1R- 463

REPORTS

DATE:





2005 ANNUAL REPORT

DELROSE SCOTT HUGH PLAINS EMS NO.: 2000-10807

UL-A, SECTION 26, T21S, R37E Lea County, New Mexico

PREPARED FOR

1R-463



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DISCLAIMER

Premier has examined and relied upon the file information provided by Plains and Environmental Plus, Inc. (EPI). Premier has not conducted an independent examination of the information contained in the Plains files; furthermore, we assume the genuineness of the documents reviewed and that the information provided in these documents to be true and accurate. Premier has prepared this report using the level of care and professionalism in the industry for similar projects under similar conditions. Premier will not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time this report was prepared. Premier believes the conclusions stated herein are factual, but no guarantee is made or implied.

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EXECUTIVE SUMMARY

On November 10, 2000, a 20 barrel release of crude oil occurred from a 4" steel pipeline at the Delrose Scott Hugh 4" Gathering line Site (Site), EMS No. 2000-10807. This pipeline was formerly owned by EOTT Energy, LLC (EOTT) and is currently owned by Plains Marketing, L.P. (Plains). The Site is located in T21S, R37E, Section 26 of Lea County, New Mexico, approximately 2 miles east of Eunice, New Mexico (Figure 1, Appendix A) or more specifically at latitude 32° 26' 48" N and longitude 103° 08' 07" W (Figure 1, Appendix A). Approximately 5 barrels of product were reported as recovered.

Premier Environmental Services, Inc. (Premier) completed an initial investigation of the release in September 2005 through the installation of five borings (SB-1 through SB-5) and collection of soil samples at selected intervals. Analytical results showed that soil samples from borings SB-1 and SB-2 contained Total Petroleum Hydrocarbons (TPH) and Benzene, Toluene, Ethylbenzene, and Xylene (BTEX) concentrations in excess of New Mexico Oil Conservation Division (NMOCD) guidelines. Analytical results show that TPH concentrations in soil samples from boring SB-1, ranging from 6,760 mg/kg at 10 feet bgs to 200.7 mg/kg at 25 feet below ground surface (bgs), exceed the NMOCD criteria of 100 mg/kg total TPH concentration in soil. Other NMOCD criteria exceeded at 10 feet bgs are BTEX concentrations (50 mg/kg criteria) at 214.28 mg/kg. In soil samples from SB-2, TPH concentrations range from 15,560 mg/kg at 20 feet bgs, to 430.3 mg/kg at 40 feet bgs. BTEX concentrations were reported at 848.3 mg/kg at 20 feet bgs to 170.3 at 35 feet bgs. Concentrations of TPH and BTEX in soil samples from borings SB-3 through SB-5 were either below detection limits or below NMOCD guidelines. To complete delineation, three groundwater monitor wells were installed in December 2005.

On December 19, 2005, during installation of soil borings for delineation of affected soils at the Site, phase separated hydrocarbons (PSH) were observed on the sampling tools and drill rod from the boring for monitor well MW-1 while collecting a soil sample from the soil/groundwater interface, at 45 feet below ground surface (bgs). The boring was converted into a 4-inch diameter monitor well. Borings completed for monitor wells MW-2 and MW-3 showed no signs of PSH and no evidence of hydrocarbons through field readings using an organic vapor monitor (OVM). These borings were converted to 2-inch diameter monitor wells.

Soil samples collected in December 2005 were analyzed for TPH and BTEX. Analytical results show that TPH concentrations in soil samples from the boring for monitor well MW-1, ranging from 698 mg/kg at 45 feet bgs to 15,720 mg/kg at 20 feet bgs, exceed the NMOCD criteria of 100 mg/kg total TPH concentration in soil. Other NMOCD criteria exceeded in monitor well MW-1 at 20 feet bgs are benzene (10 mg/kg criteria concentration) at 18.9 mg/kg and BTEX (50mg/kg criteria concentration) at 379.8 mg/kg. BTEX concentrations in soil were also exceeded at 40 feet bgs, at 115.19 mg/kg. In soil a sample at 45 feet bgs, from the boring for monitor well MW-2, a TPH concentration of 214 mg/kg was reported. Benzene, BTEX and TPH concentrations for all other samples are below NMOCD criteria.

The three monitor wells were gauged and developed in December 2005. Groundwater from monitor wells MW-2 and MW-3 was sampled and analyzed for BTEX by EPA method 8021B. Groundwater from MW-1 was not sampled due to PSH sheen. An oil absorbent sock was placed in MW-1 for PSH recovery. Groundwater samples collected from monitor wells MW-2 and MW-3 were placed on ice and shipped overnight to Accutest Laboratories, in Houston, Texas, for laboratory analyses.

BTEX concentrations were not detected in groundwater samples collected from monitor wells MW-2 and MW-3. Analytical results are summarized on tables in Appendix B, and analytical reports are found in Appendix C.

Further monitoring and investigation is planned at the Site to fully delineate groundwater impact at the Site, with NMOCD approval. The monitor wells at the Site will be gauged twice a month and the sock changed as required. Groundwater samples will be collected quarterly to monitor BTEX concentrations in groundwater. Based on the results of the investigation to fully delineate the groundwater impact at the site and quarterly groundwater sampling results, a detailed work plan will be prepared and submitted to NMOCD for approval.

1.0 INTRODUCTION AND SITE HISTORY

Premier Environmental Services, Inc. (Premier) was retained by Plains Marketing, L.P. (Plains) to complete a Site Investigation at the Delrose Scott Hugh Gathering 4" Site (Site) (EMS Nos. 2000-10807).

The leak that occurred at the Site on November 10, 2000, was apparently caused by corrosion. The Site is located in T21S, R37E, Section 26 of Lea County, New Mexico, approximately 2 miles east of Eunice, New Mexico (Figure 1, Appendix A). At the time of the release, the pipeline was owned by EOTT, Inc. The pipeline is now owned by Plains Marketing, L.P. (Plains). The release occurred due to corrosion of this surface pipeline, and was reported by EOTT to Ms. Donna Williams at the New Mexico Oil Conservation Division (NMOCD) on November 10, 2000 at 2:25 p.m. Approximately 5 barrels of product was reported as recovered.

The leak was repaired and impacted soil was removed and temporarily placed on a plastic liner. In September 2005, Premier completed an initial investigation of the release through the installation of five borings and collection of soil samples at selected intervals. To complete vertical delineation of hydrocarbon impact and to investigate groundwater at the Site, three groundwater monitor wells were installed in December 2005.

2.0 ENVIRONMENTAL CHARACTERIZATION

2.1 Geological Description

In Lea County, bedrock frequently crop out or are thinly veneered with alluvium and eolian dune sands. The bedrock outcrops range from Triassic age strata rocks to Pleistocene age sediments. The Recent Age Mescalero sands cover 80% of Lea County, and are described as fine to medium-grained and reddish brown in color. Lea County lies in the Pecos Valley Section of the Great Plains Province, very near the Southern High Plains to the east. The Tertiary Age Ogallala Formation underlies all of the High Plains and mantles several ridges in Lea County.

The Site seems to be characteristic of the High Plains, with a uniform, topographically relatively flat surface that slopes very gently to the southeast.

2.2 Land Use

Land use in the area is primarily livestock rangeland and oil and gas production. Several gas compressor stations are located in the vicinity of the Site and several major oil and gas transmission lines bisect the region. The area in the immediate vicinity of the Site is sparsely populated. There is a railroad track located to the south of the Site.

2.3 Ground Water

The New Mexico Office of the State Engineer database lists three water wells in Section 26, T21S R37E (Appendix D). Total depth of two of these private use water wells appears to be 85 feet bgs and one is 100 feet bgs feet. The average depth to water is approximately 50 to 60 feet bgs. There are no municipal water wells within 1000 feet of the Site.

2.4 Surface Water

There are no surface water bodies within 1000 feet of the Site.

3.0 REGULATORY FRAMEWORK

In New Mexico, the NMOCD oversees and regulates oil, gas and geothermal activities, including compliance with environmental regulations. Guidance for cleanup of crude oil releases is provided in the NMOCD <u>Guidelines for Remediation of Leaks, Spills and Releases</u> (August 13, 1993) document. Primary contaminants, or COCs, associated with crude oil releases include TPH, and BTEX. Guidelines for these COCs in soil are evaluated based on a site ranking system. The ranking system estimates the likelihood of exposures to the COCs and is based on the three following parameters to protect groundwater and surface water resources:

- Depth to groundwater
- Wellhead protection area
- Distance to surface water body

3.1 NMOCD Site Ranking Guidance – Initial Evaluation

The Site was initially evaluated based on the information presented in the previous sections. Based on the proximity of the Site to area water wells, surface water bodies, and depth to groundwater, the Site has an NMOCD ranking score of **20 points**, with the soil remedial goals highlighted below in the Site Ranking Matrix.

1. Ground	water	2. Wellhead Protection Area	3. Distance to Surface Water Body
If Depth to GW <50 feet: 20 points		If <1000' from water source, or, <200' from private domestic water source: 20 points	<200 horizontal feet: 20 points
If Depth to GW 50	to 99 feet:		200-100 horizontal feet: 10 points
10 points		If >1000' from water source, or, >200' from	·
If Depth to GW >100 feet: <i>0 points</i>		private domestic water source: 0 points	>1000 horizontal feet: 0 points
Groundwater	Score:20	Wellhead Protection Area Score: 0	Surface Water Score: 0
Site Rank (1+2+3	3) =20+0+0=	20	
Total Site Rankin	ng Score an	d Initial Guidance Cleanup Concentrations	
Parameter	20 or >	10	0
Benzene ¹	10 ppm	10 ppm	10 ppm
BTEX ¹	50 ppm	50 ppm	50 ppm
ТРН	100 ppm	1000 ppm	5000 ppm

Table 1 - Site Ranking Matrix

4.0 SITE INVESTIGATIONS AND RESULTS

4.1 **Previous Soil Investigations and Results**

According to information supplied by Plains, the impacted area was approximately 200 feet by 15 feet, and product flowed within the pipeline right of way. The leak was repaired and impacted soil was removed and temporarily placed on a plastic liner. A site visit by Premier personnel in April 2005 confirmed that impacted soil remains stockpiled onsite. Site investigations were continued in September and December 2005, as described below.

4.2 September 2005 Soil Investigation

Site delineation was initiated in September 2005 through the installation of soil borings within and adjacent to the flow path of the release. Details regarding this investigation are found in the following sections.

4.2.1 September 2005 Soil Investigation Activities

On September 14 and 15, 2005, Premier installed five borings and collected soil samples from selected intervals to evaluate soil conditions at the Site. Soil samples were collected between 2 feet to 40 feet in depth bgs and submitted to Accutest for laboratory analyses of TPH, Diesel Range Organics (DRO), and Gasoline Range Organics (GRO) by EPA Method 8015M, and for BTEX by EPA Method 8021B. Soil boring locations are shown on Figure 2, Appendix A. Soil boring logs are also found in Appendix A. Analytical results are shown on Table 2, Appendix B.

4.2.2 September 2005 Soil Investigation Results

Analytical results show that TPH concentrations in soil samples collected from boring SB-1, ranging from 6760 mg/kg at 10 feet bgs to 200.7 mg/kg at 25 feet bgs, exceed the NMOCD criteria of 100 mg/kg total TPH in soil. Other NMOCD criteria exceeded at 10 feet bgs are BTEX (50 mg/kg criteria/ 214.28 mg/kg concentration). In soil samples from boring SB-2, TPH concentrations range from 15,560 mg/kg at 20 feet bgs, to 430.3 mg/kg at 40 feet bgs. BTEX is observed at 848.3 mg/kg at 20 feet bgs to 170.3 at 35 feet bgs. Concentrations of TPH and BTEX in soil from SB-3 through SB-5 were either below detection limits or below NMOCD guidelines. Analytical results are summarized on Table 2, Appendix B.

4.3 December 2005 Soil and Groundwater Investigation

Based on findings from the September 2005 investigation, and the surface expression of the release, further delineation was required to evaluate the extent of hydrocarbons in soil and evaluate if groundwater was affected by the release. Three groundwater monitor wells were installed, MW-1 through MW-3, on December 19 and 20, 2005, with collection and screening of soil samples during drilling.

4.3.1 December 2005 Soil Investigation Activities

On December 19 and 20, 2005, three delineation soil borings were installed adjacent to the flow path of the release to evaluate the horizontal and vertical limits of affected soil, and to convert the soil borings into monitor wells to evaluate groundwater impact. A Site layout and soil boring/monitor well location map is presented in Figure 2, Appendix A. The boring for monitor well MW-1 was advanced south/southeast of the eastern pooling area along the release flow path. The boring for monitor well MW-2 was installed south/southeast of the western pooling area along the release flow path. Monitor well MW-3 was installed as an up gradient control well, to the north of the flow path and approximately halfway between MW-1 and MW-2. Soil samples were collected and examined by a Premier geologist and described using Unified Soil Classification System criteria, modified to include calcified soil horizons locally present. The well borings were logged on the basis of cuttings, discrete samples, the reaction of the rig to changes in strata, and the driller's and professional geologist's experience. The soil samples collected from field activities were analyzed on site, using an Organic Vapor Monitor (OVM) and select samples with the highest OVM readings were submitted for laboratory analyses to determine the extent of hydrocarbon impacted soils in the subsurface.

Discrete soil samples were collected using an open ended core tool mounted to the drill rod at five foot intervals. Cuttings samples were collected and analyzed continuously during drilling operations. The discrete samples were placed in self sealing polypropylene bags for visual and headspace analyses, additionally samples were collected in laboratory supplied, clean, glass containers and place in a cooler on ice in preparation for shipment to Accutest Laboratories, in Houston, Texas for laboratory analysis of TPH GRO and TPH DRO, and for BTEX by EPA method 8021B.

The first soil boring (MW-1) was advanced to a depth of 55 feet below ground surface (bgs) on December 19, 2005 approximately 20 feet west and six feet south of the source area. No staining was observed in soil samples during the drilling of this soil boring. The samples had a slight to strong hydrocarbon odor from five feet bgs to 33 feet bgs. No odors were detected from 33 feet bgs to 43 feet bgs. However, a strong odor was detected at the groundwater interface/capillary zone from 43 to 44 feet bgs. A sheen was observed on the drill rod and sampling tool during collection of sample MW1-45'. Groundwater was first encountered at 44 feet bgs and after collecting a soil sample at 45 feet bgs the hole was reamed to 7 7/8-inches to a total depth of 55 feet bgs (approximately 10 feet below the first encountered groundwater). A four-inch diameter PVC monitoring well was installed consisting of 20 feet of 0.010 inch, slotted screen from a depth of 55 feet bgs up to a depth of 35 feet bgs and solid riser was installed from a depth of 35 feet bgs up to approximately 36 inches above ground surface to accommodate a stick up well mount. A filter pack of 20/40 graded sand was installed up to 33 feet bgs and hydrated bentonite was installed from 33 feet bgs up to two feet bqs. On December 20, 2005, a 4 by 4 foot concrete pad was laid with a steel well shroud to complete the well.

Soil samples were prepared for laboratory analyses from discrete soil samples collected at five foot intervals (5', 10', 15', 20', 25', 30', 35', 40', and 45' bgs). Headspace analysis indicated organic vapor concentrations of 0.0 ppm, 447 ppm, 418 ppm, 455 ppm, 360 ppm, 394 ppm, 403 ppm, 487 ppm and 154 ppm respectively. Soil samples MW1-20', MW1-40', and MW1-45' were selected for further laboratory analyses.

The second soil boring (MW-2) was advanced to a depth of 55 feet bgs on December 19, 2005. Monitor well MW-2 was located approximately 143 feet west of the source area and eight feet south of the pipeline. No staining or odors were observed in soil samples during the drilling of this soil boring. Groundwater was first encountered at 41 feet bgs. A two-inch diameter PVC monitoring well was installed consisting of 20 feet of 0.010 inch, slotted screen from a depth of 55 feet bgs up to a depth of 35 feet bgs and solid riser was installed from a depth of 35 feet bgs up to approximately 36 inches above ground surface to accommodate a stick up well mount. A filter pack of 20/40 graded sand was installed up to 33 feet bgs and hydrated bentonite was installed from 33 feet bgs up to two feet bgs. On December 20, 2005, a 2 by 2 foot concrete pad was laid with a steel well shroud to complete the well.

