiles	0417961	1010		
Bromobenzene	<5	ug/kg	8260	04/17/9
Bromodichloromethane	· <5	ug/kg	8260	04/17/9
Bromoform	<5	ug/kg	8260	04/17/9
Bromomethane	<5	ug/kg	8260	04/17/9
Carbon Tetrachloride	<5	ug/kg	8260	04/17/9
Chlorobenzene	<5	ug/kg	8260	04/17/9
Chloroethane	<5	ug/kg	8260	04/17/9
Chloroform	<5	ug/kg	8260	04/17/9
Chloromethane (Methyl chloride)	≺5	ug/kg	8260	04/17/9
Dibromochloromethane	<5	ug/kg	8260	04/17/9
Dibromomethane	<5	ug/kg	8260	04/17/9
Dichlorodifluoromethane	<5	ug/kg	8260	04/17/9
1,2-Dichlorobenzene	<5	ug/kg	8260	04/17/9
1,3-Dichlorobenzene	<5	ug/kg	8260	04/17/9
1,4-Dichlorobenzene	<5	ug/kg	8260	04/17/9
1,1-Dichloroethane	<5	ug/kg	8260	04/17/9
1,2-Dichloroethane	<5	ug/kg	8260	04/17/9
1,1-Dichloroethene	<5	ug/kg	8260	04/17/9
c-1,2-Dichloroethene	<5	ug/kg	8260	04/17/9
t-1,2-Dichloroethene	<5	ug/kg	8260	04/17/9
1,2-Dichloropropane	<5	ug/kg	8260	04/17/9
Methylene chloride	<25	ug/kg	8260	04/17/9
1,1,1,2-Tetrachloroethane	<5	ug/kg	8260	04/17/9
1,1,2,2-Tetrachloroethane	<5	ug/kg	8260	04/17/9
Tetrachloroethene	<5	ug/kg	8260	04/17/9
1,1,1-Trichloroethane	<5	ug/kg	8260	04/17/9
1,1,2-Trichloroethane	<5	ug/kg	8260	04/17/9
Trichloroethene	<5	ug/kg	8260	04/17/9
Trichlorofluoromethane	<5	ug/kg	8260	04/17/9
/inyl chloride	< 5	ug/kg	8260	04/17/9
1,2-Dichloroethane-d4 (Surrogate)	97	%	8260	04/17/9
Toluene-d8 (Surrogate)	98	%	8260	04/17/90
-Bromofluorobenzene (Surrogate)	104	%	8260	04/17/9
OLATILE ORGANIC COMPOUNDS				
Benzyl chloride	(1)	ug/kg	8260	04/17/96
c-1,3-Dichloropropene	· <5	ug/kg	8260	04/17/96
-1,3-Dichloropropene	<5	ug/kg	8260	04/17/96
2-Chloroethyl vinyl ether	<50	ug/kg	8260	04/17/96
W		909X = 703		

Page

Client Mame:

MAXIM - TRI-CITIES, WA

Project No.:

87-921

Laboratory No. : 173226 Sample Neme: Sample Dates

MI-1 154 04/09/96

Collected by:

ROB FARRELL

Time Sumpled: Sample Type:

1535

501L

MW-1 Sal from 15' (8260)

	MEASURE	ED	METHOD	DATE
PARAMETER	VALUE		與即邻巴风	ANALYZED
EPA NETHOD 8260				
Date File Number-volatiles	041796	1010	3260	04/17/96
Benzona	<	un/kg	8260	04/17/98
Bromobenzene	×5	ug/kg	8260	04/17/96
Bromoch Loromathare	<5	us/ks	8260	04/17/98
Bromodich Loromethame	<5	ug/kg	8260	04/17/96
Brossform	-5	navka	8260	04/17/96
Bronomethane	⋖5	ua/ka	8260	04/17/96
n-Butylbenzene	45	ug/kg	8240	04/17/98
sec-Butythenzene	<5	ug/kg	8260	04/17/96
t-Butylbenzene	<5	ug/kg	8260	04/17/96
Carbon Tetrachlorida	<5	ug/kg	8260	04/17/96
Chlorobenzene	<5	un/kn	8260	04/17/96
Chloroethane	<5	ug/kg	8260	04/17/96
Chloroform	<5	ug/kg	8260	04/17/96
Chloromothane (Methyl chloride)	≪5	ug/kg	8260	04/17/96
2-Chlorotoluene	<5	ug/kg	8260	04/17/96
4-Chioratoluene	≪5	uu/ka	8260	04/17/96
D fibromach Laromerchena	⋖5	ug/kg	8260	04/17/96
1,2-Dibromo-3-chtoropropana	<25	ug/kg	8260	04/17/96
1,2-Dibromosthere	<5	ug/kg	8260	04/17/96
Dibrososthure	<5	ug/kg	8260	04/17/96
Dichlorodifluoromethene	≪5	ug/kg	8260	04/17/96
1,2-Dichlorobenzene	45	ug/kg	5260	04/17/96
1,3-Dichlorobenzene	<5	ug/kg	8260	04/17/96
1,4-DichLorobenzene	≪5	ug/kg	8260	04/17/96
1,1-Dichloreethere	<5	ug/kg	8260	04/17/96
1,2-Dichloroothene	45	ug/kg	8260	04/17/96
1,1-Dichlorpethene	45	ugrka	8260	04/17/96
c-1,2-Dichloroethene	45	ug/kg	8260	04/17/96
t-1,2-Dichloroethene	≺ 5	ug/kg	8260	04/17/96
1,2-Dichtoropropane	≪5	Man, kill	8260	04/17/96
,3-Dich Loropropare	45	ug/kg	8260	04/17/96
2,2-DichLoropropene	≪5	ug/kg	8260	04/17/96
1,1-Dichtoropropane	<5	ug/kg	8260	04/17/96
Ethylbenzene	<5	ug/kg	8260	04/17/96
Issach Lorobyted Kene	<10	ugy/kg	8260	04/17/96
Assene (Isopropylbenzene)	<5	ug/kg	8269	04/17/96
supropy to Luna	45	ug/kg	8260	04/17/95
Sethylene chioride	<25	ug/kg	8260	04/17/96
high that one	49	10.000 (A.B. 10.00)	3260	04/17/96
-Propylbenzene	9.0	ug/kg ug/kg	2260	04/17/96
it yr opy toom zene Styrene	≪5	ug/kg	8260	04/17/96

Page

→→→ IMMIMU+++

Client Name:

MAXIN - TRI-CITIES, WA

Project No.:

87-921

Laboratory Mo.: 173226

Sample Hima:

MU-1 151

Sample Date:

04/09/96

Collected by:

ROS FARRELL

Time Sampled:

1535

Sample Type:

SOIL

PARAMETER	. WEASURED		METHOD MUNICIPAL	DATE ANALYZED
1,1,1,2-Tetrachloroethane	ৰ	ug/kg	8260	04/17/96
1,1,2,2-Tetrachlorcethene	<5	ug/kg	8260	04/17/96
Tetrachicroathena	<5 ×5	ug/kg	8250	04/17/96
Tolluene	<5	ug/kg	8260	04/17/96
1,2,3-Trichlorobenzene	<5	ug/kg	8260	04/17/96
1,2,4-Trichtordenzene	<5	wg/kg	8250	04/17/96
1,1,1-Trichtoroethune	<5	ug/kg	8260	04/17/96
1,1,2-Trichtoroethane	<5 ⋅	un/kg	8260	04/17/96
Trichloroethene	*5	un/kn	8260	04/17/96
Trichlerofluoremethurm	45	սց/հա	86260	04/17/96
1,2,3-Trichtoropropana	-€3	ug/kg	0.058	04/17/96
1,2,4-Trimethylbenzama	≪9	un/kn	8260	04/17/96
1,3,5-Trimothylbenzene	E>	ug/kg	8260	04/17/96
Vinyl dilaride	<5	ug/kg	6260	04/17/96
Total xylenes	<5	ug/kg	8260	04/17/98
1,2-Dichloroothene-d4 (Surrogate)	97	%	826D	04/17/96
Tolumna-d8 (Surrogate)	98	25	8260	04/17/96
4-Bromofluorobenzene (Surrogate)	104	7.	8260	04/17/96

Client Name:

MAXIM - Yakima

Project No.:

95-932

Laboratory No.: 173224

Sample Name:

MW-4 51

Sample Date:

04/09/96

Collected by:

ROB FARRELL

Time Sampled:

1010

Sample Type:

SOIL

MW-4 SOIL From 5' (8010)

DADAMETER		MEASUR	Parameter 1	METHOD	DATE
PARAMETER		VALUE		NUMBER	ANALYZE
EPA METHOD 8260					
Data File Number-Volatiles		041796	1008		
Bromobenzene		<5	ug/kg	8260	04/17/9
Bromodichloromethane		<5	ug/kg	8260	04/17/9
Bromoform		<5	ug/kg	8260	04/17/9
Bromomethane		<5	ug/kg	8260	04/17/9
Carbon Tetrachloride		<5	ug/kg	8260	04/17/9
Chlorobenzene		<5	ug/kg	8260	04/17/9
Chloroethane		<5	ug/kg	8260	04/17/9
Chloroform		<5	ug/kg	8260	04/17/9
Chloromethane (Methyl chloride)		<5	ug/kg	8260	04/17/96
Dibromochloromethane		<5	ug/kg	8260	04/17/9
ibromomethane		<5	ug/kg	8260	04/17/9
ichlorodifluoromethane		<5	ug/kg	8260	04/17/9
,2-Dichlorobenzene		<5	ug/kg	8260	04/17/9
,3-Dichlorobenzene	1.5	<5	ug/kg	8260	04/17/9
,4-Dichlorobenzene		<5	ug/kg	8260	04/17/9
,1-Dichloroethane		<5	ug/kg	8260	04/17/9
,2-Dichloroethane		<5	ug/kg	8260	04/17/9
,1-Dichloroethene		<5	ug/kg	8260	04/17/9
-1,2-Dichloroethene		<5	ug/kg	8260	04/17/9
-1,2-Dichloroethene		<5	ug/kg	8260	04/17/96
,2-Dichloropropane		<5	ug/kg	8260	04/17/90
ethylene chloride		<25	ug/kg	8260	04/17/96
,1,1,2-Tetrachloroethane		<5	ug/kg	8260	04/17/96
,1,2,2-Tetrachloroethane		<5	ug/kg	8260	04/17/96
etrachloroethene		<5	ug/kg	8260	04/17/96
,1,1-Trichloroethane		<5	ug/kg	8260	04/17/96
,1,2-Trichloroethane		<5	ug/kg	8260	04/17/96
richloroethene		<5	ug/kg	8260	04/17/96
richlorofluoromethane		<5	ug/kg	8260	04/17/96
nyl chloride		<5	ug/kg	8260	04/17/96
2-Dichloroethane-d4 (Surrogate)		96	%	8260	04/17/96
luene-d8 (Surrogate)		99	×	8260	04/17/96
Bromofluorobenzene (Surrogate)		104	%	8260	04/17/96
DLATILE ORGANIC COMPOUNDS					
nzyl chloride	310	(1)	ug/kg	8260	04/17/96
1,3-Dichloropropene	(k)	<5	ug/kg	8260	04/17/96
1,3-Dichloropropene		<5	ug/kg	8260	04/17/96
Chloroethyl vinyl ether		<50	ug/kg	8260	04/17/96

4M 0047 049

MAKIN - TRI-CITIES, WA Client Name:

87-921 Project No.:

Laboratory No.: 173224 MH-4 5* Semple Mames

04/09/96 Sumple Date:

ROS FARRELL Callected by:

1010 Tima Semplad: SOIL Sample Type:

Soil @ Mw-4 @5' (8260)

777 LAILLIMI + + + 1

PARAMETER	Weaslired Value	METMOD	DATE ANALYZED
antique to the second s			

PARAMETER	VALUE		MUMBER	AMALYZED
ЕРА METHOD 8260				
Data File Number-Volatiles	0417961	DOB .	8260	04/17/96
Benzene	≪5	ug/kg	8260	04/17/96
Broschenzene	√ 5	ug/kg	8260	04/17/98
Wrompch Loromethane	⊲ 5	ug/ks	8260	04/17/96
Bromodichteromathane	45	ug/ks	8260	04/17/96
Brongform	~%	uag/loss	0358	04/17/96
S resseme than a	≪5	ugu/kg	0.250	04/17/96
n-Butylbenzene	45	us/leg	8260	04/17/96
sec-Butylbenzens	<5	ug/kg	8260	04/17/96
2-Burylbenzene	45	Mg/kg	3260	04/17/96
Carbon Tetrachicride	45	4100/Kg	8250	04/17/96
Chlorobanzane	<5	ug/kg	8260	04/17/96
Chlorgethane	<5	ug/kg	8260	04/17/96
Chloroform	45	usi/top	4260	04/17/96
Chloromathane (Methyl chloride)	45	untal loss	8260	04/17/96
Z-Chlorotoluene	45	ug/leg	8259	04/17/96
4-Chiorototume	≼5	uu/ka	8260	04/17/98
b jorosoch Loromethana	⊀ 5	us/kg	8260	04/17/96
1,2-Dibrono-3-chipropropere	<25	ua/kg	9260	04/17/96
	232	ug/log	8260	04/17/96
1,2-billremoethere	45	ug/kg	8250	04/17/96
Dibromomathane	√ 5	um/kg	2260	04/17/96
Dichloredifiuorcatethane	×5	ug/ks	2250	04/17/96
1,2-Dichlorobanzene	*5	ug/kg	3260	04/17/96
1,3-Dichlarobenzene	×5	ug/kg ·	8260	04/17/96
1,4-Dichtorobenzene	45	na/ka	8260	04/17/96
7,1-Dichloroethane	45	ma/ka	8260	04/17/96
1,2-pichtoroethana	* 5	ug/ka	8260	04/17/96
1,1-Dichloroethere	~5 ~§	ug/kg	3260	04/17/96
e-1,2-Dichloresthere	<5	ug/kg	8260	04/17/96
t-1,2-Dichlorosthere	*5	real/jea	8260	04/17/96
1,2-Dichtoropena			8260	04/17/96
1,3-Dichtoropropara	< 5	ug/kg	0858	04/17/96
2,2-0 ich Loropropene	<25	ug/kg	8260	04/17/96
1,1-Bichloropropens	√5 ≪5	ug/kg	8268	04/17/96
Ethylbenzana		ug/kg	#260	04/17/98
Hexach Lorebutadiene	<10	ug/kg	3260	04/17/96
Cumeno (Isopropylbenzena)	₹5	ng/kg	8260	04/17/96
Impropyltoluene	×5	ug/kg	8260	04/17/96
Neshylune chloride	₹25	ug/kg	0260	04/17/96
Nephthal ere	45	end / Juli		04/17/96
n-Propylbanzene	<5	ug/kg	0240	04/17/90
Styrene	<5	ug/kg	81260	04/11/50

Page

MAXIN - TRI-CITIES, WA Client News:

Project No.: 87-921 Leberatory No.: 173224 NU-4 51 Sample Name: 04/09/96 Sample Date: ROB FARRELL Collected by:

Time Sampled: 1010

Sample Type: SOIL



PARAMETER	WEASURED VALUE		METHOD	DATE AMALYZED
1.1.1.2-Yetrachtorocthomo	* 5	ug/kg	B260	04/17/96
1,1,2,2-Tetrachloroethane	<9	ug/kg	8260	04/17/96
Tetrachlorpethene	<5	ug/kg	6240	04/17/96
Toluene	<5	ua/ka	8260	04/17/96
1,2,3-Trichlorobenzene	<5	ug/kg	8260	04/17/96
1,2,4-Trichtorsbenzene	<5	ug/kg	8260	04/17/96
1,1,1-Trichloroethana	₹5	นต/ชต	8260	04/17/96
1.1.2-Trichloroethane	<5	ug/kg	8260	04/17/96
Trichlorgethena	€5	ug/kg	8560	04/17/96
TrichLorofLuoromathene	≪⊈	ug/kg	8260	04/17/96
1,2,3-Trichtoropropane	<5	ug/kg	B260	04/17/96
1,2,4-Trimethythenzana	<5	ug/kg	8260	04/17/96
1,3,5-Trimathylbenzena	<5	ug/km	8260	94/17/96
Vinyl chloride	<5	ug/kg	8260	04/17/96
Total xylenes	45	ug/kg	8260	04/17/96
1,2-Dichloroethene-d& (Surrogate)	56	×	8260	04/17/96
Toluene-d8 (Surrogate)	99	35	8260	04/17/96
4-Srcmofluorobenzene (Surrogate)	104	*	D928	04/17/96

Client Name: MAXIM - Yakima

Project No.: 95-932 Laboratory No.: 173225

Sample Name: M-4 15'
Sample Date: 04/09/96
Collected by: ROB FARRELL

Time Sampled: 1125 Sample Type: SOIL MW-4 Soil from 15' (8010)

PARAMETER	MEASUR	ED	METHOD	DATE
PARAMETER	VALUE		NUMBER	ANALYZED
EPA METHOD 8260				
Data File Number-Volatiles	041796	1009		
Bromobenzene	<5	ug/kg	8260	04/17/96
Bromodichloromethane	<5	ug/kg	8260	04/17/96
Bromoform	<5	ug/kg	8260	04/17/96
Bromomethane	<5	ug/kg	8260	04/17/96
Carbon Tetrachloride	<5	ug/kg	8260	04/17/96
Chlorobenzene	· <5	ug/kg	8260	04/17/96
Chloroethane	<5	ug/kg	8260	04/17/96
Chloroform	<5	ug/kg	8260	04/17/96
Chloromethane (Methyl chloride)	<5	ug/kg	8260	04/17/96
Dibromochloromethane	<5	ug/kg	8260	04/17/96
Dibromomethane	<5	ug/kg	8260	04/17/96
Dichlorodifluoromethane	<5	ug/kg	8260	04/17/96
1,2-Dichlorobenzene	<5	ug/kg	8260	04/17/96
1,3-Dichlorobenzene	<5	ug/kg	8260	04/17/96
1,4-Dichlorobenzene	<5	ug/kg	8260	04/17/96
1,1-Dichloroethane	<5	ug/kg	8260	04/17/96
1,2-Dichloroethane	<5	ug/kg	8260	04/17/96
1,1-Dichloroethene	<5	ug/kg	8260	04/17/96
c-1,2-Dichloroethene	<5	ug/kg	8260	04/17/96
t-1,2-Dichloroethene	<5	ug/kg	8260	04/17/96
1,2-Dichloropropane	<5	ug/kg	8260	04/17/96
Methylene chloride	<25	ug/kg	8260	04/17/96
1,1,1,2-Tetrachloroethane	<5	ug/kg	8260	04/17/96
1,1,2,2-Tetrachloroethane	<5	ug/kg	8260	04/17/96
Tetrachloroethene	<5	ug/kg	8260	04/17/96
1,1,1-Trichloroethane	<5	ug/kg	8260	04/17/96
1,1,2-Trichloroethane	<5	ug/kg	8260	04/17/96
Trichloroethene	. <5	ug/kg	8260	04/17/96
Trichlorofluoromethane	<5	ug/kg	8260	04/17/96
Vinyl chloride	<5	ug/kg	8260	04/17/96
1,2-Dichloroethane-d4 (Surrogate)	102	%	8260	04/17/96
Toluene-d8 (Surrogate)	99	%	8260	04/17/96
4-Bromofluorobenzene (Surrogate)	105	%	8260	04/17/96
VOLATILE ORGANIC COMPOUNDS				
Benzyl chloride	(1)	ug/kg	8260	04/17/96
c-1,3-Dichloropropene	· <5	ug/kg	8260	04/17/96
t-1,3-Dichloropropene	<5	ug/kg	8260	04/17/96
2-Chloroethyl vinyl ether	<50	ug/kg	8260	04/17/96

Maxim Technologies, Inc.

Poga

Client Nese:

MAXIM - TRI-CITIES, WA

Project No.:

Laboratory No.: 173225

09:37

87-921 N-4 151

Sumple Name: Sample Date:

04/09/96

Collected by:

Time Sampled:

1125

Sample Type:

SOIL

ROB FARRELL

MW-4 SOIL from 15' (8260)

	neasured Value		METRICIP	DATE
PARAMETER			MUNMER	AMALYZED
EPA METHOD 8260				,
Data File Number-Volatiles	0417961	9009	8260	04/17/96
Bonzone	∢ \$	ug/kg	9590	04/17/96
Brombonzeno	≪5	ug/kg	8250	04/17/96
Brosochloromethene	<5	ug/kg	8260	04/17/96
Brosodichtorosethane	≺5	ug/kg	8260	04/17/96
Branoform	<5	ug/kg	8260	04/17/96
For unconetherse	<5	LOGIFTE	8260	04/17/96
n-Butylbanzene	45	ug/kg	8260	04/17/98
eac-Butylbenzene	<5	ug/kg	6260	04/17/96
t-Sutylbenzene	<5	encal beam	8360	04/17/96
Carbon Tetrachioride	< 5	ug/kg	B260	04/17/98
Chiorobenzene	45	ug/kg	2260	04/17/96
Chlorathene	45	ug/kg	8260	04/17/98
Caloratora	≈ 5	ug/kg	8260	04/17/98
Chiprosethene (Mathyl chipride)	< 5	ug/kg	0256	04/17/98
2-Chiorotoluene	≺5	ug/kg	8260	04/17/98
4-Chlorotelusno	<5	ug/kg	8260	04/17/96
Dibromoch Loromathane	45	ug/kg	8260	04/17/96
1,2-0jbress-3-chloropropane	√25	ug/kg	8250	04/17/96
1,2-Dibramoethere	<5	ug/kg	8260	04/17/96
Dibromethane	<5	ug/log	8260	04/17/94
Dichloredifluoremethana	< 5	ug/kg	8260	04/17/98
1,2-Dichlorobonzene	~5	way/km	2260	04/17/96
1.3-Dichlorobenzene	<5	ug/kg	8260	04/17/96
1_6-Dichterspenzene	×45	ug/kg	8260	04/17/98
1,1-Dichloroethere	≈ 5	ug/kg	8260	04/17/98
1,2-pichLoroathane	≪5	un/ka	3260	04/17/96
1.1-Dichiorosthene	<5	ug/kg	8260	04/17/96
c-1,2-Dichtorosthans	< 5	ug/kg	8260	04/17/96
t-1,2-Dichloroethene	<5	ug/kg	8260	04/17/96
1,2-Dichloropropere	<5	ug/kg	8260	04/17/98
1,3-Dichlorepropone	<	ug/ku	8260	04/17/96
2,2-Dichloropropena	<25	ug/kg	8260	04/17/98
1,1-Dichioropropone	<5	ug/kg	8260	04/17/96
Ethyl benzene	45	ug/kg	8760	04/17/96
Hexach Lorobitad Tone	<10	ug/kg	2260	04/17/96
Eumone (Imagrapylbenzere)	45	ug/kg	8260	04/17/98
Isopropyltoluene	<9	ug/kg	8260	04/17/96
Methylane chloride	⊀25	ug/kg	2260	04/17/98
Mach thulene	45	ug/kg	8260	04/17/96
n-Propylbenzena	≪5	ug/kg	B260	04/17/90
Styrana	≪5	ug/kg	8260	04/17/96

Page 5

Client Name: MAXIN - TRI-CITIES, WA

Project No.: 87-921 Laboratory No.: 173225 Sample Name: M-4 15' Sample Data: 04/09/96 Collected by: ROB FARRELL

Yime Sampled: 1125 Scaple Type: SOIL DAAFT

PARAMETEN	MEASURED VALUE S Ug/kg		METHOD MR.MBER 8260	DATE ANALYZED 04/17/96
1,1,1,2-TetrachLoroethone				
1,1,2,2-Tetrachioroethane	45	ug/kg	8250	04/17/96
Tetrachioroethere	(\s5)	ug/kg	8260	04/17/96
Toluma	<5	wg/kg	6260	04/17/96
1,2,3-Trichtorobanzene	<5	ug/kg	8/260	04/17/96
1,2,4-Trichtorobenzene	<5	ug/kg	6260	04/17/96
1,1,1-Trichleroethens	<5	ug/kg	85260	04/17/96
1.1.2-Trichlorgethane	<5	ug/kg	8250	04/17/96
Trichlorosthere	<5	reg/log	8260	04/17/96
Trichlorofluoromothera	<5	ug/kg	8260	04/17/96
1,2,3-Trichloropropens	<5	ug/kg	0256	04/17/96
1.2.4-Trimothylbanaere	<5	ug/kg	0260	04/17/98
1,3,5-Trimethylbenzene	<5	ug/kg	8260	04/17/96
Vinyl chloride	<5	ugskg	9260	04/17/96
Total xylmnes	<5	ug/kg	8250	04/17/96
1,2-Djahloroethane-d4 (Surrogate)	102	%	0353	04/17/96
Tolumne-dB (Surrogate)	då	×	8260	04/17/98
4-Bromofluorobenzene (Surfogete)	105	26	8260	04/17/98

Sampler Name (Printed) Relinquished by Relinquished by: Project or Site-Name Relinquished by Relinquished by 4-9-96 Project Number 15-54 15-31-17 4-6-66 COLLECTED 46-51-17 かった 4-15-46 PO 4500346 04 10.10 13:40 11:35 COLLECTED 15:15 10:10 15:35 TIME MW-2 - WM MW-U サビーン ナナ 10 N 日本の SAMPLE LOCATION OR DESCRIPTION 0 4 5 3 6006 600 Date Date Date Date OR GRAB CHAIN OF CUSTODY RECORD U\ 9 Soi Time Time Time Time 50 SE STE SAMPLE MATRIX STO Billings, MT Boise, ID Great Falls, MT ECHNOLOGIES INC Received by: Received_b Received by Received by: NO. OF CONTAINERS 407 Jap 407 7 Y IRE & 20h R Helena, MT Missoula, MT Yakima, WA 8010 ANALYSIS REQUIRED Mulhacur 3010 NO 10 3610 8010 0,000 2010 2010 8010 15/23218 RW-2 415 8010 SOLA Dackel Sampler Signature Contact Address or Location Contact or Report to \$05 Ju. 10 ... 30 Kg blind dup tres. NOTES Semile 2658-tt C SHOW 500A 1-13 LAB NUMBER 73334 2 X 450 63/53 S 20 20



SAMPLE RECEIPT CHECKLIST

Client	Name M- Gakina t Suethgato Laundrey	5 X	Date/Time Received 4/16/96 0945 Received by
Labora	atory number(s) $173924 - 32$		Carrier name
Check by:	list completed Initials / Date		Logged in by Initials Date Sample Type Sample Type
	YES NO		YES NO
1.	Shipping container in good condition?	√ 16.	All samples rec'd within holding time?
2.	Custody seals present on shipping	17.	Preservation pH check performed by:
2	container?	18.	Metals bottle(s) pH <2?
3. 4.	Condition: Intact Broken Chain of custody present?	19.	Nutrient bottle(s) pH <2?
5.	Chain of custody signed when	20.	Cyanide bottle(s) pH >12?
а -	relinquished and received?	21.	Sulfide bottle(s) pH >9?
6.	Chain of custody agrees with sample labels?	22.	Oil & grease bottle(s) pH <2?
7.	Custody seals on sample bottles?	23.	TOC bottle(s) pH <2?
8.	Condition: Intact Broken	24.	DRO/418.1 bottle(s) pH <2?
9	Samples in proper container/bottle?	25.	Phenolics bottle(s) pH <2?
10.	Samples intact?	26.	Volatiles (VOA) pH <2? (VOA pH checked by analyst)
11.	Sufficient sample volume for indicated test?	⊹27.	Client contacted?
12.	VOA vials have zero headspace?	28.	Person contacted
13.	Trip Blank received?	29.	Date contacted
14.	Ice/Frozen Blue Ice present in shipping container? (circle one)	30.	Contacted by 73/2
15.	Container temperature 1.10.46.2 3	31.	Regarding?
Any I	NO response must be detailed in the comments section below	w. If it	ems are not applicable, they should be marked NA.
COM	MENTS: #5 SOO COSC ME		
	V = /=		

MONITORING WELL LISTING AT 3RD AVE. AND NOB HILL BLVD.

MONITORING WELL	STATE PLANE COORDINATES	ELEVATION
SOUTHEAST	N=456736.3 E=1637838.0	SOUTH RIM = 1055.25 TOP PVC = 1054.77 $\mu \omega^{-3}$
SOUTHWEST	N=456717.9 E=1637700.7	SOUTH RIM = 1055.57 TOP PVC = 1055.31 MW
MIDDLE	N=456866.4 E=1637817.4	SOUTH RIM = 1056.82 TOP PVC = 1056.47 MW-Z
NORTH	N=457023.1 E=1637695.4	SOUTH RIM = 1057.16 TOP PVC = 1056.90 MW-1

TO CONVERT state plane coordinates to actual ground coordinates scale using the factor of 1.000135034

Elevation is based on National Geodetic Vertical datum of 1988 (NGVD) 1991 adjusted, from City of Yakima GPS - control point number 593 having an elevation of 1057.41.

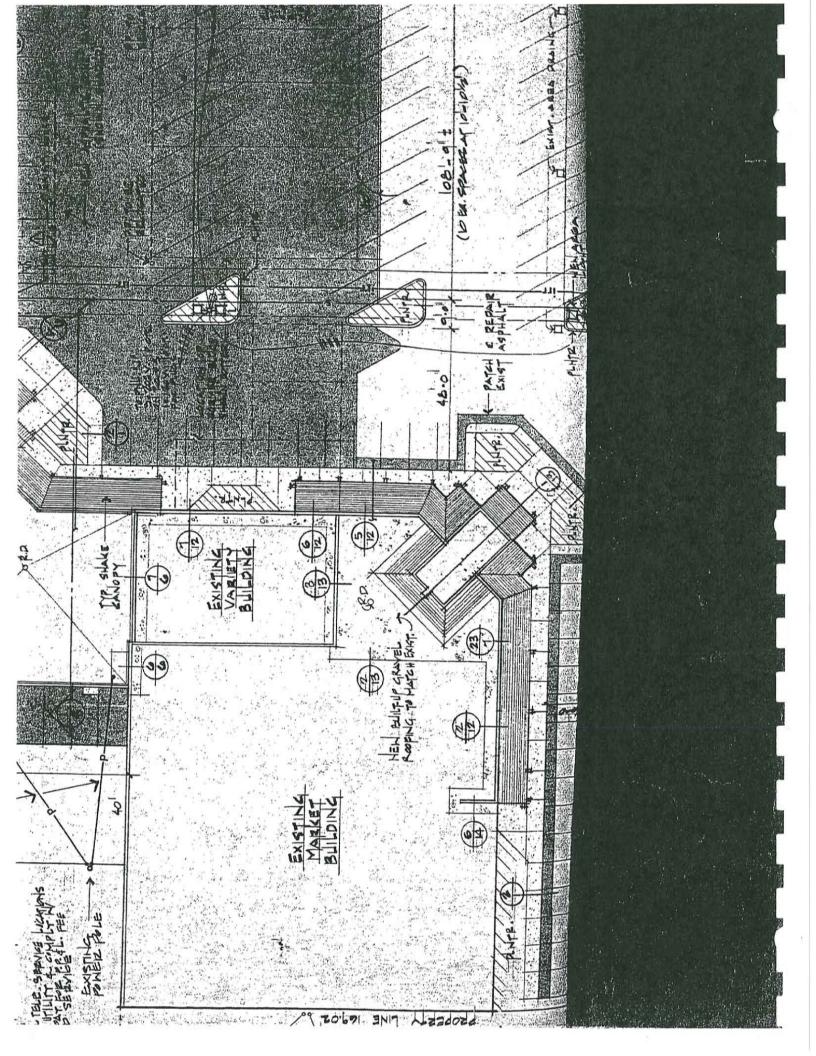
Horizontal datum is based on Washington State Plane Coordinate System (Lambert Projection) South Zone, North American Datum of 1983 (NAD 83) 1991 adjusted, established from City of Yakima GPS - control point numbers 734 and 835.

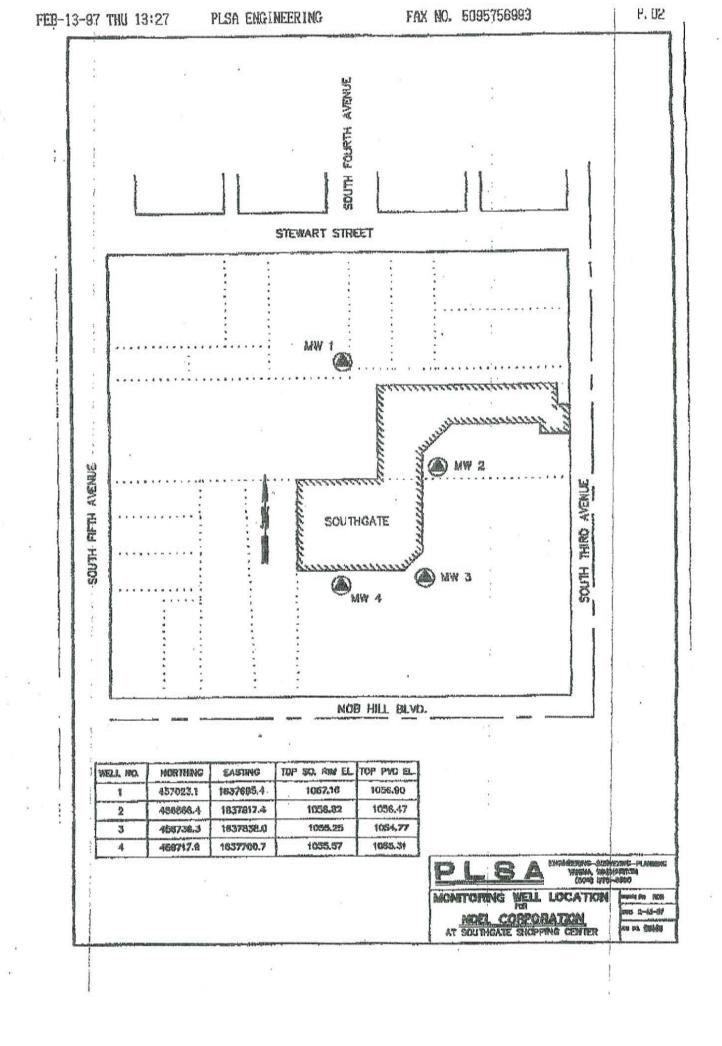
State Plane coordinates converted to latitide and longitude using U.S. Army Corps of Engineers CORPSCON program.

7_

Page 1

† ".





APPENDIX B

CONTAMINATED SOIL DISPOSAL AND BACKFILL DOCUMENTS

OCT 15'97 11:00 No.005 P.01

On stion No. 97.12511

Billing Acet. No. 12299

Product Code 66

Contambiated soil

100-0100 AT THE POSAL COMPANY 200-1120 ATHERS ME, Salts 300 Bellette, WA 98004 Telephone (200) 646-3400 / Fac (200) 546-2440

This Bill of Lading sugments the bituses Bervine Agreement ("Agreement") entered into by Non Compared in
on PANIOT (date). The terms herein are made a part of the Agreement. In the event of conflict between this Bull of Lading and the Agreement, the terms of the Agreement present.
RDC happly authorizes the Wester (Wester) described in Conffication No. 97-1257, signed by Customer on Since Officers), for disposal at Receivest Regional Landfill, Customer shall present a copy of this Bill of Lasting with each physicast delivered.
Leaston of Wess: 1020 S 3rd Ave, Yakima, WA
Distinct of Shipment: Truck - 5e 1f
Additional Fors (e.g., inhoratory floss, transportation floss, special handling floss, sic. M'mone, no state):
none.
PERFORMANCE BATE
FOR RDC TRANSPORTATEON: Contensor shall make the Waste smalled for shipment no later than h / A (data). RDC shall transport the Waste no later than / A (data), unless RDC notifies the Contensor in writing that Waste transport shall be suspended or canceled due to RDC's exercise of its right to impact or employe the Waste (as provided in the Agreement).
POR CUSTOMER TRANSPORTATION: Customer shall begin delivery of the Wests, at [check one];
Reservels Regional Landfill.
Wesse delivery shall begin no later these 92197 (date), and shall complete delivery of the Weste no later than 92196 (date), unless MDC method Contenues in writing so suspend or cancel the waste delivery due to MDC's question of its right to inspent or energy the Weste (As provided in the Agreement).
CUSTOMER REGIONAL RESPONAL COMPANY
buy A. Lite Lety willer
LANY G. ESTES V.P./SEC Kelsey Miller - Proj Coordinator
8-20-97

ALL TRUCKS MUST HAVE A COPY OF THIS BILL OF LADING WHEN DELIVERING WASTE TO THE TRANSPER STATION OR TO THE LANDFELL

Revised: 1/26/96



RABANCO REGIONAL DISPOSAL CO.

Roosevelt, WA 99356 P.O. Box 338

(509) 384-5641



SKET NUMBER

347472

*** COMPLETED WEIGHT TICKET ***

ACCOUNT: 12299 Cash - Landfill

Contaminated Soil

SOURCE: Yakika, WA CHANDDITY: 66

TOP ID: 97-1257

ONTAINER #:

CUSTOKER WEIGHT:

SEAL #:

6 LBS

29.740

59 480

KE

20/21-30 09/12/69 DATE

33380 LBS

16:19 10:35

TIME

25.740 TONS CE480 UBS /

LITIVE

DRIVER COPY 1000.81

I HAVE READ AND AGREE TO THE CONDITIONS ON THE REVERSE SIDE.

- (A.).

Weighmaster Recycled

010.0N 12:43 HUCK ID: 1 Ken-Blu-Lewis Con.

ID THE SEAT TOWER TICKET #:

SOOD AND THE SEAT T

Corporation

910.0N 12:44 50.

RABANCO REGIONAL DISPOSAL CO. Roosevelt, WA 99356 (509) 384-5641 P.O. Box 338



347213 **ECKET NUMBER**

** COMPLETE MICHELLICKE **

MODERNT: 12849 Cash - Landford

TEL ID: 1 Ken-Blu-Lewis Con.

Contaminated Soil BREET YAKIRE. THE TALL OF

6 M: 47-150

THE BRIDE

STANKE TRUKET 4:

SHIP

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TA Con Charles Con

DRIVER COPY

Section 1985

I HAVE READ AND AGREE TO THE CONDITIONS ON THE REVERSE SIDE.

τρο

ID:2035485842

noitenoqnoJ. IsoN المجارة المجارة المجارة

010.0N

RABANCO REGIONAL DISPOSAL CO.

Roosevelt, WA 99356 (509) 384-5641 P.O. Box 338



CKET NUMBER/

47.74

*** 口光江 2008年 607年60 ***

ACCOUNT: 12259 Cash · Landfill

"SOUNT ID: I Ken-BIF/Vel-LewisCh

Contaminated Soil MALLITY: 64

CLEOTE: Vak: #2, **加工法 明** 等

1. 图[4] 图[4]

STORER TICKET #: STAL BOX

正面设

15/11/50

語では 1.00

24.348 LBS 医乳管 田島

119.11

CLEATER RESIDENCE

21.570

紀14億1出。

DRIVER COPY

I HAVE READ AND AGREE TO THE CONDITIONS ON THE REVERSE SIDE.

Waighteaster - SHILL

Noel .Corporation

26.9I

12:43

ID:2035485842

CENTRAL PRE-MIX CONCRETE CO

P.O. BOX 9575 YAKIMA, WA. 98908 TELEPHONE (509) 248-2041 FAX(509)453-3344

FACSIMILIE TRANSMISSION COVER PAGE

TO:

GARY SLAGIE

COMPANY:

NOEL CORPORATION

FAX NUMBER:

248-2843

FROM:

WALT JACKSON

DATE:

8-28-97

NUMBER OF PAGES, INCLUDING THIS COVER PAGE, BEING TRANSMITTED

IF YOU DO NOT RECEIVE ALL PAGES. PLEASE CALL (509) 453-3344.

COMMENTS:

THIS IS TO CONFIRM, AS WE DISCUSSED DURING OUR CONVERSATION OF 8/27/97, THAT THE PIT RUN GRAVEL YOUR FIRM PURCHASED FROM OUR SELAH SITE ON 8/21/97 WAS NATIVE PIT RUN GRAVEL.

APPENDIX C

LABORATORY RESULTS OF GROUNDWATER SAMPLES AND SAMPLING FORMS

Client Name: MAXIM - Yakima

Project No.: 95-932 Laboratory No.: 173227 Sample Name: MW-1 Sample Date: 04/15/96 Collected by: ROB FARRELL

Time Sampled: 1010 Sample Type: WATER HW-1 8010

PARAMETER		EASURED /ALUE	METHOD NUMBER	DATE ANALYZED
EPA METHOD 8260				
Data File Number-Volatiles	0	16961013		
Bromobenzene	<	ug/l	8260	04/17/96
Bromodichloromethane	<	l ug/l	8260	04/17/96
Bromoform	<	ug/l	8260	04/17/96
Bromomethane	<	l ug/l	8260	04/17/96
Carbon Tetrachloride	<	l ug/l	8260	04/17/96
Chlorobenzene	<	l ug/l	8260	04/17/96
Chloroethane	<	ug/l	8260	04/17/96
Chloroform	1	ug/l	8260	04/17/96
Chloromethane (Methyl chloride)	<	ug/l	8260	04/17/96
Dibromochloromethane	<	ug/l	8260	04/17/96
Dibromomethane	. <	ug/l	8260	04/17/96
Dichlorodifluoromethane	<	ug/l	8260	04/17/96
1,2-Dichlorobenzene	<	ug/l	8260	04/17/96
1,3-Dichlorobenzene	<	ug/l	8260	04/17/96
1,4-Dichlorobenzene	<	ug/l	8260	04/17/96
1,1-Dichloroethane	<	ug/l	8260	04/17/96
1,2-Dichloroethane	<	ug/l	8260	04/17/96
1,1-Dichloroethene	<	ug/l	8260	04/17/96
c-1,2-Dichloroethene	<	ug/l	8260	04/17/96
t-1,2-Dichloroethene	<		8260	04/17/96
1,2-Dichloropropane	<		8260	04/17/96
Methylone chloride	<	ug/l	8260	04/17/96
1,1,1,2-Tetrachloroethane	<	ug/l	8260	04/17/96
1,1,2,2-Tetrachloroethane	<	ug/t	8260	04/17/96
Tetrachloroethene	<1	ug/l	8260	04/17/96
1,1,1-Trichloroethane	<1	ug/l	8260	04/17/96
1,1,2-Trichloroethane	<	ug/l	8260	04/17/96
Trichloròethene	<1		8260	04/17/96
Trichlorofluoromethane	≺1	ug/l	8260	04/17/96
Vinyl chloride	<1	ug/l	8260	04/17/96
1,2-Dichloroethane-d4 (Surrogate)	94		8260	04/16/96
Toluene-d8 (Surrogate)	99	3.7	8260	04/16/96
4-Bromofluorobenzene (Surrogate)	. 10	0 %	8260	04/16/96
VOLATILE ORGANIC COMPOUNDS				
Benzyl chloride	(1) ug/l	8260	04/17/96
c-1,3-Dichloropropene	. <1	ug/l	8260	04/17/96
t-1,3-Dichloropropene	<1	ug/l	8260	04/17/96
2-Chloroethyl vinyl ether	<1		8260	04/17/96

Maxim Technologies, Inc.

Client Name: MAXIM - Yakima

Project No.: 95-932 Laboratory No.: 173228 Sample Name: MW-2 Sample Date: 04/15/96 Collected by: ROB FARRELL Time Sampled: 1135

Time Sampled: 1135 Sample Type: WATER

DADAMETER		MEASUR		METHOD	DATE
PARAMETER		VALUE		NUMBER	ANALYZE
EPA METHOD 8260					
Data File Number-Volatiles		041696	1010		
Bromobenzene		<1	ug/l	8260	04/17/9
Bromodichloromethane		<1	ug/l	8260	04/17/9
Bromoform		<1	ug/l	8260	04/17/9
Bromomethane		<1	ug/l	8260	04/17/9
Carbon Tetrachloride		<1	ug/l	8260	04/17/90
Chlorobenzene		<1	ug/l	8260	04/17/90
Chloroethane		<1	ug/l	8260	04/17/96
Chloroform		1	ug/l	8260	04/17/98
Chloromethane (Methyl chloride)		<1	ug/l	8260	04/17/96
Dibromochloromethane		<1	ug/l	8260	04/17/96
Dibromomethane		≺1	ug/l	8260	04/17/96
Dichlorodifluoromethane		<1	ug/l	8260	04/17/96
1,2-Dichlorobenzene		<1	ug/l	8260	04/17/96
1,3-Dichlorobenzene		<1	ug/l	8260	04/17/96
1,4-Dichlorobenzene		<1	ug/l	8260	04/17/96
1,1-Dichloroethane		<1	ug/l	8260	04/17/96
1,2-Dichloroethane		<1	ug/l	8260	04/17/96
1,1-Dichloroethene		<1	ug/l	8260	04/17/96
c-1,2-Dichloroethene		<1	ug/l	8260	04/17/96
t-1,2-Dichloroethene		<1	ug/l	8260	04/17/96
1,2-Dichloropropane		<1	ug/l	8260	04/17/96
Methylene chloride		<5	ug/l	8260	04/17/96
1,1,1,2-Tetrachloroethane		<1	ug/l	8260	04/17/96
1,1,2,2-Tetrachloroethane		<1	ug/t	8260	04/17/96
Tetrachloroethene	171	9	ug/l	8260	04/17/96
1,1,1-Trichloroethane		<1	ug/l	8260	04/17/96
1,1,2-Trichloroethane		<1	ug/l	8260	04/17/96
Trichloroethene		<1	ug/l	8260	04/17/96
Trichlorofluoromethane		<1	ug/l	8260	04/17/96
Vinyl chloride		<1	ug/l	8260	04/17/96
1,2-Dichloroethane-d4 (Surrogate)		91	%	8260	04/16/96
[oluene-d8 (Surrogate)		99	%	8260	04/16/96
G-Bromofluorobenzene (Surrogate)		100	%	8260	04/16/96
OLATILE ORGANIC COMPOUNDS					
Benzyl chloride		(1)	ug/l	8260	04/17/96
-1,3-Dichloropropene		<1	ug/l	8260	04/17/96
-1,3-Dichloropropene		<1	ug/l	8260	04/17/96
-Chloroethyl vinyl ether		<10	ug/l	8260	04/17/96
and the second second					

Maxim Technologies, Inc.

MAXIM - TRI-CITIES, MA Client Name:

87-921 Project No.: Laboratory No.: 173227

Sample Name:

04/15/96 Sample Date: ROB FARRELL Collected by:

Time Sampled: 1010 Sample Type: WATER

MW-1 8260

	WEASUR		METHOD	DATE
PARAMETER	VALUE		MUNISER	ANALYZED
EPA METNOD 8260				
Data File Number-Volatiles	041696	1013	8260	04/16/96
Berizene	<1	աց/Լ	B7.6D	04/16/96
Bromobenzene	<1	usy (8260	04/16/96
Bresoch Laromethone	<1	un/L	5260	04/16/96
Bromodichioromethane	<\$	ug/I	87.60	04/16/98
Branoform	<1	ug/l	8260	04/16/96
Brananstiune	<2	um/l	86250	04/16/98
n-Butylbenzene	41	wg/L	2250	04/16/96
sec-Sutylloenzene	< 7	1.052 / L	8260	04/16/96
t-Butylbenzene	<1	ug/l	8260	04/15/96
Carbon Tetrachloride	<1	ug/L	8260	04/16/96
Chlorobenzene	~1	us/L	8260	04/16/96
Chloroethane	<1	ug/l	8269	04/16/96
Chloreform	1	ug/L	8260	04/16/96
Chloromethana (Mathyl chloride)	<1	ug/L	8260	04/16/98
2-Chiorotoluene	<1	ug/l	3250	04/16/96
4-thlorotoluene	41	ug/L	8260	04/16/96
Dibresechleremethene	<1	ug/t	8250	04/16/96
1,2-Wibramo-3-chioropropune	45	ug/l	8260	04/16/98
1.2-Dibromoethane	⊀1	ug/L	8260	04/16/96
Dibronomethune	·s1	ug/l	8260	04/16/96
Dichlorodifluoromethane	<1	ug/L	8260	04/16/98
1.2-Dichlorobenzene	<1	Hg/L	8260	84/16/96
1,3-Dichtorobenzene	<1	ug/t	8260	84/16/96
7.4-Dichlorobenzene	<1	una/ L	B260	04/16/96
1,1-pichloroethere	<1	ug/l	8260	04/16/96
1,2-Dichloroethana	<1	seg/t	8250	04/16/98
1,1-Dichioroethene	×1	ug/i	8260	04/18/98
c-1,2-Dichloroethene	<1	ugrt	B260	04/16/96
t-1,2-Dichloroethene	<1	ug/L	8260	94/16/96
1,2-Dichlaropropana	<'1	right.	8260	04/16/96
March 1975 Control of the control of	41	ug/l	2250	04/16/96
1,3-bichteropropere	<7	ug/l	8260	04/16/96
2,2-bichtoropropane	<1		8260	04/16/95
1,1-pichloropropene		ug/l	8260	04/16/96
Ethylbenzene Haxechlorobutediene	42	ug/L	3260	04/16/96
	<1	ug/L	8260	04/16/96
Cummine (Inopropylbanzene)	4	1700 Table 180	9260	04/16/96
Isopropyltaluene	0.8570	ug/l	8250	04/16/96
Methylene chloride	<5 41	ug/L	2260	04/16/96
Suphthalana	1,000	Ligg/ C	8260	04/16/96
n-Propylbenzene	<1	rig/t	8260	04/16/96
Styrene	~1	ug/L	OCOU	04/10/70

Client Name: MAXIN - TRI-CITIES, WA

Project No.: 87-921 Leboratory No.: 173227 Sample Name: MM-1 Sample Date: 04/15/96 Collected by: ROB FARRELL

Yime Sampled: 1010 Sample Type: WATER

百分		F4	12	المارية
自用	1	Nº B	Nine.	21
	6 3			13

	MEASURE	D C	METICO	DATE
PARAMETER	VALUE	namber	ANALYZED	
1,1,1,2-Tetrachloroethene	<1	ng/l	8260	04/16/96
1,1,2,2-Tetrachloroethane	<u> </u>	ug/t	8260	04/16/96
TetrachLoroethena	(al))	ugrl	8250	04/16/96
Toluena	41	ug/l	8260	04/16/96
1,2,3-Trichlorobenzene	<1	ug/t	8260	04/16/96
1,2,4-Trichlorobenzene	∢1	ug/t	3260	04/16/96
1,1,1-Trichloroethane	<1	ug/l	8260	04/16/96
1,1,2-Yeichloroethane	⊀1	ug/l	0358	04/16/96
Trichloroethene	<1	ugyt	8260	04/16/96
Trichlorofluoromethane	<1	աց/ Լ	8260	04/16/96
1,2,3-Trichloropropane	⊲1	ug/L	8260	06/16/96
1,2,4-Trimethylbanzano	. ≺1	ug/L	8260	04/16/96
1,3,5-Trimethylbanzana	<1	ug/l	8260	04/16/96
Vinyl shloride	447	ug/l	3260	04/16/96
Total xylenes	41	ug/L	8260	04/16/96
1,2-Dichloroethane-d/ (Surroyate)	94	OK.	8260	04/16/96
Tolueno-dB (Surrogate)	99	26	8260	04/16/96
4-Bromofluorobenzeno (Surrogate)	100	×	8260	06/16/96

* detected @ 0.7 mg/l, this
is below our reporting timit.

Client Name:

MAXIN - TRI-CITIES, WA

Project No.:

87-921 Laboratory No.: 173228

sample Name:

MH-2

Sample Dates

04/15/96

Collected by:

ROS FARRELL

Time Sampled:

1135

Sample Types MATER MW-2

8260

1.150	MEASLE	277A	PRETENDO	DATE ANALYZED
PARAMETER	VALU	1	NUMBER	
EPA METHOD 8260				
Date File Number-Volatiles	041698	31010	8260	04/16/00
Benzene	<5	n8A.f	8260	04/16/98
Bromobenzene	~1	NOVL	8260	04/16/96
Bromochloromethane	≺1	nB\[8260	04/16/98
Bronodich Laromethane	-<7	ust/t	8260	04/16/96
Bremaform .	<1	ug/L	8260	04/16/96
Sremomethane	<1	11201	8260	04/16/96
n-Butylberzene	-<1	ug/L	9590	04/16/96
zec-Busylbanzena	<1	ug/l	8260	04/16/96
t-Butylbenzene	<1	was t	8260	04/16/96
Carbon Tetrachloride	<1	ug/ L	3250	04/16/98
Chiorobenzene	×17	um/(8260	04/16/98
Chloroethane	** 1	ug/L	9590	04/16/96
Chloroform	1	ug/L	8260	04/16/99
Chloromethana (Mathyl chloride)	<1	LIGHT L	8260	04/16/96
2-Ehlorotoluene	<1	ug/L	9560	04/16/96
4-thlorotolssene	<1	ug/L	8260	04/16/96
D1bromoch1 oromethene	<1	ug/L	8260	04/16/96
1,2-0fbromo-3-chloropropane	<5	ue/t	DASE	04/15/95
1,2-Dibromoathano	<1	ug/L	8260	04/16/96
Dibromomethere	<1	ug/L	6260	04/16/96
Dichlorodifluoromothano	<1	ug/L	8260	04/16/96
1,2-Dichlorobenzene	<1	ug/L	8260	04/16/98
1,3-Dichterobenzene	<1	ug/L	8260	04/16/96
1,4-Dichlorobenzene	<1	49/1	8260	04/16/96
1,1-DichLorosthans	<1	uu/t	8260	04/16/96
1,2-Dich Loroethene	≺1	ug/L	8260	04/16/96
1,1-Dichloroethene	<1	ug/s	8260	04/16/96
c-1,2-Dichioroethene	<1	ug/L	8250	04/16/96
t-1,2-Bichloroethene	<1	ug/L	6260	04/16/96
1,2-Dichloropropene	<1	ug/L	8260	04/16/96
f,3-Dichloropropuse _	≺1	us/1	6260	04/16/96
2,2-bichloropapa	<5	ug/l	B260	04/16/96
t, 1-pichloropropene	<1	ugst	8250	04/16/96
Ethylbenzene	<1	ug/L	8260	04/16/96
łexach Lorobutad i ene	<2	ug/t	8260	04/16/96
Lumane (Isopropylbenzene)	<1	ug/L	8260	04/16/96
sopropyltolueno	<1	ng/L	8260	04/16/96
Sethylane chlorida	<5	ug/L	8260	04/16/96
aphthal ene	:<1	ug/L	8260	04/16/96
-Propylbenzere	<1	Ug/1	0250	04/16/96
tyrena	<1	ug/l	8260	04/16/96

Client Name: MAXIM - TRI-CITIES, WA

Project No.: 87-921
Laboratory No.: 173228
Sumple Nume: PW-2
Sumple Date: 04/15/96
Collected by: ROB FARRELL
Time Sumpled: 1175

Time Sampledz 1135 Sample Type: MATER



PARAMETER	NEASURE VALUE		METHOD	DATE ANALYZED D4/16/96
1.1,1,2-Tetrachioroethene	<1	nagurt	8260	
1,1,2,2-Tetrachloroethane	≺1	ug/L	8260	04/16/96
Terrachloroethern	(8)	war.	8260	04/18/96
Toluene	*1	ug/l	13260	04/16/96
1,2,3-Trich Lorobenzene	<1	Logi/L	8260	04/75/96
1,2,4-TrichLorobenzene	<1	ugrt	0250	04/16/96
1,1,1-Trichloreathane	≪1	ugr/ t	8260	04/16/96
1,1,2-Trichloroathere	⊀1	ug/t	8260	04/16/96
Trichleroothena	≪1	µg./ L	0.058	04/16/96
Trichtorofluoromethane	<1	ug/L	8260	04/16/94
1,2,3-Trichloropropane	<7	ug/l		
1,2,4-Trisathylbenzane	<1	ug/t	8260	04/16/96
1,3,5-Triesthylbenzone	<1	ug/l	8260	04/16/96
Vinyl chloride	<1	ug/t	3260	04/16/96
Total xylenes	~1	UMA/L	8260	04/16/96
1,2-Dichtoroethane-d4 (Surregate)	91	24	8260	04/16/96
Toluene-d8 (Surrogate)	99	75	8260	04/16/96
4-Bromofluorobenzane (Surregate)	100	74	8260	04/16/96

Blind dup Mw-2 Page ,2 Mw-2 8010

Client Name: MAXIM - Yakima

95-932 Project No.:

Laboratory No.: 173231

Sample Name: BLIND DUP 04/15/96 Sample Date:

ROB FARRELL Collected by: Time Sampled: NONE GIVEN

Sample Type: WATER

Maxim Technologies, Inc.

PARAMETER	METER VALUE		METHOD NUMBER	DATE ANALYZED
EPA METHOD 8260	6			
Data File Number-Volatiles	. 041696	1016		
Bromobenzene	<1	ug/l	8260	04/17/96
Bromodichloromethane	<1	ug/l	8260	04/17/96
Bromoform	<1	ug/l	8260	04/17/96
Bromomethane	<1	ug/l	8260	04/17/96
Carbon Tetrachloride	<1	ug/l	8260	04/17/96
Chlorobenzene	<1	50 MT 20 CV	8260	04/17/96
Chloroethane	<1	ug/l	8260	
Chloroform	1	ug/l	8260	04/17/96
Chloromethane (Methyl chloride)	<1	ug/l	8260	04/17/96
Dibromochloromethane	<1	ug/l	8260	04/17/96
Dibromomethane	· <1	ug/l	8260	04/17/96
Dichlorodifluoromethane	<1	ug/l	8260	04/17/96
1,2-Dichlorobenzene	<1	ug/l		04/17/96
1,3-Dichlorobenzene	<1	ug/l	8260	04/17/96
1,4-Dichlorobenzene		ug/l	8260	04/17/96
1,1-Dichloroethane	<1	ug/l	8260	04/17/96
	<1	ug/l	8260	04/17/96
1,2-Dichloroethane	<1	ug/l	8260	04/17/96
1,1-Dichloroethene	<1	ug/l	8260	04/17/96
c-1,2-Dichloroethene	· <1 ,	ug/l	8260	04/17/96
t-1,2-Dichloroethene	<1	ug/l	8260	04/17/96
1,2-Dichloropropane	<1	ug/l	8260	04/17/96
Methylene chloride	<5	ug/l	8260	04/17/96
1,1,1,2-Tetrachloroethane	<1	ug/l	8260	04/17/96
1,1,2,2-Tetrachloroethane	<1	ug/l	8260	04/17/96
Tetrachloroethene	10	ug/l	8260	04/17/96
1,1,1-Trichloroethane	<1	ug/l	8260	04/17/96
1,1,2-Trichloroethane	<1	ug/l	8260	04/17/96
Trichloroethene	<1	ug/l	8260	04/17/96
Trichlorofluoromethane	<1	ug/l .	8260	04/17/96
/inyl chloride	<1	ug/l	8260	04/17/96
1,2-Dichloroethane-d4 (Surrogate)	94	%	8260	04/16/96
Toluene-d8 (Surrogate)	98	%	8260	04/16/96
-Bromofluorobenzene (Surrogate)	100	%	8260	04/16/96
OLATILE ORGANIC COMPOUNDS				
Benzyl chloride	(1)	ug/l	8260	04/17/96
-1,3-Dichloropropene	· <1	ug/l	8260	04/17/96
-1,3-Dichloropropene	. <1	ug/l	8260	04/17/96
-Chloroethyl vinyl ether	<10	ug/l	8260	04/17/96

Blind dup

MANCIM - TRI-CITIES, MA Eliert Name:

Project No.:

87-921

Laboratory No.: 173231 Sample Name:

Brino brib 04/15/96

Sumple Date: Callected by: Time Sampled:

ROB FARRELL MORGE GIVEN

Sample Type: WATER MW-Z

8260

	raf	Section 1
Not only	 	- 61

		MEASU	RFO	METHOD	DATE
PARAMETER VALUE			NUMBER	WALASE	
EPA METNOD 8260				1	11
Data File Number-Volatiles		04169	Arore	8260	04/16/96
Bunzane		×1	ug/L	8260	04/16/98
Bromobenzene		4r]	USL/L	8250	04/16/98
Bramochioromethans		<1	ug/t	0258	84/16/96
Promodich Loromathene		<1	Ugy/£	0558	04/16/96
tronoform		<1	ug/1	8260	04/16/96
ironoma thena		<7	ug/L	8260	04/16/96
r-Buty Livergege		<1	ug/t	2260	06/16/96
suc-Butylbenzere		*1	LIG2/1	6260	04/16/96
:-Butylbenzene		-67	LOGI/ L	8260	04/16/96
Jarbon Tetrachloride		<1 .	us/L	8260	04/16/96
thi arobanzene		<1	ug/L		1000 0 - 0 7 100 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0
hloroethane		<7	ug/l	8260	04/16/96
bloroform		1	cos/t	8260	04/16/96
hloremethana (Methyl chloride)		<1	LEST L	82260	04/16/96
-Chiorocoluene		<# ***	ug/L	8260	04/16/96
-Chicatoluene		<1	ug/L	8260	04/16/96
i bronoch Loromethane		<1	1101/1.	8260	04/16/96
, Z-Dibrema-3-chloroprepane		43	WHAT A	DASE	04/16/96
"Z-Dibromoethens		<1	ug/l	8260	04/16/96
ibrosomethana		<1	ug/L	8260	04/16/96
ichlorodifluoromethane		<1	up/1	8260	04/16/96
72-01chlorobenzene		<1	ug/l	B260	04/16/96
,3-Dichlorabenzens		41	ug/L	8260	04/16/96
.6-0 î ch Lorobenzene		±1	ug/L	DAKB	04/16/96
, 1-D ichloroethane		<1	ug/L	8260	04/16/96
2-Dichtorosthens		~1	ug/l	2260	04/16/96
1-Dichloroethene		<1	ua/l	8260	04/16/96
1,2-Dichloroethene		<1	us/t	2260	04/16/96
1,2-Dickloroethene		<1	us/1	8250	04/16/96
2-Dichloropropane		<1	ug/L	2250	04/16/96
3-0 (chtaropropore		-<1	ma/r	9540	04/16/96
2-Dichloropropane		< 5	ug/1 .	8260	04/16/96
1-DichLaropropens		×1	ug/t	8590	04/16/94
hylbanzene		≺1	ug/l	8260	04/16/96
xadil orobutedjene		ACS.	1851/L	8260	04/16/96
mena (Isopropylbenzene)		<1	ug/t	8260	04/16/96
ppropyltoluene		<1	ug/L	8260	04/16/96
thylene chloride		45	ug/L	8260	06/16/96
phthalone		<1	1197 L	8260	04/16/96
Propylbenzene		<1	ug/t	8260	04/16/96
yrene	9	<1	ug/L	8260	04/16/96

Client Name:

MAKIN - TRI-CITIES, NA

Project Ho.:

87-921

Laboratory No.: 173231 BLIND DUP

Sample Mame: Sample Date:

04/15/96

Callected by:

ROS FARRELL

Time Sampled:

MONE GIVEN

Sample Type:

WATER

PARAMETER	MEASURE VALUE	D .	METHOD NUMBER	DATE ANALYZED
1,1,1,2-Tetrachicrosthame	<1	ug/l	8260	04/16/96
1,1,2,2-Tetrachiorcethane	<1	ug/l	8260	04/16/96
Tatrachloroethena	(10)	ug/l	8260	04/16/95
Toluene	*1	ug/L	OASH	04/16/96
1,2,3-TrichLorobenzene	<1	Legy/L	8260	04/16/96
1,2,4-TrichLorobenzene	<1	ug/L	8260	04/15/96
1,1,1-Trichloroethana	<1	ug/l	0658	04/16/96
1,1,2-TrichLorosthene	<1	ug/l	8260	04/16/96
Trichloroethene	<1	ug/t	8260	04/16/96
Trichlorofluoromethane	<1	193/1	8260	04/16/96
1,2,3-Trichloropropens	<1	J/Brs	2260	04/16/96
1,2,4-Trimathythanzene	<7	ug/L	8260	04/16/94
1,3,5-Trimethytbenzone	<1	May L	8260	04/16/96
Vinyl chloride	<1	ug/L	8260	04/16/96
Total mylenes	<1	ua/L	8260	04/16/96
1,2-Dichloroethens-d4 (Surrogate)	94	%	8260	04/16/96
Toluens-d8 (Surregate)	98	34	B260	04/16/96
4-Bromofluorobenzene (Surrogate)	100	×	8260	04/16/96

Client Name:

MAXIM - Yakima

Project No.: Laboratory No.: 173229

95-932

Sample Name:

MW-3

Sample Date:

04/15/96

Collected by:

ROB FARRELL

Time Sampled:

Maxim Technologies, Inc.

1340

Sample Type:

WATER

MW-3 8010

PARAMETER EPA METHOD 8260 Data File Number-Volatiles Bromobenzene Bromodichloromethane Bromoform Bromomethane Carbon Tetrachloride Chlorobenzene Chloroethane	041696 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1	d.	8260 8260 8260 8260 8260 8260 8260	04/17/96 04/17/96 04/17/96 04/17/96 04/17/96 04/17/96
Data File Number-Volatiles Bromobenzene Bromodichloromethane Bromoform Bromomethane Carbon Tetrachloride Chlorobenzene	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1<	ug/l ug/l ug/l ug/l ug/l ug/l	8260 8260 8260 8260 8260	04/17/96 04/17/96 04/17/96 04/17/96
Bromobenzene Bromodichloromethane Bromoform Bromomethane Carbon Tetrachloride Chlorobenzene	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1<	ug/l ug/l ug/l ug/l ug/l ug/l	8260 8260 8260 8260 8260	04/17/96 04/17/96 04/17/96 04/17/96
Bromodichloromethane Bromoform Bromomethane Carbon Tetrachloride Chlorobenzene	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1<	ug/l ug/l ug/l ug/l ug/l ug/l	8260 8260 8260 8260 8260	04/17/96 04/17/96 04/17/96 04/17/96
Bromoform Bromomethane Carbon Tetrachloride Chlorobenzene	<1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <1 <	ug/l ug/l ug/l ug/l ug/l ug/l	8260 8260 8260 8260 8260	04/17/96 04/17/96 04/17/96 04/17/96
Bromomethane Carbon Tetrachloride Chlorobenzene	<1 <1 <1 <1 <1 <1 <1 <1	ug/l ug/l ug/l ug/l ug/l	8260 8260 8260 8260 8260	04/17/96 04/17/96 04/17/96 04/17/96
Carbon Tetrachloride Chlorobenzene	<1 <1 <1 <1 <1 <1	ug/l ug/l ug/l ug/l ug/l	8260 8260 8260 8260	04/17/96 04/17/96 04/17/96
Chlorobenzene	<1 <1 <1 <1	ug/l ug/l ug/l ug/l	8260 8260 8260	04/17/96
	<1 <1 <1 <1	ug/l ug/l ug/l	8260 8260	04/17/96
Chloroethane	<1 <1 <1 <1	ug/l ug/l	8260	
	<1 <1 <1	ug/l		
Chloroform	<1 <1		8260	04/17/96
Chloromethane (Methyl chloride)	<1	ug/t	8260	04/17/96
Dibromochloromethane		ug/l	8260	04/17/96
Dibromomethane	<1	ug/l	8260	04/17/96
Dichlorodifluoromethane	<1	ug/l	8260	04/17/96
1,2-Dichlorobenzene	<1	ug/l	8260	04/17/96
1,3-Dichlorobenzene	<1	ug/l	8260	04/17/96
1,4-Dichlorobenzene	<1	ug/l	8260	04/17/96
1,1-Dichloroethane	<1	ug/l	8260	04/17/96
1,2-Dichloroethane	<1	ug/l	8260	04/17/96
1,1-Dichloroethene	<1	ug/l	8260	04/17/96
c-1,2-Dichloroethene	<1	ug/l	8260	04/17/96
t-1,2-Dichloroethene	<1	ug/l	8260	04/17/96
1,2-Dichloropropane	<1	ug/l	8260	04/17/96
Methylene chloride	<5	ug/l	8260	04/17/96
1,1,1,2-Tetrachloroethane	<1	ug/l	8260	04/17/96
1,1,2,2-Tetrachloroethane	<1	ug/t	8260	04/17/96
Tetrachloroethene	45	ug/l	8260	04/17/96
1,1,1-Trichloroethane	<1	ug/l	8260	04/17/96
1,1,2-Trichloroethane	<1	ug/l	8260	04/17/96
Trichloroethene	<1	ug/l	8260	04/17/96
Trichlorofluoromethane	<1	ug/l	8260	04/17/96
Vinyl chloride	<1	ug/l	8260	04/17/96
1,2-Dichloroethane-d4 (Surrogate)	99	%	8260	04/16/96
Toluene-d8 (Surrogate)	99	%	8260	04/16/96
4-Bromofluorobenzene (Surrogate)	101	%	8260	04/16/96
VOLATILE ORGANIC COMPOUNDS				
Benzyl chloride	(1)	ug/l	8260	04/17/96
c-1,3-Dichloropropene	<1	ug/l	8260	04/17/96
t-1,3-Dichloropropene	<1	ug/l	8260	04/17/96
2-Chloroethyl vinyl ether	<10	ug/l	8260	04/17/96

Client Hame:

MAKIM - TRI-CITIES, MA

Project No.:

87-921 Laboratory No.: 173229

Sample Name: MI-3

Sample Dates Collected by:

Time Sampled:

1340 Sumple Type: WATER

04/15/96

ROB FARRELL

MW-3 8260

PARAMETER	WEASURED VALUE		METHOD	date Analyzez
EPA METHOD 8260				
Dato File Mumber-Volatiles	0416961	1014	8260	04/16/90
Senzono	<1	ug/t	8260	04/16/9
Bromobenzena	<1	ug/l	8260	04/16/9
Bronochioremathene	<1	up/t	8260	04/16/9
Bromodichloromethane	<7	ug/l	8260	04/16/91
Brossform	<1	ug/L	8260	04/16/9
Brunomethure	<1	ug/1	8260	04/16/9
n-Butytbanzone	<1	usi/t	8260	04/16/9
Bac-Butylbanzana	<1	ug/l	8260	04/16/9
r-sutylbenzene	<1	ug/L	8260	04/16/9
Carbon Tetrachloride	<1	ug/l	8260	04/16/9
Ch Lorobenzene	*1	wart	8260	04/16/9
Chloroethana	<1	ug/L	8260	04/16/94
Chloroform	£1 ×	ug/l	8260	04/16/96
interemethane (Methyl chloride)	جرا	409/L	8260	04/16/90
2-Chlorotoluene	<1	ug/l	8260	04/16/9/
i-Chlorotoluene A	≺1	un/t	8260	04/16/96
10romoch Loromethane	<1	ug/l	8260	04/16/56
,2-Dibromo-3-chloropropena	45	ug/t	0358	04/16/98
.2-Dibromoothano	41	ug/l	8260	04/16/96
ibromomethene	×1	ug/t	8260	04/16/96
Total ground fluoromethane	<1	ug/L	8260	04/16/96
.2-Dichlorobenzene	<1	Ma/l	8260	04/16/98
3-Dichlorobenzene	<1	ua/L	8260	
,4-Dichlorobenzene	\ <1	100 March 2017	8260	04/16/96
,1-Dichtoroethene	1 4	LISSI / É.	8260	04/16/96
2-Dichloroethene) 4	ug/l		04/16/96
,1-Dichloroethene	/ <1	ug/l	8260	04/16/96
-1,2-Dichlorosthene		ug/L	8260	04/16/96
-1,2-Dichioroethene	<1	Ug/1	8260	04/16/98
,2-Dichloropropana	<1	ug/L	2260	04/16/96
,3-Dichloropropena	<1	ug/L	2260	04/16/96
,2-Dichtoropropana	<1	ug/L	8260	04/16/96
,1-Dichtoropropene	<5	ng/t	8260	04/16/95
thylbenzene	<1	ug/L	8260	04/16/96
	<1	mg/L	8260	04/16/96
wach i arabutadi ene	<2	wart	8250	04/16/96
mane (Isopropylbenzone)	<1	esg/l	0250	04/16/96
sopropyltaluene	<1	ug/l	8250	04/16/96
othylene chloride	<5	ug/l	8260	04/16/96
phthatene	≺1	mg/t	8260	04/16/96
Propylbanzene	≺1	ug/L	8260	04/16/96
yrene	vet.	ug/L	8260	04/16/96

Client Namm: MAXIM - TRI-CITIES, WA

MATER

Project No.: 87-921 Laboratory No.: 173229 Sample Name: MM-3 Sample Dato: 04/15/96 Collected by: ROS FARRELL Time Samplad: 1340

Sample Type:

	PIEASURE	en co	METHOD	Bate Analyzed
PARAMETER	VALUE		MUNIBER	
1,1,1,2-Tetrackloroethane	<1	ug/L	8260	04/16/96
1,1,2,2-Tetrachi proethane	≺1	Ma/L	8260	04/16/96
Tetrachloroethene	45	ug/L	8260	04/16/96
Toluene	41	ug/L	8260	04/16/96
1,2,3-Trichlorobenzene	<1	MB/L	8250	04/16/96
1,2,4-Trichlorobenzone	≺1	ug/L	6250	04/16/96
1,1,1-TrichLoroethane	<1	ug/L	8260	04/16/96
1,1,2-TrichLoroethane	<1	ug/L	2260	04/16/96
TrichLoraethene	<1	ug/L	9260	04/16/96
Trichlorofluoromethana	<1	ug/L	8260	04/16/96
1,2,3-Trichloropropane	<1	tsg/t	8260	04/16/96
1,2,4-Trimethylbenzene	<1	ug/t	8260	04/16/96
1,3,5-Trimethylbenzene	<7	cog/L	8260	04/16/96
Vinyl chloride	<1	ug/l	8260	04/16/96
Total xytense	41	ug/l	8260	04/16/96
1,2-Dichloroethane-d4 (Surrogate)	99	16	6260	04/15/96
Toluene-dB (Surrogeta)	99	22	8260	04/16/96
-Branofluorobensene (Surrogete)	101	. %	8260	04/16/96
		- 2	No.	