Samples were prepared from discrete soil samples collected at five foot intervals (from 5' to 45' bgs). Headspace analysis indicated organic vapor concentrations of 0.0 ppm for all soil samples. Soil samples MW2-30', MW2-40', and MW2-45' were selected for further laboratory analyses.

The third soil boring (MW-3) was advanced to a depth of 55 feet bgs on December 20, 2005. Monitor well MW-3 was located approximately 84 feet west and 48 feet north of the source area. No staining or odors were observed in soil samples during the drilling of this soil boring. Groundwater was first encountered at 43 feet. A two-inch diameter PVC monitoring well was installed consisting of 20 feet of 0.010 inch, slotted screen from a depth of 55 feet bgs up to a depth of 35 feet bgs and solid riser was installed from a depth of 35 feet bgs up to approximately 36 inches above ground surface to accommodate a stick up well mount. A filter pack of 20/40 graded sand was installed up to 33 feet bgs and hydrated bentonite was installed from 33 feet bgs up to two feet bgs. On December 20, 2005, a 2 by 2 foot concrete pad was laid with a steel well shroud to complete the well.

Samples were prepared from discrete soil samples collected at five foot intervals (from 5' to 45' bgs). Headspace analysis indicated organic vapor concentrations of 0.0 ppm for all soil samples. Soil samples MW3-5', MW3-40', and MW3-45' were selected for further laboratory analyses. Soil boring locations are shown on Figure 2, Appendix A. The well boring log and construction drawings are also provided in Appendix A.

4.3.2 December 2005 Soil Investigation Results

Based upon the examination of soil cuttings, the lithology at the Delrose Scott Hugh Site is consistent with aeolian and ephemeral stream deposition. Interbedded clays and sands with calcified caliche layers indicate wind blown deposits with historic undulating groundwater capillary zones. Observation of the general area indicates wind generated sand dunes, somewhat stabilized with vegetation including mesquite and shinnery oak. Monument Draw bisects the area to the east of the site.

The water table currently ranges in depth locally from 45 to 65 feet bgs. The clay layers may act as an aquitard locally, however they are rarely widespread or thick enough to be considered an aquiclude.

Analytical results of selected soil samples analyzed for TPH DRO, TPH GRO and BTEX were compared to the NMOCD Site ranking cleanup goals.

Soil samples collected from the boring associated with monitor well MW-1 showed TPH concentrations above 100 mg/kg down to the first water bearing zone at a depth of 45 feet bgs. Analytical results are summarized in Table 2, Appendix B.

Soil samples collected from the boring associated with monitor well MW-2 detected no TPH concentrations from ground surface to a depth of 40 feet bgs. A soil sample collected at the first water bearing zone at a depth of 45 feet bgs showed TPH concentrations of 214 mg/kg. This indicates potential migration of hydrocarbon in groundwater to monitor well MW-2.

Soil samples collected from the boring associated with monitor well MW-3 detected no TPH concentrations from ground surface to the first water bearing zone at a depth of 45 feet bgs as anticipated as this represents a background monitor well.

Results of the laboratory analyses indicate the Site has been laterally and vertically delineated to the north and west, however further investigation will be required to delineate groundwater impact to the south and southeast.

4.3.3 Groundwater Investigation Activities

On December 21, 2005, monitor wells were gauged from the top of casing to determine groundwater levels in each well. The groundwater level from top of casing in each well is as

follows: MW-1 - 36.22 feet, MW-2 - 45.23 feet, and in MW-3 - 45.57 feet. PSH sheen was observed in MW-1.

On December 21, 2005, all three wells were also developed/purged and sampled by Premier personnel by hand bailing a minimum of 5 well volumes from each well. Groundwater samples were collected for laboratory analyses BTEX by EPA method 8021B. These samples were shipped overnight to Accutest Laboratories, in Houston, TX. Groundwater gauging is summarized in Table 3, Appendix B. The groundwater gradient is shown on Figure 3, Appendix A.

4.3.4 Groundwater Investigation Results

Analytical results from groundwater samples collected from monitor wells MW-2 and MW-3 indicated BTEX concentrations at less than the method detection limit of 0.002 mg/L and therefore, below NMOCD guideline. Groundwater analytical results are summarized in Table 4, Appendix B. PSH was present as sheen in MW-1; this was addressed by placing an absorbent sock in MW-1. The groundwater gauging data indicates a relatively shallow gradient of 0.0047 ft/ft towards the southeast (Figure 3, Appendix A). Figure 4, Appendix A, shows locations of NMOCD exceedances in soil and groundwater.

5.0 REMEDIATION ACTIVITIES COMPLETED

Investigation activities completed at the Site included installation of 5 borings in September 2005 and three monitor wells in December 2005. Soil boring analytical data indicated subsurface impact in close proximity to groundwater. Of the three monitor wells installed, PSH sheen was observed only in groundwater from MW-1. Dissolved phase hydrocarbons were not detected in any other monitor wells.

6.0 CONCLUSIONS

The September and December 2005 Site subsurface investigation at the Del Rose Scott Hugh Site included advancing soil borings along the southern side flow path of the release to delineate vertical soil impact at the Site and converting the borings to monitor wells to investigate potential groundwater impact at the Site. The data collected illustrates the following:

- Soil samples from the monitor well MW-1 boring detected TPH concentrations above 100 mg/kg down to the first water bearing zone at a depth of 45 feet bgs.
- Soil samples from the monitor well MW-2 boring indicate no TPH concentrations from ground surface to a depth of 40 feet bgs. A soil sample collected at the first water bearing zone at a depth of 45 feet bgs showed TPH concentrations of 214 mg/kg.
- Soil samples from the monitor well MW-3 boring detected no TPH concentrations from ground surface to total depth of 45 feet bgs. MW-3 represents a background/upgradient monitor well.
- Groundwater in monitor well MW-1 displayed PSH sheen. Groundwater samples from monitor wells MW-2 and MW-3 showed no concentrations of BTEX above the method detection limit.

The results of this soil and groundwater investigation demonstrate that hydrocarbons in groundwater and soil has been delineated to the west and north at the Site; however, hydrocarbons in groundwater have not been delineated south and east of the source area.

7.0 PROPOSED REMEDIAL APPROACH

The monitor wells at the Site will be gauged twice a month and the sock changed as required. Further monitoring and investigation is planned to fully delineate PSH associated with monitor well MW-1 and to further evaluate the presence of hydrocarbon in groundwater.

Two additional monitor wells are planned for installation in March 2006 at the Site to further delineate the groundwater impact and evaluate Site conditions. PSH (when present) will be recovered by manual bailing product from the recovery wells or with the use of absorbent socks. Wells with no PSH present will be developed and sampled on completion, then resampled on a quarterly basis to evaluate any changes in Site conditions.

Appendix A Figures

Figure 1 – Site Location Map

Figure 2 – Site Map

Figure 3 – Groundwater Gradient Map

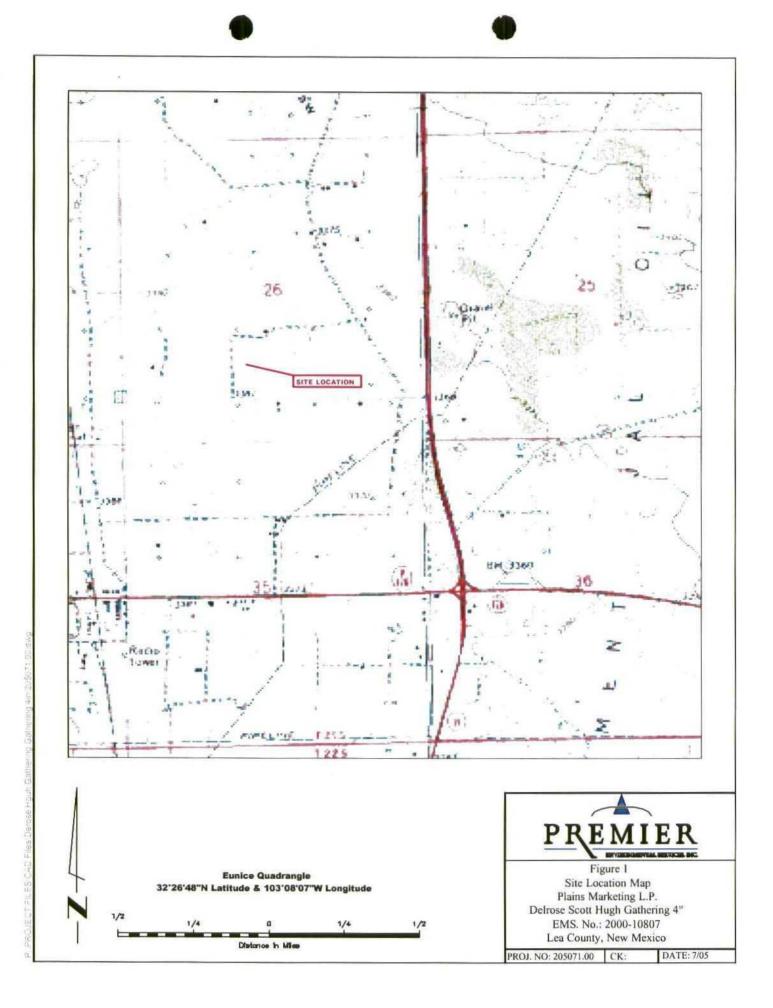
Figure 4 – BTEX and TPH NMOCD Soil Exceedances

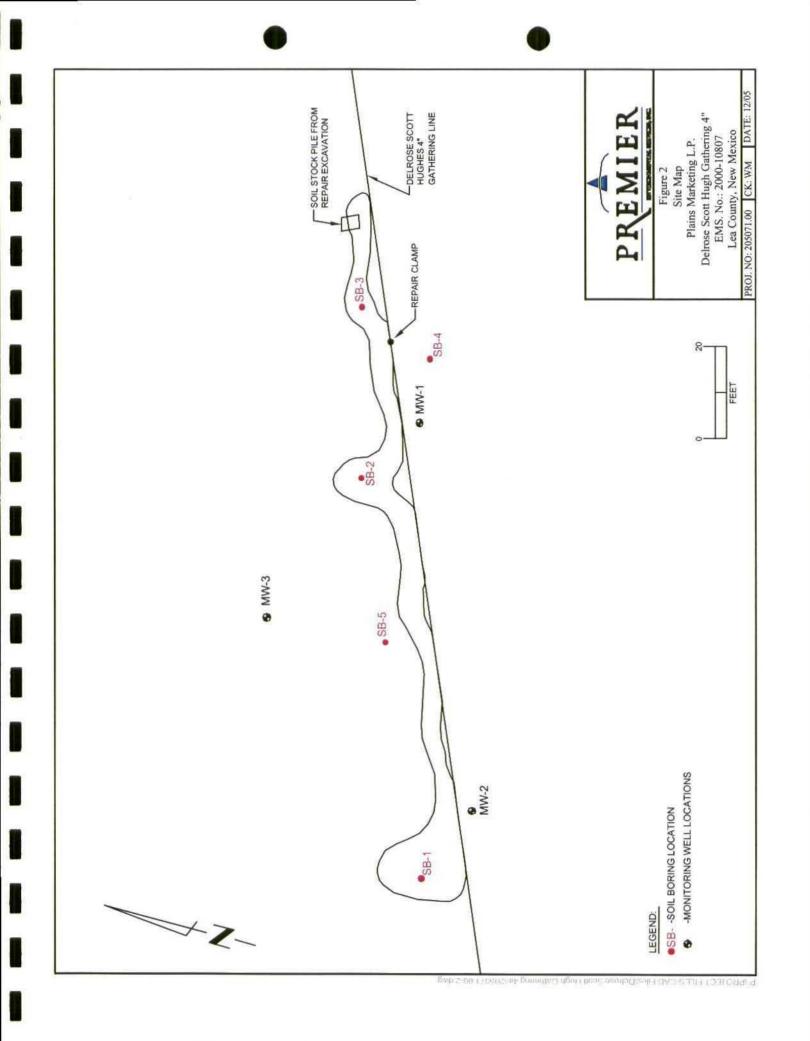
Soil Boring Logs and Monitor Well Construction Diagrams

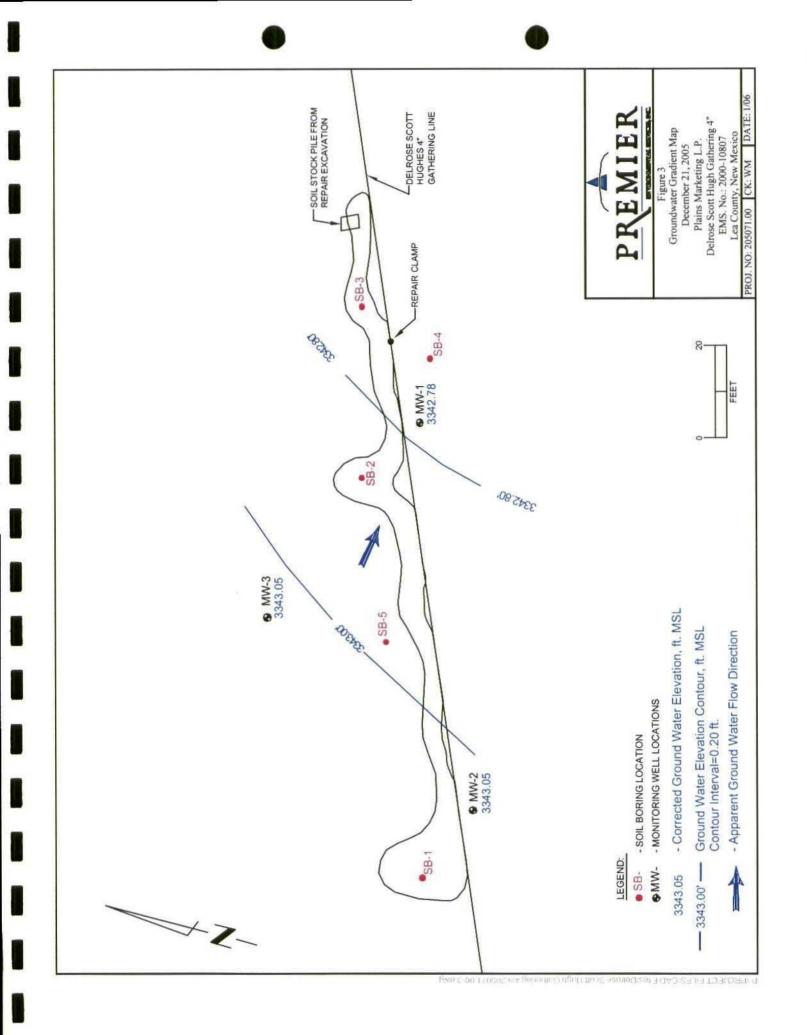
- SB-1
- SB-2
- SB-3
- SB-4
- SB-5
- MW-1
- MW-2