Client Name:

MAXIM - TRI-CITIES, WA

Project No.:

87-921

Laboratory No.: 173230

Sample Wame: Sample Date: 14A-4

Collected by:

04/15/96 ROS FARRELL

Time Sampled:

1515

Sample Type:

WATER

Page 14

8260

	HEASLUR	Ð	METHOD	DATE
PARAMETER	VALUE		MANAGER	ANALYZEI
EPA METHOD B260		3		
Daka fila Number-Volutiles	041696	1015	B260	04/16/90
Benzene	<1	LIGHT L	3260	04/16/90
Brosobenzene	<1	usi/L	8260	04/16/9
Brosochioromethane	<1	ua/l	8260	04/16/9
BromodichLoromethana	≪1	ug/L	8260	04/16/90
Brannfars	<1	ug/ L	8260	04/16/9
Bromomethene	≺1	ug/l	8260	04/16/9
n-Dutylbenzone	<1	ug/1	8260	04/76/94
aec-Butylbenzene	<1	ug/L	8250	04/16/96
t-Sutylbenzene	<1	ugyt	B260	04/16/98
Carbon Tetrachleride	≺1	ug/t	8240	04/16/90
Ch Carobenzene	<1	um/l	8260	04/16/96
Chloroethane	≺1	ug/l	8260	04/16/90
Chloroform	1	ug/ (8260	06/16/9
Chloromethane (Methyl chloride)	<1	ug/l	8260	04/16/90
2-Milorotoluene	*1	ug/l	8260	94/16/96
i-Chlorotoluene	<1	ug/L	8260	04/16/96
Dibrosech Loresethane	~1	un/t	8260	06/16/96
1,2-Dibraso-3-chloropropane	4	ug/L	8260	04/16/96
1,2-Dibromoethane	<1	ug/L	8260	04/16/90
Dibramomethane	~1	ug/L	8250	04/16/98
ichtorodiftuoromethere	<1	ug/L	8260	04/16/96
,2-Dichtorobenzene	<1	ug/t	8260	04/16/96
3-Dichtorobenzene	<1	ua/L	3260	04/16/96
,4-Dichlorobenzana	<1	ug/l	8250	04/16/96
1,1-pichloroethane	<1	ug/L	8260	04/16/96
1,2-Dichloroethene	<1	ug/L	8260	04/16/96
1,1-0 ichloroethene	<1	ug/L	8260	04/16/98
-1,2-Dichloroethene	<1	ug/L	8260	04/16/96
-1,2-Dichloroethere	<1	ug/t	2240	04/16/96
,2-DichLeropropene	<1	ug/L	8260	04/16/96
,3-01chloropropane	4	ug/L	3260	04/16/98
,2-DichLoropropane	<5	ug/L	8260	04/16/98
, 1-01chtoropropene	<1	1/60	8250	04/16/96
thylbenzene	<1	ug/l	8260	04/16/96
exachlorobutadiene	<2	ug/l	8260	04/16/96
umene ((sepropylbenzene)	<1	ug/l	2260	04/16/96
apropyl tolusne	<1	ua/ l	8260	04/16/96
eshylene chioriste	45	ug/t	15260	06/16/96
ephthelene	<1	ug/L	8260	04/16/96
-Propylbenzene	<1	ug/L	8260	04/16/96
tyrene	ব	right f	8260	04/16/96

MAXIM

Client Name: MAXIN - TRI-CITIES, MA

MATER

Project No.: 87-921 Laboratory No.: 173230 Sample Name: M1-5 04/15/96 Sumple Daves Collected by: ROW FARRELL Time Sampled: 1515

Sample Type:





ARAMETER	HAMETER VALUE		METHOD MUMBER	DATE ANALYZED
1,1,1,2-Tetrachloroethane	41	ug/l	8260	04/16/96
1,1,2,2-Tetrachloroethane	-61	ugel	8260	04/16/96
Tetrochloroethene	<1	ug/t .	8260	04/16/96
Toluene	×1	ug/L	8280	04/16/96
1,2,3-TrickLoroberzans	*T	ug/L	8260	04/16/96
1,2,4-Trichlorobenzone	<1	ug/l	8260	04/16/96
1,1,1-TrichLoroethane	<1	ug/l	8260	04/16/96
1,1,2-Trichloroethane	<1	ug/L	8260	04/16/56
Trichloroathene	<1	ug/L	8260	04/16/96
Trichlorofluoromethane	~1	STORE	0260	04/16/96
1,2,3-Trichioropropane	<1	1/0/1	9260	04/16/96
1,2,4-Trimethylbenzene	~1	ASSE/ L	8260	04/16/96
1,3,5-Trimethylbenzone	«1	ua/L	8260	04/16/96
Vinyl chloride	<1	ug/1	8260	04/16/96
Fotal xylenes	<1	աց/ւ	8260	04/16/96
1,2-Dichloroethane-d4 (Surrogete)	98	K.	8260	04/16/96
(dluene-dB (Surrogate)	99	76	8260	04/16/96
i-Brasoflyorobenzene (Surrogate)	99	z	8260	04/16/96

Client Name:

MAXIM - Yakima

Project No.:

95-932

Laboratory No.: 173230

MW-4

Sample Name: Sample Date:

04/15/96

Collected by:

Time Sampled:

ROB FARRELL

1515

Sample Type:

WATER

8010

		MEASURED VALUE		DATE
PARAMETER	VALUE			ANALYZED
EPA METHOD 8260				
Data File Number-Volatiles	041696	1015		
Bromobenzene	<1	ug/l	8260	04/17/96
Bromodichloromethane	<1	ug/l	8260	04/17/96
Bromoform	<1	ug/l	8260	04/17/96
Bromomethane	<1	ug/l	8260	04/17/96
Carbon Tetrachloride	<1	ug/l	8260	04/17/96
Chlorobenzene	<1	ug/l	8260	04/17/96
Chloroethane	<1	ug/l	8260	04/17/96
Chloroform	1	ug/l	8260	04/17/96
Chloromethane (Methyl chloride)	<1	ug/l	8260	04/17/96
Dibromochloromethane	<1	ug/l '	8260	04/17/96
Dibromomethane	<1	ug/l	8260	04/17/96
Dichlorodifluoromethane	<1	ug/l	8260	04/17/96
1,2-Dichlorobenzene	<1	ug/l	8260	04/17/96
1,3-Dichlorobenzene	<1	ug/l	8260	04/17/96
1,4-Dichlorobenzene	<1	ug/l	8260	04/17/96
1,1-Dichloroethane	<1	ug/l	8260	04/17/96
1,2-Dichloroethane	<1	ug/l	8260	04/17/96
1,1-Dichloroethene	<1	ug/l	8260	04/17/96
c-1,2-Dichloroethene	<1	ug/l	8260	04/17/96
t-1,2-Dichloroethene	<1	ug/l	8260	04/17/96
1,2-Dichloropropane	<1	ug/l	8260	04/17/96
Methylene chloride	<5	ug/l	8260	04/17/96
1,1,1,2-Tetrachloroethane	<1	ug/l	8260	04/17/96
1,1,2,2-Tetrachloroethane	<1	ug/l	8260	04/17/96
Tetrachloroethene	<1	ug/l	8260	04/17/96
1,1,1-Trichloroethane	<1	ug/l	8260	04/17/96
1,1,2-Trichloroethane	<1	ug/l	8260	04/17/96
Trichloroethene	<1	ug/l	8260	04/17/96
Trichlorofluoromethane	<1	ug/l	8260	04/17/96
Vinyl chloride	<1	ug/l	8260	04/17/96
1,2-Dichloroethane-d4 (Surrogate)	98	%	8260	04/16/96
Toluene-d8 (Surrogate)	99	%	8260	04/16/96
4-Bromofluorobenzene (Surrogate)	99	%	8260	04/16/96
VOLATILE ORGANIC COMPOUNDS				
Benzyl chloride	(1)	ug/l	8260	04/17/96
c-1,3-Dichloropropene	<1	ug/l	8260	04/17/96
t-1,3-Dichloropropene	<1	ug/l	8260	04/17/96
2-Chloroethyl vinyl ether	<10	ug/l	8260	04/17/96

Client Name:

MAXIM - Yakima

Project No.:

95-932

Laboratory No.: 173232

Sample Name:

TRIP BLANK

Sample Date:

NONE GIVEN

Collected by:

NONE GIVEN

Time Sampled:

NONE GIVEN

Sample Type:

WATER

QAIQC Trip Blank

PARAMETER	TER MEASURED VALUE		METHOD NUMBER	DATE ANALYZEI
EPA METHOD 8260				
EFA METROD 0200				
Data File Number-Volatiles	041696	1009		
Bromobenzene	<1	ug/l	8260	04/17/96
Bromodichloromethane	<1	ug/l	8260	04/17/96
Bromoform	<1	ug/l	8260	04/17/9
Bromomethane	<1	ug/l	8260	04/17/9
Carbon Tetrachloride	<1	ug/l	8260	04/17/9
Chlorobenzene	<1	ug/l	8260	04/17/9
Chloroethane	<1	ug/l	8260	04/17/9
Chloroform	<1	ug/l	8260	04/17/9
Chloromethane (Methyl chloride)	<1	ug/l	8260	04/17/9
Dibromochloromethane	<1	ug/l	8260	04/17/9
Dibromomethane	<1	ug/l	8260	04/17/9
Dichlorodifluoromethane	<1	ug/l	8260	04/17/9
1,2-Dichlorobenzene	<1	ug/l	8260	04/17/9
1,3-Dichlorobenzene	<1	ug/l	8260	04/17/9
1,4-Dichlorobenzene	<1	ug/l	8260	04/17/9
1,1-Dichloroethane	. <1	ug/l	8260	04/17/9
1,2-Dichloroethane	<1	ug/l	8260	04/17/9
1,1-Dichloroethene	<1	ug/l	8260	04/17/9
-1,2-Dichloroethene	<1 .	ug/l	8260	04/17/9
t-1,2-Dichloroethene	<1	ug/l	8260	04/17/9
,2-Dichloropropane	<1	ug/l	8260	04/17/9
Methylene chloride	<5	ug/l	8260	04/17/9
1,1,1,2-Tetrachloroethane	<1	ug/l	8260	04/17/96
,1,2,2-Tetrachloroethane	<1	ug/t	8260	04/17/9
etrachloroethene	<1	ug/l	8260	04/17/9
,1,1-Trichloroethane	<1	ug/l	8260	04/17/96
,1,2-Trichloroethane	<1	ug/l	8260	04/17/96
richloroethene	<1	ug/l	8260	04/17/96
richlorofluoromethane	<1	ug/l	8260	04/17/96
inyl chloride	<1	ug/l	8260	04/17/96
,2-Dichloroethane-d4 (Surrogate)	99	%	8260	04/16/96
oluene-d8 (Surrogate)	98	%	8260	04/16/96
-Bromofluorobenzene (Surrogate)	98	%	8260	04/16/96
OLATILE ORGANIC COMPOUNDS	¥)			
enzyl chloride	(1)	ug/l	8260	04/17/96
-1,3-Dichloropropene	<1	ug/l	8260	04/17/96
-1,3-Dichloropropene	<1	ug/l	8260	04/17/96
-Chloroethyl vinyl ether	<10	ug/l	8260	04/17/96

Client Home:

MAXIM - TRI-CITIES, WA

Project No.:

87-921

Laboratory Mo.: 173232

Sumple Henry

TRIP BLANK

Sample Date: Collected by:

MONE GIVEN MONE GIVEN

Time Sampled:

MONE GIVEN

Sample Type:

MATER

QA/ac 8260 Trip blank

	- Commission of the Commission	THE STATE OF THE S			
PARAMETER	MEASURED VALUE		METHOD WATHBER	DATE ANALYZED	
EPA METHOD 8250					
Dota File Wimber-Volatiles	04169	61009	8260	04/16/98	
Benzene	<1	ug/l	8260	04/18/96	
Si'otiobenzene	<1	ug/1	8260	04/16/96	
Bromoch Loromatheme	≺1	ug/1	8260	04/16/98	
Branedich Lorenethune	<1	ug/L	8260	04/16/96	
Bromoform	~7	ug/L	8260	04/16/96	
Browomethane	<1	ugel	8260	04/16/96	
1-Butylbenzene	*1	ug/l	8260	04/16/96	
aec-Butylbenzene	<1	ug/l	8260	04/16/96	
-Sutylberzene	<1	ug/1	8260	04/16/96	
Carbon Tetrachloride	<1	us/t	8260	04/16/96	
hlorobenzene	<1	up/l	8260	04/16/96	
hloroethene	<1	ug/l	8260	04/16/96	
hloroform	41	ug/L	8260	04/16/96	
hloromethana (Mathyl chloride)	41	usi/1	8260	04/16/96	
-Chlorotoluene	<1	Luci/C	8260	04/16/96	
-Chiorotoluene	-51	129/1	8260	04/16/96	
i brosoch Loromethane	<1	ug/t	8260	04/16/96	
,2-Dibromo-3-chioropropene	<5	ug/L	8260	04/16/96	
, 2-Dibromoethane	<7	ug/L	8260	04/16/96	
1brosomethene	<1	ug/L	8260	04/16/96	
ichtorodifluoromethane	<1	way t	8260	04/16/96	
,2-Dichtorobenzene	<1	ug/t	8260	04/16/96	
,3-Dichtorobanzera	<1	ug/L	8260	04/16/96	
,4-Dichlorobanzene	<1	ug/l	8260	04/16/96	
,1-Dichloroethane	· <1	ug/L	8260	04/16/96	
2-Dichlorosthana	<1	ug/l	8260	04/16/96	
1-Dichlorosthene	<1	ug/L	8260	04/16/96	
1,2-Dichtoroethene	<1	129/1	8260	04/16/96	
1,2-Dichloroethers	-41	ug/l	8260	04/16/96	
2-Dichtoropropass	<1	ug/L	8260	04/16/96	
3-Dichlaropropene	<1	ug/L	8260	04/16/96	
2-Dichloropropune	<5	um/L	8250	04/16/96	
1-Dichtoropropene	ન	ug/L	8260	04/16/96	
hylbenzene	<1	ug/L	2260	04/16/96	
etachlorobutadiene	<3	ug/l	2260	04/16/96	
Mane (Isopropylbenzene)	<1	ug/L	8260	04/16/96	
opropyltoluene	<1	ug/l	8260	04/16/96	
thylene chloride	<5	LAGI/E	8260		
phthalene	<1		8260	04/16/96	
Propyl benzene	41	ug/(04/16/96	
ALDUA TOO TOO TOO TOO TOO TOO TOO TOO TOO TO	<1	ug/l	8260 8260	04/16/96 04/16/96	

Client Name:

MAXIM - Yakima

Project No.:

95-932 Laboratory No.: 173234

Sample Name:

MATRIX SPIKE DUPLICATE 173228 MW-2

Sample Date: Collected by: 04/15/96

Time Sampled:

ROB FARRELL

1135

Sample Type:

WATER

PARAMETER		WEASU		METHOD NUMBER	DATE
EPA METHOD 8260					
Data File Number-Volatiles		041696	31012		
Bromobenzene		<1	ug/l	8260	04/17/96
Bromodichloromethane		<1	ug/l	8260	04/17/96
Bromoform		<1	ug/l	8260	04/17/96
Bromomethane		<1	ug/l	8260	04/17/96
Carbon Tetrachloride		<1	ug/l	8260	04/17/96
Chlorobenzene		94	%	8260	04/17/96
Chloroethane	-	<1	ug/l	8260	04/17/96
Chloroform		1	ug/l	8260	04/17/96
Chloromethane (Methyl chloride)		<1	ug/l	8260	04/17/96
Dibromochloromethane		<1	ug/l	8260	04/17/96
Dibromomethane		<1	ug/l	8260	04/17/96
Dichlorodifluoromethane		<1	ug/l	8260	04/17/96
1,2-Dichlorobenzene		<1	ug/l	8260	04/17/96
1,3-Dichlorobenzene		<1	ug/l	8260	04/17/96
1,4-Dichlorobenzene		<1	ug/l	8260	04/17/96
1,1-Dichloroethane		<1	ug/l	8260	04/17/96
1,2-Dichloroethane		< 1	ug/l	8260	04/17/96
1,1-Dichloroethene		87	%	8260	04/17/96
c-1,2-Dichloroethene		<1	ug/l	8260	04/17/96
t-1,2-Dichloroethene ,		<1	ug/l	8260	04/17/96
1,2-Dichloropropane		<1	ug/l	8260	04/17/96
Methylene chloride		<5	ug/l	8260	04/17/96
1,1,1,2-Tetrachloroethane		<1	ug/l	8260	04/17/96
1,1,2,2-Tetrachloroethane		<1	ug/l	8260	04/17/96
Tetrachloroethene		7	ug/l	8260	04/17/96
1,1,1-Trichloroethane		<1	ug/l	8260	04/17/96
1,1,2-Trichloroethane		<1	ug/l	8260	04/17/96
Trichloroethene		91	%	8260	04/17/96
Trichlorofluoromethane	5. 8	<1	ug/l	8260	04/17/96
Vinyl chloride		<1	ug/l	8260	04/17/96
1,2-Dichloroethane-d4 (Surrogate)		97	%	8260	04/16/96
Toluene-d8 (Surrogate)		99	%	8260	04/16/96
-Bromofluorobenzene (Surrogate)		99	%	8260	04/16/96
OLATILE ORGANIC COMPOUNDS					
Benzyl chloride		(1)	ug/l	8260	04/17/96
-1,3-Dichloropropene		<1	ug/l	8260	04/17/96
-1,3-Dichloropropene		<1	ug/l	8260	04/17/96
-Chloroethyl vinyl ether		<10	ug/l	8260	04/17/96

Client Name: MAXIN - TRI-CITIES, WA

Project No.1

87-921

Laboratory No.: 173233 Sample Memes

MATRIX SPIRE 173228 WA-2

Sample Date:

04/15/96

Collected by:

ROB FARRELL

Time Sampled:

Sample Type:

1135

WATER

MATRIX SPIKE 8260

grave presidences	MEASU	RED	METHOD	DATE .
PARANETER	VALU	E :	MUMBER	ANALYZED
EPA NETHOD 8260		is a second		
Data File Mumber-Voiatiles	04169	61011	8250	04/16/96
Benzene	42	ug/t	8250	04/16/96
Bromobenzene	<1	1391	8260	04/16/96
Bromochloromethene	<1	UB/L	8260	04/16/96
Bronodichloromethane	<1	ug/L	8260	04/16/96
Bronoform	≪1	ug/L	8260	04/16/96
Bronomathone	<1	ug/l	8260	04/16/96
n-Butylbenzene	<1	ug/t	8260	04/16/96
aec-Butylbenzene	<1	ug/L	8269	04/16/95
t-Sutylbanzane	<1	ug/t	82250	04/16/96
Carbon Tatrachloride	<1	un/t	8260	04/16/96
Chlorobenzane	47	199/1	8260	04/16/96
Ch Loroothana	<1	um t	8260	04/16/96
Chioroform	1	ug/L	8260	04/16/96
Chioromathane (Methyl chioride)	<1	ug/L	8260	04/16/96
2-Chiorotoluene	<1	ug/L	8260	04/16/96
5-Chlorotoluene	<1	ug/l	8260	04/16/96
Horomoch Laramethurm	<1	ug/L	8250	04/16/96
1,2-Dibroma-3-chloropropane	<5	ug/L	0260	04/16/96
1,2-Dibromoethene	<1	ug/1	8260	04/16/96
Thronomethere	«1	ua/L	8260	04/16/96
ichleredifluoromathene	<4	ug/L	8260	
,2-Dichtorobanzene	«Y	ug/1	8260	04/16/96
,3-0ichlorobenzene	< 1	ug/L	8260	04/16/96
,4-Dichtorobenzene	<1		8260	04/16/96
,1-Dichtoroethere	<1	ug/t	8260	04/16/96
, 2-Dichlorcethane	41	ug/t		04/16/96
,1-Ujohlurosthene	45	1/60	8260 8260	04/16/96
-1,2-Dichlercethene	<1	ungs t	AAAA AAAAA	04/18/98
-1,2-Dichloroethere	<1	ug/1	8260	04/16/96
,Z-Dichloropropane	10,67	ug/L	8260	04/16/98
,3-DichLoropropane	47	ug/1	8260	04/16/96
2-Dichtoropropage	*1	ug/L	8260	04/16/96
, 1-pichtoropropene	ৰ	ug/l	8540	04/16/96
khylbenzene	্ ব	us/L	8260	04/16/96
much (orobutadiene	<1	ug/l	8260	04/16/96
	<2	ug/l	8260	04/16/98
where (Isopropylbenzene)	ধ	ug/l	5250	04/16/98
opropyltolusne	<1	ug/I	8260	04/16/96
ethylena chloride	<5	1/84	0928	04/16/96
phthalone	~1	ng/L	8260	04/16/98
Propylbenzene	<1	ug/t	8260	04/16/96
enany:	<1	141/1	8280	06/16/96

Client Name: MAXIM - TRI-CITIES, MA

Project Wo.; Laboratory No.: 173233

87-921

Sample Memes

MATRIX SPIKE 173228 NN-2

Sample Date:

04/15/96

Time Sampled: Sample Type:

Collected by: ROB FARRELL

1135 MATER

	MEASUR	ED	METHOD	DATE ANALYZED
PARAMETER	· VALUE		NUMBER	
1,1,1,2-Totrachioroethune	٧1	May 1	8240	04/16/96
1,1,2,2-Tetrachloroethane	<1	ug/L	SEAD	04/16/96
Tetrachloroothera	Ü	ug/L	8260	04/16/98
Toluene	45	ug/L	8260	04/16/96
1,2,3-Trichlorobenzene	- <1	ug/L	8260	04/16/96
1,2,4-Trichtorobenzene	<1	ug/L	8260	04/16/96
1,1,1-Trichloroethane	≺1	un/L	8260	04/16/96
1,1,2-Trichloroethene	<1	USI/I	9590	04/16/96
Trichtoroothene	46	ug/L	8260	04/16/96
Trichlorofluoromethune	<1	ung/L	8260	04/16/96
1,2,3-Trichloropropane	<7	ug/L	8760	04/16/96
1,2,4-Trimothylbenzona	*1	ug/ l	8260	04/16/96
1,3,5-Trimethylbenzena	<1	LOGIF L	8260	04/16/96
finyl chloride	≺1	ug/L	8260	06/16/96
fotal xylanas	~9	un/L	8260	04/16/96
.2-Dichlorosthans-d% (Surrogate)	100	*	8260	04/16/96
'oluene-di (Surrogate)	98	*	8260	04/16/96
-Browofluorobenzene (Surroyate)	105	x	8260	D4/16/96

MAXIM

Page

Ctient Wame:

MAXIM - TRI-CITIES, MA

Project No.:

87-921

Laboratory No.: 173234 Sample Merse:

Sample Dates

MATRIX SPIKE DUPLICATE 173228 WU-2

Collected by:

04/15/96

ROS FARRELL

Time Sampled:

1135

Sample Type:

WATER

PARAMETER	NEASURED VALUE		METHOD NUMBER	DATE ANALYZE
ера метной 8260				N
Data File Number-Volatiles	04169	67012	8760	04/16/98
Bonzona	42	ug/l	8260	04/16/96
Broschanzene	*1	UD/L	8260	04/16/96
Bromochloromezhana	<1	ug/L	B260	04/16/96
BranadichLaromethene	*1	ug/t	B260	04/16/96
Bromoform	<1	ug/l	8260	04/16/96
Bromomathane	<1	ug/i	8260	04/16/96
n-Butylbenzene	«1	Ug/L	8260	04/16/96
sec-Butylbenzene	<1	ug/l	8260	04/16/96
t-Butylbanzene	<1	19/1	8260	04/16/96
Carbon Tetrachloride	<1	ug/L	8250	04/16/98
Chloroberzona	43	ug/t	8260	04/16/96
Chloroethans	≺1	LEG/L	8260	04/16/96
In Loroferin	1	ug/L	\$250	04/16/96
Chioromethane (Methyl chioride)	<1	ug/L	8260	04/16/96
2-Chlorotoluene	41	ug/I	8260	04/16/96
i-chlorozoluene	<1	ug/l	8260	04/16/96
i Dromoch Loromethane	<1	ug/t	8260	04/16/96
,2-Dibrezo-3-chloropropane	<5	49/1	8260	04/16/96
, 2-D ibrancethene	<1	ug/l	8260	04/16/96
anad second in the second in t	<1	619/ L	D250	04/16/96
ichlorodifluoromethana	<1	ug/t	8260	
"2-Dichlorobenzena	≺1	usa/t	8260	04/16/96
"3-Dichlorobenzane	<1	ug/L	8260	04/16/96
,4-Dichtorobenzene	<1	ug/L	8260	04/16/96
,1-Dichloroethure	41	ug/l	8260	04/16/96
,2-Dichloroethene	<1	ug/t	8260	04/16/96
,1-Dichloroethana	45	ug/l	8260	04/16/96
-1,2-Dichtaraethene	×1	ug/L	8260	04/16/96
1,2-Dichloroethene	<1	4773	8760	04/16/96
2-Dichloroprepane	. 47	ug/t	78.55.007	04/16/96
3-Dichloropropage		const	8260	04/16/96
2-pichloropropane	<5	ug/L	8260	04/16/96
1-Dishleropropere	<1	ug/L	8260	04/16/96
hylbenzone		ug/l	8260	04/16/96
xachlorobutadiene	<1 <2	ug/L	8260	04/16/96
mena (Isopropylbenzene)	<2 <1	ug/L	8260	04/16/96
opropyltaluane		CEVI	8260	04/16/96
thylene chloride	<1 -P	ug/L	8260	04/16/96
phtholone	< 5	nug/f	8260	04/16/96
Propylbenzene	<1	rig/l	8260	04/16/96
ALDUR	<1	rog/l	8260	04/16/96
/ · · · · · ·	<1	ug/L	8260	04/16/96

Client Hemm:

MAXIM - TRI-CITIES, WA

Project No.: 87-929

Laboratory No.: 173234

Sample Name:

MATRIX SPIXE DUPLICATE 173228 NU-2

Sample Date: 04/15/96 Collected by: ROS FARRELL

Time Sampled: 1135 Sample Type: WATER Page 23

PARAMETER	MEASURED WALLE		HETHOD NUMBER	PATE ANALYZED
1,1,1,2-Tatrachioroethene	<1	ug/l	8260	04/16/96
1,1,2,2-Tetrachiorosthene	<1	ug/L	8260	04/16/96
Tetrachloroethena	7	ug/L	8260	04/16/96
Toluene	66	ug/t	8260	94/15/96
1,2,3-Trichlorobenzone	<1	Leg/L	8260	
1,2,4-Trichtorobenzene	<1	Un/L	8250	04/16/96
1,1,1-Trichloroethune	<1	ug/l	8260	04/15/95
1,1,2-Trichloroethana	<1			04/16/96
Trichtoreathers	47	ug/L	2260	04/16/96
Trichlorofluoromethane	<1	ug/l	8260	04/16/96
1,2,3-Trichloropropane	<1 <1	ug/(8260	04/16/96
1,2,4-Trimethylbonzene	: :::(N)	war t	9560	04/76/96
,3,5-Trimethylbenzene	·¢1	ugst	8260	04/16/96
finyl chloride	<1	ug/t	8260	04/16/96
osal myisasa	<1	ust/ L	2250	04/16/96
	<1	ug/l	0358	04/16/96
(2-Dichloroethern-d4 (Surrogate)	97	%	8260	04/16/96
oluena-dő (Surrogate)	99	%	8260	04/16/96
-Gramofitiorobenzene (Surrogate)	99	*	8260	04/16/96

MAXIM

SAMPLE RECEIPT CHECKLIST

Clien	t Name M- Gabina		Date/Time Received 4/16/96 094				
Project Suethoato Laundry			Received by				
Labor	ratory number(s) 173224 -32		Carrier name				
	klist completed		Logged in by				
by:	Initials / Date		Sample Type Sacolwate				
	YES NO	-	ALEA NO				
		105,6761	YES NO				
1.	Shipping container in good condition?	16.	All samples rec'd within holding time?				
2.	Custody seals present on shipping container?	17.	Preservation pH check performed by:				
2	No. 10 at a later of the No. 10 at a later of	18.	Metals bottle(s) pH <2?				
3.	Condition: Intact Broken	19.	Nutrient bottle(s) pH <2?				
4.	Chain of custody present?	20.	Cyanide bottle(s) pH >12?				
5.	Chain of custody signed when relinquished and received?		_				
6.	Chain of custody agrees with	21.	Sulfide bottle(s) pH >9?				
	sample labels?	22.	Oil & grease bottle(s) pH <2?				
7.	Custody seals on sample bottles?	23.	TOC bottle(s) pH <2?				
8.	Condition: Intact Broken	24.	DRO/418.1 bottle(s) pH <2?				
9.	Samples in proper container/bottle?	25.	Phenolics bottle(s) pH <2?				
10.	Samples intact?	26.	Volatiles (VOA) pH <2? (VOA pH checked by analyst)				
11.	Sufficient sample volume for indicated test?	27.	Client contacted?				
12.	VOA vials have zero headspace?	28.	Person contacted				
13.	Trip Blank received?	29.	Date contacted				
14.	Ice/Frozen Blue Ice present in shipping container? (circle one)	30.	Contacted by				
15.	Container temperature 1.0.4°C2 3	31.	Regarding?				
Any NO response must be detailed in the comments section below. If items are not applicable, they should be marked NA.							
COMI	COMMENTS: #5 SOO COSTO MIS						

Data File : C:\HPCHEM\1\DATA\041796\1008.D

11:09 am

Acq Time : 17 Apr 96 Sample : 173224 5g

Misc

Operator: GHP Inst : GC/MS Multiplr: 1.00

Quant Time: Apr 17 11:37 1996

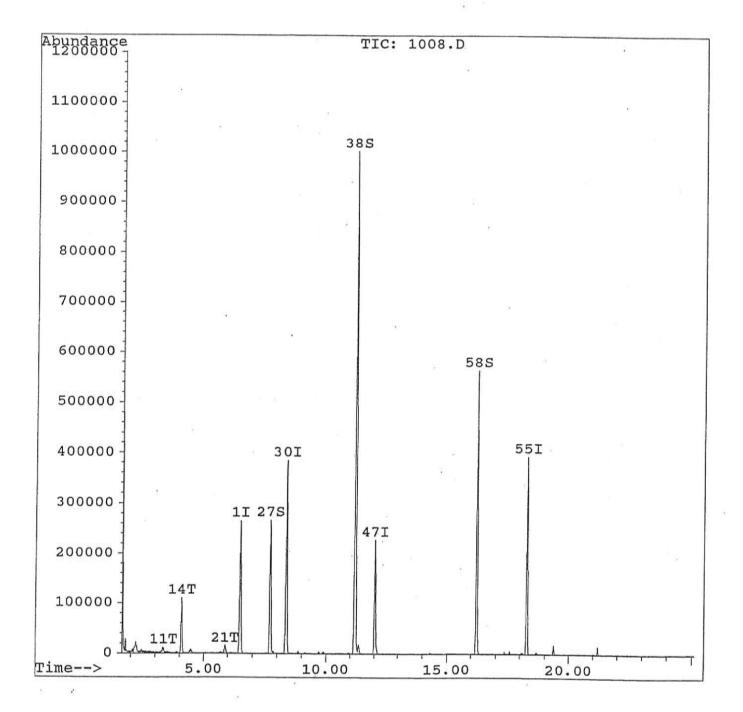
Method

: C:\HPCHEM\1\METHODS\82600319.M

Title

: 8260

Last Update : Wed Apr 17 09:58:09 1996 Response via : Single Level Calibration



Data File : C:\HPCHEM\1\DATA\041796\1010.D

12:30 pm

Acq Time : 17 Apr 96 Sample : 173226 5g

Misc

Operator: GHP Inst : GC/MS Multiplr: 1.00

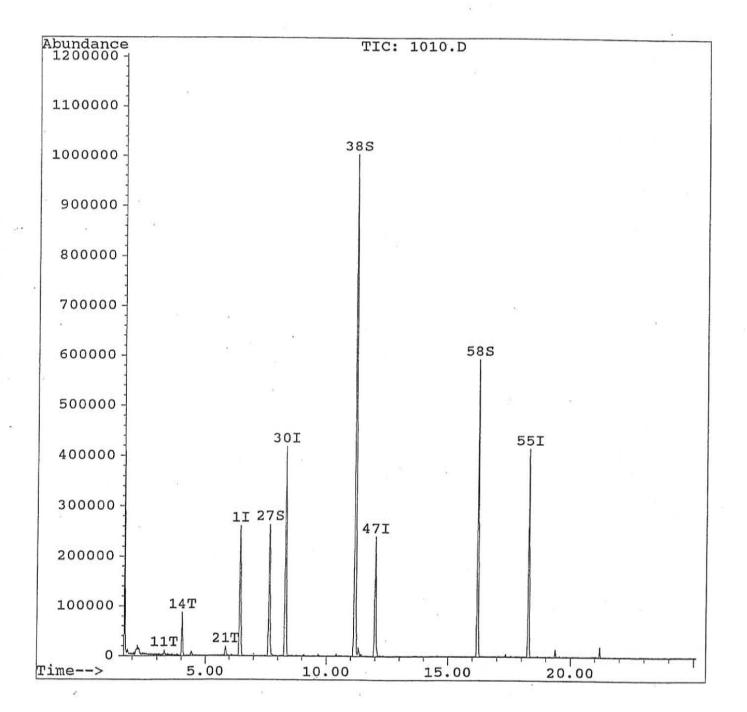
Quant Time: Apr 17 12:58 1996

Method

: C:\HPCHEM\1\METHODS\82600319.M

Title : 8260

Last Update : Wed Apr 17 09:58:09 1996 Response via : Single Level Calibration



Data File : C:\HPCHEM\1\DATA\041696\1010.D Acq Time : 16 Apr 96 1:48 pm

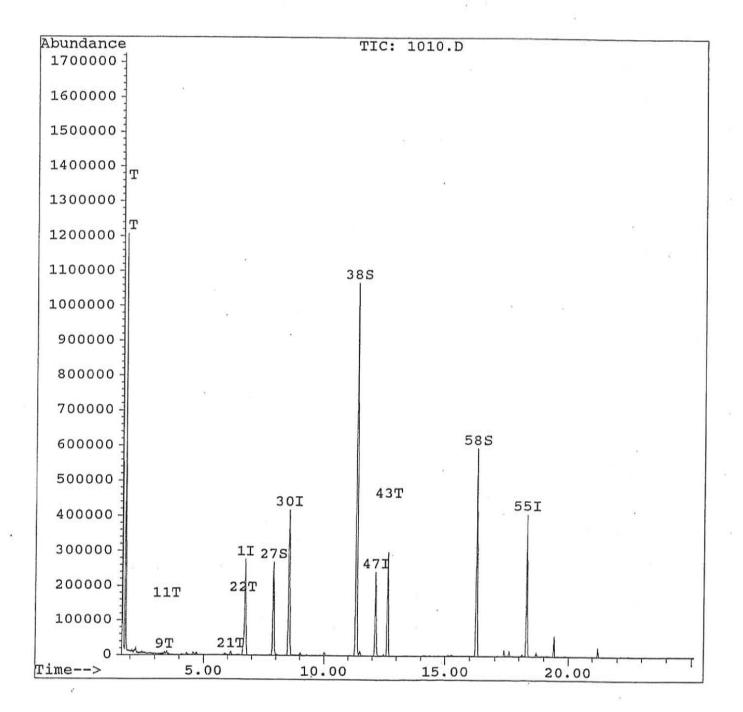
Sample : 173228

Misc

Quant Time: Apr 16 14:17 1996

Method : C:\HPCHEM\1\METHODS\82600319.M Title : 8260

Last Update : Tue Apr 16 11:16:43 1996 Response via : Single Level Calibration



Operator: GHP

Multiplr: 1.00

: GC/MS

Inst

Data File : C:\HPCHEM\1\DATA\041696\1015.D

Acq Time : 16 Apr 96 4:31 pm

Sample : 173230

Misc :

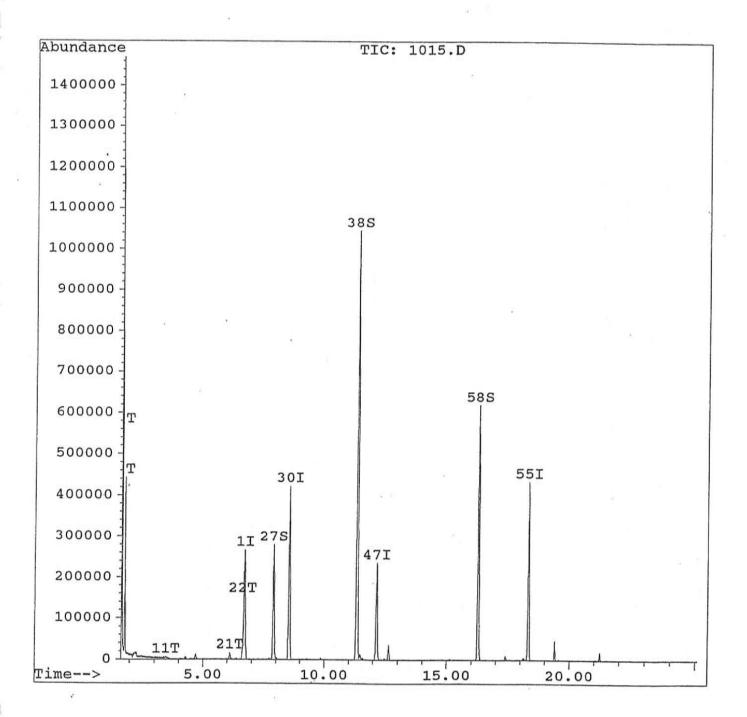
173230

Quant Time: Apr 16 16:59 1996

Method : C:\HPCHEM\1\METHODS\82600319.M

Title : 8260

Last Update : Tue Apr 16 15:09:21 1996 Response via : Single Level Calibration



Operator: GHP

Multiplr: 1.00

: GC/MS

Inst

Data File : C:\HPCHEM\1\DATA\041696\1012.D

Acq Time : 16 Apr 96 2:54 pm

: 173234 msd Sample

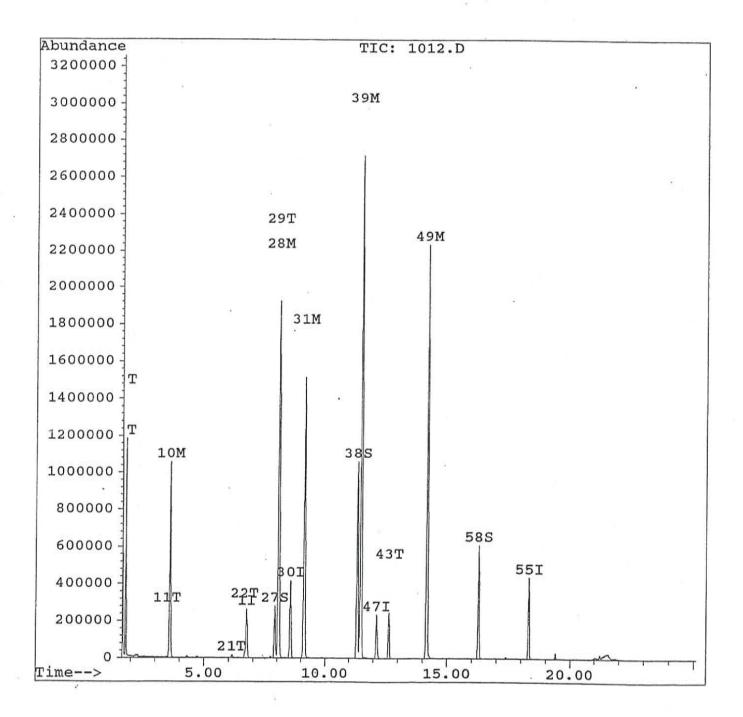
Misc

Method

Quant Time: Apr 16 15:23 1996

: C:\HPCHEM\1\METHODS\82600319.M Title : 8260

Last Update : Tue Apr 16 15:09:21 1996 Response via : Single Level Calibration



Operator: GHP

Multiplr: 1.00

: GC/MS

Inst

Project: 50 thgate Laundry Date/Time		1.
Normalia Distributions	1 415 96 Station No.	HW-2
1 0		
Porsonnel: Rob tarrell Weather:	680	
Well Locked? Yes X No 11 Well Log? You No []	*	
Condition of Well: V. Good		
GABING Type: PVC	Casing Diameter: 21'	
Coming Stockup: None Flush mount	Measuring Point Description: 16 £	PH side of Pre
Aquiter: Yakıma (stave)		
Depth to Woter (feet below measuring point): 33.75		
WELL EVACU	ATION	**************************************
Method: Positive Displacement Pump [] Hand-Lift Pump [] Submerable Pump [] SS	•	Other:
One Bore Volume - Gallers	()	
Remarks: See HW-1		W ₂
EVACUATION	DATA	
11-20 Cumulative Galdone Tento	<u>pH</u> <u>SC</u>	Other
1130	6.9 300 6.9 300	
11.50	<u>G.1</u> <u>306</u>	
20 Total		
	7 000	A DEPRESANDA COMPANY
Sampling Method: \$\int 15 p.05 n.6 ke \$PVC BaileL Sample Type: Nature SC DAT Water Temp. Observed SC Temp. (pm/hos) Correction (1) (2) (3)	Gall .	SC = (2) x (4) x (4) production @ 25°C Compensated SC
191	(44)	- William - Will
Temperature pH:	Other:	
Temperatura pH:	Other:	reservativa
	0.000 0.000 0.000	Preservativa
	0.000 0.000 0.000	Présorvactive
	0.000 0.000 0.000	Preservative
	0.000 0.000 0.000	Procorvativa
	0.000 0.000 0.000	Présorvativa
	0.000 0.000 0.000	Preservativa
	0.000 0.000 0.000	?-deborvastiva
Laboratory Billings Lab (Maxim)		Proborvativa
Laboratory Billings Lab (Maxim)		
Laboratory: Billings Lab (Maxim) Sample Analysis Request Forms Yes [] No [] Research Serial No. Gallbration Date	Chain-of-Gustody: Yes 1 No 11	
Laboratory Billings LCL (Maxim) Sample Analytic Request Form: Yes [] No [] Rectes Parameters Calibration Date pH	Chain-of-Gustody: Yes No 1 Queentaminat Stazm: Yes 1 No 1	ion
Laboratory: Dillings Lab (Maxim) Sample Analysis Request Forms: Yes 1] No [] Meter Serial No. Gallbration Date pH	Chain-of-Gustody: Yes No 1 Queentaminet Stazen: Yes No 1	ion Potable Water: Yes [1 No []
Laboratory Dillings LCL (Maxim) Sample Analysis Request Form: Yes 11 No [1] Reserve Serial No. Gallbration Date pH gc M-Scope	Chain-of-Guatedy: Yes No 1 Quantaminet Steam: Yes No 1 Scrub: Yes No 1	ion Potable Water: Yes [] No [] iquinox: Yes [] No []
Laboratory Billings Lab (Maxim) Sample Analytic Request Forms Yes [] No []	Chain-of-Guatody: Yes No [] Queentaminet Steam: Yes No Scrub: Yes No Mathanal: Yes No	ion Potable Water: Yes [] No [] iquinox: Yes [] No []

Project: So Hugate		NATER SAMPLI	T. a.	-4
		Date/Time: 1 (5)	6 Station No. 1 Cu	2
Personnel Rob Fa	rell	Weather: 680		A STATE OF THE STA
Well Locked? Yes X No 11	Well Log? Yes No []	***************************************		
1 //	900d		6 53	
Casing Type: PUC V	J	Casing Dies	neter: 2"	
Costing Stickup: Flush	Mount		Point Description: No PTH	side of PVC
Aguster: Pakima	Gravel			
Depth to Water (feet below measure		- AFTERWARD TO THE STATE OF THE	3	-
mone.	······································	CONSTRUCTO	TP-00-	- Constant
		WELL EVACUATION	6	į.
Method: Positive Displacement Pun One Bore Volume ~	np [] Hand-Lift Pump [] Submi	ursible Pump[] SST Bailer [] PV	C Bailes M Tesson Baller [] Other:	
Remorks:				
		EVACUATION DATA		
(Time Cur	mulative Gallens	emp pH	sc	Other
15:00		7.3	30	200
15.00		7.3	810	
		_		
2	Stotal _	_		
Sampling Method: DIS POSalo Water Tamp.	Observed SC (pmhos)	Temp. Correction Factor	Gell Factor (4)	SC = (2) x (3) x (4) probation @ 25°C Compensated SC
	· · · · · · · · · · · · · · · · · · ·			
Temperature	рН:	-	Other:	
Sample Container	Purti	00/613	Preserva	upra
			ALBORIDA MARIANTA	
			- LAVERSON OF THE STATE OF THE	
			- A TANAMA AND AND A TANAMA AND	***************************************
Billing	Lab CH	uxim mines		
Laboratory Billing	Lab CH	axim) chain-of-cu	atocky: Yess No 11	A Marine of the Control of the Contr
Sample Anatyeis Request Form: Ye				
1		•	<u>Qecontamination</u>	Water Variable
Sample Analysis Request Form: Ya		Stazm:	<u>Decontamination</u> Year 1 No 1 Potable	Water: Yes [] No []
Sample Analysis Request Form: Ya Merse Sorial No. pH		Stezm:	Decortemination Year 1 No 1 Potable Year 1 No 1 Liquinex	: Yes [] No []
Sample Analycie Request Form: Yo Merse Scrial No.		Steam: Scrub: Methanoli	Qecontamination Yes 1 No 1 Potable Yes 1 No 1 Liquinex Yes 1 No 1 Acetone:	: Yes [] No []
Sample Analysis Request Form: Ya Merse Sorial No. pH		Steam: Scrub: Methanoli	Decortemination Year 1 No 1 Potable Year 1 No 1 Liquinex	: Yes [] No []
Sample Anatycia Request Form: You Merse Scrial No. pH SC M-Scope		Steam: Scrub: Methanoli	Qecontamination Yes 1 No 1 Potable Yes 1 No 1 Liquinex Yes 1 No 1 Acetone:	: Yes [] No []

Client Name: MAXIM - Yakima

Project No.: 95-932
Laboratory No.: 176497
Sample Name: MW-3
Sample Date: 07/15/96
Collected by: ROD HEIT
Time Sampled: 0713
Sample Type: WATER

	MEASUR		METHOD	DATE
PARAMETER	VALUE		NUMBER	ANALYZE
		7	1	
HALOGENATED VOLATILE ORGANICS		,		
Data File Number-Volatiles	071796	51011		
Benzyl chloride	. <1	ug/l	8260	07/17/96
Bromobenzene	<1	ug/l	8260	07/17/96
Bromodichloromethane	<1	ug/l	8260	07/17/96
Bromoform	<1	ug/l	8260	07/17/96
Bromomethane	<1	ug/l	8260	07/17/96
Carbon Tetrachloride	<1	ug/l	8260	07/17/96
Chlorobenzene	<1	ug/l	8260	07/17/96
Chloroethane	<1	ug/l	8260	07/17/96
Chloroform	<1	ug/l	8260	07/17/96
Chloromethane (Methyl chloride)	<1	ug/l	8260	07/17/96
Dibromochloromethane	<1	ug/l	8260	07/17/96
Dibromomethane	<1	ug/l	8260	07/17/96
Dichlorodifluoromethane	18	ug/l	8260	07/17/96
1,2-Dichlorobenzene	<1	ug/l	8260	07/17/96
1,3-Dichlorobenzene	<1	ug/l	8260	07/17/96
1,4-Dichlorobenzene	<1	ug/l	8260	07/17/96
1,1-Dichloroethane	<1	ug/l	8260	07/17/96
1,2-Dichloroethane	<1	ug/l	8260	07/17/96
1,1-Dichloroethene	<1	ug/l	. 8260	07/17/96
-1,2-Dichloroethene	<1	ug/l	8260	07/17/96
t-1,2-Dichloroethene	<1	ug/l	8260	07/17/96
,2-Dichloropropane	<1	ug/l	8260	07/17/96
:-1,3-Dichloropropene	<1	· ug/l	8260	07/17/96
-1,3-Dichloropropene	<1	ug/l	8260	07/17/96
Methylene chloride	<5	ug/l	8260	
,1,1,2-Tetrachloroethane	<1	ug/l	8260	07/17/96
,1,2,2-Tetrachloroethane	<1	ug/l	8260	07/17/96
etrachloroethene	62	ug/l	8260	07/17/96
,1,1-Trichloroethane	<1	ug/l	8260	07/17/96
,1,2-Trichloroethane				07/17/96
richloroethene	<1	ug/l	8260	07/17/96
richlorofluoromethane	<1 -1	ug/l	8260	07/17/96
,2,3-Trichloropropane	<1 <1	ug/l	8260	07/17/96
inyl Chloride		ug/l	8260	07/17/96
-Chloroethyl vinyl ether	<1	ug/l	8260	07/17/96
,2-Dichloroethane-d4 (Surrogate)	<10	ug/l	8260	07/17/96
oluene-d8 (Surrogate)	90	%	8260	07/17/96
oluene-d8 (Surrogate) -Bromofluorobenzene (Surrogate)	104	% %	8260	07/17/96

Client Name:

MAXIM - Yakima

Project No.:

95-932

Laboratory No.: 176499

Sample Name:

Sample Date:

Mw-3 MW-BLIND

Collected by:

07/15/96

Time Sampled:

ROD HEIT NONE GIVEN

Sample Type:

WATER

PARAMETER	MEASUR VALUE	930101	METHOD NUMBER	DATE
HALOGENATED VOLATILE ORGANICS		(0)		
Data File Number-Volatiles	071796	1013		
Benzyl chloride	<1	ug/l	8260	07/17/96
Bromobenzene	<1	ug/l	8260	07/17/98
Bromodichloromethane	<1	ug/l	8260	07/17/98
Bromoform	<1	ug/l	8260	07/17/98
Bromomethane	<1	ug/l	8260	07/17/98
Carbon Tetrachloride	<1	ug/l	8260	07/17/96
Chlorobenzene	<1	ug/l	8260	07/17/96
Chloroethane	<1	ug/l	8260	07/17/96
Chloroform	<1	ug/l	8260	07/17/96
Chloromethane (Methyl chloride)	<1	ug/l	8260	07/17/96
Dibromochloromethane	<1	ug/l	8260	07/17/96
Dibromomethane	<1	ug/l	8260	07/17/96
Dichlorodifluoromethane	28	ug/l	8260	07/17/96
1,2-Dichlorobenzene	<1	ug/l	8260	07/17/96
1,3-Dichlorobenzene	<1	ug/l	8260	07/17/96
1,4-Dichlorobenzene	<1	ug/l	8260	07/17/96
1,1-Dichloroethane	<1	ug/l	8260	07/17/96
1,2-Dichloroethane	<1	ug/l	8260	07/17/96
1,1-Dichloroethene	<1	ug/l	8260	07/17/96
c-1,2-Dichloroethene	<1	ug/l	8260	07/17/96
t-1,2-Dichloroethene	<1	ug/l	8260	07/17/96
1,2-Dichloropropane	<1	ug/l	8260	07/17/96
c-1,3-Dichloropropene	<1	ug/l	8260	07/17/96
t-1,3-Dichloropropene	<1	ug/l	8260	07/17/96
Methylene chloride	<5	ug/l	8260	07/17/96
1,1,1,2-Tetrachloroethane	<1	ug/l	8260	07/17/96
1,1,2,2-Tetrachloroethane	<1	ug/l	8260	07/17/96
Tetrachloroethene	53	ug/l	8260	07/17/96
1,1,1-Trichloroethane	<1	ug/l	8260	07/17/96
1,1,2-Trichloroethane	<1	ug/l	8260	07/17/96
Trichloroethene	<1	ug/l	8260	07/17/96
richlorofluoromethane	<1	ug/l	8260	07/17/96
,2,3-Trichloropropane	<1	ug/l	8260	07/17/96
/inyl Chloride	<1	ug/l	8260	07/17/96
-Chloroethyl vinyl ether	<10	ug/l	8260	07/17/96
,2-Dichloroethane-d4 (Surrogate)	97	%	8260	07/17/96
oluene-d8 (Surrogate)	103	%	8260	07/17/96
-Bromofluorobenzene (Surrogate)	102	%	8260	07/17/96

Tarel blank (2vila) LAB NUMBER blind (21/16) 4 welk 2 viles 200 Compect Address or Location AKIMI Contact or Report to Sampler Signature Remarks: U 10 REJOR ANALYSIS REQUIRED Missoula, M Yakima, WA Helena, MT 9008 NO. OF CONTAINERS Great Falls, MT Received by: Billings, MT Received by: Boise, ID sab Wake SAMPLE COMP OR GRAB 1/15/96/ 7:08 Am Tave blank MW- blind SAMPLE LOCATION OR DESCRIPTION 7115/96 9:18 Am NW -4 7/15/96 7,15 Am MW-3 7/1896 8:20 Am MW -2 7/15/96 10:23 Am MW-Souther to TIME Sampler Name (Printed Project or Site Name Project Number Relinquished by: Relinquished by:, 16/51/1 Relinquished by: Refinquished by: DATE COLLECTED 3/13/8

MAXIM

SAMPLE RECEIPT CHECKLIST

Client Project	1 Mill - Partier		Date/Time Received 7/16/9/- 165 Received by A Concerns
Labora	tory number(s) 176495 - 500		Carrier name UDS Reac
Checkl by:	ist completed Initials Date	m ²	Sample Type Waler
	YES NO		YES NO
1.	Shipping container in good condition?	16.	All samples rec'd within holding time? [
2.	Custody seals present on shipping container?	17.	Preservation pH check performed by:
3.	Condition: Intact Broken	18.	Metals bottle(s) pH <2? ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓
4.	Chain of custody present?	19. 20.	Nutrient bottle(s) pH <2? Cyanide bottle(s) pH >12?
5.	Chain of custody signed when relinquished and received?	21.	Sulfide bottle(s) pH >9?
6.	Chain of custody agrees with sample labels?	22.	Oil & grease bottle(s) pH <2?
7.	Custody seals on sample bottles?	23.	TOC bottle(s) pH <2?
8.	Condition: Intact Broken	24.	DRO/418.1 bottle(s) pH <2?
9.	Samples in proper container/bottle?	25.	Phenolics bottle(s) pH <2?
10.	Samples intact?	26.	Volatiles (VOA) pH <2? (VOA pH checked by analyst)
11.	Sufficient sample volume for indicated test?	27.	Client contacted?
12.	VOA vials have zero headspace?	28.	Person contacted
13.	Trip Blank received?	29.	Date contacted
14. /	Ice/Frozen Blue Ice present in shipping container? (circle one)	30.	Contacted by
15.	Container temperature 1. 1710°2. 3.	31.	Regarding?
Note: S Please o	contact the lab if you have concerns about the temperature of	your sa	commended by the EPA for the test you've selected. amples.

Data File : C:\HPCHEM\1\DATA\071796\1019.D

Acq Time : 17 Jul 96 6:37 pm

Sample : 176315 5gm soil (7649, Te.

Misc : Quant Time: Jul 17 19:03 1996

DE 1, 4196

Operator: GHP

Inst : GC/MS

Multiplr: 1.00

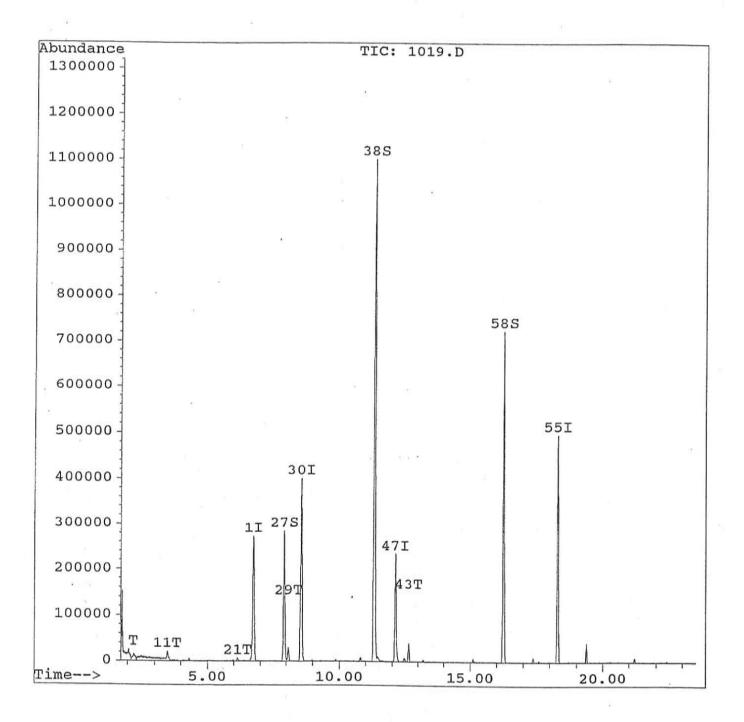
244.10 IIMC. Bul 17 19:03 1990

: C:\HPCHEM\1\METHODS\82600702.M

Title : 8260

Method

Last Update : Wed Jul 17 10:43:46 1996 Response via : Single Level Calibration



Data File : C:\HPCHEM\1\DATA\071796\1010.D

Acq Time : 17 Jul 96 1:40 pm

Sample : 176496

Operator: GHP Inst : GC/MS Multiplr: 1.00

Misc

Quant Time: Jul 17 14:08 1996

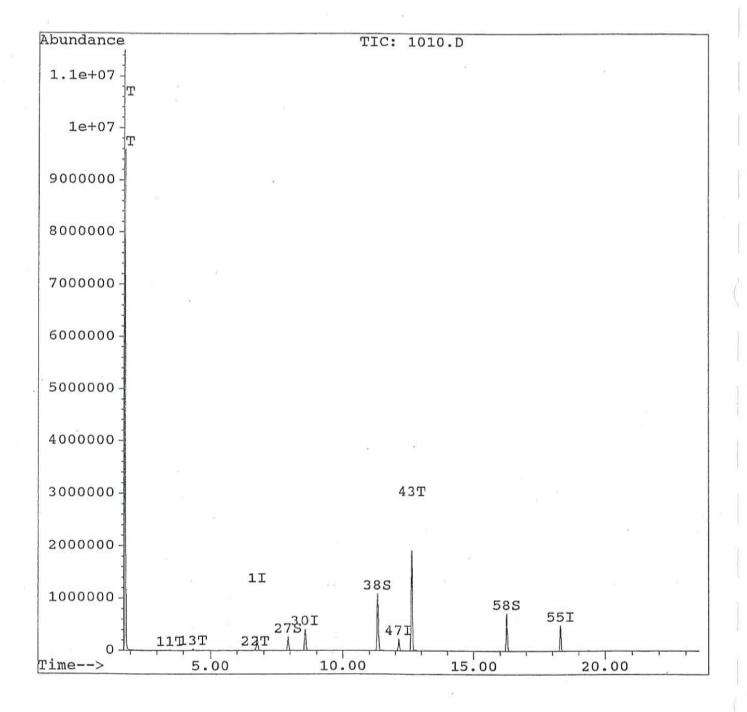
Method

: C:\HPCHEM\1\METHODS\82600702.M

Title

: 8260

Last Update : Wed Jul 17 10:43:46 1996 Response via : Single Level Calibration



Data File : C:\HPCHEM\1\DATA\071796\1011.D

Acq Time : 17 Jul 96 2:12 pm

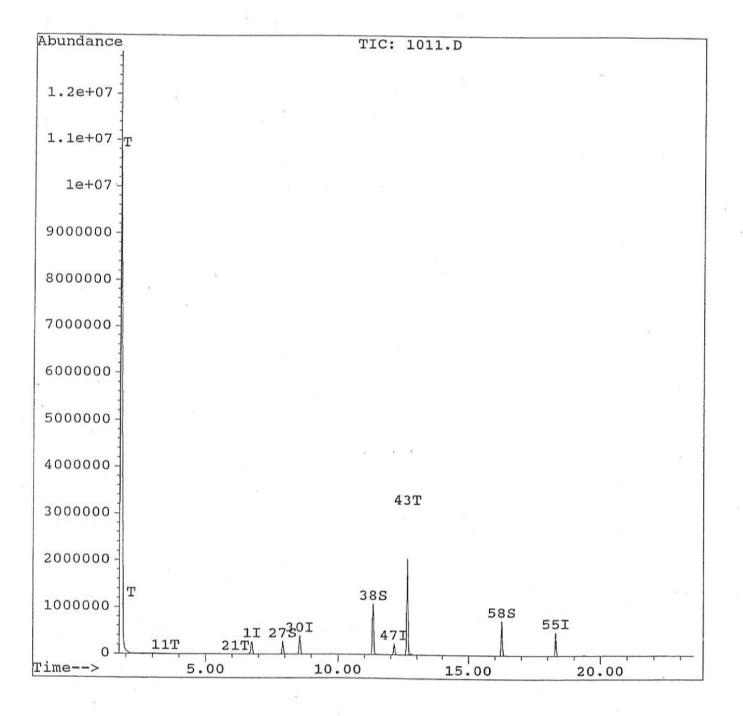
Sample : 176497

Misc

Quant Time: Jul 17 14:42 1996

Method : C:\HPCHEM\1\METHODS\82600702.M Title

: 8260 Last Update : Wed Jul 17 10:43:46 1996 Response via : Single Level Calibration



Operator: GHP

Multiplr: 1.00

: GC/MS

Inst

Data File: C:\HPCHEM\1\DATA\071796\1012.D Acq Time: 17 Jul 96 2:45 pm

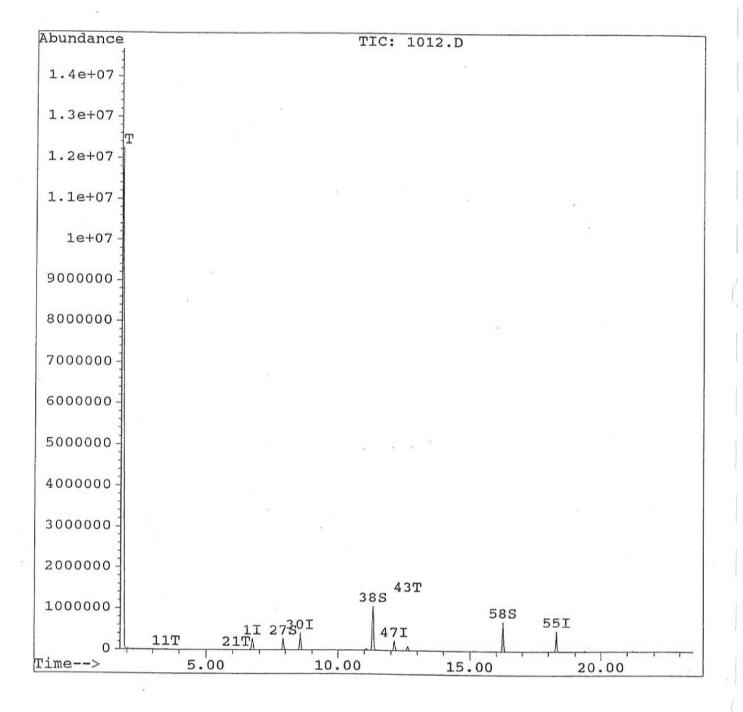
Sample : 176498

Misc

Quant Time: Jul 17 15:12 1996

Method : C:\HPCHEM\1\METHODS\82600702.M Title : 8260

Last Update : Wed Jul 17 10:43:46 1996 Response via : Single Level Calibration



Operator: GHP

Multiplr: 1.00

: GC/MS

Inst

Data File : C:\HPCHEM\1\DATA\071796\1013.D Acq Time : 17 Jul 96 3:18 pm

Sample : 176499

Operator: GHP : GC/MS Inst Multiplr: 1.00

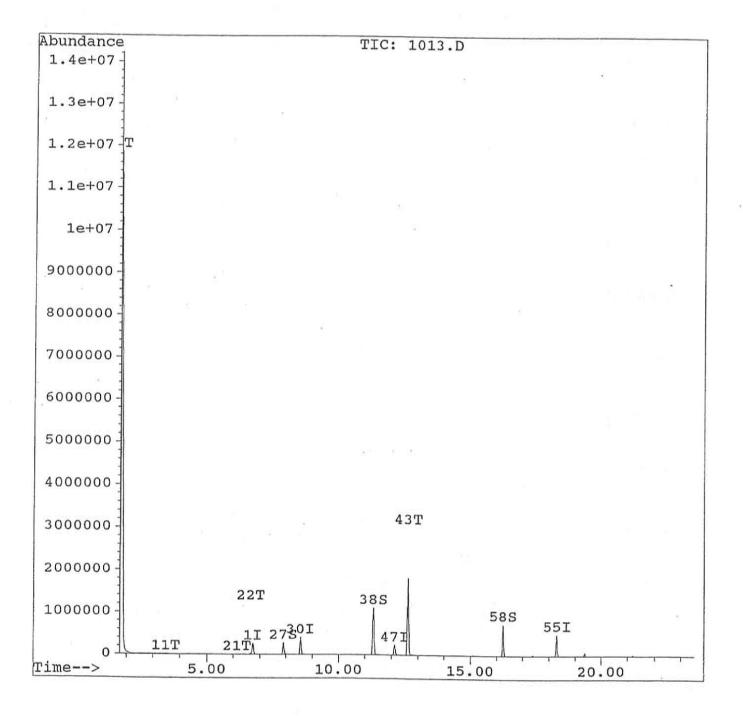
Misc

Quant Time: Jul 17 15:47 1996

Method : C:\HPCHEM\1\METHODS\82600702.M

Title : 8260

Last Update : Wed Jul 17 10:43:46 1996 Response via : Single Level Calibration



Data File : C:\HPCHEM\1\DATA\071796\1007.D

Acq Time : 17 Jul 96 11:28 am

Sample : 176500 t Misc :

6500 t

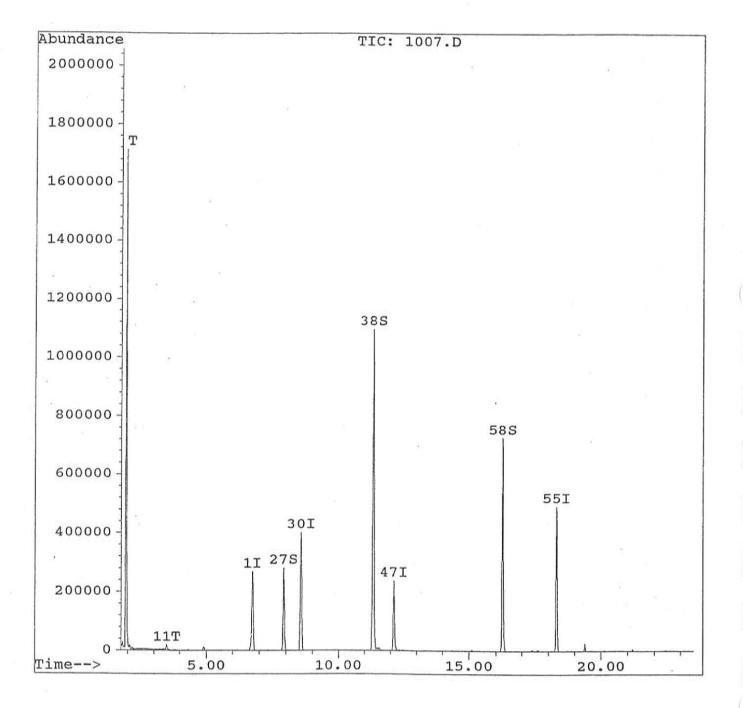
Quant Time: Jul 17 11:55 1996

Method

: C:\HPCHEM\1\METHODS\82600702.M

Title : 8260

Last Update : Wed Jul 17 10:43:46 1996 Response via : Single Level Calibration



Operator: GHP

Multiplr: 1.00

: GC/MS

Inst

GROUNDWATER SAMPLING REPORT

Field Personnel Podney Heit		Date	7-15-96
Site Name South gate	Site Location 324	j l	606 4111

Time	Description
5:50	ARRIVE Racheals Home Crabo Key
	ARRIVE ON SHE SOUTH gate
6:05	open murt3 Car parks on Coner Car monea
	Tope measurment nut 3 NORTH TOP PUC Case,
6:27	Prepare & Ball MW#3
7:10	FINISH Bale 10 gollons Briled
7:15	Sample in w = 3 water (Seni Clear)-
7:28	more to mutz Resione coner
	Gary Slagel Stops By
7:35	Take Hop measurement mu #2
7:42	Set up Bales Bale must 2
8:10	FINISH Balo mw = 2 10 gellons (Seni Clear)
8:15	Sample mento
8:20	FINISH, How water, more to me # 4 South agreen
8:36	Take Ho measure meet must 4
	(TO Black DOT High SiDE WEST)
	(TO NORTH SIDE Case TOP)
9:18	Balo 10 gallono 4.0 mw & Collect Sample Cloudy

Well Measurements

Time	Well Number	SWL	Temperature	pН	Conductivity
6:22	mw#3	21.70			
7:13	mw#3		64°F	7.8	330 NS
7:37	mw #2	23.93			
8:20	11 tc ·	3 Acres de la constitución de la	-63°F	7.9	340 VS
8:38	mw#4	TO Black 22.08			
9:18	11 11		64°F	7.9	320 ps

GROUNDWATER SAMPLING REPORT

Field Personnel Roding Hert		Date _ 7-15-96
Site Name Sourgate	Site Location 3rd	¿ NOB H,11

Time	Description
9:25	Close mw # 4 Dung water, Seewe Borrel liel
9;40	more Truck To must 1
	Purchase distilled #50 for Rinse of WILI TAPE TIP.
9:45	OPEN Well Cover, Proceed with SWL measurment
	Ball, mw # 1 Black Dat opposed on South Rim
	Top of well Caseing measurement. And As
	indicates no difference for SWL to that
9:52	of North Top Casing
9:55	Start Rale proceeding mu #1
	FINISH Bale 10 gallons (Cloudy
10:23	Collect Sample
10:45	Leans Site

Well Measurements

Time	Well Number	SWL	Temperature	pН	Conductivity
9:50	MW#1	NERTH 22.61			
10:23	11 11		6205	7.8	410 µs
			;		

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE Lacey, Washington 98503

Mobile Environmental Laboratories Environmental Sampling Services Telephone:

360-459-4670

Fax:

360-459-3432

S.GATE Ochber GW

October 14, 1996

Rachel Tauman Maxim Technologies P.O. Box 2887 Yakima, WA 98907

Dear Ms. Tauman:

Please find enclosed the data report for off-site analyses of water samples conducted on October 10, 1996, for the Southgate Laundry Project, Project No. 5809500946.04, in Yakima, Washington. The water samples were analyzed for Specific Halogenated Hydrocarbons and BTEX by Modified EPA Method 8010/8020.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. An invoice for this work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Maxim Technologies for this project. It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michaela Koroser

President

QA/QC FOR ANALYTICAL METHODS

GENERAL

The TEG Northwest Laboratory quality assurance and quality control (QA/QC) procedures are conducted following the guidelines and objectives which meet or exceed certification/-accreditation requirements of California DOHS, Washington DOE, and Oregon DEQ. The Quality Control Program is a consistent set of procedures which assures data quality through the use of appropriate blanks, replicate analyses, surrogate spikes, and matrix spikes, and with the use of reference standards that meet or exceed EPA standards.

When analyses are taking place on-site with the mobile lab, the need for Field Blanks or Travel/Trip Blanks is eliminated. If there is going to be a delay before sample preparation for analysis, the sample is stored at 4° C.

ANALYTICAL METHODS

TEG Northwest Labs use analytical methodologies which are in conformity with U. S. Environmental Protection Agency (EPA), Washington DOE, and Oregon DEQ methodologies. When necessary and appropriate due to the nature or composition of the sample, TEG may use variations of the methods which are consistent with recognized standards or variations used by the industry and government laboratories.

Purgeable Volatile Aromatics (BTEX, EPA 602/8020)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

Purgeable Volatile Halocarbons (Chlorinated Hydrocarbons, EPA 601/8010,8021)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

SOUTHGATE LAUNDRY PROJECT Yakima, Washington Maxim Technologies, Inc. Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Water

Sample-Number	MDL	Method Blank	MW-1	MW-1 Dup.	MW-2	MW-3	MW-4
Date	***************************************	10/10/96	10/10/96	10/10/96	10/10/96	10/10/96	10/10/96
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Vinylchloride	1	nd	nd	nd	nd	nd	nd
1,1 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Trans-1,2 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Cis-1,2 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Benzene	1	nd	nd	nd	nd	nd	nd
Trichloroethene	1	nd	nd	nd	nd	nd	nd
Toluene	1	nd	nd	nd	nd	nd	nd
Tetrachloroethene	1	nd	1.4	1.2	52	62	2.6
Ethylbenzene	1	nd	nd	nd	nd	nd	nd
m,p-Xylene	1	nd	nd	nd	nd	nd	nd
o-Xylene	1	nd	nd	nd	nd	nd	nd
Dichloromethane	1	nd	nd	nd	nd	nd	nd
1,1 Dichloroethane	1	nd	nd	nd	nd	nd	nd
1,2 Dichloroethane	1	nd	nd	nd	nd	nd	nd
Chloroform	1	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	1	nd	nd	nd	nd	nd	nd
1,1,1 Trichloroethane	1	nd	nd	nd	nd	nd	nd
1,1,2 Trichloroethane	1	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	1	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	1	nd	nd	nd	nd	nd	nd
Spike Recovery (%)		83	106	126	103	100	83
======	====			=====	=====	=====	

[&]quot;nd" Indicates Not Detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

SOUTHGATE LAUNDRY PROJECT

Yakima, Washington Maxim Technologies, Inc. Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Water

Sample-Number	MDL	Travel Blank	Matrix Sp. 5 ug/l	Matrix Sp. Dup.	Blind Dup.	=====	=====
Date		10/10/96	10/10/96	10/10/96	10/10/96		
	ug/l	ug/l	ug/l	ug/l	ug/l		
Vinylchloride	1	nd	4.43	4.91	nd		
1,1 Dichloroethene	1	nd	4.82	5.31	nd		
Trans-1,2 Dichloroethene	1	nd	4.36	4.71	nd		
Cis-1,2 Dichloroethene	1	nd	5.05	4.27	nd		
Benzene	1	nd	4.45	4.85	nd		
Trichloroethene	1	nd	4.57	4.41	nd		
Toluene	1	nd	4.43	4.91	nd		
Tetrachloroethene	1	nd	4.79	5.12	54		
Ethylbenzene	1	nd	4.53	5.20	nd		
m,p-Xylene	1	nd	8.90	8.99	nd		
o-Xylene	1	nd	4.82	5.31	nd		
Dichloromethane	1	nd	4.36	5.31	nd		
1,1 Dichloroethane	1	nd	4.47	4.27	nd		
1,2 Dichloroethane	1	nd	4.61	5.02	nd		
Chloroform	1	nd	4.74	4.45	nd		
Carbon Tetrachloride	1	nd	4.95	5.32	nd		
1,1,1 Trichloroethane	1	nd	4.69	5.01	nd		
1,1,2 Trichloroethane	1	nd	4.92	4.80	nd		
1,1,1,2-Tetrachloroethane	1	nd	4.46	5.25	nd		
1,1,2,2-Tetrachloroethane	1	nd	5.08	5.50	nd		
Spike Recovery (%)		78	100	106	128	시 호	

[&]quot;nd" Indicates Not Detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

GROUNDWATER SAMPLING REPORT

Field Personnel Rodney Heit Site Name Sout H GATE PROP. Site Location 3rd ENOB HILL Page 1 Time Description APRINE @ Rachel's Home PICKUP SAMPLEMY COUP. 6:40 Am ARRIVE ON Site 655AM OPEN MW# 3 S.E CORH Well MEASURE SWL ZZ. 07. 7:00 Am FROM Black MARK TOP H. W CORN OF PUL Casem PREPARE TO Baile MW # 3, RINGE (SULI) OFF 7:12AND 10. GALLONS HOO BONED MWH 3 Semi-Clear 7:37 AM 8:00 Am DiscHARGE accomplated HOD INTO 8:10 Am MU#Z TAKE SWL. @ 23,87 Black 8:12 8;28 8:49 Close mw # 2 move To empty Bailed H20 INTO DRUMS 9:05 9:10 TAKE SWL, @ Black mark too west edge PVC, casing 9:14 Roading is 22,49 PREPARE AND Bails MW #4 9:15 9:50

Well Measurements

Time	Well Number	SWL	Temperature	pН	Conductivity
7:01	# 3	22.07			
7:37	#3		60°F	7.9	290 NS
8:12.	#2	23.87	<u> </u>	_	
8:49	# Z .		61°F	7.5	300 ps
9:14	#4	22.49			
9:50	#4	-	61°F	7.6	270 NS

GROUNDWATER SAMPLING REPORT

	SouthGATE PROP. Site Location 3rd & Nob Hill
Page 2	Site Location 3 2 NOW FALL
Ťime	Description
10:10	MOVE TO MW#1 N.W PROP CORN. NEAR GROWL
	DRIVE. DREN MU # 1 Take HOO SWL Measurment
	@ 22.93 FROM Black Mark TOP South Rim
	OF PUC Caring. 10 gallons Bailed Cloudy Mudd
10:15	Boila MW#1
10:50	Sample MW#1 Empty Hoo generated into
	duino rear mw #1
11:29	Close mw #1 Leane for Maxim Storage AREA. Pick up 55 gallon HA = MAT. DRUM.
	AREA. PICK UP 55 gallon HAZ MAT, DRUM
	Head for Adeline Property 1st street AND PAK.
	AVIE

Well Measurements

Time	Well Number	SWL	Temperature	pН	Conductivity
10112	MW#1 MW#1	22.93			
10:50	mw#1		61°F.	7.3	280NS
-					
	1 .				
. 1	*	1		,	

SOUTHGATE LAUNDRY Project or Site Name

40.9460036085 Project Number

Khanou Sampler Name (Printed)

CHAIN OF CUSTODY RECOF	TECHNOLOGIES INC
CHA	

Richal Townan

Contact or Report to

24-8692 Contact Address or Location 577 (605)

Sampler Signature

☐ Billings, MT ☐ Helena, MT ☐ Boise, ID ☐ Missoula, MT ☐ Great Falls, MT ☐ Yakima, WA

	NOTES LAB NUMBER						2	5	C.	69	5	5	S. S	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	3 S S S S S S S S S S S S S S S S S S S
IREO /							Mw-3	MW-3	MW-3	Mw-3	MW-3	48.3	Mw-3 Remarks:	Mw-3 Remarks:	14.W-3 Remarks:
A ANALYSIS REQUIRED	TE /0 1013	gl	7	.>~.		×	× ×	× ×	× ×	× ×	× × .	**	× ×.	× ×.	× × .
	NO. OF CONTAINERS	2	4	2	6	1	1 2	2 62	2 63	2 62	2 62	2	2 Received by:	Received by:	Received by: Received by:
	SAMPLE	Like the	**********	Construction to Construct Account to	agent) mark fol	I Sa	\rightarrow						Time 4:8		
	COMP OR GRAB	6 (ub	1, 6 b	9 mg	6wb		6wb	6 wb	6 wb	q m g	Gwb	6 w b	6 (4.1) Date 10/9/96	6 w b Date 1019/96	6 w b Date 10/9/96 Date Date
	SAMPLE LOCATION OR DESCRIPTION	THE THE	KW-2	MW-3	Mu-4		TOWN PURE						7	7	76
	TIME	10:50 AM	8:49 Am	0	9,50 Am	H	di Cantino Contino						A STATE OF S	The state of the s	A STATE OF THE STA
	DATE	76/5/01	10/9/9	10/9/94	16/8/8/		10/9/96	10/9/96	10/9/96	10/9/96	96/6/01	2019/9	Relinquished by:	Relinquished by:	Relinquished by: Relinquished by:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE Lacey, Washington 98503

Mobile Environmental Laboratories Environmental Sampling Services Telephone:

360-459-4670

Fax:

360-459-3432

February 7, 1997

Rachel Tauman Maxim Technologies P.O. Box 2887 Yakima, WA 98907

Dear Ms. Tauman:

Please find enclosed the data report for off-site analyses of water samples conducted on February 6, 1997, for the Southgate Laundry Project, Project No. 5809500946.04, in Yakima, Washington. The water samples were analyzed for Specific Halogenated Hydrocarbons and BTEX by Modified EPA Method 8010/8020.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. An invoice for this work is also enclosed.

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Sincerely,

Michael A. Korosec

Michael a Korone

President

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Purgeable Volatile Aromatics (BTEX, EPA 602/8020)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

Purgeable Volatile Halocarbons (Chlorinated Hydrocarbons, EPA 601/8010,8021)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

SOUTHGATE LAUNDRY PROJECT

Yakima, Washington Maxim Technologies, Inc. Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Water

Sample-Number	MDL	Method Blank	MW-1	MW-2	MW-3	MW-4
 Date		02/06/97	02/06/97	02/06/97	02/06/97	02/06/97
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Vinylchloride	1	nd	nd	nd	nd	nd
,1 Dichloroethene	1	nd	nd	nd	nd	nd
Trans-1,2 Dichloroethene	1	nd	nd	nd	nd	nd
Cis-1,2 Dichloroethene	1	nd	nd	nd	nd	nd
Benzene	1	nd	nd	nd	nd	nd
Trichloroethene	1	nd	nd	nd	nd	nd
Coluene	1	nd	nd	nd	nd	nd
Tetrachioroethene	1	nd	9.5	11.9	107	6.3
Ethylbenzene	1	nd	nd	nd	nd	nd
n,p-Xylene	1	nd	nd	nd	nd	nd
-Xylene	1	nd	nd	nd	nd	nd
Dichloromethane	1	nd	nd	nd	nd	nd
,1 Dichloroethane	1	nd	nd	nd	nd	nd
,2 Dichloroethane	1	nd	nd	nd	nd	nd
Chloroform	1	nd	1.7	1.1	0.9	1.5
Carbon Tetrachloride	1	nd	nd	nd	nd	nd
,1,1 Trichloroethane	1	nd	nd	nd	nd	nd
,1,2 Trichloroethane	1	nd	nd	nd	nd	nd
,1,1,2-Tetrachloroethane	1	nd	nd	nd	nd	nd
,1,2,2-Tetrachloroethane	1	nd	nd	nd	nd	nd
pike Recovery (%)		94	127	84	110	132

[&]quot;nd" Indicates Not Detected at the listed detection limit.