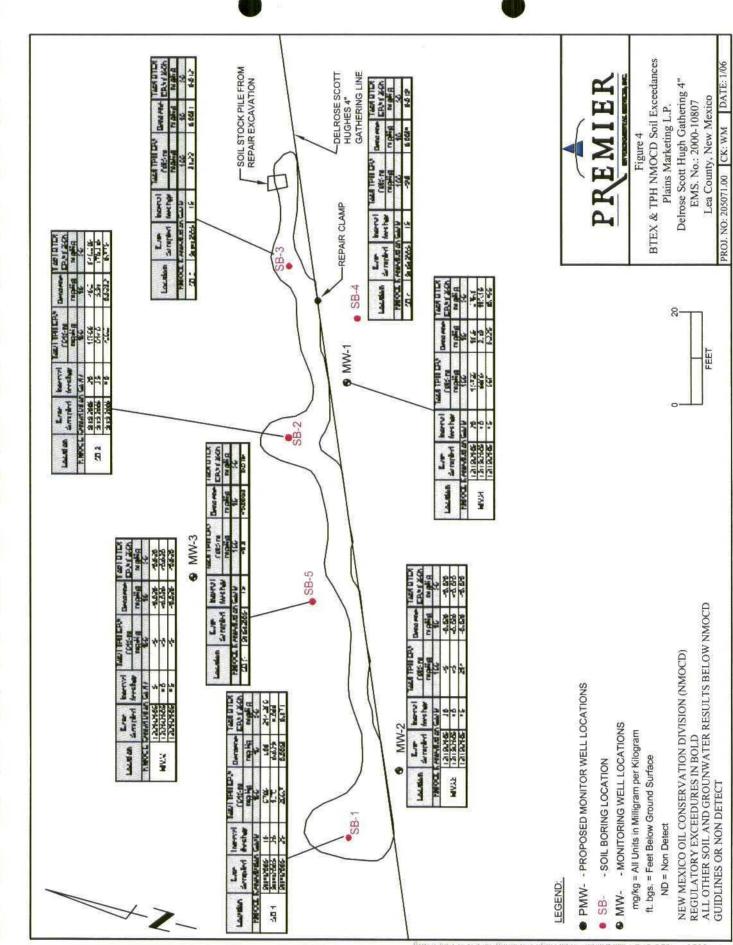












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	PREMIER	LOCATION M	IAP
DTAL DEPTH <u>25'</u> RILLING CO. <u>Stra</u>	cott Hugh Gathering 4" LOCATION Lea County, New Mexico BOREHOLE DIA (in) _5" nubDRILLING METHOD Air Rotary MurleyDATE DRILLED 9/14/05		
DIA CRAPHIC GRAPHIC GRAPHIC GRAPHIC GRAPHIC	LITHOLOGIC DESCRIPTION/COMMENTS		REMARKS
	Silty Sand, dark reddish brown, stained to 4°.		
	Caliche, reddish brown, firm, damp, no plasticity, very fine grained	d, poorly sarted.	Strong odor to 11'
10 - 278	Caliche, light greyish green, firm, dry, low plasticity, very fine gra	ined, poorly sorted.	Moderate odor to '
145 18 -	Coliche and 1" grovel, light reddieh brown, firm, damp, low plasti grained, poorly sorted, subraunded.	city, very fine to coarse	Slight odor to 22'
20 - 72 - 72 22 - 72	Caliche, light reddish brown, firm, dry, law plasticity, very fine to subrounded.	coarse grained, poorly sorted,	
2426	Clayey Sand, reddieh brown, loose, dry, very fine to coarse grains TD= 25'	ed, poorly sorted, subrounded.	No odor 🖾 23°
28 - 30 -			
32 - 34 - 36 -			
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-		LOCATION N	IAP
TATION ID <u>SB-2</u>	n Gathering 4" LOCATION Lea County, New Mexico		
OTAL DEPTH <u>40'</u> RILLING CO. Straub	BOREHOLE DIA (in) 5" DRILLING METHOD Air Rotary		
EOLOGIST <u>Will Murley</u>	DATE DRILLED 9/15/05		
	LITHOLOGIC DESCRIPTION/COMMENT	TS	REMARKS
2 - Sand, c stained	dark reddish brawn, loose, damp, very fine to medium ç to 3'.	grained, poarly sorted, subangular,	Strong adar 0 to 1
4	, líght greyish green, firm, damp, low plasticity, very fin ular.	e grained, fairly sorted,	
253 Caliche,	, light greyish green, firm, dry, low plasticity, very fine	grained, fairly sorted, subangular.	
16-	, light greyish orange, firm, dry, low plasticity, very fine nd @ 17'.	grained, fairly sorted, subangular.	Moderate odor to 2
20 - 152 Silty Sc 22 - 22 - 22 - 22 - 22 - 22 - 22 - 22	and, reddish brown, firm, dry, very fine to fine grained,	poorly sorted, subangular.	
24	Galiche, dark reddish brown, firm to loose, dry, very fin ular.	e to coarse grained, poorly sorted,	Slight odor to 37'
30 - Sandy	Caliche, light reddish brown, firm to loose, dry, very fin ular.	e to fine grained, poorly sorted,	
	Caliche, light reddish brown, firm to loose, dry, very fin subangular.	a to medium grained, poorly	No odor to 40'
17 Sandy	Galiche, light grey, firm to loose, dry, very fine grained	. fairly sorted, subrounded.	

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	PREMIER BURGENEETEL AND AND A	LUCATION	μ ΑΓ
STATION ID SB-3			
	cott Hugh Gathering 4" LOCATION Lea County, New Mexico		
	BOREHOLE DIA (in) 5"		
	DRILLING METHOD Air Rotary		
GEOLOGIST <u>WIII N</u>	Aurley DATE DRILLED_ 9/15/05		
DEPTH CS SAPH () C C C C C C C C C C C C C C C C C C C	LITHOLOGIC DESCRIPTION/COMMENTS		REMARKS
	Silty Sand, reddish brown, laase, stained to 2°, caliche at 3′.		Fair odor ta 7°
4 – 265 6 – 265	Callche, light greyish green, stiff, dry, moderate plasticity, very fine grained,	fairly sorted.	
	Caliche, light greyish rsd. loose, dry, low plasticity, very fine grained, fairly		Slight adar to 11° No odor to 15'
	Clayey Sand, light reddish grey, laase, dry, very fine grained, fairly sorted, a TD= 15'		
16 18 20 22 22 24			
26 - 28 -			
30 - 32 -			
34 — 36 —			
38 -			
40 - 42 -			
•			

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	PREMIER	OCATION M	IAP
OTAL DEPTH <u>15'</u> RILLING CO. <u>Stra</u>	cott Hugh Gathering 4" LOCATION Lea County, New Mexico BOREHOLE DIA (in) 5" aub DRILLING METHOD Air Rotary Aurley DATE DRILLED 9/15/05		
PTH US PID (ppm)	LITHOLOGIC DESCRIPTION/COMMENTS		REMARKS
2 -	Silty Sand, light reddish brown, loose, dry, very fine to fine grained, poorly sorted	d, subangular.	
4	Sandy Callche, light reddish grey, firm to loose, dry, very fine grained, fairly sort	ed, subangular.	
1.3 12 14	Sandy Caliche, light grey, firm to looss, dry, very fine grained, fairly sorted, subc	ingular.	
16 - 18 - 18 -	TD= 15'		
20 —			
22 - - 24 - -			
26 - - 28 -			
30 - 32 -			
34 - 36 -			
- 38 - -			
40 — 			

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			pı		LOCATIO	ON MAP	
TOTAL WELL CASING DIA DRILLING CC	Irose S DEPTI (in) <u>4</u>). Stra	W-1 coot Hu <u>H 55</u> _ TYPE aub	igh 205 , BOR 5 <u>PVC</u>	6071.00 EHOLE	LOCATION Lea County, New Mexico DIA (in) 7 7/8 STICKUP (ft) EEN LENGTH 20 SLOT SIZE (in) 0.020 DRILLING METHOD Air Rotary DATE DRILLED 12/19/05	9383 9384	
DEPTH	RECOVERY BA	EV. (ft) ඉ	3389. PID (ppm)	uscs	_ GROUND SURFACE ELV. (ft)	REMARKS	WELL
- 0				SC	Sand, medium reddish brown, loose, dry, very fine to fine grained, fair sorting, subrounded to 2'.		
4 -	100	\bigotimes	0.0	Caliche	Caliche @ 2' Silty Sandy, light reddish grey, poorly indurated dry, very fine to fine grained, fair sorting, subangular, some small gravel to 0.25" Odor @ 6' slight.	MW1-5*	
8 10 12	100	\bigotimes	447	Coliche	Caliche, light yellowish red @ 11°.	MW1-10	
14 16	100	\bigotimes	418	Caliche	Odor in waves from slight to strong.	WW1-15'	
18 20	100	\bigotimes	455	Caliche		WW1-20'	
24	100	\bigotimes	360	Caliche	Caliche, light yellowish grey, well indurated, dry, very fine to fine grained, fair sorting, subangular.	MW1-25'	
28 - 30 - Solution 32 -	100	\bigotimes	394	Coliche	Odor dropping off.	MW1-30'	
-34 -36 -	100	\bigotimes	403	Caliche		MW1-35'	
38 40 ->>>	100	\bigotimes	487	Coliche	Strong odor.	MW1-40'	

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Р	REMIER	LOCATIO	DN MAP
TOTAL WELL DEPT <u>H 55</u> BC CASING DIA (in <u>)4</u> TYPE <u>P</u> DRILLING CO. <u>Straub</u> GEOLOGIST <u>Will Murley</u>	205071.00 LOCATION Lea County, New Mexico DREHOLE DIA (in) 7 7/8 STICKUP (ft) VC SCREEN LENGTH 20 SLOT SIZE (in) 0.020 DRILLING METHOD Air Rotary DATE DRILLED 12/19/05 39.00' GROUND SURFACE ELV. (ft)	• MW-3	
IIIA LOG RECOVERY	USCS LITHOLOGIC DESCRIPTION	COMMENTS	WELL REMARKS CONSTRUCTIO
40 42 44 46 46 48 50 52 54 46 48 50 52 54 46 50 52 54 55 55 55 55 55 55 55 55 55	4 Caliche Caliche, clayey, gravelly, light yellowish gre very fine to coarse grained, poorly sorted, Increase in Clay. No Sample — PSH	y, poorly indurated, wet, subangular.	MW1-45'
56 58 60 62 64 66 68 70 72 74 74 76 78			ı
80 -			Page 2 of .

				~	LOCATIO	ON MAP	
			PI	<u>E</u>	MIER	B MW-3	
WELL NUMB	ER M	W-2					\sim
					LOCATION Lea County, New Mexico	# \$8-5	58.2
					DIA (in) 7 7/8 STICKUP (ft)		I MI
					DRILLING METHOD Air Rotary		
	100000000000000000000000000000000000000				DATE DRILLED 12/19/05		
Construction and the second					_ GROUND SURFACE ELV. (ft)		
TAV	VERY	DOG					WELL
	RECOVERY	ГО	PID (ppm)	USCS	LITHOLOGIC DESCRIPTION/COMMENTS	REMARKS	CONSTRUCT
				SC	Sand, medium reddish brown, loose, dry, very fine to fine grained, fair sorting, subrounded to 2'.		
- 2 -		\bigotimes				1	
4-	100	\otimes	0. D	Caliche	Caliche, light yellowish red, poorly indurated, dry, very fine to fine	1.000 51	
- 6 -		\bigotimes			grained, fair sorting, subangular.	NW2-5'	
- 8 -		\otimes					
	100	\bigotimes	0.0	Coliche		MW2-10'	
10		\otimes		Concile		10	
12		\bigotimes			Callche, medlum red, Iron staining 🛛 12'.		
-14-	100	\otimes	0.D	Definition		MW2-15'	
16-	100	\bigotimes	0.0	Caliche	Caliche, medium reddish grey.	MW2-15	
		\otimes					
- 18 -		\times		-201			
20	100	\otimes	0.D	Caliche		MW2-20'	
-22-		\bigotimes					
-24		\otimes					
	100	\bigotimes	Q.D	Coliche	Caliche, medium reddish grey, dry, poorly indurated, silty sandy, very fine to fine grained, subangular, iron staining.	MW2-25'	
-26 -		\otimes					
-28	0	\bigotimes			Poor to fair induaration @ 28°.		
30 - >>>	100	\otimes	0.0	Calicha		MW2-30'	
-32-		\bigotimes					
-34 -	1	\otimes					335 8
	100	\bigotimes	0.D	Caliche		MW2-35'	
-36 -		\otimes					
-38		\bigotimes					
40	100	\otimes	D. D	Coliche	Odor @ 40'	NW2-40'	
		\bigotimes					
-42 -	1	(X)					

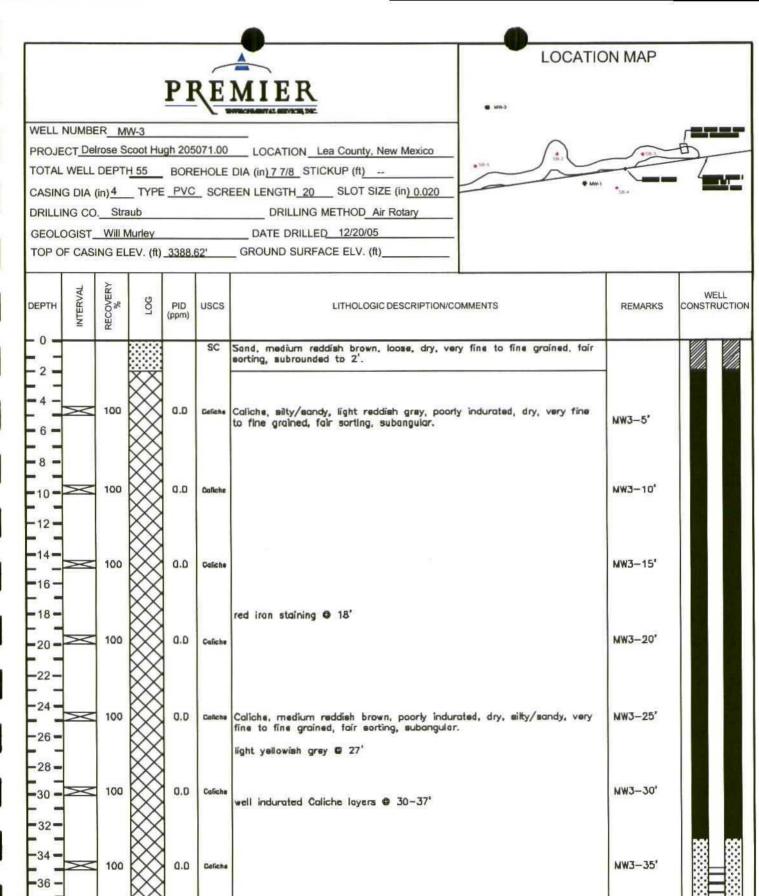
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VELL NUMBER_MW2	VELL NUMBER_MW-2 PROJECT Delicase Scoot Hugh 205071.00 LOCATION Lea County, New Mexico TOTAL WELL DEPTH 55 BOREHOLE DIA (in) 77/8 STICKUP (ft) CASING DIA (in) 4 TYPE PVC SCREEN LENSTH 20 SLOT SIZE (in) 0.020 DRILLING CO_Straub DRILLING METHOD Air Rotary SEOLOGIST_Will Murley DATE DRILLED 12/19/05 FOP OF CASING ELEV. (ft) 3388.38' GROUND SURFACE ELV. (ft) EPTH VEL V (ft) 3388.38' GROUND SURFACE ELV. (ft) EPTH VEL V (ft) 3388.38' GROUND SURFACE ELV. (ft) Construction 40 40 40 40 40 40 40 40 40 40			LOCATION MAP	
PROJECT Delrose Scoot Hugh 205071.00 LOCATION Lea County, New Mexico COTAL WELL DEPTH 55 BOREHOLE DIA (in) 77/8 STICKUP (ft) CASING DIA (in)4 TYPE PVC SCREEN LENGTH 20 SLOT SIZE (in) 0.020 DRILLING CO_Straub DRILLING METHOD Air Rotary SEOLOGIST Will Murley DATE DRILLED 12/19/05 TOP OF CASING ELEV. (ft) 3388.38' GROUND SURFACE ELV. (ft) 40 0 0 42 0 0 42 0 0 44 0 0 40 0.0 Daitese Caliche, medium reddish brown, sandy, poorly indurated, wet, very fine NW2-45' 44 100 0.0 Daitese Caliche, medium reddish brown, sandy, poorly indurated, wet, very fine NW2-45' 44 No Sample – water No Sample – water No Sample – water	ROJECT <u>Delrose Sood Hugh 205071.00</u> LOCATION <u>Las County, New Mexico</u> OTAL WELL DEPTH <u>55</u> BOREHOLE DIA (m) <u>7.78</u> STICKUP (M)	PRE	MIER	4 MM-3	
40 42 44 46 46 48 50 52 54 54 54 54 54 40 50 52 54 54 54 54 54 54 50 54 54 54 50 54 50 54 50 50 50 50 50 50 50 50 50 50	40 42 44 40 40 40 40 40 40 40 40 40	PROJECT_ <u>Delrose Scoot Hugh 205071.00</u> OTAL WELL DEPT <u>H 55</u> BOREHOLE CASING DIA (in) <u>4</u> TYPE <u>PVC</u> SCR DRILLING CO. <u>Straub</u> GEOLOGIST <u>Will Murley</u>	E DIA (in <u>) 7 7/8</u> STICKUP (ft)		≥ ● MAN-3
42 44 46 46 48 50 52 54	42 100 0.0 bases 0.0 bases Database Database Database Database Database NW2-45' NW2-45' 48 100 0.0 bases Database Database Database NW2-45' NW2-45' 50 100 0.0 bases Database No Somple - water NW2-45' 50 100 100 100 No Somple - water NW2-45' NW2-45' 50 100 100 100 100 No Somple - water NW2-45' 50 100 100 100 100 100 100 100 50 100 100 100 100 100 100 100 50 100 100 100 100 100 100 100 100 50 100 100 100 100 100 100 100 100 50 100 100 100 100 100 100 100 50 100 100	INTERVAL INTERVAL LOG Udd Udd Udd Udd Udd	LITHOLOGIC DESCRIPTION/COMMENTS	REMARKS CON	
	58 - 60 - 62 - 64 - 66 - 68 - 70 - 72 - 74 - 76	42- 44- 46- 48- 50- 52- 0.0 Celiche	Caliche, medium reddish brown, sandy, poorly indurated, w to fine grained, fair sarting, subangular.	iet, very fine MW2-45'	