_____ ===== ===== ===== ===== ===== =====

[&]quot;int" Indicates that interference peaks prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

SOUTHGATE LAUNDRY PROJECT Yakima, Washington Maxim Technologies, Inc. Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Water

Sample-Number	MDL	Travel Blank	Matrix Sp. 5 ug/l	Matrix Sp. Dup.	Blind Dup.	 =====
Date		02/07/97	02/07/97	02/07/97	02/07/97	
	ug/l	ug/l	ug/l	ug/I	ug/l	
Vinylchloride	1	nd			nd	 **************
1,1 Dichloroethene	1	nd	5.6	5.0	nd	
Trans-1,2 Dichloroethene	1	nd	4.8	4.3	nd	
Cis-1,2 Dichloroethene	1	nd	4.7	4.4	nd	
Benzene	. 1	nd	4.9	4.5	nd	
Trichloroethene	1	nd	4.5	4.2	nd	
Toluene	1	nd	4.8	4.2	nd	
Tetrachloroethene	1	nd	4.4	4.2	106	
Ethylbenzene	1	nd	4.5	4.7	nd	
m,p-Xylene	1	nd	10.4	8.7	nd	
o-Xylene	1	nd	5.6	5.0	nd	
Dichloromethane	1	nd	5.0	5.1	nd	
1,1 Dichloroethane	1	nd	4.8	4.1	nd	
1,2 Dichloroethane	1	nd	5.2	4.9	nd	
Chloroform	1	nd	4.7	4.1	0.9	
Carbon Tetrachloride	1	nd	5.0	4.5	nd	
1,1,1 Trichloroethane	1	nd	5.0	4.9	nd	
1,1,2 Trichloroethane	1	nd	4.9	4.8	nd	
1,1,1,2-Tetrachloroethane	1	nd	4.9	4.3	nd	
1,1,2,2-Tetrachloroethane	1	nd	4.8	4.6	nd	
Spike Recovery (%)		123	94	97	127	
					3	

[&]quot;nd" Indicates Not Detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

Southgate Laundey 40.9460051085 Project Number

CHAIN OF CUSTODY RECORD

TECHNOLOGIES INC

42 E. 44KINS AVE, P.O. 130X 2887 WA 98957 Rachel Tay man

747 (M.A. Contact Address or Location

Sampler Name (Printed)

Sámpler Signature	
☐ Billings, MT ☐ Helena, MT ☐ Boise, ID ☐ Missoula, MT ☐ Great Falls, MT ☑ Yakima, WA	ANALYSIS REQUIRED
$S_{co} + C_{o} + C_{o} + C_{o}$	

		1				ANALYSIS REDUIRED		
DATE	TIME	SAMPLE LOCATION OR DESCRIPTION	COMP OR GRAB	SAMPLE	NO. OF CONTAINERS	708/008	NOTES	LAB NUMBER
2/5/97	1001	l√w~i	Gralo	G.W 12.0	7	×	PCE + BTEX	
	1200	Nw-2	/		7	X		
	0830	MW-3	/		2			
>	1100	MW-H	/		7	X		
M	MA	Dind dup	7	//	2	*	*	
		Tarel Blank		∑ _a				
		1.0						
Relinquished by:	W.			Time	Received by:		Remarks: Back Alla K	F KW-I
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neimquisnea by.	λ:		Date	e me	Received by:		•	
Relinquished by:	y:		Date	Time	Received by:			
Relinquished by:	y:		Date	Time	Received by:		6 MW3 6 MW-2	
							Parking Lot	+

Project: Zetter of the project of th		GROT	JNDWATER	SAMPLING I	OG	
Nerseance: CLAYLY Weat Locked? Yes [9] No [] Weat Log? Yes [] No [9] Condition of Weit: Garing Diameter: Z Measuring Point Description: Top FVC at Mark Aquifer: Measuring Point Description: Top FVC at Mark Aquifer: Weat Depth (Yest Below measuring point): 4 Depth to Weiser Z 9, 44 .		rate Lay	dec Date:	2-5-976	1000 000	10 11/1-1
Personnel: CANAN Weat Looked Yee, [9] No [] Well Looked Yee, [9] No [] Well Looked Yee, [9] No [] Casing Diameter: 2 ** Measuring Point Description: Top PVC at Measuring Tool Description: Top PVC at Measuring Stocking: Measuring Point Description: Top PVC at Measuring Stocking: Measuring Point Description: Top PVC at Measuring Stocking: Measuring Point Description: Top PVC at Measuring Stocking Top PVC at Measuring Stocking Top PVC at Measuring Point Description: Top PVC at Measuring Pvc Adultion **Well Casing Diameter: 2 ** **Well C	Narrative Description:	ngia dient	-10w	of mile	n Station i	io. Mill
Well LogArd Yes [8] No [] Well Log? Yes [] No [9] Condition of Walt. Gening Strakup: Measuring Point Description: Measuring	Personnel:COZ_V	10				-
Casing Type:	Well Locked? Yes [No []	Well Log? Yes []				
Casing Steckup: Measuring Point Description: Tay PCC at Mach Aduller: Well Depth (feet below measuring point): Well Depth (feet below measuring point): Well EMCHATON Mathod: Positive Displacement Pump [] Hand-Lift Pump [] Submerable Pump [] Stabler [] Disp, Polyethylene Baller (P Other: "Well Sampling Nethod: Positive Displacement Pump [] Hand-Lift Pump [] Submerable Pump [] Sample Types Positive Displacement Pump [] Hand-Lift Pump [] Submerable Pump [] Sample Types Positive Displacement Pump [] Hand-Lift Pump [] Sample Types Positive Displacement Pump [] Hand-Lift Pump [] Sample Types Positive Displacement Pump [] Hand-Lift Pump [] Sample Types Positive Displacement Pump [] Trip Blank [] Blind Field Stat [] Sampling Method: Page [] Sample Types Positive Displacement [] Trip Blank [] Blind Field Stat [] Sampling Method: Page [] No Contam [] Trip Blank [] Blind Field Stat [] Sample Types Positive Displacement Pump [] Trip Blank [] Blind Field Stat [] Sample Types Positive Displacement Pump [] Trip Blank [] Blind Field Stat [] Sample Types Positive Displacement Pump [] Trip Blank [] Blind Field Stat [] Sample Types Positive Displacement Pump [] Trip Blank [] Blind Field Stat [] Sample Types Positive Displacement Pump [] Trip Blank [] Blind Field Stat [] Sample Types Positive Displacement Pump [] Trip Blank [] Blind Field Stat [] Sample Types Positive Displacement Pump [] Trip Blank [] Blind Field Stat [] Sample Types Positive Displacement Pump [] Trip Blank [] Blind Field Stat [] Positive Displacement Pump [] Trip Blank [] Blind Field Stat [] Positive Displacement Pump [] Trip Blank [] Blind Field Stat [] Positive Displacement Pump [] Trip Blank [] Blind Field Stat [] Positive Displacement Pump [] Positive Displa	Condition of Well:	90	2 2			÷
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Method: Positive Displacement Pump [] Hand-Lift Pump [] Submersible Pump [] Set Baller [] Disp. Polyethyliene Baller [] Chner: Set Note Se	Casing Stickup:			Measuring Point O	escription: Time	ir I m
WELL EVACUATION Mathod: Positive Displacement Pump [] Hand-Lift Pump [] Submersible Pump [] SST Baller [] Disp. Polyethylene Baller (P Omer: Twell = 0.163 gal.nt. ** well = 0.653 gal.nt. ** one casing volume 2	Agulfer:					
Method: Positive Displacement Pump [] Hand-Lit Pump [] Submerable Pump [] SST Baller [] Disp, Polyethylene Bailer [M Other: 1. water x	Well Depth (feet below measur	ring point):	S Depti	to Water 29. 9	9-15	ft water
Method: Positive Displacement Pump [] Hand-Lit Pump [] Submerable Pump [] SST Baller [] Disp, Polyethylene Bailer [M Other: 1. water x			WELL EVA	CUATION		
Time Computative Gallons Sampling Method: Time Computative Gallons Sampling Method: Time Computative Gallons Sampling Method: Time Computative Gallons Tamp Sampling Method: Sample Type: Natural [1] Replicate [] X-Contam [] Trip Blank [] Blind Field Sta. [] SCOATA Well SAMPLING Sample Type: Natural [1] Replicate [] X-Contam [] Trip Blank [] Blind Field Sta. [] Scoate Computative Gallons Temp. Observed SC (umhos) Correction Factor	Method: Positive Displacemen	nt Pump [] Hand-Lift Pun	np [] Submersible Pur	no (1 SST Baller (1 Dies	Polyethylass Ball - 12	
Sampler Container Parameters Parameters Parameters Parameters Sample Container Parameters Param	/5 tt. wat	erx_//63gal./ft	= one casing volume	22 5 gala w	2	Other:
EVACUATION DATA Time Cumulative Gallons Teme DH SC 34 7.5 34 7.5 Sampling Method: Discred SC (uninos) Correction Factor (i) Ci) Ci) Ci) Ci) Ci) Ci) Ci)	* 2" well = 0.163 gal./ft.	4" well = 0.653 gal./ft.	6" well = 1,469 cal	ft Buyell - 2 611 col	3 = purge volume/	gals.
EVACUATION DATA Time Cumulative Gallons Temp PH SC Other 2.5 .5 .3 .4 WELL SAMPLING Sampling Method:	Remarks: Evacue	atol 2.51	gallon	Weil = 2.511 gal.	m. Well C feet in diam	eter = 5.875 x C'
Time Cumulative Gallons Temp pH SC Other 7.5 12.5 S. G. 34.1 Sampling Method: D. J. Sample Type: Natural (1) Replicate (1) X-Contam (1) Trip Blank (1) Blind Field Sta. (1) SC DATA Nater Temp. Observed SC Temp. Cell (2) (3) Correction Factor Factor punhosizem @ 23e-(2) x (3) x (4) (1) (2) (3) (4) Correction Factor Factor punhosizem @ 23e-(2) x (3) x (4)			1		- Sall dens	
Sampling Method: Sampling Me	Time Co	umulative Gallons		SI DAIA		
		2.5		25	300	Other
Sampling Method: Proper Sample Type: Natural (My Replicate [] X-Contam [] Trip Blank [] Blind Field Sta. [] SC DATA Nater Temp. Observed SC Temp. (umhos) Correction Factor Factor punhas/cm @ 25 ** (Compensated SC Compensated SC Compensate SC Compensate SC Compensated SC Compensate SC Compensate SC Compensate SC Compensate SC Compensate SC Comp		5		Str (a)	311	
Sample Type: Natural [] Replicate [] X-Contam [] Trip Blank [] Blind Field Sta. [] SC DATA		7.5	13	75 5	341	
Sample Type: Natural [] Replicate [] X-Contam [] Trip Blank [] Blind Field Sta. [] SC DATA						
Sample Type: Natural [] Replicate [] X-Contam [] Trip Blank [] Blind Field Sta. [] SC DATA		-				-
Sample Container Sample Container Parameters Preservative HCL + CVTC Chain-of-Custody: Yes [] No [] Steam: Yes [] No [] Scape Methanol: Yes [] No [] Scrub: Yes [] No [] Mitric Acid: Yes [] No [] Nitric Acid: Yes [] No []		(µmhos)	SC DA Ten Correct	<u>TA</u>	Cell Factor	SC = (2) x (3) x (4) µmhos/cm @ 25 °C
Sample Container Parameters Preservative HCL + CVVC Aboratory: TEC. Chain-of-Custody: Yes [] No [] Leter Serial No. Steam: Yes [] No [] Scrub: Yes [] No [] Scrub: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No []		<u> </u>	(3)		(4)	The state of the s
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Scope Chain-of-Custody: Yes [] No [] Decontamination Steam: Yes [] No [] Potable Water: Yes [] No [] Scrub: Yes [] No [] Uquinox: Yes [] No [] Methanoi: Yes [] No [] Acetone: Yes [] No [] Nitric Acid: Yes [] No [] Di Water Yes [] No [] mments: Well profe by fill fire of water Chinnel About Fed for	2-40m1 10	A BO		_ <u>_ H</u>	120	<u>e</u>
Scope Chain-of-Custody: Yes [] No [] Decontamination Steam: Yes [] No [] Potable Water: Yes [] No [] Scrub: Yes [] No [] Uquinox: Yes [] No [] Methanoi: Yes [] No [] Acetone: Yes [] No [] Nitric Acid: Yes [] No [] Di Water Yes [] No [] mments: Well profe by fill fire of water Chinnel About Fed for		-		_		
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Scope Chain-of-Custody: Yes [] No [] Decontamination Steam: Yes [] No [] Potable Water: Yes [] No [] Scrub: Yes [] No [] Uquinox: Yes [] No [] Methanol: Yes [] No [] Acetone: Yes [] No [] Nitric Acid: Yes [] No [] DI Water Yes [] No [] mments: WP mitches fill fire of water Chinnel About Fed for				_		
Scope Chain-of-Custody: Yes [] No [] Decontamination Steam: Yes [] No [] Potable Water: Yes [] No [] Scrub: Yes [] No [] Uquinox: Yes [] No [] Methanol: Yes [] No [] Acetone: Yes [] No [] Nitric Acid: Yes [] No [] DI Water Yes [] No [] mments: Well profe for fill fire of water Chinnel About Fed for				_		
Scope Chain-of-Custody: Yes [] No [] Decontamination Steam: Yes [] No [] Potable Water: Yes [] No [] Scrub: Yes [] No [] Uquinox: Yes [] No [] Methanol: Yes [] No [] Acetone: Yes [] No [] Nitric Acid: Yes [] No [] DI Water Yes [] No [] mments: Well profe for fill fire of water Chinnel About Fed for	TEC			_)	
Serial No. Calibration Date Steam: Yes [] No [] Potable Water: Yes [] No [] Scrub: Yes [] No [] Liquinox: Yes [] No [] Scope Methanol: Yes [] No [] Acetone: Yes [] No [] Nitric Acid: Yes [] No [] Di Water Yes [] No [] mments: Well protector for fill fire of water Chinnel About Fed for	boratory: 120			Chain-of-Custody: Yes	[] No []	
Steam: Yes [] No [] Potable Water: Yes [] No [] Scrub: Yes [] No [] Liquinox: Yes [] No [] Methanol: Yes [] No [] Acetone: Yes [] No [] Nitric Acid: Yes [] No [] DI Water Yes [] No [] mments: Well protector for fill fire of water Chinnel About the form	leter Serial No.	<u>Callbrati</u>	on Date		Page 1 and the state of	
Scrub: Yes () No [] Liquinox: Yes () No [] Methanol: Yes [] No [] Acetone: Yes [] No [] Nitric Acid: Yes [] No [] DI Water Yes [] No [] mments: Well profes for fill fire of water chinned A box fed for		- ' '		Steam: Yes[] No		er: Yes [] No tot
Methanol: Yes [] No [] Acetone: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] Nitric Acid: Yes [] No [] Methanol: Yes [] No [] No [] No [] Methanol: Yes [] No [] No		_				
mments: well printer by fill of to of water chinnel & box box for	Scope	_ '		1000		
mments: Will prite by fill of the of water chinned of box fed to		_				
The state of the s	mments: WP // Ani	4. kg -6111.	fro of a	after she	,	
	allen can		U	1 601	agreed A BC	160 10

Project: Sou Tage	TILE	war fee	Date: 2-5	17 - 1201	7)	11111-2
Narrative Description: 77	1	South	nel 1	1	Station No.	· Mill A
Personnel:COZ_VI		300143	Weather:	(320 F	2
Well Locked? Yes [4] No []	Well Log? Ye	ne (1 No (1	weather:	CON	32 /	
Condition of Well:						
Casing Type: DVC		C1	7/4/17/4/17/20	. 2	4	
Casing Stickup:				Ciameter.		of many
			Measur	ing Point Description:	100000	at may
Aquifer:		45	_ = =	30.45 .	14.0	,
Well Depth (feet below measuri	ng point):	7-2	Depth to Water	"-	17. (ft water
			WELL EVACUATION	,		
Method: Positive Displacement	:Pump[] Hand-L	.ift Pump [] Subm	ersible Pump [] SST Ba	ailer [] Disp. Polyethy	ylene Bailer 🕡 Ot	her:
	erx 163	gal./ft * = one casin	ng volume 2.4	gals. x 3 > purge	volume 7	/ gals
* 2" well = 0.163 gal./tt.			1.469 gal./ft. 8" well			
Remarks: Evacua	ted 7	2.5 gar	Um jon	or to son	ma his	25
			EVACUATION DATA		1	
Time Cu	mulative Gailons	Temp	pl	4	sc	Other
	2.5	14	3	4 3	53	Other
	5.0	13.	5 8,	5 3	5.8	,
	7.5	19	5	9 3	59	
		• /				
		200	WELL SAMPLING			
	Observed SC (umhos)	Sampl		epilcate [] X-Contar Cell Facto (4)	,	SC = (2) x (3) x (4) µmhos/cm @ 25°C Compensated SC
4.000	(µmhos)	Sampl	SC DATA Temp. Correction Factor	Cell Facto	,	SC = (2) x (3) x (4) µmhos/cm @ 25°C
Water Temp.	(µmhos) (2)	2	SC DATA Temp. Correction Factor	Cell Facto	,	SC = (2) x (3) x (4) µmhos/cm @ 25°C
Water Temp. (1) Temperature Sample Container	(µmhos) (2)	2	SC DATA Temp. Correction Factor (3)	Cell Facto (4)	,	SC = (2) x (3) x (4) µmhos/cm @ 25 °C Compensated SC
Water Temp. (1) Temperature	(µmhos) (2) ph		SC DATA Temp. Correction Factor (3)	Cell Facto (4)	or .	SC = (2) x (3) x (4) µmhos/cm @ 25°C Compensated SC
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Water Temp. (1) Temperature	(µmhos) (2) ph		SC DATA Temp. Correction Factor (3)	Cell Facto (4)	or .	SC = (2) x (3) x (4) µmhos/cm @ 25°C Compensated SC
Water Temp. (1) Temperature Sample Container Diff Om (V)	(µmhos) (2) ph		SC DATA Temp. Correction Factor (3)	Cell Factor (4) Other:	Preservativ	SC = (2) x (3) x (4) µmhos/cm @ 25°C Compensated SC
Water Temp. (1) Temperature Sample Container O M (V)	(umhos) (2) p+	Parameters	SC DATA Temp. Correction Factor (3)	Cell Factor (4) Other:	Preservative or Cord	SC = (2) x (3) x (4) µmhos/cm @ 25 °C Compensated SC
Water Temp. (1) Temperature Sample Container O M (V) Aboratory: Meter Serial No.	(umhos) (2) p+		SC DATA Temp. Correction Factor (3)	Cell Factor (4) Other:	Preservative 17 Cord	SC = (2) x (3) x (4) µmhos/cm @ 25°C Compensated SC
Water Temp. (1) Temperature Sample Container D: FO M (V) Aboratory: Meter Serial No	(umhos) (2) p+	Parameters	SC DATA Temp. Correction Factor (3)	Cell Factor (4) Other:	Preservative 17 Cord	SC = (2) x (3) x (4) µmhos/cm @ 25°C Compensated SC
Water Temp. (1) Temperature Sample Container Dim (V) Aboratory: The Container Serial No.	(umhos) (2) p+	Parameters	SC DATA Temp. Correction Factor (3) Chain-of-	Cell Factor (4) Other:	Preservative 17 Cord	SC = (2) x (3) x (4) µmhos/cm @ 25 °C Compensated SC
Water Temp. (1) Temperature Sample Container Diff O M (V) Aboratory: The Container Serial No.	(umhos) (2) p+	Parameters	SC DATA Temp. Correction Factor (3) Chain-of- Steam: Scrub:	Cell Factor (4) Other: Custody: Yes [AP No Decon	Preservative (1) (1) (2) (3) (4) (5) (6) (7) (7) (7) (8) (9) (1) (1) (1) (1) (2) (1) (2) (3) (4) (4) (4) (5) (7) (7) (7) (7) (8) (9) (9) (1) (1) (1) (1) (1) (1	SC = (2) x (3) x (4) µmhos/cm @ 25 °C Compensated SC
Water Temp. (1) Temperature Sample Container Diff Om (V)	(umhos) (2) p+	Parameters	SC DATA Temp. Correction Factor (3) Chain-of- Steam: Scrub:	Custody: Yes [4] No [7] Yes [2] No [7]	Preservative Pr	SC = (2) x (3) x (4) µmhos/cm @ 25 °C Compensated SC e Yes [] No []

c	/ /		SAMPLING I		_1/
Project: Ser th great	haind ny	_ Date: _	3/5/97 K	0830 Station N	·110-37
Narrative Description:	Thouse	en Fr	Burgo.		
Personnel:COV/	<i>U</i>	_ ` Weath	er: clien	~ 300E	
Well Locked? Yes [No []	Well Log? Yes [] No	th.			
Condition of Well:					U=7/4/2
Casing Type: PV			Casing Diameter: _	2"	
Casing Stickup:	,		Measuring Point D	escription: Topo n	por at mark
Aquifer:					
Well Depth (feet below measurin	g point):4	S Depth	to Water_ 25. (3. 16.4	ft water
		WELL EVAC	CHATION		
Method: Positive Displacement	Pump [] Hand-Lift Pump (NAME OF THE PARTY
16 - 4 ft, water	× 1/63 and man	one casing volume	7 7	p. Polyethylene Baller 29 C	ther:
* 2" well = 0.163 gal./ft.	4" well = 0.653 gal./ft.	6" well = 1 469 cal #	gais. x	I./ft. Well C feet in diame	gals.
Remarks: Prucin		ne long			
4	,	EVACUATIO		b . Some	my.
<u>Time</u> Cur	nulative Gallons	Temp	nH	50	
	3 /	3,0	5.3	403	Other
	6 1	3.5	5.3	414	
	8_1	3.5	3.7	906	
Sampling Method: 73	Observed SC (µmhos)	SC DA	tural Of Replicate	X-Contam [] Trip Blank Cell Factor	SC = (2) × (3) × (4) μπhos/cm @ 25 °C
(1)	(2)	(3)		(4)	Compensated SC
T	10.00				
Temperature	pH:	BANASO METERO	Other: _	· · · · · · · · · · · · · · · · · · ·	
2-40 in 1 100	A PCF	rameters	4 :	Preservativ	<u>/e</u>
2 10 10 10		150		100 7 = NO-(
	3010	18020			
2-10m1 10	W 72	20/1-0			
10111110	1	pri ical		1.1	
	-		-		
Laboratory: TEC	=				
	WWW.MACHIEVA	Via Mero	Chain-of-Custody: Yo	es [ii No []	•
Meter Serial No.	Callbration	Date		Decontamination	
рН			Steam: Yes[] N	No [4] Potable War	ter: Yes [4] No []
sc	-		Scrub: Yes 问 N		Yes [A] No []
M-Scope	- '		Methanol: Yes []	No (3) Acetone:	Yes [] No ()
00			Nitric Acid: Yes [] N	lo (γ) DI Water	Yes [] No []*
Comments:	7- mist	ly ofen	1		accent the state of

GROUNDWATER SAMPLING LOG Date: 2-5-970 1100 Station No. 1/4/ -Weather: Personnel: Well Locked? Yes No [] Well Log? Yes [] No [] Casing Type: Casing Diameter: Casing Stickup: Measuring Point Description: Aquifer: Depth to Water 29.05 Well Depth (feet below measuring point): ft water WELL EVACUATION Method: Positive Displacement Pump [] Hand-Lift Pump [] Submersible Pump [] SST Baller [] Disp. Polyethylene Bailer [] Others ft. water x 1/63 gal./ft = one casing volume 2 6 gals. x3 = purge volume 6" well = 1.469 gal./ft. 4" well = 0.653 gal./ft. Well C feet in diameter = 5.875 x C* EVACUATION DATA Cumulative Gallons Time Temp Other 6 WELL SAMPLING Sample Type: Natural [] Replicate [] X-Contam [] Trip Blank [] Blind Field Sta: [] SC DATA Water Temp. Observed SC Temp. Cell $SC = (2) \times (3) \times (4)$ (umhos) Correction Factor Factor µmhos/cm @ 25 °C Compensated SC Temperature Other: Sample Container Parameters Preservative - 90m1 Laboratory: Chain-of-Custody: Yes [12 No [] Meter Serial No. Calibration Date Decontamination pH Steam: Yes [] No [] Potable Water: Yes [] No [7] SC Scrub: Yes [4] No [] Uquinox: Yes (No [] M-Scope Methanol: Yes [] No [] Acetone: Yes [] No [47 DO Nitric Acid: Yes [] No [] DI Water Yes [4] No [] Comments:

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE Lacey, Washington 98503

Mobile Environmental Laboratories Environmental Sampling Services Telephone:

360-459-4670

Fax:

360-459-3432

October 4, 1997

Rachel Tauman Maxim Technologies 96 South Zuni Street Denver, CO 80223

Dear Ms. Tauman:

Please find enclosed the data report for analyses of water samples conducted on October 2, 1997, for the Southgate Laundry Project, Project No. 5809500946.04, in Yakima, Washington. Water samples were analyzed for Specific Halogenated Hydrocarbons and BTEX by Modified EPA Method 8010/8020.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. An invoice for this work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Maxim Technologies for this project. It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michael a Koran.

President

QA/QC FOR ANALYTICAL METHODS

GENERAL

The TEG Northwest Laboratory quality assurance and quality control (QA/QC) procedures are conducted following the guidelines and objectives which meet or exceed certification/-accreditation requirements of California DOHS, Washington DOE, and Oregon DEQ. The Quality Control Program is a consistent set of procedures which assures data quality through the use of appropriate blanks, replicate analyses, surrogate spikes, and matrix spikes, and with the use of reference standards that meet or exceed EPA standards.

When analyses are taking place on-site with the mobile lab, the need for Field Blanks or Travel/Trip Blanks is eliminated. If there is going to be a delay before sample preparation for analysis, the sample is stored at 4° C.

ANALYTICAL METHODS

TEG Northwest Labs use analytical methodologies which are in conformity with U. S. Environmental Protection Agency (EPA), Washington DOE, and Oregon DEQ methodologies. When necessary and appropriate due to the nature or composition of the sample, TEG may use variations of the methods which are consistent with recognized standards or variations used by the industry and government laboratories.

Purgeable Volatile Aromatics (BTEX, EPA 602/8020)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

Purgeable Volatile Halocarbons (Chlorinated Hydrocarbons, EPA 601/8010,8021)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

SOUTHGATE LAUNDRY PROJECT Yakima, Washington Maxim Technologies, Inc. Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Water

Sample-Number	MDL	Method Blank	MW-1	MW-2	MW-3	MW-4	MW-4 Dup
Date		10/02/97	10/02/97	10/02/97	10/02/97	10/02/97	10/02/97
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Vinylchloride	1	nd	nd	nd	nd	nd	nd
1,1 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Trans-1,2 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Cis-1,2 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Benzene	1	nd	nd	nd	nd	nd	nd
Trichloroethene	1	nd	nd	nd	nd	nd	nd
Toluene	1	nd	nd	nd	nd	nd	nd
Tetrachloroethene	1	nd	nd	20	31	3.0	3.7
Ethylbenzene	1	nd	nd	nd	nd	nd	nd
m,p-Xylene	1	nd	nd	nd	nd	nd	nd
o-Xylene	1	nd	nd	nd	nd	nd	nd
Dichloromethane	1	nd	nd	nd	nd	nd	nd
1,1 Dichloroethane	1	nd	nd	nd	nd	nd	nd
1,2 Dichloroethane	1	nd	nd	nd	nd	nd	nd
Chloroform	1	nd	1.5	1.5	1.4	3.3	2.4
Carbon Tetrachloride	1	nd	nd	nd	nd	nd	nd
1,1,1 Trichloroethane	1	nd	nd	nd	nd	nd	nd
1,1,2 Trichloroethane	1	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	1	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	1	nd	nd	nd	nd	nd	nd
Spike Recovery (%)		101	88	80	78	107	106

"nd" Indicates Not Detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

SOUTHGATE LAUNDRY PROJECT

Yakima, Washington Maxim Technologies, Inc. Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Water

Sample-Number	MDL	Travel Blank	5 PPB MS	5 PPB MSD	Blind Dup.	
Date		10/02/97	10/02/97	10/02/97	10/02/97	
	ug/l	ug/l	ug/l	ug/l	ug/l	
************						 ************
Vinylchloride	1	nd		-	nd	
1,1 Dichloroethene	1	nd	4.8	4.9	nd	
Trans-1,2 Dichloroethene	1	nd	4.3	4.0	nd	
Cis-1,2 Dichloroethene	1	nd	5.0	4.9	nd	
Benzene	1	nd	4.1	4.1	nd	
Trichloroethene	1	nd	6.0	5.5	nd	
Toluene	1	nd	4.0	4.2	nd	
Tetrachloroethene	1	nd	5.9	5.2	37	
Ethylbenzene	1	nd	5.0	5.1	nd	
m,p-Xylene	1	nd	10.0	10.0	nd	
o-Xylene	1	nd	5.0	5.3	nd	
Dichloromethane	1	nd	5.0	4.4	nd	
1,1 Dichloroethane	1	nd	4.8	4.9	nd	
1,2 Dichloroethane	1	nd	5.9	5.3	nd	
Chloroform	1	nd	5.2	5.1	1.6	
Carbon Tetrachloride	1	nd	5.7	5.5	nd	
1,1,1 Trichloroethane	1	nd	5.4	5.7	nd	
1,1,2 Trichloroethane	1	nd	5.8	4.9	nd	
1,1,1,2-Tetrachloroethane	1	nd	6.3	5.8	nd	
1,1,2,2-Tetrachloroethane	1	nd	4.2	4.8	nd	
Spike Recovery (%)		98	100	98	99	

[&]quot;nd" Indicates Not Detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

3 000	GROUNDWATER	SAMPLING LOG		10.
Project: Southmate La	winder our	-9/18/97	_ Station No.	MW-1.
Narrative Description: In to	he alley be	hind Shopp	na Comy	Dlay
Personnel: Randel Ta	eman J wes	attier: COOl	J. : 1	
Well Locked? Yes Mino [] Well Lo	g? Yes [] No []			241
Condition of Well: V. 6.000	٠			
Casing Type: PTC		Casing Clameter:	2 H	
Casing Stickup:		Measuring Point Descript	ton: TOS PVE	at may
Aquifer: Yakima (Gravels		,	
Well Depth (feet below measuring point): _		oth to Water <u>22.21</u>	22.79	R water
* / · · · · · · · · · · · · · · · · · ·	WELL	VACUATION		
Method: Positive Cisplacement Pump [] H			othylana Bailar 7 W Cthon	
	gai./ft = one casing volum			-
		al/ft. 8" well = 2.511 gal/ft.		gais.
Remarks:	man ganyia a right ; i.too g	autic à men = 5011 dantie	Well C leet in clameter =	3.875 x C*
	EVACUA	TIGN DATA		
Time Cumulative Ga	144.1	. pH	<u>sc</u>	Other
18:00 11	61°F	<u> 7.4</u>	100	Galer
2				
		-		
	1 1			
Water Temp. Observe (umhos	ed SC	OATA Femp. C cotion Factor Fi		8lind Field Stz: [] 8C = (2) × (3) × (4) µmhos/cm @ 25 * C Compensated SC
		•		
Temperature	pH:	Other:	· · ·	3 3
Sample Container	801018020		Preservative	
2-40m/ VDA	2010/8020		elt cool	
	E E E E E			
19				
19.				
		Chain-of-Custody: Yes	БNa []	
Meter Serial No.	Calibration Date	1	ENG []	
Meter Serial No.	Calibration Date	1	contamination	Yes (] No
Meter Serial No.	Calibration Date	Steam: Yes [] No []	Potable Water:	Yes (] No H
рн sc	Calibration Date	Steam: Yes [] No A Scrub: Yes (Ø No [] Methanol: Yes [] No A	Pottible Water: Uquinox: Yo Acetone: Y	as [] No []
Meter Serial No. pH		Steam: Yes [] No []	Pottible Water: Uquinox: Yo Acetone: Y	1) ON ()
Meter Serial No. pH		Steam: Yes [] No A Scrub: Yes (Ø No [] Methanol: Yes [] No A	Pottible Water: Uquinox: Yo Acetone: Y	as (] No (]

10	GROUNDWATER	R SAMPLING LOG		
Project Southagate La	aundry Dar	10:- 9/13/97	Station No. MW-	2
Narrative Description: AUTCON	it to dry	clearer		-
Personnel: Derliet To	unar W	entier: COO		
	13 L A 62 (] NO ()			
Condition of Well:	<u> </u>			
Casing Type: PVC		Casing Olameter:	M	
Casing Stickup:	0.000	Measuring Point Description	TOP PUC of	347Q4
Aquifer: Yakima (3)	1avers		21 82 87	
Well Depth (feet below measuring point):	45 00	epth to Water <u>23, 18</u> -	The state of the s	water
	WELL	EVACUATION		- Aug
Method: Positive Oisplacement Fump [] H			viene Bailer 77 Other	
21082 12 water x .16	gai./it = one casing volur	ne <u>3.56</u> gals. x3 = purg	e volume 10, 7	afa.
A		And the second s	ell C'feet in diameter = 5.875 x C*	
Remarks:				
	EVACU	ATION DATA		
Time Cumulative Ga	lons Temp	. 些/	SC Other	
11.00	<u> </u>	7.5	100	
				- in
and de noch	1 1) / 2	SAMPUNG	e t	
Sampling Method: _disposab	N (1955)	: Natural of Repilcate [] X-Conta	m [] Trip Blank [] Blind Field S	ita:[]
W-1	722	DATA	X	
Water Temp. Observe (umnos)	1.00	Temp. Call rection Factor Fact	SC = (2) \times (3) μ mhos/cm) x (4) @ 25°C
<u>(1)</u> (2)		(3) (4)	Compens	
	1 1 1			
Temperature	pH:	Other:		
Sample Container	Parameters		Preservative	
2-40m/ VDA	801980 20	HE	14 cool	
	a (*	<u> </u>		
	15			
aboratory: TEG.		Chain-of-Custody: Yas	• []	
Meter Serial No.	Calibration Date	, ,	itamination	
ын	7	Steam: Yes (] No	Potable Water: Yes [] No	حالة و
ic		Scrub: Yes (4) No (]	Uquinox: Yes Yo No (
1-Scope		Methanol: Yes [] No	Acatona: Yes [] No	-
		Nitric Acid: Yes [] No	Ol Water Yes Wo (7
ammenta: Water clea	2		an states transfer, Mg (

-1-
m/m
als.
Stat: []
3) × (4)
@ 25 °C ated SC
3
-
-
-
3

1. P

GROUNDWATER	R SAMPLING LOG
Project South Laundey Date	e: 9/18/97 - Stadon No. MW-Cf
Narrative Description: South of Calley	Mr. Hway
Personnel: Raple Taraman (Wes	ather: COb /
Well Locked? Yes N No [] Well Log? Yes [] No []	10
Condition of Well: 900d See Comm	The state of the s
Casing Type: PVL	Casing Clameter: 2 H
Casing Stickup:	Measuring Point Description: TOS PUE OF MAY
Aquiter: 19 KIMER (9 Vall)	0100 000
Well Depth (feet below measuring point):	pth to Water 1, 87 - 30 () It water
WELL 5	VACUATION
Method: Positive Olsplacement Pump [] Hand-Lift Pump [] Submersible f	Pump [] SST Bailer (] Disp. Polyethylene Bailer [2] Other:
23.11 t. water x .163 gal./ft = one casing volum	
2" weil = 0.163 gal./ft. 4" weil = 0.653 gal./ft. 6" weil = 1.469 g	al./ft. 8" weil = 2.511 gal./ft. Weil C feet in dameter = 5.875 x C"
Remarks:	
EVACUA	ATION DATA
Time Cumulative Gailons Temo	DH SC Other
10.00	7.6 100
	
And the second s	
D-00 Hello	SAMPUNG
Sampling Method: _ Dar Resample Type:	Natural [] Replicate [] X-Contam [] Trip Blank [] Blind Field Sta; []
sc	DATA
	Temp. Gell SC = (2) x (3) x (4) section Factor without m @ 25 = 0
The same of the sa	action Pactor pmhos/cm @ 25 °C Compensated SC
Temperature pH:	Other:
Sample Container Parameters	Freservative
2-40m1 VOA 3010/ROZU	Helt cord
	<u> </u>
Laboratory: TEG	Chain-of-Custody: Yes No []
Meter Serial No. Calibration Date	Occontamination
рн	Steam: Yes [] No Potable Water: Yes [] No A
sc	Scrub: Yes [60 No [] Uquinox: Yes No []
M-Scape	Methanol: Yes [] No Acetone: Yes [] No
00 (1) free 0	Nitra Acid: Yes (] No J Oi Water Yes No (]
Comments: Vecce Voca Claim -	Well Cover Gize by
Show flow. Chient set	Steel Plate on to for of.
Well- flush with +	to tacking of

ENVIRONIMENTAL GEOSCIENCES	Technologies DATE: Sep 18 PAGE (OF 1	PROJECT NAMES LOVELING (3) Adeline (3)	/ O S FAX:	Rochel Farman	1818 Hall 0158 828 00 108 108 108 108 108 108 108 108 108	Wife Slightly Hubby	WAS SVOAWISK DOWN X DIM (3.75)	7 WIR (X X Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	2 WAP D VOA WOON V DIE 10 41	WR X Dry 12.	We is X my 18.64 Walter	195		WPC PWAKES X DTW	1 DTW 33.	X DTW	0 X DIV 21.89	192 V WELLS	DATE/TIME RECEIVED BY (Signature)	Eur 9/8/97 Fed Ex 3:30	DATE/TIME RECEIVED BY (Signature) DATE/TIME	SEALS INTACT? Y/N/NA	SAMPLE DISPOSAL INSTRUCTIONS RECEIVED GOOD COND./COLD	DISPOSAL @ \$2.00 each Thetum Pickup NOTES:
TRANT DBAL ENVIRONMENTA GEOSCI	MITH	ADDRESS:	PHONE (303) 744-7105	CLIENT PROJECT #: Sentage Adel	Sample Number Depth Time Type Co	97 WR	-1 WD 9/13/97 WA	MW-4 19 0 19 19 19 19 19 19 19 19 19 19 19 19 19	S	2 4,891/7/197 WR	(7/97	_	Socrangate 4/18/97	1	0	0 0 13	30 9 18	RIDA 4:012 918 193 V	HED BY (Signature)	(3)	RELINQUISHED BY (Signature) DATE/TIME		SAMPLE DISPOSAL	☐TEG DISPOSAL @ \$2.00 each

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST, INC.