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Colicha

NW3-40'

			PI	KE	LOCATIC MIER	N MAP	
WELL NUM	MBER M	W-3					
			igh 205	5071.00	LOCATION Lea County, New Mexico	-94.3	-
					DIA (in) 7 7/8 STICKUP (ft)		T
DRILLING GEOLOGI	CO. <u>Str</u> ST <u>Will</u>	aub Murley			EEN LENGTH 20 SLOT SIZE (in) 0.020 • MMMM DRILLING METHOD Air Rotary DATE DRILLED 12/20/05 GROUND SURFACE ELV. (ft)	580 A	, <u>, , , , , , , , , , , , , , , , , , </u>
DEPTH		FOG	PID (ppm)	uscs	LITHOLOGIC DESCRIPTION/COMMENTS	REMARKS	WELL
40 42 44 44 46 48 50 50	< 100		0.0	Galiche	water @ 43' na odor Caliche, clayey, gravelly, light reddish grey, poar to well indurated, wet, very fine to coarse grained, poorly sorted, subangular. No Sample — water	MW3-45'	
56 - 58 - 60 -							
64 66 68							
72 74 76 -							
78 80							Page 2 of :

Appendix B Tables

- Table 1 Site Ranking Matrix (in Section 3.1)
- Table 2 Soil Samples Analytical Results

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- Table 3 December 2005 Groundwater Elevation and PSH Gauging Data
- Table 4 December 2005 Groundwater Samples Analytical Results



Table 2	oil Analytical Results	plains Marketing, L.P.	1s EMS No. 2000-10807	Delrose Scott Hugh	a County, New Mexico
	Soil	Pla	Plains	å	Lea (

Location	Date Sampled	Interval	Laboratory Sample ID	GRO (C6-C10)	DRO (C10-C28)	Total TPH EPA 8015 m	Benzene	Toluene	Ethylbenzene	Total Xylene	Total BTEX EPA 8260b	Field OVM Reading
The second s	Element (12	feet bgs		mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mdd
NMOCD	NMOCD Remediation Goals	als				100	10		THE MAN WAR		50	Real Property
	9/14/2005	10	T11458-1	2460	4300	6760	1.08	20.6	56.6	136	214.280	276
SB 1	9/14/2005	20	T11458-2	203	1170	1373	0.029	0,168	0.681	3.21	4.088	72
	9/14/2005	25	T11458-3	16.7	184	200.7	0.0053	0.0038	0.0392	0.123	0.171	26
	9/15/2005	20	T11458-4	5260	10300	15560	40.3	264	152	392	848.300	152
SB 2	9/15/2005	35	T11458-5	2070	4070	6140	5.91	102	33.8	28.6	170.310	145
	9/15/2005	40	T11458-6	57.3	373	430.3	0.0232	0.091	0.0839	0.577	0.775	17
SB 3	9/14/2005	15	T-11458-7	4.32	26.9	31.22	0.0031	<0.0062	0.0029	0.0061	0.012	6.2
SB 4	9/15/2005	15	T-11458-8	<6.6	<9.8	<9.8	0.0034	0.0053	0.0016	0.0086	0.019	2.4
SB 5	9/15/2005	15	T-11458-9	<5.6	<8.8	<8.8	<0.0053	<0.0053	<0.0053	0.016	0.016	0
	ST. S.	Constant 1		A Strengthered		and the second second		No. No. In Concession	A CONTRACTOR OF	ENVIRONMENTAL A	Provinsion and and	Submitted in
	12/19/2005	20	MW1-20	9070	6650	15720	18.9	99.5	81,4	180	379.8	455
MW-1	12/19/2005	40	MW1-40	7380	2600	9980	2.19	20.8	15.2	76.9	115.19	487
	12/19/2005	45	MW1-45	344	354	698	0.225	1.23	2.42	6.58	10.455	154
	12/19/2005	30	MW2-30	\$	\$	5	<0.020	<0.020	<0.020	<0.020	<0.020	0
MW-2	12/19/2005	40	MW2-40	5	\$	\$5	<0.020	<0.020	<0.020	<0.020	<0.020	0
	12/19/2005	45	MW2-45	214	€5	214	<0.020	<0.020	<0.020	<0.020	<0.020	0
	12/20/2005	5	MW3-5	\$	\$	5	<0.020	<0.020	<0.020	<0.020	<0.020	0
MW-3	12/20/2005	40	MW3-40	Ø	\$	€5	-<0.020	<0.020	<0.020	<0.020	<0.020	0
	12/20/2005	45	MW3-45	\$	\$	₽	<0.020	<0.020	<0.020	<0.020	<0.020	0

BGS - Below Ground Surface DRO - Diesel Range Organics Concentrations in bold exceed NMOCD Remedaition Goals

Diesel Range Organics GRO - Casoline Range Organics daition Goals

OVM - Organic Vapor Meter

Table 32005 Groundwater Elevation and PSH Gauging DataPlains Marketing L.P.EMS No. 2000-10807Delrose Scott HughLea County, New Mexico

Well No.	Date	TOC Elevation	Depth to PSH	Depth to Water	Depth of Well	PSH Thickness	Groundwater Elevation
MW-1	12/21/2005	3389.00	Sheen (46.22)	46.22	59.82		3342.78
	12/29/2005		Sheen (46.16)	46.16			
MW-2	12/21/2005	3388.28	ND	45.23	59.34		3343.05
10100-2	12/29/2005		ND	45.15			
MW-3	12/21/2005	3388.62	ND	45.57	59.69		3343.05
	12/29/2005		ND	45.52			

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Table 4 2005 Groundwater Sample Analytical Results Plains Marketing L.P. EMS No. 2000-10807 Delrose Scott Hugh Lea County, New Mexico

Well	Sample ID	Sampling Date	Benzene ma/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	BTEX 8260b mg/L
NMOC	D Remediation	n Criteria	0.01	0.750	0.750	0.620	and the second
MW-1	T12186-1	12/21/2005	NS	NS	NS	NS	Sheen
MW-2	T12186-2	12/21/2005	<0.002	< 0.002	< 0.002	<0.006	< 0.002
MW-3	T12186-3	12/21/2005	<0.002	< 0.002	< 0.002	<0.006	< 0.002

Note: MW-1 not sampled due to presence of hydrocarbon sheen (NS)

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Table 4 2005 Groundwater Sample Analytical Results Plains Marketing L.P. EMS No. 2000-10807 Delrose Scott Hugh Lea County, New Mexico

Well	Sample ID	Sampling Date	Benzene mg/L	Toluene mg/L	Ethylbenzene mg/L	Total Xylenes mg/L	BTEX 8260b mg/L
NMOC	D Remediation	n Criteria	0.01	0.750	0.750	0.620	
MW-1	T12186-1	12/21/2005	NS	NS	NS	NS	Sheen
MW-2	T12186-2	12/21/2005	<0.002	< 0.002	<0.002	<0.006	< 0.002
MW-3	T12186-3	12/21/2005	<0.002	< 0.002	< 0.002	<0.006	< 0.002

Note: MW-1 not sampled due to presence of hydrocarbon sheen (NS)

Appendix C Analytical Reports

Quality Assurance/Quality Control Chain of Custody Documentation

September 2005 – Soil Samples - Analytical Results December 2005 – Soil Samples - Analytical Results December 2005 – Groundwater Samples - Analytical Results



Delrose Scott Hugh

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September 2005 – Soil Samples – Analytical Results





Gulf Coast

Technical Report for

Premier Environmental Services

Delrose Scott Hughes/205071/2000-10807

Accutest Job Number: T11458

Sampling Dates: 09/14/05 - 09/15/05

Report to:

Premier Environmental Services

cpatel@premiercorp-usa.com

ATTN: Chan Patel

Total number of pages in report: 52



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Ron Martino Laboratory Manager

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Sample Summary

Premier Environmental Services

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Job No: T11458

Delrose Scott Hughes/205071/2000-10807

Sample Number	Collected Date 7	Гіте Ву	Received	Matri Code		Client Sample ID
T11458-1	09/14/05 1	15:09 WM	09/17/05	SO	Soil	SB1-10'
T11458-2	09/14/05 1	15:37 WM	09/17/05	SO	Soil	SB1-20'
T11458-3	09/14/05 1	15:52 WM	09/17/05	SO	Soil	SB1-25'
T11458-4	09/15/05 0	09:48 WM	09/17/05	SO	Soil	SB2-20'
T11458-5	09/15/05 1	10:34 WM	09/17/05	SO	Soil	SB2-35'
T11458-6	09/15/05 1	10:53 WM	09/17/05	SO	Soil	SB2-40'
T11458-7	09/15/05 1	11:58 WM	09/17/05	SO	Soil	SB3-15'
T11458-8	09/15/05 1	12:34 WM	09/17/05	SO	Soil	SB4-15'
T11458-9	09/15/05	13:10 WM	09/17/05	SO	Soil	SB5-15'
T11458-10	09/15/05 (00:00 WM	09/17/05	AQ	Trip Blank Soil	TRIP BLK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



			Repo	rt of A1	nalysis			Page 1 of 1
Client Sar Lab Samp Matrix: Method: Project:	ole ID: T11458 SO - Sc SW846	-1 iil 8260B	nes/205071/20	00-10807	Date l	Sampled: Received nt Solids	: 09/17/05	·····
Run #1 Run #2	File 1D Z18963.D Z18964.D	DF 1 10	Analyzed 09/21/05 09/21/05	By LJ LJ	Prep D n/a n/a	ate	Prep Batch n/a n/a	Analytical Batch VZ995 VZ995
Run #1 Run #2	Initial Weight 5.04 g 5.04 g	Final Vol 5.0 ml 5.0 ml	ume Meth 100 u 100 u		ot			
Purgeable	e Aromatics							
CAS No.	Compound		Result	RL	MDL	Units	Q	
71-43-2 108-88-3 100-41-4	Benzene Toluene Ethylbenzene		1080 20600 a 56600 a	350 3500 3500	97 880 880	ug/kg ug/kg ug/kg		

1330-20-7	Xylene (total)	136000 a	10000	2600 ug/	-
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7	Dibromofluoromethane	87%	90%	75-137%	
2037-26-5	Toluene-D8	90%	100%	88-147%	
460-00-4	4-Bromofluorobenzene	159% ^b	111%	82-154%	
17060-07-0	1.2-Dichloroethane-D4	101%	88%	62-135%	

(a) Result is from Run# 2

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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	Report of Analysis										
Client San Lab Samp Matrix: Method: Project:	le ID: T1145 SO - S SW846	8-1 oil 5 8015	thes/205071/200	00-10807	Date l	Sampled: Received: nt Solids:	09/17/05				
Run #1 Run #2	File ID EE021585.D	DF 100	Analyzed 09/20/05	By JH	Prep D n/a	ate	Prep Batch n/a	Analytical Batch GEE972			
Run #1 Run #2	Initial Weight 5.04 g	Final V 5.0 ml	olume Metha 100 ul	anol Aliquo	it .						
CAS No.	Compound		Result	RL	MDL	Units	Q				
	TPH-GRO (C	6-C10)	2460	700	350	mg/kg					
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	nits					
460-00-4 98-08-8	4-Bromofluoro aaa-Trifluorot	• • • • • • •	95% 94%			139% 136%					

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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	Report of Analysis									
Client San Lab Samp Matrix: Method: Project:	le ID: T114 SO - SW8						Date Sampled:09/14/05Date Received:09/17/05Percent Solids:83.2			
Run #1 Run #2	File ID CC9817.D	DF 20	Analyzed 09/28/05	By FO	Prep Date 09/26/05		Prep Batch OP5019	Analytical Batch GCC478		
Run #1 Run #2	Initial Weig 30.1 g	ht Final Vo 10.0 ml	lume							
CAS No.	Compound		Result	RL	MDL	Units	Q			
	TPH (C10-0	028)	4300	2000	800	mg/kg				
CAS No.	Surrogate I	Recoveries	Run# 1	Run# 2	Lim	nits				
84-15-1	o-Terpheny	l	0% a		41-153%					

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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	Report of Analysis									
Client Sam Lab Sampl Matrix: Method: Project:	e ID: T1145 SO - S SW84	8-2 Soil 6 8260B	hes/205071/20	00-10807	Date I	Sampled: Received: nt Solids:	09/17/05			
Run #1 Run #2	File ID Z18965.D	DF 1	Analyzed 09/21/05	By LJ	Prep D n/a	ate	Prep Batch n/a	Analytical Batch VZ995		
Run #1 Run #2	Initial Weight 0.990 g	Final Vo 5.0 ml	lume							
Purgeable	Aromatics			<u></u> ,						
CAS No.	Compound		Result	RL	MDL	Units	Q			
71-43-2	Benzene		ND	29	8.2	ug/kg				
108-88-3	Toluene		168	29	7.4	ug/kg				
100-41-4	Ethylbenzene		681	29	7.4	ug/kg	_			
1330-20-7	Xylene (total)	a	3210	88	22	ug/kg	E			
CAS No.	Surrogate R	ecoveries	Run# 1	Run# 2	Lim	iits				
1868-53-7	Dibromofluo	omethane	88%		75-1	137%				
2037-26-5	Toluene-D8 102%				88-147%					
460-00-4	4-Bromofluor	obenzene	145%		82-1	54%				

(a) Estimated value, concentration exceeds linear calibration range by less than 10%

84%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

17060-07-0 1,2-Dichloroethane-D4

J = Indicates an estimated value

62-135%

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound

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	Report of Analysis									
Client Sar Lab Samp Matrix: Method: Project:	ole ID: T1145 SO - S SW840	8-2 oil 6 8015	ghes/205071/200	00-10807	Date I	Sampled: Received: nt Solids:	: 09/17/05			
Run #1 Run #2	File ID EE021586.D	DF 10	Analyzed 09/20/05	Ву JH	Prep D n/a	ate	Prep Batch n/a	Analytical Batch GEE972		
Run #1 Run #2	Initial Weight 5.13 g	Final Vo 5.0 ml	p lume Meth a 100 ul	anol Aliquo	ot					
CAS No.	Compound		Result	RL	MDL	Units	Q			
	TPH-GRO (C	6-C10)	203	65	32	mg/kg				
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	iits				
460-00-4 98-08-8	4-Bromofluor aaa-Trifluorot		112% 90%			139% 136%				

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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	Report of Analysis									
Client San Lab Samp Matrix: Method: Project:	le ID: T114 SO - SW84	58-2 Soil 16 8015 M - S	SW846 3550B hes/205071/20	00-10807	Date I	Sampled: Received: nt Solids:	09/17/05			
Run #1 Run #2	File 1D CC9818.D	DF 50	Analyzed 09/28/05	By FO	Prep D 09/26/0		Prep Batch OP5019	Analytical Batch GCC478		
Run #1 Run #2	Initial Weigh 30.1 g	t Final Vo 1.0 ml	lume							
CAS No.	Compound		Result	RL	MDL	Units	Q			
	ТРН (С10-С	28)	1170	480	190	mg/kg				
CAS No.	Surrogate R	ecoveries	Run# 1	Run# 2	Lim	its				
84-15-1	o-Terphenyl		0% a		41-1	53%				

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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	Report of Analysis										
Client Sam Lab Sampl Matrix: Method: Project:	e ID: T11458 SO - So SW846	-3 il 8260B	hes/205071/200	00-10807	Date I	Sampled: Received: nt Solids:	09/17/05				
Run #1 Run #2	File ID Z18967.D	DF 1	Analyzed 09/21/05	By LJ	Prep D n/a	ate	Prep Batch n/a	Analytical Batch VZ995			
Run #1 Run #2	Initial Weight 5.04 g	Final Vo 5.0 ml	lume		,						
Purgeable	Aromatics										
CAS No.	Compound		Result	RL	MDL	Units	Q				
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)		ND 3.8 39.2 123	5.3 5.3 5.3 16	1.5 1.3 1.3 4.0	ug/kg ug/kg ug/kg ug/kg	J				
CAS No.	Surrogate Rec	overies	Run# 1	Run# 2	Lim	nits					
1868-53-7	Dibromofluoro	methane	88%		75-1	37%					

99%

119%

82%

RL = Reporting Limit

2037-26-5

460-00-4

Toluene-D8

17060-07-0 1,2-Dichloroethane-D4

4-Bromofluorobenzene

- E = Indicates value exceeds calibration range
- J = Indicates an estimated value

88-147%

82-154%

62-135%

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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	Report of Analysis												
Client San Lab Samp Matrix: Method: Project:	ole ID: T11458 SO - S SW846	8-3 oil 5 8015	hes/205071/200	es/205071/2000-10807		Sampled: Received: nt Solids:	09/17/05						
Run #1 Run #2	File ID EE021561.D	DF 1	Analyzed 09/19/05	Ву ЈН	Prep D n/a	Pate	Prep Batch n/a	Analytical Batch GEE972					
Run #1 Run #2	Initial Weight 5.16 g	Final Vo 5.0 ml	lume Metha 100 ul	anol Aliquo	t								
CAS No.	Compound		Result	RL	MDL	Units	Q						
	TPH-GRO (C	6-C10)	16.7	5.6	2.8	mg/kg							
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	nits							
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene		120% 91%		56-139% 46-136%								

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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			Repo	rt of An	alysis			Page 1 of 1
Client Sar Lab Samp Matrix: Method: Project:	Die ID: T1145 SO - S SW84	00-10807	Date Sampled:09/14/05Date Received:09/17/05Percent Solids:92.9					
Run #1 Run #2	File ID CC9819.D	DF 20	Analyzed 09/28/05	By FO	Prep D 09/26/0		Prep Batch OP5019	Analytical Batch GCC478
Run #1 Run #2	Initial Weight 30.0 g	Final Vo 1.0 ml	olume					
CAS No.	Compound		Result	RL	MDL	Units	Q	
	ТРН (С10-С2	28)	184	180	72	mg/kg		
CAS No.	Surrogate Re	Surrogate Recoveries		Run# 2	Lim	nits		
84-15 - 1	o-Terphenyl	-Terphenyl			41-1	53%		

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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Client San Lab Samp Matrix: Method: Project:	ole ID: T11458 SO - So SW846						Date Sampled:09/15/05Date Received:09/17/05Percent Solids:83.4		
Run #1 Run #2	File ID Z18968.D	DF 20	Analyzed 09/21/05	By LJ	Prep D n/a	ate	Prep Batch n/a	Analytical Batch VZ995	
Run #1 Run #2	Initial Weight 5.02 g	Final Vo 5.0 ml	lume Meth 100 u	anol Aliqu 1	ot				
Purgeable	Aromatics								
CAS No.	Compound	•	Result	RL	MDL	Units	Q		
71-43-2	Benzene		40300	7000	1900	ug/kg			

7000

7000

21000

Run# 2

1800

1800

5300

Limits

75-137%

88-147%

82-154%

62-135%

ug/kg

ug/kg

ug/kg

264000

152000

392000

Run# 1

89%

99%

112%

88%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

108-88-3

100-41-4

1330-20-7

CAS No.

1868-53-7

2037-26-5

460-00-4

Toluene

Ethylbenzene

Xylene (total)

Toluene-D8

17060-07-0 1,2-Dichloroethane-D4

Surrogate Recoveries

Dibromofluoromethane

4-Bromofluorobenzene

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Page 1 of 1

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Report of Analysis

			Repo	rt of An	alysis			Page 1 of 1
Client San Lab Sam Matrix: Method: Project:	ole ID: T11458 SO - So SW846	-4 oil 8015	hes/205071/200	00-10807	Date S Date I Perce			
Run #1 Run #2	File ID EE021588.D	DF 100	Analyzed 09/20/05	By JH	Prep D n/a	ate	Prep Batch n/a	Analytical Batch GEE972
Run #1 Run #2	Initial Weight 5.16 g	Final Vo 5.0 ml	lume Metha 100 u	anol Aliquo	t			
CAS No.	Compound		Result	RL	MDL	Units	Q	
	TPH-GRO (Co	5-C10)	5260	680	340	mg/kg		
CAS No.	Surrogate Ree	overies	Run# 1	Run# 2	Lin	nits		
460-00-4 98-08-8			122% 111%	56-139% 46-136%				

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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			Repo	rt of An	alysis			Page 1 of 1
Client San Lab Samp Matrix: Method: Project:	le ID: T1145 SO - S SW84	58-4 Soil 6 8015 M S	W846 3550B les/205071/20	00-10807	Date Sampled: Date Received: Percent Solids:		09/17/05	
Run #1 Run #2	File ID CC9820.D	DF 20	Analyzed 09/28/05	By FO	Prep D 09/26/0		Prep Batch OP5019	Analytical Batch GCC478
Run #1 Run #2	Initial Weight 30.0 g	Final Vol 10.0 ml	ume					
CAS No.	Compound		Result	RL	MDL	Units	Q	
	ТРН (С10-С	28)	10300	2000	800	mg/kg		
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Lim	its		
84-15-1	o-Terphenyl		0% a		41-153%			

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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Ethylbenzene

Xylene (total)

Toluene-D8

17060-07-0 1,2-Dichloroethane-D4

Surrogate Recoveries

Dibromofluoromethane

4-Bromofluorobenzene

			Repo	rt of Aı	nalysis			Page 1 of 1
Client San Lab Samp Matrix: Method: Project:	Sole ID: T11458 SO - So SW846	-5 bil 8260B	hes/205071/20	00-10807	Date Sampled:09/15/05Date Received:09/17/05Percent Solids:78.2			
Run #1 Run #2	File ID Z18969.D	DF 5	Analyzed 09/21/05	By LJ	Prep D n/a	ate	Prep Batch n/a	Analytical Batch VZ995
Run #1 Run #2	Initial Weight 5.01 g	Final Vo 5.0 ml	olume Meth 100 ι	anol Aliqu	ot			
Purgeable	Aromatics							
CAS No.	Compound		Result	RL	MDL	Units	Q	
71-43-2 108-88-3	Benz <i>e</i> ne Toluene		5910 33800	1900 1900	540 490	ug/kg ug/kg		

1900

5800

Run# 2

28600

102000

Run#1

89%

100%

111%

86%

490

1500

Limits

75-137%

88-147%

82-154%

62-135%

ug/kg

ug/kg

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

100-41-4

1330-20-7

CAS No.

1868-53-7

2037-26-5

460-00-4

- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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aaa-Trifluorotoluene

			Repo	rt of An	alysis			Page 1 of 1
Client San Lab Samp Matrix: Method: Project:	de ID: T11458 SO - So SW846	8-5 bil 8015	hes/205071/20	00-10807	Date Sampled:09/15/05Date Received:09/17/05Percent Solids:78.2			
Run #1 Run #2	File ID EE021589.D	DF 100	Analyzed 09/20/05	Ву ЈН	Prep D n/a	ate	Prep Batch n/a	Analytical Batch GEE972
Run #1 Run #2	Initial Weight 5.01 g	Final Vo 5.0 ml	olume Meth 100 u	anol Aliquo 1	t			
CAS No.	Compound		Result	RL	MDL	Units	Q	
	TPH-GRO (Ce	5-C10)	2070	780	390	mg/kg		
CAS No.	Surrogate Re	Surrogate Recoveries		Run# 2	Lim	its		
460-00-4	4-Bromofluoro	benzene	85%		56-1	39%		

46-136%

98%

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

98-08-8

E = Indicates value exceeds calibration range

J = Indicates an estimated value

- H

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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	Report of Analysis											
Client San Lab Samp Matrix: Method: Project:	le ID: T114 SO - SW8						Date Sampled: 09/15/05 Date Received: 09/17/05 Percent Solids: 78.2					
Run #1 Run #2	File ID CC9821.D	DF 20	Analyzed 09/28/05	By FO	Prep D 09/26/0		Prep Batch OP5019	Analytical Batch GCC478				
Run #1 Run #2	Initial Weigł 30.0 g	t Final Ve 10.0 ml	olume									
CAS No.	Compound		Result	RL	MDL	Units	Q					
	трн (С10-С	28)	4070	2100	850	mg/kg						
CAS No.	Surrogate Recoveries		Run# 1	Run# 2	Lim	its						
84-15-1	o-Terphenyl		0% a		41-153%							

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit

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- RL = Reporting Limit
- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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			Repo	rt of A	nalysis			Page 1 of 1
Client Sam Lab Samp Matrix: Method: Project:					Date Sampled:09/15/05Date Received:09/17/05Percent Solids:85.2			
Run #1 Run #2	File ID B116554.D Z18970.D	DF 1 1	Analyzed 09/26/05 09/21/05	By LJ LJ	Prep D n/a n/a	ate	Prep Batch n/a n/a	Analytical Batch VB1103 VZ995
Run #1 Run #2	Initial Weight 5.16 g 0.990 g	Final Vo 5.0 ml 5.0 ml	lume					
Purgeable	Aromatics							
CAS No.	Compound		Result	RL	MDL	Units	Q	
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)		23.2 91.0 83.9 577 ^a	5.7 5.7 5.7 89	1.6 1.4 1.4 22	ug/kg ug/kg ug/kg ug/kg		

1550-20-7	Aylene (total)	577 "	89	22 ug/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	74% b	85%	75-137%
2037-26-5	Toluene-D8	100%	101%	88-147%
460-00-4	4-Bromofluorobenzene	152%	115%	82-154%
17060-07-0	1,2-Dichloroethane-D4	63%	81%	62-135%

(a) Result is from Run# 2

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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			Repor	rt of An	alysis			Page 1 of 1
Client San Lab Samp Matrix: Method: Project:	ole ID: T11458 SO - S SW846	00-10807	Date S Date I Percer					
Run #1 Run #2	File ID EE021605.D	DF 2	Analyzed 09/20/05	Ву ЈН	Prep D n/a	ate	Prep Batch n/a	Analytical Batch GEE972
Run #1 Run #2	Initial Weight 5.01 g	Final Vo 5.0 ml	olume Metha 100 ul	anol Aliquo	t			
CAS No.	Compound		Result	RL	MDL	Units	Q	
	TPH-GRO (C	6-C10)	57.3	13	6.7	mg/kg		
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	nits		
460-00-4 98-08-8	4-Bromofluorobenzene124%aaa-Trifluorotoluene92%			56-139% 46-136%				

ND = Not detected MDL - Method Detection Limit

- RL = Reporting Limit
- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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			Repo	rt of An	alysis			Page 1 of 1
Client San Lab Samp Matrix: Method: Project:	le ID: T1145 SO - S SW84						09/15/05 : 09/17/05 : 85.2	
Run #1 Run #2	File ID CC9822.D	DF 20	Analyzed 09/28/05	By FO	Prep D 09/26/0		Prep Batch OP5019	Analytical Batch GCC478
Run #1 Run #2	Initial Weight 30.1 g	Final Vo 1.0 ml	lume					
CAS No.	Compound		Result	RL	MDL	Units	Q	
	ТРН (С10-С2	.8)	373	190	78	mg/kg		
CAS No.	Surrogate Re	Surrogate Recoveries		Run# 2	Lim	its		
84-15-1	o-Terphenyl		108%		41-153%			

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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	Page 1 of 1							
Client San Lab Samp Matrix: Method: Project:	ole ID: T11458 SO - So SW846	hes/205071/20	00-10807	Date S Date I Percei	: 09/17/05			
Run #1 Run #2	File ID Z18972.D	DF 1	Analyzed 09/21/05	By LJ	Prep D n/a	ate	Prep Batch n/a	Analytical Batch VZ995
Run #1 Run #2	Initial Weight 5.13 g	Final Vo 5.0 ml	lume					
Purgeable	Aromatics							
CAS No.	Compound		Result	RL	MDL	Units	Q	
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)		3.1 ND 2.9 6.1	6.2 6.2 6.2 18	1.7 1.6 1.6 4.7	ug/kg ug/kg ug/kg ug/kg	J J	
CAS No.	Surrogate Rec	overies	Run# 1	Run#	2 Lim	its		
10(0 52 5			0(0)					

108-88-3	Toluene	ND	6.2	1.6	ug/kg
100-41-4	Ethylbenzene	2.9	6.2	1.6	ug/kg
1330-20-7	Xylene (total)	6.1	18	4.7	ug/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limi	ts
1868-53-7	Dibromofluoromethane	86%		75-13	37%
2037-26-5	Toluene-D8	103%		88-14	47%
460-00-4	4-Bromofluorobenzene	118%		82-15	54%
17060-07-0	1,2-Dichloroethane-D4	81%		62-13	35%

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

- E = Indicates value exceeds calibration range
- J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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	Report of Analysis										
Client Sar Lab Samp Matrix: Method: Project:	ole ID: T11458 SO - S SW846	8-7 oil 5 8015	hes/205071/200	00-10807	Date l	Sampled: Received: nt Solids:	09/17/05				
Run #1 Run #2	File ID EE021565.D	DF 1	Analyzed 09/19/05	Ву ЈН	Prep D n/a	ate	Prep Batch n/a	Analytical Batch GEE972			
Run #1 Run #2	Initial Weight 5.05 g	Final Vo 5.0 ml	lume Metha 100 u	anol Aliquo	ıt						
CAS No.	Compound		Result	RL	MDL	Units	Q				
	TPH-GRO (C	6-C10)	4.32	7.6	3.8	mg/kg	J				
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	nits					
460-00-4 98-08-8	4-Bromofluoro aaa-Trifluorot		78% 86%			139% 136%					

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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	Report of Analysis									
Client San Lab Samp Matrix: Method: Project:	le ID: T1 SC SV						Sampled: Received: nt Solids:			
Run #1 Run #2	File ID CC9825.D		DF 1	Analyzed 09/28/05	By FO	Prep D 09/26/0		Prep Batch OP5019	Analytical Batch GCC478	
Run #1 Run #2	Initial Wei 30.1 g	ight	Final Vo 1.0 ml	lume						
CAS No.	Compour	d		Result	RL	MDL	Units	Q		
	TPH (C10)-C28)		26.9	10	4.2	mg/kg			
CAS No.	Surrogate	e Reco	overies	Run# 1	Run# 2	Lim	its			
84-15-1	o-Terpher	nyl		55%		41-1	53%			

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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Surrogate Recoveries

Dibromofluoromethane

4-Bromofluorobenzene

Toluene-D8

17060-07-0 1,2-Dichloroethane-D4

	Report of Analysis									
Client Sam Lab Sampl Matrix: Method: Project:	e ID: T11458 SO - So SW846	-8 il 8260B	hes/205071/20	5/205071/2000-10807		Sampled: Received: nt Solids:	: 09/17/05			
Run #1 Run #2	File ID Z18973.D	DF 1	Analyzed 09/21/05	By LJ	Prep D n/a	ate	Prep Batch n/a	Analytical Batch VZ995		
Run #1 Run #2	Initial Weight 5.06 g	Final Vo 5.0 ml	lume							
Purgeable	Aromatics									
CAS No.	Compound		Result	RL	MDL	Units	Q			
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)		3.4 5.3 1.6 8.6	5.8 5.8 5.8 17	1.6 1.5 1.5 4.4	ug/kg ug/kg ug/kg ug/kg	J J J			

Run# 2

Limits

75-137%

88-147%

82-154%

62-135%

Run# 1

86%

107%

118%

79%

ND =	Not detected	MDL - Method Detection Limit

RL = Reporting Limit

CAS No.