7110 38th Drive SE Lacey, Washington 98503

Mobile Environmental Laboratories Environmental Sampling Services Telephone:

360-459-4670

Fax:

360-459-3432

December 11, 1997

Rachel Tauman Maxim Technologies 3525 Holland St. Wheat Ridge, Co 80033-5847

Dear Ms. Tauman:

Please find enclosed the analytical data report for the Southgate Laundry Project, Project No. 9732801, in Yakima, Washington. Water samples were analyzed for Specific Halogenated Hydrocarbons and BTEX by Modified EPA Method 8010/8020 on December 5, 1997.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. An invoice for this work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Maxim Technologies for this project. It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michael a Korosce

President

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

SOUTHGATE LAUNDRY PROJECT

Yakima, Washington Maxim Technologies, Inc. Project No.: 9732801

Specific Halogenated Hydrocarbons (Mod. EPA 8010) in Water

"int" Indicates that interference peaks prevent determination.

===== ===== ===== ===== =====

Sample-Number	MDL	Method Blank	MW-1	MW-2	MW-3	MW-4	BLIND
Date		12/05/97	12/05/97	12/05/97	12/05/97	12/05/97	12/05/97
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
1,1 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Dichloromethane	1	nd	nd	nd	nd	nd	nd
Trans-1,2 Dichloroethene	1	nd	nd	nd	nd	nd	nd
1,1 Dichloroethane	1	nd	nd	nd	nd	nd	nd
Cis-1,2 Dichloroethene	1	nd	nd	nd	nd	nd	nd
Chloroform	1	nd	2.3	2.2	2.4	2.1	2.3
1,1,1 Trichloroethane	1	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	1	nd	nd	nd	nd	nd	nd
1,2 Dichloroethane	1	nd	nd	nd	nd	nd	nd
Trichloroethene	1	nd	nd	nd	nd	nd	nd
1,1,2 Trichloroethane	1	nd	nd	nd	nd	nd	nd
Tetrachloroethene	1	nd	1.7	16	8.2	2.0	9.0
1,1,1,2-Tetrachloroethane	1	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	1	nd	nd	nd	nd	nd	nd
Spike Recovery (%)		102	108	111	106	113	105
	=====	=====	=====	=====	=====	=====	=====

FROM Fax: (509) 465-219 GROUNDWATER MONITORING AND SAMPLING OF PAGE 73280 FIELD REPORT No.: PHOJECT No.: OTHER (SPECIFY) WEATHER: 2-3-9 TREATMENT DRUMMED ON-SITER DATE SAMPLED. METHOD OF COLLECTION DESCRIPTE PURGE WATER DISPOSITION: SAMPLER TTELC PROJECT NAME

MAXIM SPOKANE

500

DRUM COUNT

OTHER (SPECIFY) AND

DRUM COUNT

DRUMMED ONSITE

PRODUCT DISPOSITION:

THERN

TO

13034030426

P.02

TOTAL

6"ID... 1.469 gal/ft 돐 TEMP. (C) |mg/L1 DISSOLVED G, 4"ID., 0.653 gal/ft CONDUCTIMITY (SOHWA) 1 WELL VOLUME - (COLUMN HEIGHT) (WELL VOLUME CONSTANT) 2"ID...0.183 gal/ft 1000 0200 SAMPLED 150 00) 800 BALLED DRY VOLUME 1.5 TO. 0.092 gal/ft COLUMN HEIGHT (M) Sales of the sales I WELL **WOLUME** 8/ A SOL OEPTH TO BOTTOM (fit) 45 S) 7 PRODUCT THICKNESS (II) 1"ID...0.041 gal/ft DEPTH TO WATER (TI) 28.47 29.82 8,8 36,3 PRODUCT (III) WELL VOLUME CONSTANTS: NWY マヤン NW NUL 30 WELL DIMMETER SAMME WW-3 2-00 1 Mers-4 SIN

CHAIN OF CUSTODY RECORD

MAXIM

South Cate

FECHNOLOGIES INC 600 South 25th Street Billing Montana E0101

600 South 25th Street
Billings, Montana 59101
Phone (406) 248-9161 • Fax (406) 248-9282

Sample Name (Printed)

Project Number

Kachel acunais Contact Name
Waxiw
Report to (Firm or Agency)
3525 Holland St. Uheat

Sample Signature

_		_	_												
	LAB NUMBER									*		2		^	n f
	NOTES											Remarks:	Canel Stage is	Ned City	Sak: 27-248-2743
O ANALYSIS REQUIRED	WC 80	X	X	X	X	X	×				Ċ	The Ky	The formal of the second of th	1	
	NO. OF CONTAINERS	3	_		*	i						Received tay:	Received by:	Received by:	Received by:
	SAMPLE	3	_									Time	174	Time	Time
	COMP OR GRAB								25			Date U.S. C.	Date 1	Date	Date
NOTE ACCUSANCE	SAMPLE LOCATION OR DESCRIPTION	WW-3	Blind	MW-Z	MWH	1-0m	Twir Blank	-	-				7	10	
TIME	COLLECTED	0900	0260	000	00)[1150	DAS.					1	-	<i>t</i>	· ·
DATE	COLLECTED	12397					_					Relinquished by:	Relinquished by:	Relinquished by:	Relinquished by:

APPENDIX D

REMEDIAL INVESTIGATIONS-LABORATORY REPORTS OF SOIL SAMPLES (MARCH-AUGUST 1996)

STRATAPROBE SOIL SAMPLING MARCH 1996 SAMPLES 1-11

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

Page 4

SOUTHGATE SHOPPING CENTER PROJECT Yakima, Washington MAXIM Technologies, Inc.

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Soil

Sample-Number	MDL	===== Method Blank	===== Soil #1	===== Soil #2	===== Soil #3	===== Soil #4	===== Soil #5
Date	mg/kg	03/25/96 mg/kg	03/25/96 mg/kg	03/25/96 mg/kg	03/25/96 mg/kg	03/25/96 mg/kg	03/25/96 mg/kg
Vinylchloride	0.05	nd	nd	nd	nd	nd	nd
1,1 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
Benzene	0.05	nd	nd	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd	nd	nd
Toluene	0.05	nd	nd	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	0.11	0.36	3.99	0.38	0.30
Ethylbenzene	0.05	ba	nd	nd	nď	nd	nd
m,p-Xylene	0.05	nd	nd	nd	nd	nd	nd
o-Xylene	0.05	nd	nd	nd	nd	nd	nd
Dichloromethane	0.05	nd	nd	nd	nd	nd	nd
1,1 Dichloroethane	0.05	nd	nd	nd	nd	nd	nd
1,2 Dichloroethane	0.05	nd	nd	nd	nd	nd	nd
Chloroform	0.05	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	0.05	nd	nd	nd	nd	nd	nd
1,1,1 Trichloroethane	0.05	nd	nd	nd	nd	nd	nd
1,1,2 Trichloroethane	0.05	nd	nd .	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	0.05	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	0.05	nd	nd	nd	nd	nd	nd
Spike Recovery (%)		92	88	91	. 89	86	89

"nd" Indicates Not Detected at the listed detection limit.

"int" Indicates that interference peaks prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

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SOUTHGATE SHOPPING CENTER PROJECT Yakima, Washington MAXIM Technologies, Inc.

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Soil

====== ===============================	MDL	Soil #5 Dup	Soil #6	Soil #6 Dup	===== Soil #7	===== Soil #8	Soil #9
Date	mg/kg	03/25/96 mg/kg	03/25/96 mg/kg	03/25/96 mg/kg	03/25/96 mg/kg	03/25/96 mg/kg	03/25/96 mg/kg
Vinylchloride	0.05	nd	nd	nd	nd	nd	nd
1,1 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
Benzene	0.05	nd	nd	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd	nd	nd
Toluene	0.05	nd	nd	nd	nd	nd	nd
Tetrachloroethene	0.05	0.41	0.33	0.47	2.08	0.15	0.22
Ethylbenzene	0.05	nd	nd	nd	nd	nd	nd
m,p-Xylene	0.05	nd	nd	nd	nd	nd	nd
o-Xylene	0.05	nd	nd	nd	nd	nd	nd
Dichloromethane	0.05	nd	nd	nd	nd	nd	nd
1,1 Dichloroethane	0.05	nd	nd	nd	nd	nd	nd
1,2 Dichloroethane	0.05	nd	nd	nd	nd	nd	nd
Chloroform	0.05	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	0.05	nd	nd	nd	nd	nd	nd
1,1,1 Trichloroethane	0.05	nd	nd	nd	nd	nd	nd
1,1,2 Trichloroethane	0.05	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	0.05	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	0.05	nd	nd	nd	nd	nd	nd
Spike Recovery (%)		93	81	86	. 87	92	96

[&]quot;nd" Indicates Not Detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

TRANSGLOBAL ENVIRONMENTAL GEOSCIENCES NORTHWEST INC.

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SOUTHGATE SHOPPING CENTER PROJECT Yakima, Washington MAXIM Technologies, Inc.

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Soil

Sample-Number	===== MDL	===== Soil #10	===== Soil #11	===== 2.5 ppm MS	===== 2.5 ppm MSD
Date	mg/kg	03/25/96 mg/kg	03/25/96 mg/kg	03/25/96 mg/kg	03/25/96 mg/kg
Vinylchloride	0.05	nd	nd		
1,1 Dichloroethene	0.05	nd	nd	2.35	2.49
Trans-1,2 Dichloroethene	0.05	nd	nd	2.42	2.53
Cis-1,2 Dichloroethene	0.05	nd	nd	2.29	2.30
Benzene	0.05	nd	nd	2.28	2.37
Trichloroethene	0.05	nd	nd	2.24	2.38
Toluene	0.05	nd	nd	2.22	2.24
Tetrachloroethene	0.05	0.17	0.16	2.35	2.23
Ethylbenzene	0.05	nd	nd	2.23	2.32
m,p-Xylene	0.05	nd	nd	4.41	4.39
o-Xylene	0.05	nd	nd	2.26	2.11
Dichloromethane	0.05	nd	nd	2.63	2.71
1,1 Dichloroethane	0.05	nd	nd	2.60	2.34
1,2 Dichloroethane	0.05	nd	nd	2.35	2.38
Chloroform	0.05	nd	nd	2.44	2.45
Carbon Tetrachloride	0.05	nd	nd	2.56	2.47
1,1,1 Trichloroethane	0.05	nd	nd	2.22	2.23
1,1,2 Trichloroethane	0.05	nd	nđ	2.21	2.27
1,1,1,2-Tetrachloroethane	0.05	nd	nd	2.34	2.30
1,1,2,2-Tetrachloroethane	0.05	nd	nd	2.29	2.23
Spike Recovery (%)		87	97		

[&]quot;nd" Indicates Not Detected at the listed detection limit.

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[&]quot;int" Indicates that interference peaks prevent determination.

CHAIN-OF-CUSTODY RECORD

GEOSCIENCES TRANSGLOBAL ENVIRONMENTAL

LAUNDEY O. Murch 22 1996 PAGE DATE 77'11 30 Z

COLLECTION HOW IS THE Note Number MDL 0.05 mg/kg Laboratory of Containers Total Number FIELD NOTES LABORATORY NOTES: LOCATION: YAKAA , WA PROJECT NAME: SOUTH GATE 子工 SO18388V CHAIN OF CUSTODY SEALS Y/N/NA TOTAL NUMBER OF CONTAINERS RECEIVED GOOD COND./COLD OVER TEND *COLLECTOR: SAMPLE RECEIPT SEALS INTACT? Y/N/NA NOTES: PROJECT MANAGER: P. T AUM & N FAX: 609/892,28520 RECEIVED BY (Signature) DATE/TIME からいるなら DATE/TIME RECEIVED BY (Signature) 1200 VON 0108/108 401 PATONO ☐ Pickup 12/76 Mach 22/96 SAMPLE DISPOSAL INSTRUCTIONS 407 にいが 409 17.7 402 402 402 7107 400 70h Container Type CLIENT: SOUTH GATE LAUNDE ☐TEG DISPOSAL @ \$2.00 each ☐ Return 21 191 DATE/TIME DATE/TIME Sample Type Soil 798-FF2 (505) SHONE So. 1 18.00 Soil 501 18,20< 13.00 50, 0h. Cl 16:50 Time 1530 01.6 1555 ADDRESS: Thien of RELINQUISHED BY (Signature) RELINQUISHED BY (Signature) 20 Sample Number | Depth | \$ 00° 0 3 0.0 CLIENT PROJECT #: 20 H & Soit # 6 30: # t‡

600 South 25th Street P O Box 30615 Billings, MT 59107 (406) 248-9161 FAX (406) 248-9282

hand Auger - Soil August Samples 12-20 TECHNICAL REPORT

REPORT TO: ATTN: RACHEL TAUMAN

MAXIM TECHNOLOGIES, INC.

P. O. Box 2887

YAKIMA WA 98907

DATE:

August 16, 1996

JOB NUMBER:

95-932

SHEET:

1 of 14

INVOICE NO.:

036167

REPORT OF:

Soil Analysis - Southgate Laundry 946.04

SAMPLE IDENTIFICATION:

On August 14, 1996, these soil samples (laboratory numbers 177580 through 177590) were received in our laboratory for analysis. Tests were conducted in accordance with SW-846 "Test Methods for Evaluating Solid Waste", 3rd Edition, updates I, II, IIA, IIB.

The condition of the samples upon receipt at the laboratory is ntoed on the attached sampe receipt checklist. Chain of custody documentation is enclosed. Chromatograms are attached for your reference.

The test results are shown on the following pages.

A < sign indicates the value reported was the practical quantitation limit for this sample using the method described. Concentrations of analyte, if present, below this were not quantifiable.

Reviewed by

Attachments:

Sample Receipt Checklist

Chain of Custody Chromatograms

rmr

As a mutual protection to clients, the public and ourselves, all reports are submitted as the confidential property of our clients and authorization or publication of statements, conclusions or extracts from or regarding our reports is reserved pending our written approval. Test results apply specifically to the samples tested only. The entire report shall not be reproduced, except in full, without the written approval of the laboratory. Samples will be disposed of after testing is completed unless other arrangements are agreed to in writing.

Project No.: 95-932 Laboratory No.: 177584

Sample Name: 15 H&R 2.5' Sample Date: 08/13/96 Collected by: RACHEL TAUMAN

Time Sampled: 0910 Sample Type: SOIL

				m.committeeses
PARAMETER		MEASURED VALUE		DATE ANALYZED
HALOGENATED VOLATILE ORGANICS				
Data File Number-Volatiles	081496	31013		
Bromobenzene	<5	ug/kg	8260	08/14/96
Bromodichloromethane	<5	ug/kg	8260	08/14/96
Bromoform	<5	ug/kg	8260	08/14/96
Bromomethane	<5	ug/kg	8260	08/14/96
Carbon Tetrachloride	<5	ug/kg	8260	08/14/96
Chlorobenzene	<5	ug/kg	8260	08/14/96
Chloroethane	<5	ug/kg	8260	08/14/96
Chloroform	<5	ug/kg	8260	08/14/96
Chloromethane (Methyl chloride)	<5	ug/kg	8260	08/14/96
Dibromochloromethane	<5	ug/kg	8260	08/14/96
Dibromomethane	<5	ug/kg	8260	08/14/96
Dichlorodifluoromethane	<5	ug/kg	8260	08/14/96
1,2-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,3-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,4-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,1-Dichloroethane	<5	ug/kg	8260	08/14/96
1,2-Dichloroethane	<5	ug/kg	8260	08/14/96
1,1-Dichloroethene	<5	ug/kg	8260	08/14/96
c-1,2-Dichloroethene	<5	ug/kg	8260	08/14/96
t-1,2-Dichloroethene	<5	ug/kg	8260	08/14/96
1,2-Dichloropropane	<5	ug/kg	8260	08/14/96
c-1,3-Dichloropropene	<5	ug/kg	8260	08/14/96
t-1,3-Dichloropropene	<5	ug/kg	8260	08/14/96
Methylene chloride	<25	ug/kg	8260	08/14/96
1,1,1,2-Tetrachloroethane	<5	ug/kg	8260	08/14/96
1,1,2,2-Tetrachloroethane	<5	ug/kg	8260	08/14/96
Tetrachloroethene	5	ug/kg	8260	08/14/96
1,1,1-Trichloroethane	<5	ug/kg	8260	08/14/96
1,1,2-Trichloroethane	<5	ug/kg	8260	08/14/96
Trichloroethene	<5	ug/kg	8260	08/14/96
Trichlorofluoromethane	<5	ug/kg	8260	08/14/96
,2,3-Trichloropropane	<5	ug/kg	8260	08/14/96
/inyl Chloride	<5	ug/kg	8260	08/14/96
-Chloroethyl vinyl ether	<50	ug/kg	8260	08/14/96
,2-Dichloroethane-d4 (Surrogate)	104	%	8260	08/14/96
oluene-d8 (Surrogate)	100	%	8260	08/14/96
-Bromofluorobenzene (Surrogate)	100	%	8260	08/14/96

Client Name:

MAXIM - Yakima 95-932

Project No.:

Laboratory No.: 177585

Sample Name:

15 H&R 3.0'

Sample Date: Collected by:

08/13/96 RACHEL TAUMAN

Time Sampled:

0915

Sample Type:

CC	. 7	
20	,,	L

PARAMETER	MEASURED		METHOD	DATE	
PARAPIETER		VALU	! 	NUMBER	ANALYZED
HALOGENATED VOLATILE ORGANICS					
Data File Number-Volatiles		081498	51014		4
Bromobenzene		<5	ug/kg	8260	08/14/96
Bromodichloromethane		<5	ug/kg	8260	08/14/96
Bromoform		<5	ug/kg	8260	08/14/96
Bromomethane		<5	ug/kg	8260	08/14/96
Carbon Tetrachloride		<5	ug/kg	8260	08/14/96
Chlorobenzene		<5	ug/kg	8260	08/14/96
Chloroethane		<5	ug/kg	8260	08/14/96
Chloroform		<5	ug/kg	8260	08/14/96
Chloromethane (Methyl chloride)		<5	ug/kg	8260	08/14/96
Dibromochloromethane		<5	ug/kg	8260	08/14/96
Dibromomethane		<5	ug/kg	8260	08/14/96
Dichlorodifluoromethane		<5	ug/kg	8260	08/14/96
1,2-Dichlorobenzene		<5	ug/kg	8260	08/14/96
1,3-Dichlorobenzene		<5	ug/kg	8260	08/14/96
1,4-Dichlorobenzene		<5	ug/kg	8260	08/14/96
1,1-Dichloroethane		<5	ug/kg	8260	08/14/96
1,2-Dichloroethane		<5	ug/kg	8260	08/14/96
1,1-Dichloroethene		<5	ug/kg	8260	08/14/96
c-1,2-Dichloroethene		< 5	ug/kg	8260	08/14/96
t-1,2-Dichloroethene		<5	ug/kg	8260	08/14/96
1,2-Dichloropropane		< 5	ug/kg	8260	08/14/96
c-1,3-Dichloropropene		<5	ug/kg	8260	08/14/96
t-1,3-Dichloropropene		<5	ug/kg	8260	08/14/96
Methylene chloride		<25	ug/kg	8260	
1,1,1,2-Tetrachloroethane		< 5	ug/kg	8260	08/14/96
1,1,2,2-Tetrachloroethane		<5	ug/kg	8260	08/14/96
Tetrachloroethene		<5	ug/kg	8260	08/14/96
1,1,1-Trichloroethane		< 5	ug/kg	8260	08/14/96
1,1,2-Trichloroethane		<5	100 70	8260	08/14/96
Trichloroethene		<5	ug/kg		08/14/96
richlorofluoromethane		<5	ug/kg	8260	08/14/96
1,2,3-Trichloropropane		<5	ug/kg	8260	08/14/96
/inyl Chloride		<5	ug/kg	8260	08/14/96
2-Chloroethyl vinyl ether		<50	ug/kg	8260	08/14/96
,2-Dichloroethane-d4 (Surrogate)		104	ug/kg	8260	08/14/96
oluene-d8 (Surrogate)		100	%	8260	08/14/96
			%	8260	08/14/96
-Bromofluorobenzene (Surrogate)		102	%	8260	08/14/9

Project No.: 95-932 Laboratory No.: 177586

Sample Name: 16 WRAY 1.5'
Sample Date: 08/13/96
Collected by: RACHEL TAUMAN

Time Sampled: 0940 Sample Type: SOIL

	MEASUR	ED	METHOD	DATE
PARAMETER	VALUE		NUMBER	ANALYZED
HALOGENATED VOLATILE ORGANICS				
Data File Number-Volatiles	081496	1015		
Bromobenzene	<5	ug/kg	8260	08/14/96
Bromodichloromethane	<5	ug/kg	8260	08/14/96
Bromoform	<5	ug/kg	8260	08/14/96
Bromomethane	<5	ug/kg	8260	08/14/96
Carbon Tetrachloride	<5	ug/kg	8260	08/14/96
Chlorobenzene	<5	ug/kg	8260	08/14/96
Chloroethane	<5	ug/kg	8260	08/14/96
Chloroform	<5	ug/kg	8260	08/14/96
Chloromethane (Methyl chloride)	<5	ug/kg	8260	08/14/96
Dibromochloromethane	<5	ug/kg	8260	08/14/96
Dibromomethane	<5	ug/kg	8260	08/14/96
Dichlorodifluoromethane	<5	ug/kg	8260	08/14/96
1,2-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,3-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,4-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,1-Dichloroethane	<5	ug/kg	8260	08/14/96
1,2-Dichloroethane	<5	ug/kg	8260	08/14/96
1,1-Dichloroethene	<5	ug/kg	8260	08/14/96
c-1,2-Dichloroethene	<5	ug/kg	8260	08/14/96
t-1,2-Dichloroethene	<5	ug/kg	8260	08/14/96
1,2-Dichloropropane	<5	ug/kg	8260	08/14/96
c-1,3-Dichloropropene	<5	ug/kg	8260	08/14/96
t-1,3-Dichloropropene	<5	ug/kg	8260	08/14/96
Methylene chloride	<25	ug/kg	8260	08/14/96
1,1,1,2-Tetrachloroethane	<5	ug/kg	8260	08/14/96
1,1,2,2-Tetrachloroethane	<5	ug/kg	8260	08/14/96
Tetrachloroethene	20	ug/kg	8260	08/14/96
1,1,1-Trichloroethane	<5	ug/kg	8260	08/14/96
1,1,2-Trichloroethane	<5	ug/kg	8260	08/14/96
Trichloroethene	<5	ug/kg	8260	08/14/96
Trichlorofluoromethane	<5	ug/kg	8260	08/14/96
1,2,3-Trichloropropane	<5	ug/kg	8260	08/14/96
Vinyl Chloride	<5	ug/kg	8260	08/14/96
2-Chloroethyl vinyl ether	<50	ug/kg	8260	08/14/96
1,2-Dichloroethane-d4 (Surrogate)	105	%	8260	08/14/96
Toluene-d8 (Surrogate)	100	%	8260	08/14/96
4-Bromofluorobenzene (Surrogate)	100	%	8260	08/14/96

Client Name:

MAXIM - Yakima

Project No.: 95-932 Laboratory No.: 177587

Sample Name:

17 WRAY 21

Sample Date: Collected by: 08/13/96

Time Sampled: 0950

RACHEL TAUMAN

Sample Type:

SOIL

PARAMETER		MEASURED VALUE		DATE ANALYZE
HALOGENATED VOLATILE ORGANICS		1		
Data File Number-Volatiles	204/2	:		
Bromobenzene	081496		2202	22.20
Bromodichloromethane	<5 .5	ug/kg	8260	08/14/96
Bromoform	<5	ug/kg	8260	08/14/96
Bromomethane	<5	ug/kg	8260	08/14/96
Carbon Tetrachloride	<5	ug/kg	8260	08/14/96
Chlorobenzene	<5	ug/kg	8260	08/14/96
Chloroethane	<5	ug/kg	8260	08/14/96
Chloroform	< 5	ug/kg	8260	08/14/96
Chloromethane (Methyl chloride)	<5 .F	ug/kg	8260	08/14/96
Dibromochloromethane	<5 .5	ug/kg	8260	08/14/96
Dibromomethane	<5	ug/kg	8260	08/14/96
Dichlorodifluoromethane	<5	ug/kg	8260	08/14/96
1,2-Dichlorobenzene	<5 <5	ug/kg	8260	08/14/96
1,3-Dichlorobenzene		ug/kg	8260	08/14/96
1,4-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,1-Dichloroethane	<5 <5	ug/kg	8260	08/14/96
1,2-Dichloroethane	< 5	ug/kg	8260	08/14/96
1,1-Dichloroethene	<5	ug/kg	8260	08/14/96
c-1,2-Dichloroethene		ug/kg	8260	08/14/96
t-1,2-Dichloroethene	<5	ug/kg	8260	08/14/96
1,2-Dichloropropane	<5	ug/kg	8260	08/14/96
c-1,3-Dichloropropene	<5 .F	ug/kg	8260	08/14/96
t-1,3-Dichloropropene	<5 -5	ug/kg	8260	08/14/96
Methylene chloride	<5	ug/kg	8260	08/14/96
	<25	ug/kg	8260	08/14/96
1,1,1,2-Tetrachloroethane	< 5	ug/kg	8260	08/14/96
1,1,2,2-Tetrachloroethane Tetrachloroethene	< 5	ug/kg	8260	08/14/96
1,1,1-Trichloroethane	40	ug/kg	8260	08/14/96
1,1,2-Trichloroethane	< 5	ug/kg	8260	08/14/96
richloroethene	<5	ug/kg	8260	08/14/96
	< 5	ug/kg	8260	08/14/96
richlorofluoromethane	<5	ug/kg	8260	08/14/96
,2,3-Trichloropropane	<5	ug/kg	8260	08/14/96
/inyl Chloride	< 5	ug/kg	8260	08/14/96
2-Chloroethyl vinyl ether	<50	ug/kg	8260	08/14/96
,2-Dichloroethane-d4 (Surrogate)	103	%	8260	08/14/96
oluene-d8 (Surrogate)	100	%	8260	08/14/96
-Bromofluorobenzene (Surrogate)	99	%	8260	08/14/96

Project No.: 95-932 Laboratory No.: 177588

Sample Name: 18 WRAY 0.5

Sample Date: 08/13/96 Collected by: RACHEL TAUMAN

Time Sampled: 1010 Sample Type: SOIL

	MEASURE	ED	METHOD	DATE
PARAMETER	VALUE	1 50	NUMBER	ANALYZE
HALOGENATED VOLATILE ORGANICS				
Data File Number-Volatiles	081496	1017	(6)	
Bromobenzene	<5	ug/kg	8260	08/14/9
Bromodichloromethane	<5	ug/kg	8260	08/14/96
Bromoform	<5	ug/kg	8260	08/14/9
Bromomethane	<5	ug/kg	8260	08/14/96
Carbon Tetrachloride	<5	ug/kg	8260	08/14/96
Chlorobenzene	<5	ug/kg	8260	08/14/96
Chloroethane	<5	ug/kg	8260	08/14/96
Chloroform	<5	ug/kg	8260	08/14/96
Chloromethane (Methyl chloride)	<5	ug/kg	8260	08/14/96
Dibromochloromethane	<5	ug/kg	8260	08/14/96
Dibromomethane	<5	ug/kg	8260	08/14/96
Dichlorodifluoromethane	<5	ug/kg	8260	08/14/96
1,2-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,3-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,4-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,1-Dichloroethane	<5	ug/kg	8260	08/14/96
1,2-Dichloroethane	<5	ug/kg	8260	08/14/96
1,1-Dichloroethene	<5	ug/kg	8260	08/14/96
c-1,2-Dichloroethene	<5	ug/kg	8260	08/14/96
t-1,2-Dichloroethene	<5	ug/kg	8260	08/14/96
1,2-Dichloropropane	<5	ug/kg	8260	08/14/96
c-1,3-Dichloropropene	<5	ug/kg	8260	08/14/96
t-1,3-Dichloropropene	< 5	ug/kg	8260	08/14/96
Methylene chloride	<25	ug/kg	8260	08/14/96
1,1,1,2-Tetrachloroethane	<5	ug/kg	8260	08/14/96
1,1,2,2-Tetrachloroethane	<5	ug/kg	8260	08/14/96
Tetrachloroethene	<5	ug/kg	8260	08/14/96
1,1,1-Trichloroethane	<5	ug/kg	8260	08/14/96
1,1,2-Trichloroethane	<5	ug/kg	8260	08/14/96
Trichloroethene	<5	ug/kg	8260	08/14/96
Trichlorofluoromethane	<5	ug/kg	8260	08/14/96
1,2,3-Trichloropropane	<5	ug/kg	8260	08/14/96
Vinyl Chloride	<5	ug/kg	8260	08/14/96
2-Chloroethyl vinyl ether	<50	ug/kg	8260	08/14/96
1,2-Dichloroethane-d4 (Surrogate)	109	%	8260	08/14/96
Toluene-d8 (Surrogate)	100	%	8260	08/14/96
4-Bromofluorobenzene (Surrogate)	97	%	8260	08/14/96

Project No.: 95-932 Laboratory No.: 177589

Sample Name: 19 WRAY 1.5'

Sample Date: 08/13/96 Collected by: RACHEL TAUMAN

Time Sampled: 1020 Sample Type: SOIL

PARAMETER		MEASURED		DATE
	VALUE		NUMBER	ANALYZED
HALOGENATED VOLATILE ORGANICS				
Data File Number-Volatiles	081496	1018		
Bromobenzene	<5	ug/kg	8260	08/14/96
Bromodichloromethane	<5	ug/kg	8260	08/14/96
Bromoform	<5	ug/kg	8260	08/14/96
Bromomethane	<5	ug/kg	8260	08/14/96
Carbon Tetrachloride	<5	ug/kg	8260	08/14/96
Chlorobenzene	<5	ug/kg	8260	08/14/96
Chloroethane	<5	ug/kg	8260	08/14/96
Chloroform	<5	ug/kg	8260	08/14/96
Chloromethane (Methyl chloride)	<5	ug/kg	8260	08/14/96
Dibromochloromethane	<5	ug/kg	8260	08/14/96
Dibromomethane	<5	ug/kg	8260	08/14/96
Dichlorodifluoromethane	<5	ug/kg	8260	08/14/96
1,2-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,3-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,4-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,1-Dichloroethane	<5	ug/kg	8260	08/14/96
1,2-Dichloroethane	<5	ug/kg	8260	08/14/96
1,1-Dichloroethene	<5	ug/kg	8260	08/14/96
c-1,2-Dichloroethene .	<5	ug/kg	8260	08/14/96
t-1,2-Dichloroethene	<5	ug/kg	8260	08/14/96
1,2-Dichloropropane	<5	ug/kg	8260	08/14/96
c-1,3-Dichloropropene	<5	ug/kg	8260	08/14/96
t-1,3-Dichloropropene	<5	ug/kg	8260	08/14/96
Methylene chloride	<25	ug/kg	8260	08/14/96
1,1,1,2-Tetrachloroethane	<5	ug/kg	8260	08/14/96
1,1,2,2-Tetrachloroethane	<5	ug/kg	8260	08/14/96
Tetrachloroethene	179	ug/kg	8260	08/14/96
1,1,1-Trichloroethane	<5	ug/kg	8260	08/14/96
1,1,2-Trichloroethane	<5	ug/kg	8260	08/14/96
Trichloroethene	<5	ug/kg	8260	08/14/96
Trichlorofluoromethane	<5	ug/kg	8260	08/14/96
1,2,3-Trichloropropane	<5	ug/kg	8260	08/14/96
Vinyl Chloride	<5	ug/kg	8260	08/14/96
2-Chloroethyl vinyl ether	<50	ug/kg	8260	08/14/96
1,2-Dichloroethane-d4 (Surrogate)	107	%	8260	08/14/96
Toluene-d8 (Surrogate)	97	%	8260	08/14/96
-Bromofluorobenzene (Surrogate)	117	%	8260	08/14/96

Project No.: 95-932 Laboratory No.: 177590

Sample Name: 2019 WRAY 2.01

Sample Date: 08/13/96 Collected by: RACHEL TAUMAN

Time Sampled: 1025 Sample Type: SOIL

		MEASURED		DATE
PARAMETER	VALUE	*	NUMBER	ANALYZE
HALOGENATED VOLATILE ORGANICS				
Data File Number-Volatiles	081496	1019		
Bromobenzene	<5	ug/kg	8260	08/14/96
Bromodichloromethane	<5	ug/kg	8260	08/14/96
Bromoform	<5	ug/kg	8260	08/14/96
Bromomethane	<5	ug/kg	8260	08/14/96
Carbon Tetrachloride	<5	ug/kg	8260	08/14/96
Chlorobenzene	<5	ug/kg	8260	08/14/96
Chloroethane	<5	ug/kg	8260	08/14/96
Chloroform	<5	ug/kg	8260	08/14/96
Chloromethane (Methyl chloride)	<5	ug/kg	8260	08/14/96
Dibromochloromethane	<5	ug/kg	8260	08/14/96
Dibromomethane	<5	ug/kg	8260	08/14/96
Dichlorodifluoromethane	<5	ug/kg	8260	08/14/96
1,2-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,3-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,4-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,1-Dichloroethane	<5	ug/kg	8260	08/14/96
1,2-Dichloroethane	<5	ug/kg	8260	08/14/96
1,1-Dichloroethene	<5	ug/kg	8260	08/14/96
c-1,2-Dichloroethene	<5	ug/kg	8260	08/14/96
t-1,2-Dichloroethene	<5	ug/kg	8260	08/14/96
1,2-Dichloropropane	<5	ug/kg	8260	08/14/96
c-1,3-Dichloropropene	<5	ug/kg	8260	08/14/96
t-1,3-Dichloropropene	<5	ug/kg	8260	08/14/96
Methylene chloride	<25	ug/kg	8260	08/14/96
1,1,1,2-Tetrachloroethane	<5	ug/kg	8260	08/14/96
1,1,2,2-Tetrachloroethane	<5	ug/kg	8260	08/14/96
Tetrachloroethene	23	ug/kg	8260	08/14/96
1,1,1-Trichloroethane	<5	ug/kg	8260	08/14/96
1,1,2-Trichloroethane	<5	ug/kg	8260	08/14/96
Trichloroethene	<5	ug/kg	8260	08/14/96
Trichlorofluoromethane	<5	ug/kg	8260	08/14/96
1,2,3-Trichloropropane	<5	ug/kg	8260	08/14/96
Vinyl Chloride	<5	ug/kg	8260	08/14/96
2-Chloroethyl vinyl ether	<50	ug/kg	8260	08/14/96
,2-Dichloroethane-d4 (Surrogate)	105	%	8260	08/14/96
Toluene-d8 (Surrogate)	99	%	8260	08/14/96
-Bromofluorobenzene (Surrogate)	103	%	8260	08/14/96

Client Name:

MAXIM - Yakima

Project No.:

95-932

Laboratory No.: 177591

Sample Name:

MATRIX SPIKE 177580 12 H&R 1'

Sample Date:

08/13/96

Collected by:

RACHEL TAUMAN

Time Sampled:

0820

c	0	Ŧ	
a	u	Ţ.	ъ.

ample	Type:	SOIL

	MEASUR	RED .	METHOD	DATE
PARAMETER	VALUE		NUMBER	ANALYZED
HALOGENATED VOLATILE ORGANICS				
Data File Number-Volatiles	081496	1008		
Bromobenzene	<5	ug/kg	8260	08/14/96
Bromodichloromethane	<5	ug/kg	8260	08/14/96
Bromoform	<5	ug/kg	8260	08/14/96
Bromomethane	<5	ug/kg	8260	08/14/96
Carbon Tetrachloride	<5	ug/kg	8260	08/14/96
Chlorobenzene	91	%	8260	08/14/96
Chloroethane	<5	ug/kg	8260	08/14/96
Chloroform	<5	ug/kg	8260	08/14/96
Chloromethane (Methyl chloride)	<5	ug/kg	8260	08/14/96
Dibromochloromethane	<5	ug/kg	8260	08/14/96
Dibromomethane	<5	ug/kg	8260	08/14/96
Dichlorodifluoromethane	<5	ug/kg	8260	08/14/96
1,2-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,3-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,4-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,1-Dichloroethane	77	%	8260	08/14/96
1,2-Dichloroethane	<5	ug/kg	8260	08/14/96
1,1-Dichloroethene	<5	ug/kg	8260	08/14/96
c-1,2-Dichloroethene	<1	ug/kg	8260	08/14/96
t-1,2-Dichloroethene	<5	ug/kg	8260	08/14/96
1,2-Dichloropropane	<5	ug/kg	8260	08/14/96
c-1,3-Dichloropropene	<5	ug/kg	8260	08/14/96
t-1,3-Dichloropropene	<5	ug/kg	8260	08/14/96
Methylene chloride	<25	ug/kg	8260	08/14/96
1,1,1,2-Tetrachloroethane	<5	ug/kg	8260	08/14/96
1,1,2,2-Tetrachloroethane	<5	ug/kg	8260	08/14/96
[etrachloroethene	<5	ug/kg	8260	08/14/96
1,1,1-Trichloroethane	<5	ug/kg	8260	08/14/96
1,1,2-Trichloroethane	<5	ug/kg	8260	08/14/96
Trichloroethene	91	%	8260	08/14/96
richlorofluoromethane	<5	ug/kg	8260	08/14/96
,2,3-Trichloropropane	<5	ug/kg	8260	08/14/96
finyl Chloride	<5	ug/kg	8260	08/14/96
-Chloroethyl vinyl ether	<50 '	ug/kg	8260	08/14/96
,2-Dichloroethane-d4 (Surrogate)	98	%	8260	08/14/96
oluene-d8 (Surrogate)	102	%	8260	08/14/96
-Bromofluorobenzene (Surrogate)	97	%	8260	08/14/96

Client Name:

MAXIM - Yakima

Project No.:

95-932 Laboratory No.: 177592

Sample Name:

MATRIX SPIKE DUPLICATE 177580 12 H&R 1'

Sample Date:

08/13/96

Collected by:

RACHEL TAUMAN

Time Sampled:

0820

Sample Type: SOIL

PARAMETER	MEASURED VALUE		METHOD	DATE
FARAPIETER			NUMBER	ANALYZED
HALOGENATED VOLATILE ORGANICS				
Data File Number-Volatiles	081496	1009		
Bromobenzene	<5	ug/kg	8260	08/14/96
Bromodichloromethane	<5	ug/kg	8260	08/14/96
Bromoform	<5	ug/kg	8260	08/14/96
Bromomethane	<5	ug/kg	8260	. 08/14/96
Carbon Tetrachloride	<5	ug/kg	8260	08/14/96
Chlorobenzene	92	%	8260	08/14/96
Chloroethane	<5	ug/kg	8260	08/14/96
Chloroform	<5	ug/kg	8260	08/14/96
Chloromethane (Methyl chloride)	<5	ug/kg	8260	08/14/96
Dibromochloromethane	<5	ug/kg	8260	08/14/96
Dibromomethane	<5	ug/kg	8260	08/14/96
Dichlorodifluoromethane	<5	ug/kg	8260	08/14/96
1,2-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,3-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,4-Dichlorobenzene	<5	ug/kg	8260	08/14/96
1,1-Dichloroethane	<5	ug/kg	8260	08/14/96
1,2-Dichloroethane	<5	ug/kg	8260	08/14/96
1,1-Dichloroethene	78	%	8260	08/14/96
c-1,2-Dichloroethene	<5	ug/kg	8260	08/14/96
t-1,2-Dichloroethene	<5	ug/kg	8260	08/14/96
1,2-Dichloropropane	<5	ug/kg	8260	08/14/96
c-1,3-Dichloropropene	<5	ug/kg	8260	08/14/96
t-1,3-Dichloropropene	<5	ug/kg	8260	08/14/96
Methylene chloride	<25	ug/kg	8260	08/14/96
1,1,1,2-Tetrachloroethane	<5	ug/kg	8260	08/14/96
1,1,2,2-Tetrachloroethane	<5	ug/kg	8260	08/14/96
Tetrachloroethene	<5	ug/kg	8260	08/14/96
1,1,1-Trichloroethane	<5	ug/kg	8260	08/14/96
1,1,2-Trichloroethane	<5	ug/kg	8260	08/14/96
 Trichloroethene	93	%	8260	08/14/96
richlorofluoromethane	<5	ug/kg	8260	08/14/96
,2,3-Trichloropropane	< 5	ug/kg	8260	08/14/96
/inyl Chloride	<5	ug/kg	8260	08/14/96
2-Chloroethyl vinyl ether	<50	ug/kg	8260	08/14/96
,2-Dichloroethane-d4 (Surrogate)	102	%	8260	08/14/96
oluene-d8 (Surrogate)	191	%	8260	08/14/96
-Bromofluorobenzene (Surrogate)	102	%	8260	08/14/96

Kachel Gernan SO O I PAB NUMBER da de Son Son Son Silhela Batham recession godson AA SIPHICLAN DIGGING Vacomed fill Garel) Collate KILLED ORD GOLIGIANS Samoles Brate FI 中國 - + (>08) Contact-Address or Location OSUND Brown SQF/Sol Contact or Report to Sampler Signature good Soil Neigh O 些些 ANALYSIS REDUIRED CHAIN OF CUSIODY RECURD Billings, MT Helena, MT
Boise, ID Creat Falls, MT d MAXIM THE X ST. A LOA NO. OF CONTAINERS Received by: TAP 一个配子 Received by: Received by: Received by: Date Time SAMPLE V Time Time COMP OR GRAB Date Date # IS HIP R 35 # 14 HAPPO 15 井一十の職の #15 H&R 30 # 17 Way 102 #18 W/d/pos #16 WPAP 1.5 一下った香 #12 48R @1 Sittinged Lauraby #13 HPP(0) SAMPLE LOCATION OR DESCRIPTION Sampler Name (Printed) Rego (of 2 3 から AKHEL 40.946 TIME ンガン 8:50 10:10 00:01 9.12 9:50 9,10 Relinquished by: Relinquished by: Relinquished by: Relinquished by: Project Number DATE d 10 212

from SUMP Samples 16,17,18 Colors Sangle LAB NUMBER though human In Soil 406855 concrete Stab 6" between Contact Address or Location di reetta 707 Sample 19 pro Sampler Signature Good Soil Distance 508 Remarks: ANALYSIS REQUIRED **CHAIN OF CUSTODY RECORD** ☐ Missoula, MT ▼ Yakima, WA ☐ Helena, MT TECHNOLOGIES INC 0/00 TAPIX NO. OF CONTAINERS Received by: Received by: Received by: Received by: Great Falls, MT 0 Billings, MT Boise, ID SAMPLE MATRIX S Time Time アト O Det COMP OR GRAB -120 Way 1016 6106 Date Date Date Southgate Laundey 70 0 9 0 1+ SAMPLE LOCATION OR DESCRIPTION ササ de TIME N. 76 Sampler Name (Printed) Relinquished by: Relinquished by: Relinquished by: Relinquished by: Project Number DATE COLLECTED 30



SAMPLE RECEIPT CHECKLIST

Client Name M- Yakema				Date/Time Received	8/14/96 ODate 0 1	0950 Time
Project Suittgate Fridy				Received by	A Colline	lenc
Laboratory number(s) 177580 -90				Carrier name	Lew.	\times
Checklist completed by: Initials / Date				Sample Type	Sail	1
		YES NO		1		YES NO
1.	Shipping container in good condition?	<u></u>	16.	All samples rec'd within	n holding time?	<u>~</u> _
2.	Custody seals present on shipping container?	V	17.	Preservation pH check performed by	·:	1) //
3.	Condition: Intact Broken		18.	Metals bottle(s) pH <2?	•	N
4.	Chain of custody present?	<u>~</u> _	19.	Nutrient bottle(s) pH <		-/-
5.	Chain of custody signed when		20.	Cyanide bottle(s) pH >1	12?	/-
	relinquished and received?	~	21.	Sulfide bottle(s) pH >97	?	-
6. Chain of custody agrees with sample labels?	V _	22.	Oil & grease bottle(s) p	H <2?	->-	
7.	Custody seals on sample bottles?	_ ~	23.	TOC bottle(s) pH <2?		_(_
8.	Condition: Intact Broken	_	24.	DRO/418.1 bottle(s) pl	H <2?	__
9.	Samples in proper container/bottle?	V	25.	Phenolics bottle(s) pH	<2?	1
10.	Samples intact?	<u></u>	26.	Volatiles (VOA) pH < (VOA pH checked by a		M
11.	Sufficient sample volume for indicated test?	V	27.	Client contacted?	ilalyst)	<u> </u>
12.	VOA vials have zero headspace?	NA	28.	Person contacted		
13.	Trip Blank received?	_ <u> </u>	29.	Date contacted		
14.	Ice/Frozen Blue Ice present in shipping container? (circle one)	<u>~</u> _	30.	Contacted by		
15	Container temperature 1. 16.6°C2.	3	31.	Regarding?		
Note: S Please o	amples may be affected when not transport contact the lab if you have concerns about	rted at the tempera the temperature of	ture red	commended by the EPA f	or the test you've	selected.
СОММ	2 31	150	ET .	25.4		141

Data File: C:\HPCHEM\1\DATA\081496\1007.D

Acq Time : 14 Aug 96 12:00 pm Sample

: 177580 5gm : GC/MS Inst Multiplr: 1.00

Operator: GHP

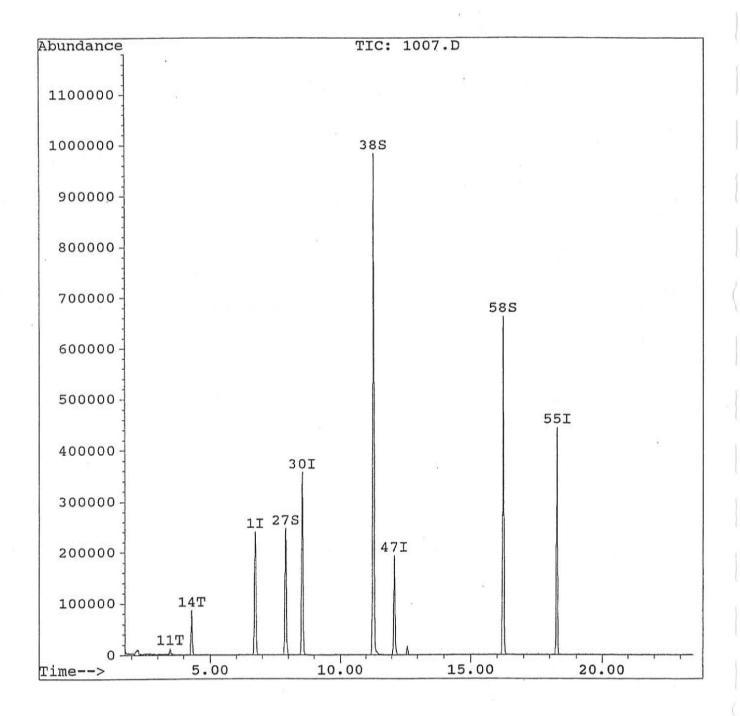
Misc

Quant Time: Aug 14 12:26 1996

: C:\HPCHEM\1\METHODS\82600808.M Method

Title : 8260

Last Update : Wed Aug 14 10:52:10 1996 Response via : Single Level Calibration



Data File : C:\HPCHEM\1\DATA\081496\1010.D Acq Time : 14 Aug 96 1:35 pm

Sample : 177581 5gm

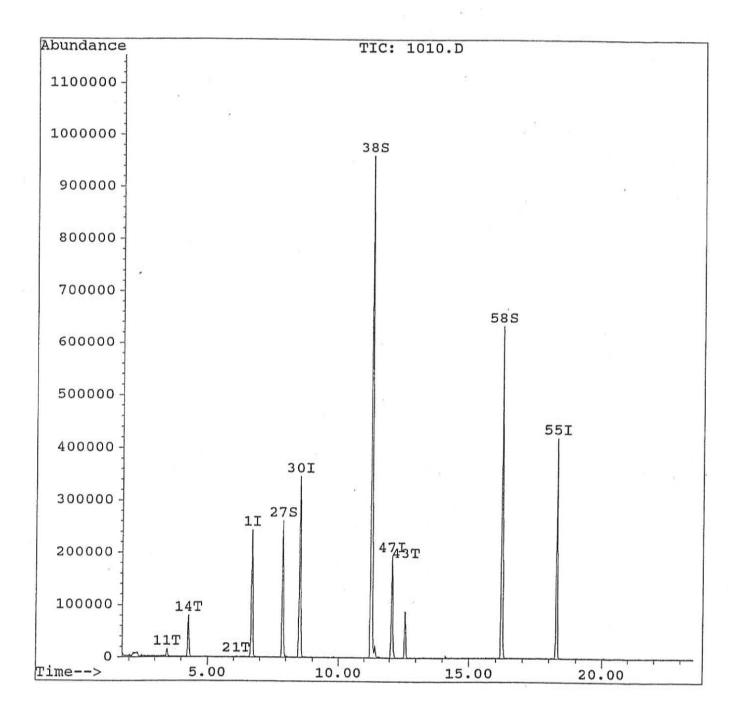
Misc

Quant Time: Aug 14 14:02 1996

Method : C:\HPCHEM\1\METHODS\82600808.M

Title : 8260

Last Update : Wed Aug 14 10:52:10 1996 Response via : Single Level Calibration



Operator: GHP

Multiplr: 1.00

: GC/MS

Inst

Data File : C:\HPCHEM\1\DATA\081496\1011.D

Acq Time : 14 Aug 96 2:07 pm

: 177582 5gm Sample

Operator: GHP Inst : GC/MS Multiplr: 1.00

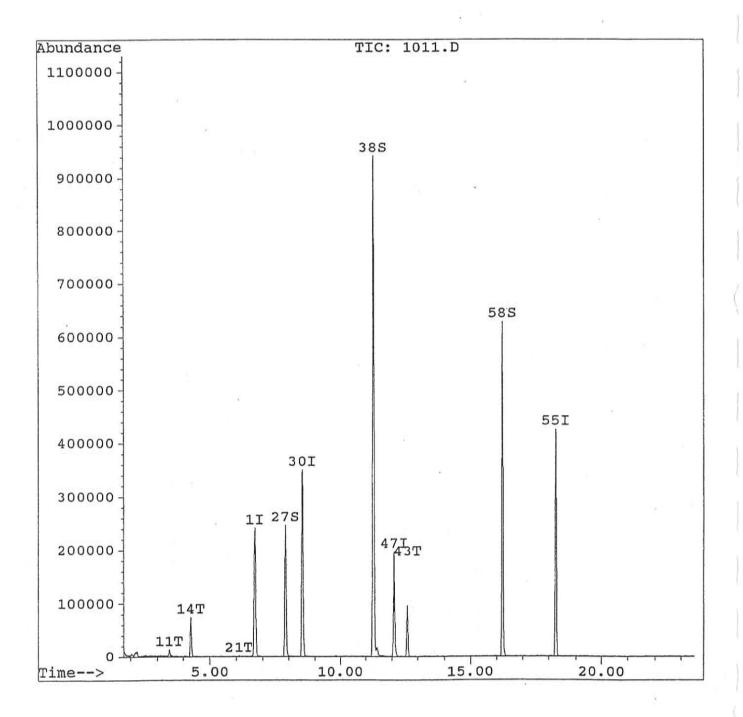
Quant Time: Aug 14 14:34 1996

Method : C:\HPCHEM\1\METHODS\82600808.M

: 8260 Title

Misc

Last Update : Wed Aug 14 10:52:10 1996 Response via : Single Level Calibration



Data File : C:\HPCHEM\1\DATA\081496\1012.D

Acq Time : 14 Aug 96 2:39 pm

Sample : 177583 5gm

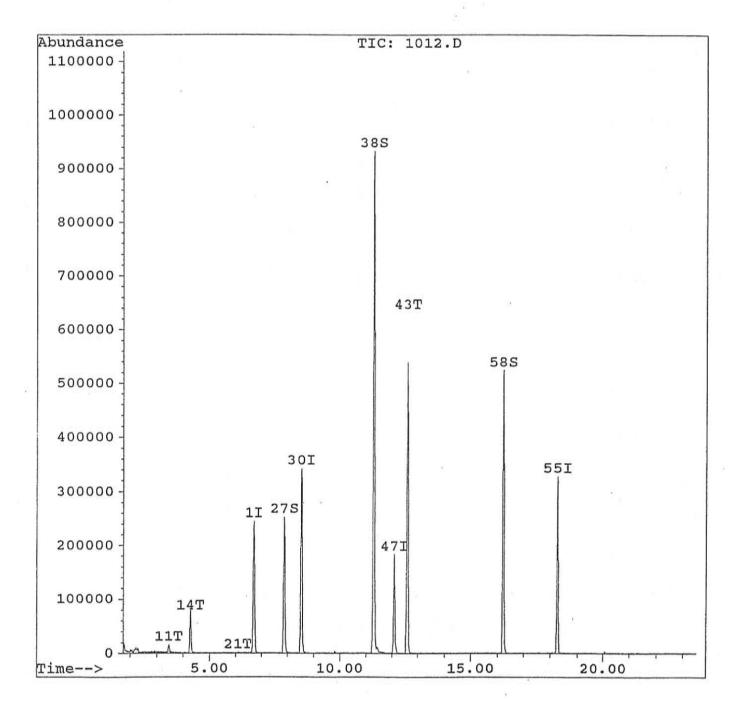
Misc :

Quant Time: Aug 14 15:06 1996

Method : C:\HPCHEM\1\METHODS\82600808.M

Title : 8260

Last Update : Wed Aug 14 10:52:10 1996 Response via : Single Level Calibration



Operator: GHP

Inst : GC/MS

Multiplr: 1.00

Data File: C:\HPCHEM\1\DATA\081496\1013.D

3:12 pm

Acq Time : 14 Aug 96 Sample : 177584 5gm

Operator: GHP Inst : GC/MS Multiplr: 1.00

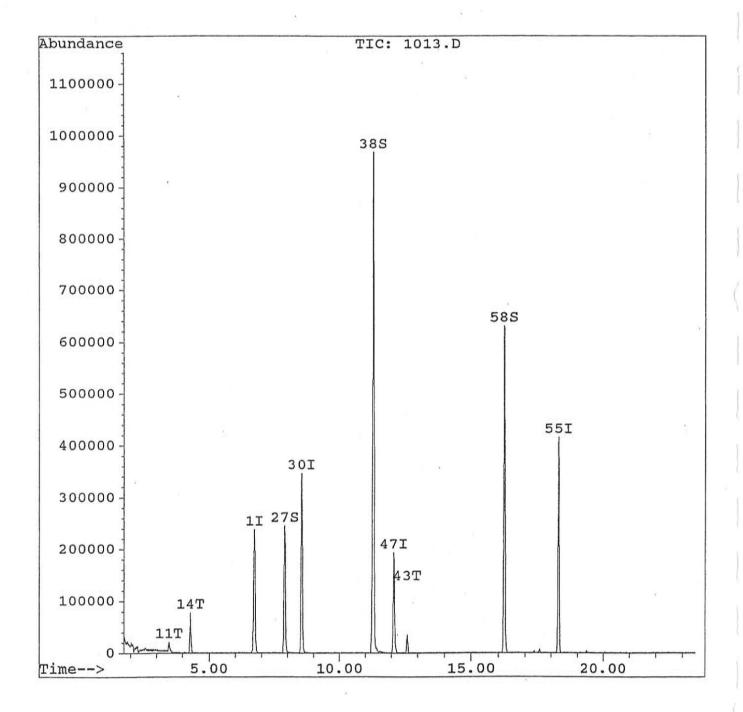
Quant Time: Aug 14 15:39 1996

: C:\HPCHEM\1\METHODS\82600808.M Method

Title : 8260

Misc

Last Update : Wed Aug 14 10:52:10 1996 Response via : Single Level Calibration



Data File : C:\HPCHEM\1\DATA\081496\1014.D

Acq Time : 14 Aug 96 3:45 pm

Sample : 177585 5gm

Operator: GHP Inst : GC/MS Multiplr: 1.00

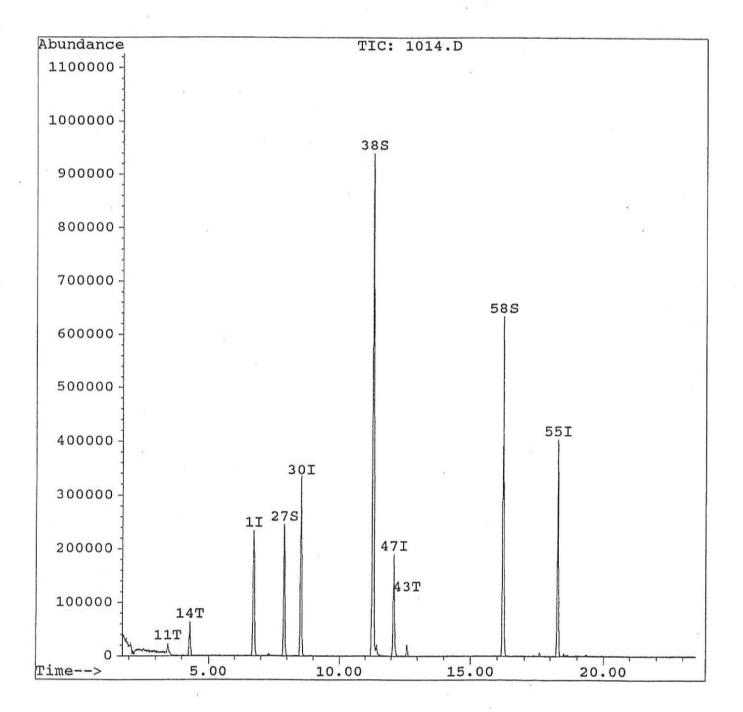
Quant Time: Aug 14 16:11 1996

Method : C:\HPCHEM\1\METHODS\82600808.M

: 8260 Title

Misc

Last Update : Wed Aug 14 10:52:10 1996 Response via : Single Level Calibration



Data File : C:\HPCHEM\1\DATA\081496\1015.D

4:17 pm

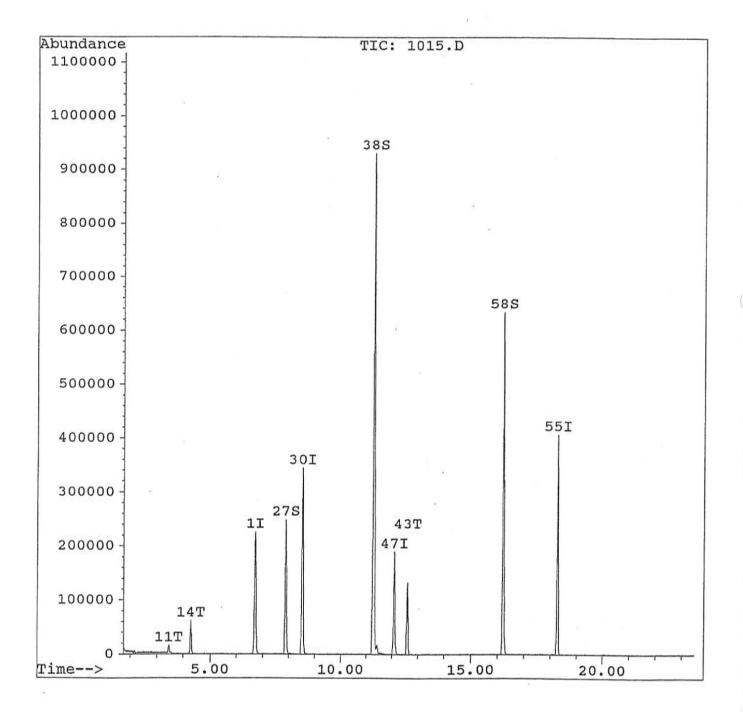
Acq Time : 14 Aug 96 Sample : 177586 5gm

Misc

Quant Time: Aug 14 16:44 1996

: C:\HPCHEM\1\METHODS\82600808.M Title : 8260

Last Update : Wed Aug 14 10:52:10 1996 Response via : Single Level Calibration



Operator: GHP Inst : GC/MS

Multiplr: 1.00

Data File : C:\HPCHEM\1\DATA\081496\1016.D

Acq Time : 14 Aug 96 4:49 pm

: 177587 5gm Sample

Operator: GHP Inst : GC/MS Multiplr: 1.00

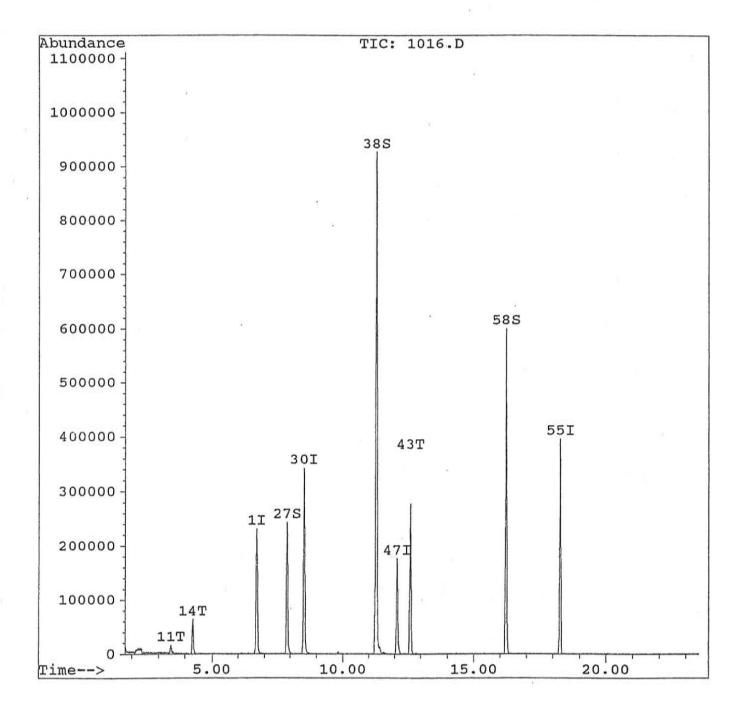
Quant Time: Aug 14 17:15 1996

Method : C:\HPCHEM\1\METHODS\82600808.M

Title : 8260

Misc

Last Update : Wed Aug 14 10:52:10 1996 Response via : Single Level Calibration



Data File : C:\HPCHEM\1\DATA\081496\1017.D

Acq Time : 14 Aug 96 5:20 pm

Sample : 177588 5gm

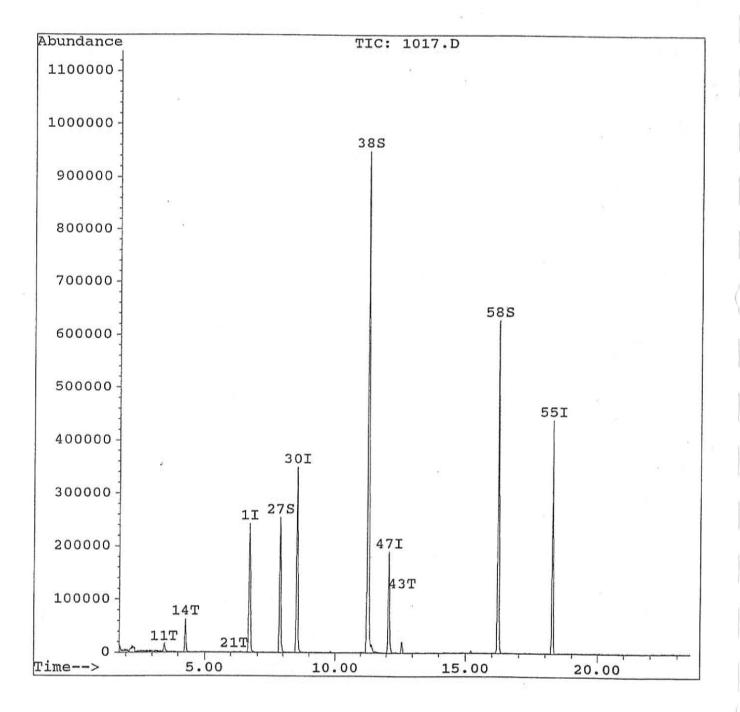
Misc

:

Quant Time: Aug 14 17:47 1996

Method : C:\HPCHEM\1\METHODS\82600808.M
Title : 8260

Last Update : Wed Aug 14 10:52:10 1996 Response via : Single Level Calibration



Operator: GHP

Multiplr: 1.00

: GC/MS

Inst

Data File : C:\HPCHEM\1\DATA\081496\1018.D

Acq Time : 14 Aug 96 5:52 pm

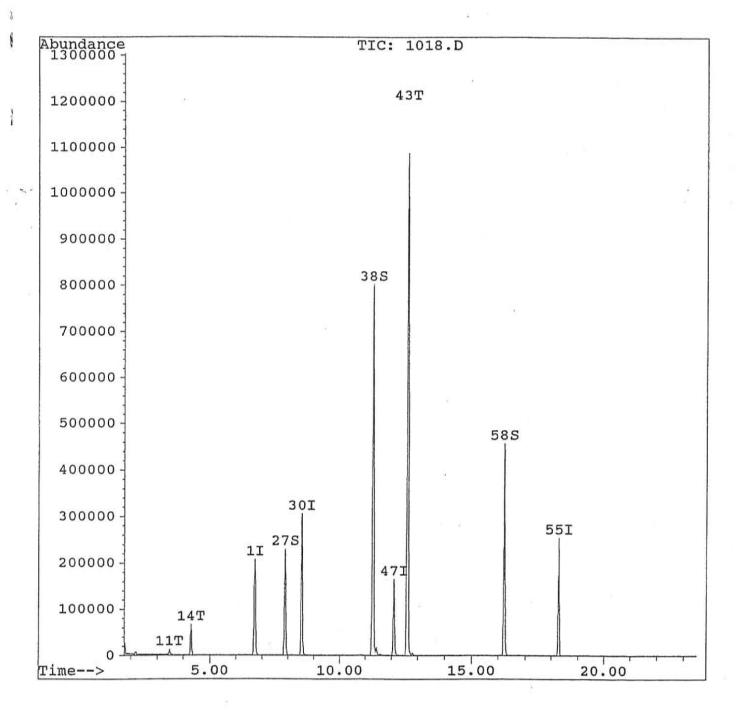
Sample : 177589 5gm

Misc

Quant Time: Aug 14 18:19 1996

Method : C:\HPCHEM\1\METHODS\82600808.M Title : 8260

Last Update : Wed Aug 14 10:52:10 1996 Response via : Single Level Calibration



Operator: GHP

Multiplr: 1.00

: GC/MS

Inst

Data File: C:\HPCHEM\1\DATA\081496\1019.D
Acq Time: 14 Aug 96 6:23 pm

Sample : 177590 5gm

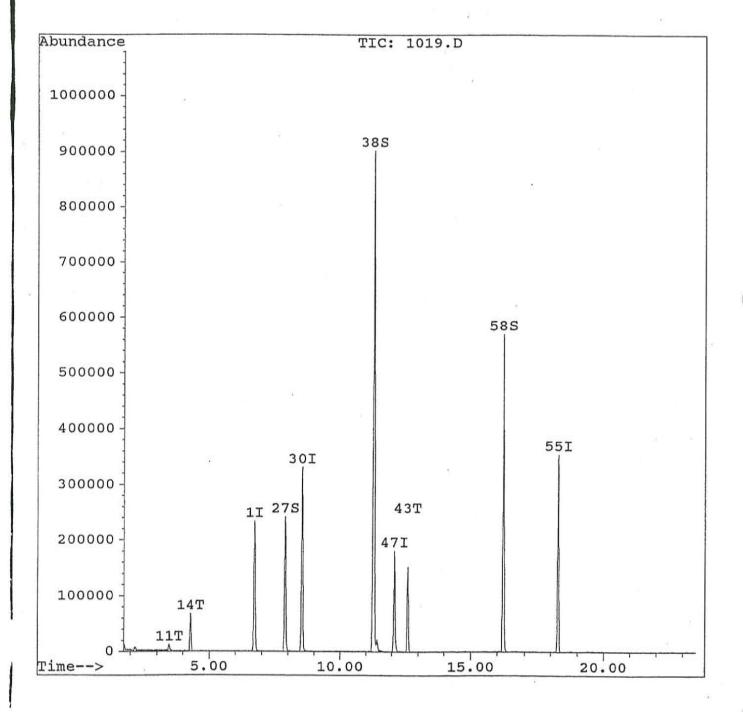
Misc

Quant Time: Aug 14 18:50 1996

Method : C:\HPCHEM\1\METHODS\82600808.M

Title : 8260

Last Update : Wed Aug 14 10:52:10 1996 Response via : Single Level Calibration



Operator: GHP

Inst : GC/MS

Multiplr: 1.00

Data File : C:\HPCHEM\1\DATA\081496\1008.D

Acq Time : 14 Aug 96 12:32 pm Sample : 177591 ms 5gm

Misc

Quant Time: Aug 14 12:59 1996

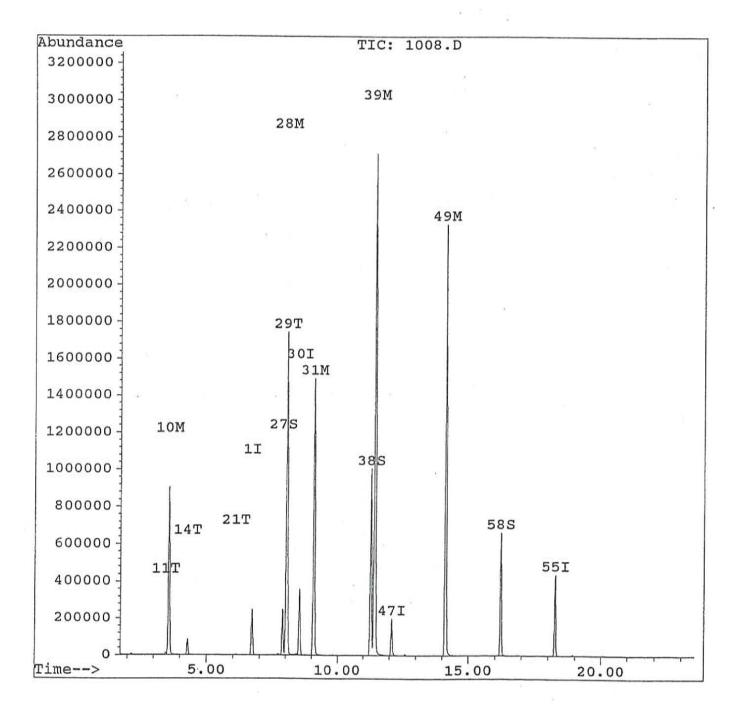
Operator: GHP Inst : GC/MS

Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\82600808.M

Title : 8260

Last Update : Wed Aug 14 10:52:10 1996 Response via : Single Level Calibration



Data File: C:\HPCHEM\1\DATA\081496\1009.D

Acq Time : 14 Aug 96 1:04 pm

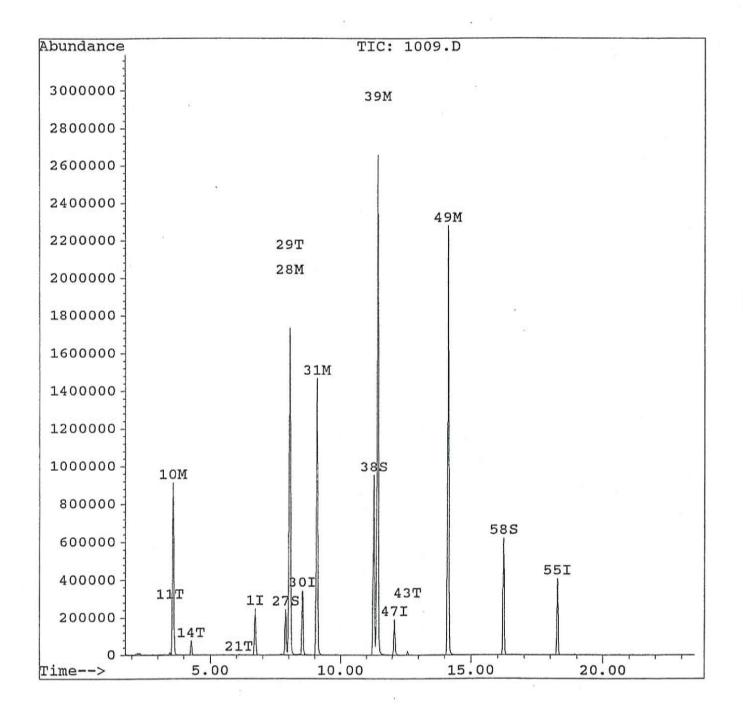
Sample : 177592 ms 5gm Misc :

Quant Time: Aug 14 13:33 1996

Method : C:\HPCHEM\1\METHODS\82600808.M

Title : 8260

Last Update : Wed Aug 14 10:52:10 1996 Response via : Single Level Calibration



Operator: GHP

Multiplr: 1.00

: GC/MS

Inst

APPENDIX E

REMEDIAL ACTIONS-LABORATORY REPORTS OF SOIL SAMPLES (JULY-SEPTEMBER 1997)

7110 38th Drive SE Lacey, Washington 98503

Mobile Environmental Laboratories Environmental Sampling Services

Telephone:

360-459-4670

Fax:

360-459-3432

July 18, 1997

Rachel Tauman Maxim Technologies 96 South Zuni Street Denver, CO 80223

Dear Ms. Tauman:

Please find enclosed the data report for analyses of soil samples conducted July 16, 1997, for the Southgate Laundry Project, Project No. 5809500946.04, in Yakima, Washington. The soil samples were analyzed for Specific Halogenated Hydrocarbons and BTEX by Modified EPA Method 8010/8020.

The results of the analyses are summarized in the attached tables. Applicable detection limits and QA/QC data are included. An invoice for this work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Maxim Technologies for this project. It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michaela Horace

President

QA/QC FOR ANALYTICAL METHODS

GENERAL

The TEG Northwest Laboratory quality assurance and quality control (QA/QC) procedures are conducted following the guidelines and objectives which meet or exceed certification/-accreditation requirements of California DOHS, Washington DOE, and Oregon DEQ. The Quality Control Program is a consistent set of procedures which assures data quality through the use of appropriate blanks, replicate analyses, surrogate spikes, and matrix spikes, and with the use of reference standards that meet or exceed EPA standards.

When analyses are taking place on-site with the mobile lab, the need for Field Blanks or Travel/Trip Blanks is eliminated. If there is going to be a delay before sample preparation for analysis, the sample is stored at 4° C.

ANALYTICAL METHODS

TEG Northwest Labs use analytical methodologies which are in conformity with U. S. Environmental Protection Agency (EPA), Washington DOE, and Oregon DEQ methodologies. When necessary and appropriate due to the nature or composition of the sample, TEG may use variations of the methods which are consistent with recognized standards or variations used by the industry and government laboratories.

Purgeable Volatile Aromatics (BTEX, EPA 602/8020)

A check standard is run at the beginning of the day. The check standard is run at the end of the day. Both open and close standards must be within 15% of the continuing calibration curve value. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135% unless high sample concentrations interfere with the determination of the recovery percentage. At least 1 method blank is run per day.

Purgeable Volatile Halocarbons (Chlorinated Hydrocarbons, EPA 601/8010,8021)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

SOUTHGATE LAUNDRY PROJECT Yakima, Washington Maxim Technologies, Inc.

Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Soil

Sample-Number	MDL	Method Blank	TP-1 #1 @ 2'	TP-1 #1 @ 5'	TP-1 #1 @ 9'	TP-1 #1 @ 13'	TP-1 #2 @ 2'
Date	mg/kg	07/16/97 mg/kg	07/16/97 mg/kg	07/16/97 mg/kg	07/16/97 mg/kg	07/16/97 mg/kg	07/16/97 mg/kg
Vinylchloride	0.05	nd	nd	nd	nd	nd	nd
1,1 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd
Benzene	0.05	nd	nd	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd	nd	nd
Toluene	0.05	nd	nd	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	nd	nd	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd	nd	nd	nd
m,p-Xylene	0.05	nd	nd	nd	nd	nd	nd
o-Xylene	0.05	nd	nd	nd	nd	nd	nd
Dichloromethane	0.05	nd	nd	nd	nd	nd	nd
1,1 Dichloroethane	0.05	nd	nd	nd	nd	nd	nd
1,2 Dichloroethane	0.05	nd	nd	nd	nd	nd	nd
Chloroform	0.05	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	0.05	nd	nd	nd	nd	nd	nd
1,1,1 Trichloroethane	0.05	nd	nd	nd	nd	nd	nd
1,1,2 Trichloroethane	0.05	nd	nd	nd	nd	nd	nd
1,1,1,2-Tetrachloroethane	0.05	nd	nd	nd	nd	nd	nď
1,1,2,2-Tetrachloroethane	0.05	nd	nd	nd	nd	nd	nd
Spike Recovery (%)		94	86	90	95	93	86

[&]quot;nd" Indicates Not Detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

SOUTHGATE LAUNDRY PROJECT Yakima, Washington Maxim Technologies, Inc. Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Soil

Sample-Number	MDL	TP-1 #2 @ 5'	TP-1 #2 @ 9'	TP-1 #2 @ 9' Dup	TP-1 #2 @ 13'	TP-1 #3 @ 7'	
Date	mg/kg	07/16/97 mg/kg	07/16/97 mg/kg	07/16/97 mg/kg	07/16/97 mg/kg	07/16/97 mg/kg	
77:1-1	0.05						
Vinylchloride	0.05	nd	nd	nd	nd	nd	
1,1 Dichloroethene	0.05	nd	nd	nd	nd	nd	
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	
Benzene	0.05	nd	nd	nd	nd	nd	
Trichloroethene	0.05	nd	nd	nd	nd	nd	
Toluene	0.05	nd	nd	nd	nd	nd	
Tetrachloroethene	0.05	0.11	0.04	0.05	0.05	nd	
Ethylbenzene	0.05	nd	nd	nd	nd	nd	
m,p-Xylene	0.05	nd	nd	nd	nd	nd	
o-Xylene	0.05	nd	nd	nd	nd	nd	
Dichloromethane	0.05	nd	nd	nd	nd	. nd	
1,1 Dichloroethane	0.05	nd	nd	nd	, nd	nd	
1,2 Dichloroethane	0.05	nd	nd	nd	nd	nd	
Chloroform	0.05	nd	nd	nd	nd	nd	
Carbon Tetrachloride	0.05	nd	nd	nd	nd	nd	
1,1,1 Trichloroethane	0.05	nd	nd	nd	nd	nd	
1,1,2 Trichloroethane	0.05	nd	nd	nd	nd	nd	
1,1,1,2-Tetrachloroethane	0.05	nd	nd	nd	nd	nd	
1,1,2,2-Tetrachloroethane	0.05	nd	nd	nd	nd	nd	
Spike Recovery (%)		85	86	86	85	73	

"nd" Indicates Not Detected at the listed detection limit.