1868-53-7

2037-26-5

460-00-4

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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aaa-Trifluorotoluene

98-08-8

	Report of Analysis										
Client San Lab Samp Matrix: Method: Project:	ole ID: T11453 SO - S SW846	8-8 oil 5 8015	thes/205071/20	00-10807	Date Sampled: Date Received: Percent Solids:		09/17/05				
Run #1 Run #2	File ID EE021594.D	DF 1	Analyzed 09/20/05	By JH	Prep D n/a	ate	Prep Batch n/a	Analytical Batch GEE972			
Run #1 Run #2	Initial Weight 5.11 g	Final Vo 5.0 ml	blume Meth 100 u	anol Aliquo 	t						
CAS No.	Compound		Result	RL	MDL	Units	Q				
	TPH-GRO (C	6-C10)	ND	6.6	3.3	mg/kg					
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	its					
460-00-4	4-Bromofluor	obenzene	58%		56-1	39%					

86%

ND = Not detected MDL - Method Detection Limit RL = Reporting Limit

J = Indicates an estimated value

46-136%

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



E = Indicates value exceeds calibration range

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	Report of Analysis										
Client San Lab Samp Matrix: Method: Project:	le ID: T1145 SO - S SW84	8-8 oil 6 8015 M	SW846 3550B nes/205071/2000-10807		Date F	Sampled: Received: nt Solids:	: 09/17/05				
Run #1 Run #2	File ID CC9826.D	DF 1	Analyzed 09/28/05	By FO	Prep D 09/26/0		Prep Batch OP5019	Analytical Batch GCC478			
Run #1 Run #2	Initial Weight 30.1 g	Final Vo 1.0 ml	blume								
CAS No.	Compound		Result	RL	MDL	Units	Q				
	трн (С10-С2	28)	ND	9.8	3.9	mg/kg					
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	its					
84-15-1	o-Terphenyl		42%		41-1	53%					

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

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E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



5.0 171

	Report of Analysis										
Client Sam Lab Samp Matrix: Method: Project:	le ID: T11458 SO - So SW846	-9 il 8260B	ghes/205071/20	00-10807	Date I	Sampled: Received: nt Solids:	: 09/17/05				
Run #1 Run #2	File ID Z18974.D	DF 1	Analyzed 09/21/05	By LJ	Prep D n/a	ate	Prep Batch n/a	Analytical Batch VZ995			
Run #1 Run #2	Initial Weight 5.02 g	Final V 5.0 ml	olume								
Purgeable	Aromatics										
CAS No.	Compound		Result	RL	MDL	Units	Q				
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)		ND ND ND	5.3 5.3 5.3 16	1.5 1.3 1.3 4.0	ug/kg ug/kg ug/kg ug/kg					
CAS No.	Surrogate Rec	overies	Run# 1	Run# 2	Lim	lits					

1330-20-7	Aylene (total)	ND	10	4.0 ug/k	1
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7 2037-26-5 460-00-4 17060-07-0	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene 1,2-Dichloroethane-D4	86% 109% 119% 81%		75-137% 88-147% 82-154% 62-135%	

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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			Repor	rt of An	alysis			Page 1 of 1
Client Sar Lab Samp Matrix: Method: Project:	ole ID: T1145 SO - S SW840	8-9 oil 6 8015	ghes/205071/200	00-10807	Date Sampled: Date Received: Percent Solids:		09/17/05	
Run #1 Run #2	File ID EE021569.D	DF 1	Analyzed 09/19/05	Ву ЈН	Prep D n/a	Pate	Prep Batch n/a	Analytical Batch GEE972
Run #1 Run #2	Initial Weight 5.06 g	Final V 5.0 ml	olume Metha 100 ul	anol Aliquo	ot			
CAS No.	Compound		Result	RL	MDL	Units	Q	
	TPH-GRO (C	6-C10)	ND	5.6	2.8	mg/kg		
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	nits		
460-00-4 98-08-8	4-Bromofluor aaa-Trifluorot		48% ^a 69%			139% 136%		

(a) Confirmed by MS/MSD.

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ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound



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	Report of Analysis									
Client San Lab Samp Matrix: Method: Project:	le ID: T1145 SO - S SW84	58-9 Soil 6 8015 M	SW846 3550B hes/205071/2000-10807		Date Sampled:09/15/05Date Received:09/17/05Percent Solids:94.0					
Run #1 Run #2	File ID CC9827.D	DF 1	Analyzed 09/28/05	By FO	Prep D 09/26/0		Prep Batch OP5019	Analytical Batch GCC478		
Run #1 Run #2	Initial Weight 30.1 g	t Final Vo 1.0 ml	blume							
CAS No.	Compound		Result	RL	MDL	Units	Q			
	ТРН (С10-С2	28)	ND	8.8	3.5	mg/kg				
CAS No.	Surrogate R	ecoveries	Run# 1	Run# 2	Lim	its				
84-15-1	o-Terphenyl		66%		41-1	.53%				

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

- F - F

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



			Repo	ort of A	nalysis			Page 1 of 1
Client Sar Lab Samp Matrix: Method: Project:	ole ID: T1143 AQ - SW84	58-10 Trip Blank 6 8021B	Soil 1ghes/205071/20	000-10807	Date l	Sampled: Received nt Solids	: 09/17/05	
Run #1 Run #2	File ID KK08676.D	DF 1	Analyzed 09/21/05	Ву ЈН	Prep D n/a	ate	Prep Batch n/a	Analytical Batch GKK656
Run #1 Run #2	Purge Volum 5.0 ml	e						
Purgeable	Aromatics							
CAS No.	Compound		Result	RL	MDL	Units	Q	
71-43-2	Benzene		ND	1.0	0.38	ug/l		

1.0

1.0

2.0

Run# 2

0.36

0.35

0.72

Limits

56-136%

50-144%

ug/l

ug/l

ug/l

ND

ND

ND

Run#1

115%

111%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

108-88-3

100-41-4

1330-20-7

CAS No.

460-00-4

98-08-8

Toluene

Ethylbenzene

Xylenes (total)

Surrogate Recoveries

4-Bromofluorobenzene

aaa-Trifluorotoluene

- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

Chain of Custody

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SIN 1

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CHAIN OF CUSTODY

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T11458: Chain of Custody Page 1 of 2



W for no or NA. If "N" is gircled, condition. 2, 0, N le IDs and analysis on contain and tamper not evident on boltle: arts SAMPLED MATRIX W ATRIX W ILY 9/ IC SO 2 L 1/9/ 9/ 1C SO 2 L 1/9/ 1C SO 2 L	(ed. see variance for explanation): N Sample received with themp, range. N Sample received with chain of custody, alners. N Sample received with chain of custody, alners. N Sample received with chain of custody, alners. Aloca VECF (12.34.56 (0, -2, -12, Na -1, 2, 2, 3, 4, 5, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1, 2, 3, 4, 5, 6, 1, -2, -12, Na -1,	ar NA. If "N" is gircle 2.0 N 4. Ch A analysis on contain in not evident on not if not evident on not find A TTB A TTB	and "N" for no o aged condition. If the analysis and a sample IDs and that and tamped intact and tamped y / / / / / /	Variance (Circle "Y" for yes and " Sample received in undamaged o Sample received with proper pH. Sample volume sufficient for ana Chain of Custody matches samp IA Custody seal received inhact a A Custody seal received inhact a or FIELD ID BOTTLE # D
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atili Refrig. SUB: Subcontract EF: Encore Freezer 1. 3: HNO3 4: H3504 5: NAD1 6: Other	1,2,3,4,5,6 1,2,3,4,5,6 1,2,3,4,5,6 1,2,3,4,5,6 3,0 Y			
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latile Rehig. SUB: Subcontract EF: Encore Freezer L. 3: HNO3 4: H2S04 5: NAOH 6: Other	3.07		`	
latile Refrig SUB: Subcontract EF: Encore Freezer L 3: HNO3 4: H2SO4 5: NAOH 6: Other	20%			
Comments:	30%	ontract EF: Encore F : NAOH 6: Other Comments:	rig. SUB: Subco 103 4: H2SO4 5:	LOCATION: WI: Walk-In VR: Volatile Refrig. PRESERVATIVES: 1: None 2: HCL 3: HNO3 pH of waters checked excluding volatiles
	1000	ö		Delivery method: Courier: 404 4.
Iracking#	DOULER IES :	Нон	Accutact	Iracking#:

T11458: Chain of Custody Page 2 of 2

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GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



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Method Blank Summary

Job Number: Account: Project:			205071/2000-1				
Sample	File ID	DF	Analyzed 09/21/05	By	Prep Date	Prep Batch	Analytical Batch
VZ995-MB	Z18960.D	1		LJ	n/a	n/a	VZ995

The QC reported here applies to the following samples:

Method: SW846 8260B

T11458-1, T11458-2, T11458-3, T11458-4, T11458-5, T11458-6, T11458-7, T11458-8, T11458-9

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2	Benzene	ND	5.0	1.4	ug/kg
100-41-4	Ethylbenzene	ND	5.0	1.3	ug/kg
108-88-3	Toluene	ND	5.0	1.3	ug/kg
1330-20-7	Xylene (total)	ND	15	3.8	ug/kg

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	91%	75-137%
2037-26-5	Toluene-D8	110%	88-147%
460-00-4	4-Bromofluorobenzene	122%	82-154%
17060-07-0	1,2-Dichloroethane-D4	91%	62-135%

36 of 5 **ACCUTES** T11458

Page 1 of 1

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Method Blank Summary

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Job Numbe Account: Project:	PESTXST P	remier E	nvironmental Se s/205071/2000-1					rage i c
Sample VB1103-MI	File ID 3 B116548.D	DF 1	Analyzed 09/26/05	By LJ	Prep I n/a	Date	Prep Batch n/a	Analytical Batch VB1103
The QC re T11458-6	ported here appl	ies to the	e following sam	ples:			Method: SW	7846 8260B
CAS No.	Compound		Result	RL	MDL	Units	Q	
71-43-2	Benzene		ND	5.0	1.4	ug/kg		
100-41-4	Ethylbenzene Toluene		ND ND	5.0 5.0	1.3 1.3	ug/kg ug/kg		

CAS No. **Surrogate Recoveries** Limits 1868-53-7 Dibromofluoromethane 85% 75-137% 2037-26-5 Toluene-D8 105% 88-147% 460-00-4 4-Bromofluorobenzene 121% 82-154% 17060-07-0 1,2-Dichloroethane-D4 73% 62-135%

> 37 of 5 SIM ZACCUTES' T11458

Blank Spike Summary

460-00-4

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Job Number: Account: Project:			Environmental Se s/205071/2000-1				
Sample VZ995-BS	File ID Z18958.D	DF 1	Analyzed 09/21/05	Ву LJ	Prep Date n/a	Prep Batch n/a	Analytical Batch VZ995

82-154%

62-135%

The QC reported here applies to the following samples:

4-Bromofluorobenzene

17060-07-0 1,2-Dichloroethane-D4

Method: SW846 8260B

T11458-1, T11458-2, T11458-3, T11458-4, T11458-5, T11458-6, T11458-7, T11458-8, T11458-9

105%

94%

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	49.5	99	64-136
100-41-4	Ethylbenzene	50	50.5	101	71-135
108-88-3	Toluene	50	49.7	99	70-136
1330-20-7	Xylene (total)	150	155	103	74-135
CAS No.	Surrogate Recoveries	BSP	Lin	nits	
1868-53-7	Dibromofluoromethane	94%	75-	137%	
2037-26-5	Toluene-D8	102%	88-	147%	

38 of 5 **ACCUTES** T11458

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Blank Spike Summary

Blank Spil Job Number: Account: Project:	T11458 PESTXST P	remier E	Environmental Se s/205071/2000-1				Page 1 of	1
Sample VB1103-BS	File ID B116547.D	DF 1	Analyzed 09/26/05	By LJ	Prep Date n/a	Prep Batch n/a	Analytical Batch VB1103	
The QC repor	ted here appl	ies to the	e following sam	ples:		Method: SW	/846 8260B	

T11458-6

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CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	49.7	99	64-136
100-41-4	Ethylbenzene	50	52.4	105	71-135
108-88-3	Toluene	50	52.0	104	70-136
CAS No.	Surrogate Recoveries	BSP	Lim	its	
1868-53-7	Dibromofluoromethane	84%	75-1	37%	
2037-26-5	Toluene-D8	98%	88-1	47%	
460-00-4	4-Bromofluorobenzene	109%	82-1	54%	
17060-07-0	1,2-Dichloroethane-D4	70%	62-1	35%	



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Matrix Spike/Matrix Spike Duplicate Summary

Job Number:	T11458
Account:	PESTXST Premier Environmental Services
Project:	Delrose Scott Hughes/205071/2000-10807

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T11458-9MS	Z18975.D	1	09/21/05	LJ	n/a	n/a	VZ995
T11458-9MSD	Z18976.D	1	09/21/05	LJ	n/a	n/a	VZ995
T11458-9	Z18974.D	1	09/21/05	LJ	n/a	n/a	VZ995

The QC reported here applies to the following samples:

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Method: SW846 8260B

T11458-1, T11458-2, T11458-3, T11458-4, T11458-5, T11458-6, T11458-7, T11458-8, T11458-9

CAS No.	Compound	T11458-9 ug/kg Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	52.9	48.1	91	47.7	89	1	50-125/26
100-41-4	Ethylbenzene	ND	52.9	48.4	92	48.5	91	0	46-129/25
108-88-3	Toluene	ND	52.9	47.0	89	47.4	89	1	51-127/24
1330-20-7	Xylene (total)	ND	159	145	91	148	93	2	48-130/25
CAS No.	Surrogate Recoveries	MS	MSD	T1	1458-9	Limits			
1868-53-7	Dibromofluoromethane	89%	88%	86%	6	75-1379	6		
2037-26-5	Toluene-D8	101%	102%	109	9%	88-1479	6		
460-00-4	4-Bromofluorobenzene	111%	113%	119	9%	82-1549	6		
17060-07-0	1,2-Dichloroethane-D4	90%	90%	819	6	62-1359	6		



Page 1 of 1

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Matrix Spike/Matrix Spike Duplicate Summary Job Number: T11458

Account:	PESTXST Premier Environmental Services
Project:	Delrose Scott Hughes/205071/2000-10807

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T11460-2MS	B116561.D	1	09/26/05	LJ	n/a	n/a	VB1103
T11460-2MSD	B116562.D	1	09/26/05	LJ	n/a	n/a	VB1103
T11460-2	B116560.D	1	09/26/05	LJ	n/a	n/a	VB1103

The QC reported here applies to the following samples:

T11458-6

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CAS No.	Compound	T11460-2 ug/kg Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	56.1	27.3	49*	27.6	49*	1	50-125/26
100-41-4	Ethylbenzene	ND	56.1	29.6	53	29.6	52	0	46-129/25
108-88-3	Toluene	ND	56.1	33.6	60	32.4	57	4	51-127/24
CAS No.	Surrogate Recoveries	MS	MSD	T 11	1460-2	Limits			
1868-53-7	Dibromofluoromethane	85%	84%	82%	6	75-137%	6		
2037-26-5	Toluene-D8	112%	107%	107	%	88-147%	6		
460-00-4	4-Bromofluorobenzene	127%	121%	130	%	82-154%	6		
17060-07-0	1,2-Dichloroethane-D4	86%	79%	72%	6	62-135%	6		