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[&]quot;int" Indicates that interference peaks prevent determination.

SOUTHGATE LAUNDRY PROJECT

Yakima, Washington Maxim Technologies, Inc. Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Soil

====== ===============================	MDL	Stockpile #1	Stockpile #2	Stockpile #3	=====	=====	====
Date		07/16/97	07/16/97	07/16/97	***************************************		
	mg/kg	mg/kg	mg/kg	mg/kg			
Vinylchloride	0.05	nd	nd				
1,1 Dichloroethene	0.05	nd	nd	nd			
Trans-1,2 Dichloroethene	0.05	nd	2020	nd			
Cis-1,2 Dichloroethene	0.05	nd	nd	nd			
Benzene	0.05	nd	nd	nd			
Trichloroethene	0.05		nd	nd			
Toluene	0.05	nd	nd	nd			
Tetrachloroethene		nd	nd	nd			
Ethylbenzene	0.05	0.07	0.06	0.08			
and the state of t	0.05	nd	nd	nd			
m,p-Xylene	0.05	nd	nd	nd			
o-Xylene	0.05	nd	nd	nd			
Dichloromethane	0.05	nd	nd	nd			
l,1 Dichloroethane	0.05	nd	nd	nd			
1,2 Dichloroethane	0.05	nd	nd	nd			
Chloroform	0.05	nd	nd	nd			
Carbon Tetrachloride	0.05	nd	nd	nd			
1,1,1 Trichloroethane	0.05	nd	nd	nd			
,1,2 Trichloroethane	0.05	nd	nd	nd			
1,1,1,2-Tetrachloroethane	0.05	nd	nd	nd			
1,1,2,2-Tetrachloroethane	0.05	nd	nd	nd			
Spike Recovery (%)		118	86	92			

"nd" Indicates Not Detected at the listed detection limit.
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SOUTHGATE LAUNDRY PROJECT

Yakima, Washington Maxim Technologies, Inc. Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Soil

=======================================	====	=====	=====	=====	=====	=====	=====
Sample-Number	MDL	TP-2 #1	TP-2 #1	TP-2 #1			
		@ 2'	@ 4.5'	@ 4.5' Dup			
Date		07/16/97	07/16/97	07/16/97			************
Duto	mg/kg	mg/kg	mg/kg	mg/kg			
	mg/kg	mg/kg	mig/kg				
Vinylchloride	0.05	nd	nd	nd			
1,1 Dichloroethene	0.05	nd	nd	nd			
Trans-1,2 Dichloroethene	0.05	nd	nd	nd			
Cis-1,2 Dichloroethene	0.05	nd	nd	nd			
Benzene	0.05	nd	nd	nd			
Trichloroethene	0.05	nd	nd	nd			
Toluene	0.05	nd	nd	nd			
Tetrachloroethene	0.05	nd	0.06	0.05			
Ethylbenzene	0.05	nd	nd	nd			
m,p-Xylene	0.05	nd	nd	nd			
o-Xylene	0.05	nd	nd	nd			
Dichloromethane	0.05	nd	nd	nd			
1,1 Dichloroethane	0.05	nd	nd	nd			
1,2 Dichloroethane	0.05	nd	nd	nd			
Chloroform	0.05	nd	nd	nd			
Carbon Tetrachloride	0.05	nd	nd	nd			
1,1,1 Trichloroethane	0.05	nd	nd	nd			
1,1,2 Trichloroethane	0.05	nd	nd	nd			
1,1,1,2-Tetrachloroethane	0.05	nd	nd	nd			
1,1,2,2-Tetrachloroethane	0.05	nd	nd	nd			
Spike Recovery (%)		92	76	98			
					2		

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SOUTHGATE LAUNDRY PROJECT

Yakima, Washington Maxim Technologies, Inc. Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Soil

Sample-Number	MDL	1 PPM MS	1 PPM MSD	=====	=====	=====	=====
Date		07/16/97	07/16/97				
	mg/kg	mg/kg	mg/kg				
Vinylchloride	0.05			***************************************			*************
1,1 Dichloroethene	0.05	1.14	1.13				
Trans-1,2 Dichloroethene	0.05	1.10	1.00				
Cis-1,2 Dichloroethene	0.05	1.03	0.92				
Benzene	0.05	0.99	0.99				
Trichloroethene	0.05	1.09	1.05				
Toluene	0.05	1.06	0.95				
Tetrachloroethene	0.05	1.03	0.99				
Ethylbenzene	0.05	1.10	1.15				
m,p-Xylene	0.05	2.15	2.11				
o-Xylene	0.05	1.01	0.91				
Dichloromethane	0.05	0.86	0.85				
1,1 Dichloroethane	0.05	0.91	0.86				
1,2 Dichloroethane	0.05	1.00	0.97				
Chloroform	0.05	0.89	0.82				
Carbon Tetrachloride	0.05	0.95	0.93				
1,1,1 Trichloroethane	0.05	0.91	0.83				
1,1,2 Trichloroethane	0.05	0.94	0.86				
1,1,1,2-Tetrachloroethane	0.05	0.92	0.92				
1,1,2,2-Tetrachloroethane	0.05	0.98	0.96	2			
Spike Recovery (%)		104	102				

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SOUTHGATE LAUNDRY PROJECT

Yakima, Washington Maxim Technologies, Inc. Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Soil

Sample-Number	MDL	Method Blank	TP-1 #2A @ 5'	TP-1 #2A @ 7'	TP-1 #2A @ 7' Dup		
Date	mg/kg	07/18/97 mg/kg	07/18/97 mg/kg	07/18/97 mg/kg	07/18/97 mg/kg		
Vinylchloride	0.05	nd	nd	nd	nd		
1,1 Dichloroethene	0.05	nd	nd	nd	nd		
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd		
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd		
Benzene	0.05	nd	nd	nd	nd		
Trichloroethene	0.05	nd	nd	nd	nd		
Toluene	0.05	nd	nd	nd	nd		
Tetrachloroethene	0.05	nd	nd	nd	nd		
Ethylbenzene	0.05	nd	nd	nd	nd		
m,p-Xylene	0.05	nd	nd	nd	nd		
o-Xylene	0.05	nd	nd	nd	nd		
Dichloromethane	0.05	nd	nd	nd	nd		
1,1 Dichloroethane	0.05	nd	nd	nd	nd		
1,2 Dichloroethane	0.05	nd	nd	nd	nd		
Chloroform	0.05	nd	nd	nd	nd		
Carbon Tetrachloride	0.05	nd	nd	nd	nd		
1,1,1 Trichloroethane	0.05	nd	nd	nd	nd		
1,1,2 Trichloroethane	0.05	nd	nd	nd	nd		
1,1,1,2-Tetrachloroethane	0.05	nd	nd	nd	nd		
1,1,2,2-Tetrachloroethane	0.05	nd	nd	nd	nd	5%	
Spike Recovery (%)		90	92	91	91		

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[&]quot;int" Indicates that interference peaks prevent determination.

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7110 38th Drive SE Lacey, Washington 98503

Mobile Environmental Laboratories Environmental Sampling Services

Telephone:

360-459-4670

Fax:

360-459-3432

Interior-That Spots

September 15, 1997

Rachel Tauman Maxim Technologies 96 South Zuni Street Denver, CO 80223

Dear Ms. Tauman:

Please find enclosed the data report for analyses of soil and water samples conducted September 10 and 11, 1997, for the Southgate Laundry Project, Project No. 5809500946.04, in Yakima, Washington. Soil and water samples were analyzed for Specific Halogenated Hydrocarbons and BTEX by Modified EPA Method 8010/8020.

The results of the analyses are summarized in the attached tables. All soil values are reported on a dry weight basis. Applicable detection limits and QA/QC data are included. An invoice for this work is also enclosed.

TEG Northwest appreciates the opportunity to have provided analytical services to Maxim Technologies for this project. It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

Michael A. Korosec

Michael O Keroree

President

QA/QC FOR ANALYTICAL METHODS

GENERAL

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ANALYTICAL METHODS

TEG Northwest Labs use analytical methodologies which are in conformity with U. S. Environmental Protection Agency (EPA), Washington DOE, and Oregon DEQ methodologies. When necessary and appropriate due to the nature or composition of the sample, TEG may use variations of the methods which are consistent with recognized standards or variations used by the industry and government laboratories.

Purgeable Volatile Aromatics (BTEX, EPA 602/8020)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

Purgeable Volatile Halocarbons (Chlorinated Hydrocarbons, EPA 601/8010,8021)

A blank and a calibration standard are run at the beginning of the day. The standard must be within 15% of the continuing calibration curve value. The standard is rerun at the end of the day if more than 10 samples have been run. All samples are prepared with a surrogate spike, and the recovery must be between 65% and 135%. At least 1 method blank is run per day.

Page 1

SOUTHGATE LAUNDRY PROJECT Yakima, Washington Maxim Technologies, Inc. Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Soil

"nd" Indicates Not Detected at the listed detection limit.
"int" Indicates that interference peaks prevent determination.

Sample-Number	MDL	Method Blank	1 East @ 3'	1 West @ 3'	1 East @ 5'	1 West @ 4'	1 Center @ 6'	1 Center @ 7
Date	mg/kg	09/10/97 mg/kg						
Vinylchloride	0.05	nd	nd	nd	nd	nd	nd	no
Benzene	0.05	nd	nd	nd	nd	nd	nd	no
Toluene	0.05	nd	nd	nd	nd	nd	nd	no
Ethylbenzene	0.05	nd	nd	nd	nd	nd	nd	no
Total-Xylene	0.05	nd	nd	nd	nd	nd	nd	no
1,1 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd	no
Dichloromethane	0.05	nd	nd	nd	nd	nd	nd	no
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd	no
1,1 Dichloroethane	0.05	nd	nd	nd	nd	nd	nd	no
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd	no
Chloroform	0.05	nd	nd	nd	nd	nd	nd	no
1,1,1 Trichloroethane	0.05	nd	nd	nd	nd	nd	nd	no
Carbon Tetrachloride	0.05	nd	nd	nd	nd	nd	nd	no
1,2 Dichloroethane	0.05	nd	nd	nd	nd	nd	nd	nc
Trichloroethene	0.05	nd	nd	nd	nd	nd	nd	no
1,1,2 Trichloroethane	0.05	nd	nd	nd	nd	nd	nd	no
Tetrachloroethene	0.05	nd	1.22	0.76	0.61	1.12	0.64	1.15
1,1,1,2-Tetrachloroethane	0.05	nd						
1,1,2,2-Tetrachloroethane	0.05	nd						
Spike Recovery (%)		80	85	92	93	95	100	90

Page 2

SOUTHGATE LAUNDRY PROJECT

Yakima, Washington Maxim Technologies, Inc. Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Soil

Sample-Number	MDL	1 Center @ 8.5	SP TestPit 1 East	SP TestPit 1 West	SP TestPit 1 Center	Test Pit 2 2 East @3'	Test Pit 2 2 West @3'	Test Pit 2 2 Center @ 4
Date		09/10/97	09/10/97	09/10/97	09/10/97	09/10/97	09/10/97	09/10/97
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Vinylchloride	0.05	nd	nd	nd	nd	nd	nd	nd
Benzene	0.05	nd	nd	nd	nd	nd	nd	nd
Toluene	0.05	nd	nd	nd	nd	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd	nd	nd	nd	nd
Total-Xylene	0.05	nd	nd	nd	nd	nd	nd	nd
1,1 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd	nd
Dichloromethane	0.05	nd	nd	nd	nd	nd	nd	nd
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd	nd
1,1 Dichloroethane	0.05	nd	nd	nd	nd	nd	nd	nd
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	nd	nd
Chloroform	0.05	nd	nd	nd	nd	nd	nd	nd
1,1,1 Trichloroethane	0.05	nd	nd	nd	nd	nd	nd	nd
Carbon Tetrachloride	0.05	nd	nd	nd	nd	nd	nd	nd
1,2 Dichloroethane	0.05	nd	nd	nd	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd	nd	nd	nd
1,1,2 Trichloroethane	0.05	nd	nd	nd	nd	nd	nd	nd
Tetrachloroethene	0.05	1.01	0.85	0.91	0.85	0.85	0.65	0.25
1,1,1,2-Tetrachloroethane	0.05	nd	nd	nd	nd	nd	nd	nd
1,1,2,2-Tetrachloroethane	0.05	nd	nd	nd	nd	nd	nd	nd
Spike Recovery (%)		93	127	98	126	127	102	125

[&]quot;nd" Indicates Not Detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

Page 4

SOUTHGATE LAUNDRY PROJECT

Yakima, Washington Maxim Technologies, Inc. Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Soil

Sample-Number	MDL	Test Pit 2 @ 8.5'	SP Test Pit 2 #1 Comp	SP Test Pit 2 #2 Comp	SP Test Pit 2 #2 Comp Dup	SP Test Pit 2 #3 Comp	
Date		09/10/97	09/10/97	09/10/97	09/10/97	09/10/97	
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	
Vinylchloride	0.05	nd	nd	nd	nd	nd	
Benzene	0.05	nd	nd	nd	nd	nd	
Toluene	0.05	nd	nd	nd	nd	nd	
Ethylbenzene	0.05	nd	nd	nd	nd	nd	
Total-Xylene	0.05	nd	nd	nd	nd	nd	
1,1 Dichloroethene	0.05	nd	nd	nd	nd	nd	
Dichloromethane	0.05	nd	nd	nd	nd	nd	
Trans-1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	
1,1 Dichloroethane	0.05	nd	nd	nd	nd	nd	
Cis-1,2 Dichloroethene	0.05	nd	nd	nd	nd	nd	
Chloroform	0.05	nd	nd	nd	nd	nd	
1,1,1 Trichloroethane	0.05	nd	nd	nd	nd	nd	
Carbon Tetrachloride	0.05	nd	nd	nd	nd	nd	
1,2 Dichloroethane	0.05	nd	nd	nd	nd	nd	
Frichloroethene	0.05	nd	nd	nd	nd	nd	
,1,2 Trichloroethane	0.05	nd	nd	nd	nd	nd	
Tetrachloroethene	0.05	0.29	0.27	0.47	0.56	0.88	
1,1,1,2-Tetrachloroethane	0.05	nd	nd	nd	nd	nd	
,1,2,2-Tetrachloroethane	0.05	nd	nd	nd	nd	nd	
Spike Recovery (%)		99	113	112	86	108	
nd" Indicates Not Detected	at the listed de	tection limit.					

Page 5

SOUTHGATE LAUNDRY PROJECT Yakima, Washington Maxim Technologies, Inc. Project No. 5809500946.04

Specific Halogenated Hydrocarbons and BTEX (Mod. EPA 8010/8020) in Soil

Sample-Number	MDL	1 PPM MS	1 PPM MSD			
Date		09/10/97	09/10/97	 ***************************************	***************************************	***************************************
	mg/kg	mg/kg	mg/kg			
Vinylchloride	0.05			 ***************************************		
Benzene	0.05	0.99	1.00			
Toluene	0.05	0.99	1.02			
Ethylbenzene	0.05	1.05	1.09			
Total-Xylene	0.05	3.06	3.28			
1,1 Dichloroethene	0.05	1.07	0.98			
Dichloromethane	0.05	1.11	1.17			
Trans-1,2 Dichloroethene	0.05	0.93	1.03			
1,1 Dichloroethane	0.05	1.13	1.25			
Cis-1,2 Dichloroethene	0.05	1.03	1.06			
Chloroform	0.05	1.11	1.14			
1,1,1 Trichloroethane	0.05	1.02	1.03			
Carbon Tetrachloride	0.05	1.13	1.18			
1,2 Dichloroethane	0.05	1.17	1.16			
Frichloroethene	0.05	1.10	1.05			
1,1,2 Trichloroethane	0.05	1.21	1.24			
Tetrachloroethene	0.05	1.15	1.18			
,1,1,2-Tetrachloroethane	0.05	0.81	0.82			
,1,2,2-Tetrachloroethane	0.05	1.01	1.11			
Spike Recovery (%)		98	98			

[&]quot;nd" Indicates Not Detected at the listed detection limit.

[&]quot;int" Indicates that interference peaks prevent determination.

ENVIRONMENTAL HAY IM

CHAIN-OF-CUSIODY NECON

COLLECTOR: Pachel Tayman DATE OF COLLECTION 9 PAP Note Number Laboratory of Containers Total Number PROJECT NAME: Southgate Launday Send - black/6/com P 3# 5# concete heavy Slowh grun 5.50 feet down insde day cleaners 6.7 X 6.7 yce polo R 30% grque gravel-basalt 200 Kind Deg 70% Sand FIELD NOTES test p. + # 1 8010/8020 LABORATORY NOTES: debris d FIL 0-2 PATIN 6 (qve) LOCATION: Vatima WA 2-8-E 97 PAGE SOISJESV 3.6 CHAIN OF CUSTODY SEALS(Y)NINA TOTAL NUMBER OF CONTAINERS RECEIVED GOOD COND,/COLD Sprong C 6/6 NOTES: ALL SOI C DINI LEAD SAMPLE RECEIPT N. J. SEALS INTACT TYNINA DATE: Ortaboo CLIENT PROJECT #: 5809 500946. UPROJECT MANAGER: Portel Townson C Garnees N N 3,30 CORP Southgate Launday DATE/TIME DATE/TIME Haxim Technologies' 9 997 FC (Signature) RECEIVED BY (Signature) ☐ Pickup 1.64 X FAX: SAMPLE DISPOSAL INSTRUCTIONS 1,22 0.76 1,12 PPH Container Type 0.85 ☐ Return 16.0 PHONE (303) 744-7105 □TEG DISPOSAL @ \$2.00 each DATE/TIME Sample Type 五十 6十 年 9.00 Soil 12:08 10.30 12:05 Time 9,00 9'.20 10:00 8:1 12,00 aced 5 4:30 ADDRESS: C/O RELINQUISHED BY (Signature) RELINQUISHED BY (Signature) Sample Number Depth 9 CLIENT: Moel STOCKFILE 1-2+ Pt centre Fast center center Hacket Wast centra west Cast Was-GEST

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	IRANSGLOBAL ENVIRONMENTAL GEOSCIENCES	2	MaxIM Iconnologies	710S FAX:	CLIENT PROJECT #: 5809500946. APROJECT MANAGER: Pachel	Oricana Orican	138/25/	50/0354 02 7K X	10,65	Ö,	7.47	0,34	0.3	0	1000	0+0+			88'07	M	WR 402 TAR X ND	T ,	E RECEIVED BY (Signature)	~ 9/7/97 Fed ex	DATE/TIME / RECEIVED BY (Signature) I	mside	SAMPLE DISPOSAL INSTRUCTIONS OTEG DISPOSAL @ 42 00 each	Tuelan D
(Leg IRANSGLOB	CLIENT: NOEL CORP	ADDRESS: C D F	PHONE (203) 744-7105	CLIENT PROJECT #: 5809	Test pit	Sample Number Depth Time	2 eest 3 12:00	west 3	S court 4 12:10	2 5.1.30	-	-	pas 1	2 1 85 2:20	Charl alos roch	Jun 0	Comp	# 5 Com 2 2:40	(1)000	DRUMS A.S.		RELINQUISHED BY (Signature)	Hacher Janon	RELINQUISHED BY (Signature)	20 gagds. Inside	10	חובת מיטי ע

APPENDIX F

MEETINGS/CORRESPONDENCE BETWEEN THE NOEL CORPORATION AND ECOLOGY

LAW OFFICEB

LYON, WEIGAND & GUSTAFSON PS

LEBATE OFFICE - SEE SOLL THIRD WALL NOVE

MAILING ADDRESS: PO BOX 1689 YAKIMA, WASHINGTON 98907-1689 TELEPHONE (500) 240-7220 FACSIMILE

(500) 576-1883

ROBERT M. BOGGS
JEFFREY R. CUTTER
RUSSELL H. GILBERT*
J. ERIC GUSTAFSON
CHARLES H. LYON (1097)
ERIC R. VARGAS
WM L. WEIGAND. JR.
JEANIE H. ZIMMERMAN

'Also admitted in Missouri And Gregon

RECEIVED JUN 0 5 1997

June 3, 1997

Rick Roeder, Site Manager Toxics Cleanup Program Department of Ecology 15 W. Yakima Avenue, Suite 200 Yakima, WA 98902-3401

RE: Sam's Southgate Cleaners 1020 South Third Avenue Yakima, Washington

Dear Rick:

Thank you for meeting with Gary Slagle, Rachel Tauman, Bill Weigand and myself this morning regarding the cleanup of the above referenced property.

As we agreed this morning, the Noel Corporation will begin cleanup of the PERC contamination on the property by excavating and removing the contaminated soil beneath the Southgate Cleaners. Cleanup work will begin on June 30, 1997 at which time the Noel Corporation will begin gutting the interior of the premises. You agreed to notify Mr. Kim that he must vacate the premises by June 29, 1997 so work can begin the morning of June 30, 1997.

You also agreed to advise Mr. Kim that in the event that he does not vacate the premises by June 29, 1997, the Department would issue an enforcement order against him which could result fines of up to \$25,000 per day for interference with the cleanup process, and in addition, Mr. Kim would be named a potentially liable party.

You also approved the Noel Corporation's plan to excavate and remove as much soil beneath the contaminated premises as possible without endangering the structural integrity of the building itself. Upon completion of this process, the Noel Corporation will continue to monitor PERC levels from the existing test well sites.

As the process of getting Mr. Kim to vacate the premises has taken significantly longer than originally anticipated, we agreed that it would be appropriate to amend the Agreed Order dated January 5, 1996 to extend the time for the Noel Corporation to take appropriate remedial steps.

COPY

NOV 24'97 10:45 No.014 P.06

Rick Roeder, Site Manager June 3, 1997 Page 2

You suggested an additional year would be appropriate. Therefore, we request that your office prepare an amended order for signature and entry.

Thank you again for meeting with us this morning and providing assistance in getting the cleanup process going.

Very truly yours,

Russell H. Gilbert

cc: Gary Slagle Rachel Tauman

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NOV 24'97 10:44 No.014 P.03

Jrporation ID:5092482843

NOV 24'97 10:43 No.014 P.02

RECEIVED AUG 0 5 1997



STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

15 West Yakima, Suite 200 • Yakima, Washington 98902-3401 • (509) 575-2490

August 4, 1997

Mr. Gary Slagel Nocl Corporation 1001 S 1st St Yakima WA 98901

RE:

Groundwater Sampling: Property Access at Southgate Laundry Site

Dear Mr. Slagel:

SECOR International, Inc. (SECOR) is beginning work on the Yakima Railroad Area Remedial Investigation for Ecology. As part of this investigation SECOR will be sampling one ground water monitoring well at your site four times over the next year or so. A SECOR representative will also survey the elevation of the well designated for monitoring by SECOR prior to the first monitoring event. The sample will be analyzed for perchloroethylene and breakdown products. Results will be available to you once Ecology receives them. You will remain responsible for sampling all additional wells at your site. Ecology will be contacting you in separate correspondence to coordinate your sampling events with those performed by SECOR.

Please consider this letter to be a formal property access notice for Ecology and/or a SECOR representative. A SECOR representative will be contacting you in the next couple of weeks to make necessary arrangements such as getting keys to locks. Ecology encourages you to provide the necessary access as promptly as possible so that this critical step in the cleanup process can begin.

If you have any questions please feel free to call me at (509)454-7837.

Sincerely,

Rick Roeder Site Manager

Toxics Cleanup Program

Rich Roch

Peter Jewett, SECOR International, Inc. CC:

Mark Valentine, de maximis inc.

Mark Jobson, AAG

Steve Thiele, AAG

LAW OFFICES

LYON, WEIGAND & GUSTAFSON PS

LYON LAW OFFICES - 222 NORTH THIRD STREET

MAILING ADDRESS: PO BOX 1689 YAKIMA, WASHINGTON 98907-1689



TELEPHONE (509) 248-7220

FACSIMILE (509) 575-1883

ROBERT M. BOGGS
JEFFREY R. CUTTER
RUSSELL H. GILBERT*
J. ERIC GUSTAFSON
CHARLES R. LYON (1997)
ERIC R. VARGAS
WM. L. WEIGAND, JR.
JEANIE R. ZIMMERMAN

*Also admitted in Missouri and Oregon

August 11, 1997

Rick Roeder, Site Manager Toxics Cleanup Program Department of Ecology 15 W. Yakima Avenue, Suite 200 Yakima, WA 98902-3401

RE: Sam's Southgate Cleaners 1020 South Third Avenue Yakima, Washington

Dear Rick:

Your August 4, 1997 letter to Gary Slagle was forwarded to me by him for review and response.

The Noel Corporation will do everything it can to cooperate with Ecology during the process of obtaining water samples from one of the ground water monitoring wells at the above referenced site. However, during SECOR's water sampling program, the Noel Corporation would like to employ the following procedures:

- That SECOR provide Noel with at least a one week advance notice prior to each date that SECOR plans on obtaining a water sample.
- 2. That Noel personnel be in attendance during each ground water sampling to obtain and/or receive a split water sample to enable Noel to conduct its own testing and monitoring parallel with the SECOR/Ecology testing and monitoring process.

The above procedures are not unusual, nor is it anticipated that they would in any way interfere or otherwise hinder or obstruct SECOR or Ecology from conducting the water sampling and data gathering from any one of the Southgate ground water monitoring wells. Therefore, please contact either myself or Gary Slagle regarding implementation and coordination of the above.

Rick Roeder, Site Manager August 11, 1997 Page 2

Thank you.

Very truly yours,

Russell H. Gilbert

cc: Gary Slagle

Rachel Tauman

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STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

15 West Yakima, Suite 200 · Yakima, Washington 98902-3401 · (509) 575-2490

September 16, 1997

Mr. Gary Slagel Noel Corporation 1001 S 1st Street Yakima, Washington 98901

Dear Mr. Slagel:

The Department of Ecology (Ecology) is presently working with SECOR International, Inc. (SECOR) on the Areawide Remedial Investigation of the Yakima Railroad Area (YRRA). As part of this work it is necessary for each YRRA subfacility to conduct groundwater monitoring on a coordinated, quarterly basis for the next year. The information generated by the groundwater monitoring will be used by SECOR and Ecology in the remedial investigation to characterize the areawide contamination problem.

Currently your subfacility, Southgate Laundry, is under Agreed Order No. DE 95TC-C239, for Remedial Investigation. This Agreed Order requires that you sample groundwater according to method 8010 or 8260 on a routine basis. It is necessary to change this sampling schedule to quarterly sampling for the next year on the same schedule as all other facilities in the YRRA. The new sampling schedule will be as follows:

1st quarter:

Week of December 1 - 5th, 1997

2nd quarter:

Week of March 2 - 7, 1998

3rd quarter:

Week of June 1 - 5, 1998

4th quarter:

Week of September 8 - 11, 1998

All wells at your facility will need to be sampled for PCE and its breakdown products (i.e. sample analysis method 8010 of 8240) and water level measurements need to be taken. Sample results and the water level measurements must be submitted to Ecology, in both hardcopy and electronic format, within four weeks of each sampling event.

In the interest of simplicity I ask that you respond to this letter in writing indicating whether you will agree to the above sampling schedule or not. By undertaking this voluntarily, both you and Ecology will save the costs associated with having to modify your existing order or issue a new agreed or enforcement order. Please provide your response by September 30, 1997.

As always, if you have any questions please feel free to call me at (509) 454-7837.

Sincerely.

Rick Roeder Site Manager

Toxics Cleanup Program

oc:

Peter Jewett, SECOR

Mark Valentine, de maximus

Mark Jobson, AAG

APPENDIX G

MAXIM TECHNOLOGIES' STANDARD OPERATING PROCEDURES

STANDARD OPERATING PROCEDURES (SOPs)

MAXIM TECHNOLOGIES, INC.

Revision Dates Noted

EQUIPMENT DECONTAMINATION

The purpose of this section is to describe general decontamination procedures for field equipment in contact with mine/mill tailings, soil, or water. During field sampling activities, sampling equipment will become contaminated after it is used. Sampling equipment must be decontaminated between sample collection points if it is not disposable. Field personnel must wear disposable latex or vinyl gloves while decontaminating equipment at the project site. Change gloves between every sample. Every precaution must be taken by personnel to prevent contaminating themselves with the wash water and rinse water used in the decontamination process.

Table A-1 lists equipment and liquids necessary to decontaminate field equipment.

The following should be done in order to complete thorough decontamination:

- Set up the decontamination zone upwind from the sampling area to reduce the chances of windborne contamination.
- Visually inspect sampling equipment for contamination; use stiff brush to remove visible material.
- The general decontamination sequence for field equipment includes: wash with Liquinox or an equivalent degreasing detergent; deionized water rinse; 10% dilute nitric acid rinse; deionized water rinse; rinse with sample water three times.
- Rinse equipment with methanol in place of the nitric rinse if sampling for organic contamination.
 Follow with a deionized water rinse.
- Decontaminated equipment that is to be used for sampling organics should be wrapped in aluminum foil if not used immediately.
- Clean the outside of sample container after filling sample container.

Alternatively, field equipment can be decontaminated by steam cleaning, rinsing with 10% dilute nitric acid, and rinsing with deionized water.

All disposable items (e.g., paper towels, latex gloves) should be deposited into a garbage bag and disposed of in a proper manner. Contaminated wash water does not have to be collected, under most circumstances.

If vehicles used during sampling become contaminated, wash both inside and outside as necessary.

TABLE A-1. EQUIPMENT LIST FOR DECONTAMINATION

5-gallon plastic tubs
5-gallon plastic water-container
5-gallon carboy DI water
1-gallon cube of 10% HNO₃
1-gallon container or spray bottle of
10% Methanol or pesticide grade
acetone for organics

Liquinox (soap)
Hard bristle brushes
Garbage bags
Latex gloves
Squeeze bottles
Paper Towels

SAMPLE DOCUMENTATION

Sample documentation is an important step to ensure the laboratory, project manager, and field personnel are informed on the status of field samples. Depending on the specifics required for each project, a number of forms will need to be filled out. Most sample documentation forms are preprinted carbonless triplicates, enabling copies to be filled or mailed from labs or offices. The forms will be completed by field personnel, who have custody of the samples. The office copy will be kept in the project file and subsequent copies sent to the laboratory, or other designated parties. The responsibility for the completion of these forms will be with each field crew leader. It is important the field crew leader is certain field personnel are familiar with the completion process for filling out forms, and the expected information is included.

Potential documents to be completed clearly in ink for each sample generated include:

- Field Form
- Chain-of-Custody
- Custody Seal

If working on Superfund activities, the following additional forms will also be prepared:

- EPA Sample Tags
- SAS Packing Lists
- Sample Identification Matrix Forms
- Organic Traffic Report (if applicable)
- Inorganic Traffic Report (if applicable)

QC SAMPLES

Quality Control (QC) samples are submitted along with natural samples to provide supporting laboratory data to validate laboratory results. QC samples are submitted blind, and do not have any unique identifying codes that would enable the lab or others to bias these samples in any way. Usually, the time or sampling location is modified in a way which will separate blank and standard samples from the rest of the sample train. QC samples are identified only on field forms and in field notebooks. The following codes are typically used:

N - Natural Sample	Soil, water, air, or other of interest material from a field site
SP - Split Sample	A portion of a natural sample collected for independent analysis; used in calculating laboratory precision
D - Duplicate Sample	Two samples taken from the same media under similar conditions; also used to calculate precision
BB - Bottle Blank	Deionized water collected in sample bottle; used to detect contamination sampling containers
CCB - Cross Contamination	Deionized water run through decontaminated equipment and analyzed for Blank residual contamination and deionized water contamination
BFS - Blind Field Standard	Certified materials of known concentration; used to determine laboratory accuracy
TB - Travel or Trip Blank	Inert material (deionized water or diatomaceous earth) included in sample cooler; sent by the lab, the sample is used to determine if contamination by volatiles is present during collection or shipping

In general, selected QC samples will be inserted into the sample train within a group of twenty samples. Unless otherwise specified, QC samples will be prepared in the field. Deionized water blanks will be collected from carboys and cubitainers used in the field. An exception to field preparation of QC samples is the preparation of some blind field standards. Since the concentration of analytes in the sample is to be mixed according to specific manufacturer's instructions, field conditions may not provide the needed laboratory atmosphere. This is especially true for volatile organic compounds, which need to be prepared just before analyzing. Under these circumstances, standards will be shipped to the laboratory for preparation, keeping the concentration or manufacturer's QC Lot Number as blind as possible.

The number and types of samples submitted for each group of natural samples will be determined by the project manager and others, including state or Federal agencies, and will be defined in the project work plan. Each field crew leader will be responsible for all QC samples prepared by that crew.

Methods for computing data validation statements can be found in EPA documents or obtained from the Maxim-laboratory.

SOIL SAMPLE COLLECTION

This SOP describes the field equipment and sampling methods for surface and subsurface sampling of soil material. Methods explained in this SOP may be different from those identified in the project specific Sampling and Analysis Plan (SAP) and the project specific SAP should be referenced for additions or deletions to the methods noted below. All sampling equipment should be cleaned before arriving on site.

FIELD EQUIPMENT

- → Sharp shooter and clean-out shovel
- Stainless steel mixing bowl and sampling trowel
- → Dilute (10%) hydrochloric acid
- → Hand lens (10) power
- → Steel tape (10 foot)
- pH and electrical conductivity meters (if required)
- → Munsel color book (if required)
- → No. 10 sampling screen
- → Field forms and field book
- → Bucket augers

SURFACE SAMPLING

Surface soil/tailings samples are collected from the surface to a depth of one inch unless otherwise specified in the project specific SAP. Sufficient sample will be collected for the analysis that will be performed but generally this will be on the order of one gallon. Soil samples will be collected in either wide mouth glass jars or resealable polyethylene bags (ziplock or equivalent).

Samples should be described according to the procedures outlined in the Unified Soil Classification System (USCS; method ASTM D2487) or the Soil Conservation Service (SCS) classification system. Soil texture should be classified by either the USCS or U.S. Department of Agriculture (USDA) classification. Descriptions shall be recorded in field books or on standard morphological description logs as provided in the SAP.

Samples should be collected from an area of approximately six square feet by digging up the top inch with the sampling trowel and placed in the mixing bowl. The sample should be screened with the 10 mesh sieve if coarse fragments are to be excluded from the sample. If a sod or duff layer is present, this layer should be pealed back to the top of the mineral soil.

The sample placed in the mixing bowl shall be well mixed and then a portion of the sample placed in the sample container. To select a sample from the mixing bowl, quarter the sample in the bowl and place an equal volume of soil from each quarter in the sample container. When sampling soil for organics, the samples should not be mixed.

All equipment used in the sampling of surface soils will be decontaminated using the procedures in SOP-11. All necessary paperwork will be filled out in accordance with SOP-12.

SUBSURFACE SAMPLING

Subsurface sampling will be completed using a bucket auger, split spoon sampler, or hand dug or backhoe excavated pits. Sampling procedures for each type of equipment is described below. Sample collection, homogenation, and transfer to sampling containers should follow the same procedures as outlined for collection of surface samples.

Bucket Auger

- 1. Arrive on-site equipped with stainless steel auger rod and several sizes of stainless steel bucket augers (e.g. 2-inch, 4-inch, 6-inch, etc.).
- 2. Bucket auger holes can be drilled as one size or in a telescoping manner if contamination between sample intervals is a concern. If a single sized, advance the bucket auger to the desired sampling interval depth and empty the contents of the auger in a stainless steel mixing bowl. For the telescoping method, advance the largest auger to an approximate depth of three feet, collecting specified depth increment samples as the auger is advanced. Install temporary decontaminated PVC casing with a diameter slightly smaller than the borehole to keep the hole open and reduce possible cross-contamination between depth intervals. Using the next size smaller bucket auger, repeat the process.
- Select sample intervals for packaging for laboratory analysis in accordance with procedures described in the SAP.
- 4. Fill out appropriate paper work and bottle labels as necessary prior to leaving site.
- 5. Decontaminate all equipment between sample locations.

Split Spoon Sampler

- Arrive on-site equipped with at least two standard 1.4 inch inside diameter split spoon samplers.
 If geotechnical information is desired, a 140 pound drive hammer is required.
- Install sampler into borehole and advance to the desired depth with the 140 pound drop hammer or equivalent means. Record number of blow counts to complete sampling over each 18-inch interval, as necessary. Retrieve sampler and place on work table. Using the other sampler, repeat this sequence.
- Record lithology and percent recovery from cores retrieved from split spoon sampler.
- 4. Based upon the project work plan or sampling and analysis plan, composite like core intervals by mixing in stainless steel bowl in a similar manner as described for surface sampling. When sampling for organics, the sample should not be mixed.
- Decontaminate sampling equipment between each interval sampled if required by the SAP.
 Decontaminate sampling equipment between sampling sites.

Backhoe or Hand Dug Excavations

- Locate the site to be sampled and insure that equipment can safely access the site. Minimize off
 road travel to prevent off site damage to surrounding vegetation.
- Orient excavation to maximize use of the angle of the sun to illuminate the pit for photographs.
 Place excavated material a sufficient distance from the excavation.
- Excavate to the prescribed depth. If the pit exceeds five feet in depth, OSHA construction standards for shoring or sloping must be observed to prevent accidental burials. Sampling personnel should enter the pit with care during and after excavation.
- 4. Soil profile descriptions shall be made from a hand cleaned surface along the pit wall. Complete profile descriptions and take photographs before pit is sampled.
- 5. Soil samples shall be collected from depth intervals specified in the SAP. When a depth interval is sampled, an equal volume of soil should be collected from the entire interval exposed on the pit wall. Soil samples will be collected with the stainless steel trowel and mixing bowl according to methods described for surface soil sampling. When sampling for organics, the sample should not be mixed.
- 6. After sampling is completed, the pit should be backfilled with excavated material in the reverse order that it was excavated so that topsoil material is returned to the top of the pit. When backfilling is complete the area should be cleaned-up to its original condition.
- Decontaminate sampling equipment between sampling sites. Excavation equipment should be cleaned between sites with water (where possible) or with a shovel to remove accumulated dirt and mud.

FIELD MEASUREMENT OF SOIL FIELD PARAMETERS

- Obtain soil sample in accordance with SOP-22.
- 2. Prepare mixture of 1:1 ratio of soil (dry weight basis) to deionized water in a glass beaker. A 10 gram sample of soil should be weighed and placed in a clean 50 ml glass beaker or plastic cup. Since the density of soil generally ranges from 1.3 to 1.5 grams per cubic centimeter, an equivalent volume of soil can be added to the beaker if a scale is not available. Add 10 ml of deionized water to the beaker and stir with a glass rod or plastic spoon.
- 3. Allow the sample to equilibrate for 10 minutes or until the suspension settles. For samples with high clay content, this period may be up to 30 minutes.
- 4. Insert calibrated pH or electrical conductivity probes into the supernatant solution above the soil and obtain field measurements in accordance with SOP 05 and SOP 06.
- 5. Record all collected data on standardized field forms or in the field book as required by the SAP.
- Rinse our beaker with deionized water between samples.