Page 1 of 1

Method: SW846 8260B

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GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries

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• Matrix Spike and Duplicate Summaries



Method Blank Summary

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Job Number:	T11458
Account:	PESTXST Premier Environmental Services
Project:	Delrose Scott Hughes/205071/2000-10807

Sample	File ID	DF	Analyzed 09/19/05	By	Prep Date	Prep Batch	Analytical Batch
GEE972-MB	EE021558.D	1		JH	n/a	n/a	GEE972
							······································

The QC reported here applies to the following samples:

Method: SW846 8015

T11458-1, T11458-2, T11458-3, T11458-4, T11458-5, T11458-6, T11458-7, T11458-8, T11458-9

CAS No.	Compound	Result	RL	MDL	Units Q
	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg
CAS No.	Surrogate Recoveries		Limits		

43 of 5 **ACCUTES** T11458

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Method Blank Summary

Job Number: Account: Project:		T11458 PESTXST Premier Environmental Services Delrose Scott Hughes/205071/2000-10807								
Sample	File 1D	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch			
GKK656-MB	KK08674.D	1	09/21/05	ЈН	n/a	n/a	GKK656			

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The QC reported here applies to the following samples:

Method: SW846 8021B

T11458-10

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CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2	Benzene	ND	1.0	0.38	ug/l
100-41-4	Ethylbenzene	ND	1.0	0.35	ug/l
108-88-3	Toluene	ND	1.0	0.36	ug/l
1330-20-7	Xylenes (total)	ND	2.0	0.72	ug/l

CAS No. Surrogate Recoveries			Limits
460-00-4	4-Bromofluorobenzene	111%	56-136%
98-08-8	aaa-Trifluorotoluene	101%	50-144%

44 of 5 ZACCUTES' T11458

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Blank Spike Summary

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Job Number: Account: Project:			Environmental Se s/205071/2000-1			
Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch
GEE972-BS	EE021557	.D I	09/19/05	JH	n/a	n/a

The QC reported here applies to the following samples:

Method: SW846 8015

T11458-1, T11458-2, T11458-3, T11458-4, T11458-5, T11458-6, T11458-7, T11458-8, T11458-9

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	17.8	89	70-119
CAS No.	Surrogate Recoveries	BSP	Lim	its	
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	98% 101%		.39% .36%	



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Analytical Batch

GEE972

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Blank Spike Summary

Blank Spil Job Number: Account: Project:	T11458 PESTXST P	e Summary T11458 PESTXST Premier Environmental Services Delrose Scott Hughes/205071/2000-10807							
Sample GKK656-BS	File ID KK08675.D	DF 1	Analyzed 09/21/05	By JH	Prep Date n/a	Prep Batch n/a	Analytical Batch GKK656		
The QC repor	ted here appli	es to th	e following sam	ples:		Method: SW	/846 8021B		

T11458-10

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CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71 -43-2	Benzene	20	18.8	94	72-125
100-41-4	Ethylbenzene	20	20.2	101	76-125
108-88-3	Toluene	20	19.1	96	74-125
1330-20-7	Xylenes (total)	60	59.9	100	78-124
CAS No.	Surrogate Recoveries	BSP	Li	mits	

460-00-4	4-Bromofluorobenzene	120%	56-136%
98-08-8	aaa-Trifluorotoluene	104%	50-144%

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46 of 5 CACCUTES T11458 Lacoutors

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Matrix Spike/Matrix Spike Duplicate Summary

Job Number:	T11458
Account:	PESTXST Premier Environmental Services
Project:	Delrose Scott Hughes/205071/2000-10807

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T11458-9MS	EE021570.D	1	09/19/05	JH	n/a	n/a	GEE972
T11458-9MSD	EE021571.D	1	09/19/05	JH	n/a	n/a	GEE972
T11458-9	EE021569.D	1	09/19/05	JH	n/a	n/a	GEE972

The QC reported here applies to the following samples:

Method: SW846 8015

T11458-1, T11458-2, T11458-3, T11458-4, T11458-5, T11458-6, T11458-7, T11458-8, T11458-9

CAS No.	Compound	T11458-9 mg/kg Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	22.3	17.5	78	16.8	75	4	66-122/21
CAS No.	Surrogate Recoveries	MS	MSD	T11	458-9	Limits			
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	97% 97%	80% 94%			56-139% 46-136%	-		

(a) Confirmed by MS/MSD.

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Matrix Spike/Matrix Spike Duplicate Summary

Job Number:	T11458
Account:	PESTXST Premier Environmental Services
Project:	Delrose Scott Hughes/205071/2000-10807

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T11470-3MS	KK08683.D	5	09/21/05	JH	n/a	n/a	GKK656
T11470-3MSD	KK08684.D	5	09/21/05	JH	n/a	n/a	GKK656
T11470-3	KK08681.D	1	09/21/05	JH	n/a	n/a	GKK656
T11470-3	KK08682.D	5	09/21/05	ЈН	n/a	n/a	GKK656

The QC reported here applies to the following samples:

T11458-10

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CAS No.	Compound	T11470-3 ug/l Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MS %	D RPD	Limits Rec/RPD
		-g- x	-8-	- g ·		- B -	,		
71-43-2	Benzene	126	100	201	75	196	70	3	45-137/21
100-41-4	Ethylbenzene	9.5	100	99.4	90	96.9	87	3	68-126/15
108-88-3	Toluene	ND	100	86.1	86	84.4	84	2	63-130/22
1330-20-7	Xylenes (total)	231	300	489	86	478	82	2	72-125/19
CAS No.	Surrogate Recoveries	MS	MSD	T1	1470-3	T11470	-3	Limits	
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	115% 96%	113% 93%		6% a % a	112% 78%		56-136% 50-144%	
10 00 0	ada mindorototache	2070	/5/0	20	/0	7070		50 111/0	

(a) %Recovery adjusted for double surrogate spike.



Page 1 of 1

Method: SW846 8021B

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GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries

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• Matrix Spike and Duplicate Summaries



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Method Blank Summary

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Method B Job Number: Account: Project:	T11458 Pestxst f	Premier E	Environmental So s/205071/2000-	· · · · · ·			Page 1 of 1
Sample OP5019-MB	File ID CC9813.D	DF 1	Analyzed 09/28/05	By FO	Prep Date 09/26/05	Prep Batch OP5019	Analytical Batch GCC478
The QC repor	ted here appl	ies to the	e following sam	ples:		Method: SW	/846 8015 M

T11458-1, T11458-2, T11458-3, T11458-4, T11458-5, T11458-6, T11458-7, T11458-8, T11458-9

CAS No.	Compound	Result	RL	MDL	Units Q
	ТРН (С10-С28)	ND	8.3	3.3	mg/kg
CAS No.	Surrogate Recoveries		Limit	s	
84-15-1	o-Terphenyl	77%	41-15	3%	

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Blank Spike Summary

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Job Number: Account: Project:			Environmental Se s/205071/2000-1				
Sample OP5019-BS	File ID CC9814.D	DF 1	Analyzed 09/28/05	By FO	Prep Date 09/26/05	Prep Batch OP5019	Analytical Batch GCC478
The QC repor	ted here appl	ies to the	e following sam	ples:		Method: SW	7846 8015 M

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T11458-1, T11458-2, T11458-3, T11458-4, T11458-5, T11458-6, T11458-7, T11458-8, T11458-9

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	ТРН (С10-С28)	33.3	30.9	93	55-131
CAS No.	Surrogate Recoveries	BSP	Limits		
84-15-1	o-Terphenyl	76%	41-1	53%	



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Matrix Spike/Matrix Spike Duplicate Summary

Job Number:	T11458
Account:	PESTXST Premier Environmental Services
Project:	Delrose Scott Hughes/205071/2000-10807

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5019-MS	CC9815.D	50	09/28/05	FO	09/26/05	OP5019	GCC478
OP5019-MSD	CC9816.D	50	09/28/05	FO	09/26/05	OP5019	GCC478
T11458-2	CC9818.D	50	09/28/05	FO	09/26/05	OP5019	GCC478

The QC reported here applies to the following samples:

Method: SW846 8015 M

T11458-1, T11458-2, T11458-3, T11458-4, T11458-5, T11458-6, T11458-7, T11458-8, T11458-9

CAS No.	Compound	T11458-2 mg/kg Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1170	38.7	1680	1316*	^a 1680	1317*	^a 0	49-139/24
CAS No.	Surrogate Recoveries	MS	MSD	T11	458-2	Limits			
84-15-1	o-Terphenyl	0%* ^b	0%* ^b	0%	* b	41-153%	0		

(a) Outside control limits due to high level in sample relative to spike amount.

(b) Outside control limits due to dilution.

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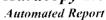
Delrose Scott Hugh

December 2005 – Soil Samples – Analytical Results

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12/30/05



Technical Report for

Premier Environmental Services

Delrose Scott Hughes/205071/2000-10807

Accutest Job Number: T12176

Sampling Dates: 12/19/05 - 12/20/05

Report to:

Premier Environmental Services

cpatel@premiercorp-usa.com

ATTN: Chan Patel

Total number of pages in report: 52



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Ron Martino Laboratory Manager

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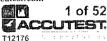


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Sample Summary

Premier Environmental Services

Job No: T12176

Delrose Scott Hughes/205071/2000-10807

Sample Number	Collected Date Time By	N Received C	Matrix Code Type	Client Sample ID
T12176-1	12/19/05 11:01 WM	A 12/21/05 S	SO Soil	MW1-20'
T12176-2	12/19/05 11:40 WM	A 12/21/05 S	SO Soil	MW1-40'
T12176-3	12/19/05 11:56 WM	A 12/21/05 S	SO Soil	MW1-45'
T12176-4	12/19/05 16:06 WM	M 12/21/05 S	SO Soil	MW2-30'
T12176-5	12/19/05 16:24 WM	И 12/21/05 \$	SO Soil	MW2-40'
T12176-6	12/19/05 16:38 WM	A 12/21/05 S	SO Soil	MW2-45'
T12176-7	12/20/05 08:47 WI	M 12/21/05 S	SO Soil	MW3-5'
T12176-8	12/20/05 09:53 WI	M 12/21/05	SO Soil	MW3-40'
T12176-9	12/20/05 10:06 WI	M 12/21/05	SO Soil	MW3-45'
T12176-10	12/19/05 00:00 WI	M 12/21/05 .	AQ Trip Blank Soil	TRIP BLANK

Soil samples reported on a dry weight basis unless otherwise indicated on result page.



Report of Analysis

Client Sam Lab Sampl Matrix: Method: Project:	e ID: T121 SO - SW8	76-1 Soil 46 8260B	thes/205071/20	000-10807	Date l	Sampled: Received: nt Solids:	: 12/21/05	
Run #1 Run #2	File ID Z20600.D	DF 10	Analyzed 12/23/05	By RR	Prep D n/a	ate	Prep Batch n/a	Analytical Batch VZ1079
Run #1 Run #2	Initial Weigl 5.12 g	ht Final Vo 5.0 ml	olume Meth 100 r	nanol Aliquo 11	t			
Purgeable	Aromatics					•		
CAS No.	Compound		Result	RL	MDL	Units	Q	
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzer Xylene (tota		18900 99500 81400 180000	2900 2900 2900 8800	820 740 740 2200	ug/kg ug/kg ug/kg ug/kg		
CAS No.	Surrogate I	Recoveries	Run# 1	Run# 2	Lin	nits		
1868-53-7 2037-26-5 460-00-4	Dibromoflu Toluene-D8 4-Bromoflu		90% 95% 92%		88-	137% 147% 154%		

79%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

17060-07-0 1,2-Dichloroethane-D4

J = Indicates an estimated value

62-135%

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



2.1

Report of Analysis

Client Sample ID: MW1-20' Lab Sample ID: T12176-1 **Date Sampled:** 12/19/05 Matrix: SO - Soil **Date Received:** 12/21/05 Method: SW846 8015 Percent Solids: 90.7 Delrose Scott Hughes/205071/2000-10807 **Project:** File ID DF **Analytical Batch** Analyzed By **Prep Date Prep Batch** Run #1 EE023317.D 100 12/29/05 JH GEE1035 n/a n/a Run #2 Initial Weight **Final Volume Methanol Aliquot** Run #1 5.0 ml 100 ul 5.12 g Run #2 CAS No. Compound Result RL MDL Units Q TPH-GRO (C6-C10) 6650 590 290 mg/kg CAS No. **Surrogate Recoveries** Run# 1 Run# 2 Limits 460-00-4 4-Bromofluorobenzene 133% 56-139% 98-08-8 aaa-Trifluorotoluene 120% 46-136%

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound





Report of Analysis

Client San Lab Samp Matrix: Method: Project:	le ID: T12176 SO - So SW846	5-1 pil 8015 M	SW846 3550B hes/205071/200	00-10807	Date F	ampled: Received: nt Solids:		
Run #1 Run #2	File 1D CC10811.D	DF 200	Analyzed 12/28/05	By RC	Prep D 12/27/0		Prep Batch OP5356	Analytical Batch GCC512
Run #1 Run #2	Initial Weight 30.0 g	Final Vo 1.0 ml	lume					
CAS No.	Compound		Result	RL	MDL	Units	Q	
	ТРН (С10-С2	8)	9070	1800	730	mg/kg		
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	its		
84-15-1	o-Terphenyl		0% a		41-1	53%		

(a) Outside control limits due to dilution.

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

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E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound





	Report of Analysis							
Client Sam Lab Sampl Matrix: Method: Project:	e ID: T12176 SO - So SW846	-2 bil 8260B	nes/205071/200	00-10807	Date Sampled: 12/19/05 Date Received: 12/21/05 Percent Solids: 83.8			······································
Run #1 Run #2	File 1D B117794.D Z20599.D	DF 1 2	Analyzed 12/22/05 12/23/05	By LJ RR	Prep D n/a n/a	ate	Prep Batch n/a n/a	Analytical Batch VB1179 VZ1079
Run #1 Run #2	Initial Weight 5.08 g 5.08 g	Final Vol 5.0 ml 5.0 ml	lume Meth 100 u 100 u	-	t			
Purgeable	Aromatics							
CAS No.	Compound		Result	RL	MDL	Units	Q	
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)		2190 20900 a 15200 a 76900 a	340 680 680 2100	95 170 170 520	ug/kg ug/kg ug/kg ug/kg		
CAS No.	Surrogate Rec	coveries	Run# 1	Run# 2	Lim	nits		
1868-53-7 2037-26-5	Dibromofluoro Toluene-D8	omethane	97% 60% ^b	90% 92%		137% 147%		

98%

84%

82-154%

62-135%

102%

89%

17060-07-0 1,2-Dichloroethane-D4

460-00-4

(a) Result is from Run# 2

(b) Outside control limits due to matrix interference.

4-Bromofluorobenzene

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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Report of Analysis

Client Sam Lab Samp Matrix: Method: Project:	le ID: T12176 SO - So SW846	-2 il 8015	es/205071/200	00-10807	Date R	ampled: Received: at Solids:	12/21/05	
Run #1 Run #2	File 1D EE023318.D EE023319.D	DF 2 20	Analyzed 12/29/05 12/29/05	Ву ЈН ЈН	Prep Da n/a n/a	ate	Prep Batch n/a n/a	Analytical Batch GEE1035 GEE1035
Run #1 Run #2	Initial Weight 5.08 g 5.08 g	Final Vol 5.0 ml 5.0 ml	ume Metha 100 ul 100 ul		t			
CAS No.	Compound TPH-GRO (C6	-C10)	Result 2600 ^a	RL 140	MDL 68	Units mg/kg	Q	
CAS No.	Surrogate Rec	overies	Run# 1	Run# 2	Lim	its		
460-00-4 98-08-8	4-Bromofluoro aaa-Trifluoroto		633% b 361% b	158% ^b 121%	56-1 46-1			

(a) Result is from Run# 2

(b) Outside control limits due to matrix interference. Confirmed by reanalysis.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

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E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



2.2 2

			Repo	rt of An	alysis			Page 1 of 1
Client Sam Lab Samp Matrix: Method: Project:	le ID: T1217 SO - S SW84	76-2 Soil 6 8015 M - S	SW846 3550B hes/205071/20	00-10807	Date F	Sampled: Received: nt Solids:	12/21/05	
Run #1 Run #2	File ID CC10812.D	DF 200	Analyzed 12/28/05	By RC	Prep D 12/27/0		Prep Batch OP5356	Analytical Batch GCC512
Run #1 Run #2	Initial Weigh 30.0 g	t Final Vo 1.0 ml	lume					
CAS No.	Compound		Result	RL	MDL	Units	Q	
	трн (С10-С	28)	7380	2000	790	mg/kg		
CAS No.	Surrogate R	ecoveries	Run# 1	Run# 2	Lim	iits		
84-15-1	o-Terphenyl		0% ^a		41-1	53%		

(a) Outside control limits due to dilution.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



2.2

108-88-3

100-41-4

1330-20-7

CAS No.

1868-53-7

2037-26-5

17060-07-0

460-00-4

Toluene

Ethylbenzene

Xylene (total)

Toluene-D8

Surrogate Recoveries

Dibromofluoromethane

4-Bromofluorobenzene

1,2-Dichloroethane-D4

Report of Analysis Page 1 of 1 Client Sample ID: MW1-45' Lab Sample ID: T12176-3 Date Sampled: 12/19/05 Matrix: SO - Soil **Date Received:** 12/21/05 Method: SW846 8260B Percent Solids: 82.9 Delrose Scott Hughes/205071/2000-10807 **Project:** File ID DF **Prep Date Prep Batch Analytical Batch** Analyzed By Run #1 B117793.D 1 12/22/05 LJ VB1179 n/a n/a Run #2 **Initial Weight Final Volume Methanol Aliquot** Run #1 5.19 g 5.0 ml 100 ul Run #2 **Purgeable Aromatics** CAS No. Compound Result RL MDL Units Q ug/kg 71-43-2 Benzene 225 95 340 J

340

340

1000

Run#2

86

86

260

Limits

75-137% 88-147%

82-154%

62-135%

ug/kg

ug/kg

ug/kg

1230

2420

6580

85%

100%

101%

92%

Run#1

ND =	Not detected	MDL - Method Detection Limit	

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

10 of 52 GACC TEST T12176



2.3

Report of Analysis

Client Sample ID: MW1-45' Lab Sample ID: T12176-3 **Date Sampled:** 12/19/05 Matrix: SO - Soil **Date Received:** 12/21/05 Percent Solids: 82.9 Method: SW846 8015 Delrose Scott Hughes/205071/2000-10807 **Project:** File ID DF **Prep Date Prep Batch Analytical Batch** Analyzed By EE023321.D 20 12/29/05 GEE1035 Run #1 JH n/a n/a Run #2 **Initial Weight Final Volume Methanol Aliquot** Run #1 100 ul 5.19 g 5.0 ml Run #2 Q CAS No. Compound Result RL MDL Units TPH-GRO (C6-C10) 354 140 68 mg/kg CAS No. Run#1 Run# 2 **Surrogate Recoveries** Limits 460-00-4 4-Bromofluorobenzene 105% 56-139% 98-08-8 aaa-Trifluorotoluene 93% 46-136%

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound





Report of Analysis

Client Sample ID: MW1-45' Lab Sample ID: Date Sampled: T12176-3 12/19/05 Matrix: SO - Soil Date Received: 12/21/05 Method: SW846 8015 M SW846 3550B Percent Solids: 82.9 **Project:** Delrose Scott Hughes/205071/2000-10807 File ID DF **Analytical Batch** Analyzed By **Prep Date Prep Batch** Run #1 CC10823.D 10 12/28/05 RC 12/27/05 OP5356 GCC512 Run #2 **Initial Weight Final Volume** Run #1 30.0 g 1.0 ml Run #2 CAS No. RL MDL Compound Result Units Q TPH (C10-C28) 344 100 40 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 114% 41-153%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound





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			Repo	rt of A	nalysis			Page 1 of 1
Client Sam Lab Sampl Matrix: Method: Project:	le ID: T12176 SO - So SW846	-4 il 8260B	thes/205071/20	00-10807	Date Sampled:12/19/05Date Received:12/21/05Percent Solids:88.7			·
Run #1 Run #2	File ID B117792.D	DF 1	Analyzed 12/22/05	By LJ	Prep D n/a	ate	Prep Batch n/a	Analytical Batch VB1179
Run #1 Run #2	Initial Weight 5.16 g	Final Vo 5.0 ml	olume					
Purgeable	Aromatics							
CAS No.	Compound		Result	RL	MDL	Units	Q	
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)		ND ND ND	5.5 5.5 5.5 16	1.5 1.4 1.4 4.1	ug/kg ug/kg ug/kg ug/kg		
CAS No.	Surrogate Rec	overies	Run# 1	Run#	2 Lim	iits		

108-88-3 100-41-4	Toluene Ethylbenzene	ND ND	5.5 5.5	1.3 1.4 1.4	ug/kg ug/kg ug/kg
1330-20-7	Xylene (total)	ND	16	4.1	ug/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its
1868-53-7	Dibromofluoromethane	101%		75-1	37%
2037-26-5	Toluene-D8	110%		88-1	47%
460-00-4	4-Bromofluorobenzene	111%		82-1	54%
17060-07-0	1,2-Dichloroethane-D4	92%		62-1	35%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank



Report of Analysis

Client Sam Lab Sampl Matrix: Method: Project:	e ID: T1217 SO - S SW846	6-4 oil 5 8015	hes/205071/200	0-10807	Date F	Sampled: Received: nt Solids:	12/21/05	
Run #1 Run #2	File ID EE023305.D	DF 1	Analyzed 12/28/05	By JH	Prep D an/a	ate	Prep Batch n/a	Analytical Batch GEE1035
Run #1 Run #2	Initial Weight 5.00 g	Final Vo 5.0 ml	lume Metha 100 ul	unol Aliquo	t			
CAS No.	Compound		Result	RL	MDL	Units	Q	
	TPH-GRO (C	6-C10)	ND	6.3	3.1	mg/kg		
CAS No.	Surrogate Re	coveries	Run# 1	Run# 2	Lim	its		
460-00-4 98 - 08-8	4-Bromofluor aaa-Trifluorot		94% 91%			39% 36%		

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

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- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound





Report of Analysis

Client Sample ID: MW2-30' Lab Sample ID: T12176-4 **Date Sampled:** 12/19/05 Matrix: SO - Soil **Date Received:** 12/21/05 Method: SW846 8015 M SW846 3550B Percent Solids: 88.7 Delrose Scott Hughes/205071/2000-10807 **Project:** DF File ID Analyzed **Analytical Batch** By **Prep Date Prep Batch** Run #1 CC10815.D 1 12/28/05 RC 12/27/05 OP5356 GCC512 Run #2 **Final Volume Initial Weight** Run #1 1.0 ml 30.1 g Run #2 CAS No. Compound Result RL MDL Units Q TPH (C10-C28) ND 9.4 3.7 mg/kg Run#1 CAS No. **Surrogate Recoveries** Run#2 Limits 101% 84-15-1 o-Terphenyl 41-153%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound





Report of Analysis Client Sample ID: MW2-40' Lab Sample ID: T12176-5 **Date Sampled:** 12/19/05 Matrix: SO - Soil **Date Received:** 12/21/05 Method: SW846 8260B Percent Solids: 73.3 **Project:** Delrose Scott Hughes/205071/2000-10807 File ID DF **Prep Batch Analytical Batch** Analyzed By **Prep Date** B117787.D 12/22/05 VB1179 Run #1 1 LJ n/a n/a Run #2

Final Volume Initial Weight Run #1 5.26 g 5.0 ml

Run #2

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)	ND ND ND ND	6.5 6.5 6.5 19	1.8 1.6 1.6 4.9	ug/kg ug/kg ug/kg ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its	
1868-53-7 2037-26-5 460-00-4 17060-07-0	Dibromofluoromethane Toluene-D8 4-Bromofluorobenzene 1,2-Dichloroethane-D4	105% 101% 97% 90%		82-1	37% 47% 54% 35%	

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound





98-08-8

Report of Analysis

Client Sample ID: MW2-40' Lab Sample ID: T12176-5 **Date Sampled:** 12/19/05 Matrix: SO - Soil **Date Received:** 12/21/05 Method: SW846 8015 Percent Solids: 73.3 **Project:** Delrose Scott Hughes/205071/2000-10807 File ID ÐF By Analyzed **Prep Date Prep Batch Analytical Batch** EE023306.D Run #1 1 12/28/05 JH n/a n/a GEE1035 Run #2 **Initial Weight Final Volume Methanol Aliquot** Run #1 5.00 g 5.0 ml 100 ul Run #2 MDL Q CAS No. Compound Result RL Units TPH-GRO (C6-C10) ND 8.6 4.3 mg/kg CAS No. Run#1 **Surrogate Recoveries** Run# 2 Limits 460-00-4 4-Bromofluorobenzene 93% 56-139%

90%

46-136%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

aaa-Trifluorotoluene

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound





Page 1 of 1 Client Sample ID: MW2-40' Lab Sample ID: T12176-5 **Date Sampled:** 12/19/05 Matrix: SO - Soil **Date Received:** 12/21/05 Method: SW846 8015 M SW846 3550B Percent Solids: 73.3 **Project:** Delrose Scott Hughes/205071/2000-10807 File ID DF **Analytical Batch** Analyzed By **Prep Date Prep Batch** CC10816.D 12/28/05 Run #1 1 RC 12/27/05 OP5356 GCC512 Run #2 **Initial Weight Final Volume** Run #1 30.0 g 1.0 ml Run #2 CAS No. Compound Result RL MDL Units Q TPH (C10-C28) ND 11 4.5 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run# 2 Limits 84-15-1 o-Terphenyl 77% 41-153%

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound







Report of Analysis

Report of Analysis

Client Sample ID: MW2-45' Lab Sample ID: T12176-6 **Date Sampled:** 12/19/05 Date Received: 12/21/05 Matrix: SO - Soil Method: SW846 8260B Percent Solids: 75.6 **Project:** Delrose Scott Hughes/205071/2000-10807 File ID ÐF **Prep Date Prep Batch Analytical Batch** Analyzed By Z20602.D 12/23/05 RR VZ1079 Run #1 1 n/a n/a Run #2 **Initial Weight Final Volume** Run #1 5.06 g 5.0 ml Run #2 **Purgeable Aromatics** CAS No. Compound Result RL MDL Q Units

end no.	compound	Result	RL	MDD	enits
71-43-2	Benzene	ND	6.5	1.8	ug/kg
108-88-3	Toluene	ND	6.5	1.6	ug/kg
100-41-4	Ethylbenzene	ND	6.5	1.6	ug/kg
1330-20-7	Xylene (total)	ND	20	4.9	ug/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its
1868-53-7	Dibromofluoromethane	85%		75-1	.37%
2037-26-5	Toluene-D8	103%		88-1	47%
460-00-4	4-Bromofluorobenzene	95%		82-1	54%
17060-07-0	1,2-Dichloroethane-D4	67%		(2.1	35%

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound





Page 1 of 1 Client Sample ID: MW2-45' Lab Sample ID: T12176-6 **Date Sampled:** 12/19/05 Matrix: **Date Received:** 12/21/05 SO - Soil Method: SW846 8015 Percent Solids: 75.6 Delrose Scott Hughes/205071/2000-10807 **Project:** File ID DF Analyzed **Prep Date Prep Batch Analytical Batch** By EE023307.D Run #1 1 12/28/05 JΗ n/a n/a GEE1035 Run #2 **Initial Weight Final Volume Methanol Aliquot** Run #1 5.07 g 5.0 ml 100 ul Run #2 CAS No. Compound Result RL MDL Units Q TPH-GRO (C6-C10) ND 8.1 4.1 mg/kg

CAS No. Run#1 Run# 2 **Surrogate Recoveries** Limits 460-00-4 4-Bromofluorobenzene 89% 56-139% 46-136% 98-08-8 aaa-Trifluorotoluene 93%

- ND = Not detectedMDL - Method Detection Limit
- RL = Reporting Limit
- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound





Report of Analysis

84-15-1

o-Terphenyl

Report of Analysis

Client Sample ID: MW2-45' Lab Sample ID: T12176-6 **Date Sampled:** 12/19/05 Matrix: SO - Soil **Date Received:** 12/21/05 SW846 8015 M SW846 3550B Method: Percent Solids: 75.6 **Project:** Delrose Scott Hughes/205071/2000-10807 File ID DF Analyzed **Analytical Batch** By **Prep Date Prep Batch** CC10824.D 12/28/05 Run #1 5 RC12/27/05 OP5356 GCC512 Run #2 • **Initial Weight Final Volume** Run #1 30.0 g 1.0 ml Run #2 CAS No. RL MDL Q Compound Result Units TPH (C10-C28) 214 55 22 mg/kg CAS No. Run# 1 Run# 2 Limits **Surrogate Recoveries**

41-153%

71%

MDL - Method Detection Limit ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound





			Repo	rt of An	alysis			Page 1 of 1
Client Sam Lab Samp Matrix: Method: Project:	e ID: T12176 SO - So SW846	-7 oil 8260B	thes/205071/20	00-10807	Date I	Sampled: Received: nt Solids:	: 12/21/05	
Run #1 Run #2	File ID Z20603.D	DF 1	Analyzed 12/23/05	By RR	Prep D n/a	ate	Prep Batch n/a	Analytical Batch VZ1079
Run #1 Run #2	Initial Weight 5.10 g	Final Vo 5.0 ml	olume					
Purgeable	Aromatics							
CAS No.	Compound		Result	RL	MDL	Units	Q	
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)		ND ND ND ND	5.8 5.8 5.8 17	1.6 1.5 1.5 4.4	ug/kg ug/kg ug/kg ug/kg		
CAS No.	Surrogate Rec	coveries	Run# 1	Run# 2	Lim	nits		

88%

106%

103%

70%

ND = Not detected MDL - Method Detection Limit RL = Reporting Limit

E = Indicates value exceeds calibration range

Dibromofluoromethane

4-Bromofluorobenzene

1,2-Dichloroethane-D4

Toluene-D8

1868-53-7

2037-26-5

460-00-4

17060-07-0

J = Indicates an estimated value

75-137%

88-147%

82-154%

62-135%

- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



7 2 8

Report of Analysis

Client Sample ID: MW3-5' Lab Sample ID: T12176-7 **Date Sampled:** 12/20/05 Matrix: SO - Soil 12/21/05 Date Received: Method: SW846 8015 Percent Solids: 85.1 **Project:** Delrose Scott Hughes/205071/2000-10807 DF File ID **Prep Batch Analytical Batch** Analyzed By **Prep Date** Run #1 EE023308.D 1 12/28/05 JH GEE1035 n/a n/a Run #2 **Final Volume Initial Weight Methanol Aliquot** Run #1 5.16 g 5.0 ml 100 ul Run #2 CAS No. RL MDL Q Compound Result Units TPH-GRO (C6-C10) ND 6.6 3.3 mg/kg CAS No. **Surrogate Recoveries** Run#1 Run#2 Limits 460-00-4 4-Bromofluorobenzene 87% 56-139% 98-08-8 aaa-Trifluorotoluene 86% 46-136%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound





Report of Analysis

Client Sample ID: MW3-5' Lab Sample ID: T12176-7 Date Sampled: 12/20/05 Matrix: SO - Soil **Date Received:** 12/21/05 Method: SW846 8015 M SW846 3550B Percent Solids: 85.1 **Project:** Delrose Scott Hughes/205071/2000-10807 File ID DF **Prep Batch Analytical Batch** Analyzed By **Prep Date** CC10818.D Run #1 1 12/28/05 RC 12/27/05 GCC512 OP5356 Run #2 **Initial Weight Final Volume** Run #1 30.1 g 1.0 ml Run #2 MDL CAS No. Compound RL Units Q Result TPH (C10-C28) ND 9.8 3.9 mg/kg CAS No. Run# 1 Run# 2 **Surrogate Recoveries** Limits 48% 84-15-1 o-Terphenyl 41-153%

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

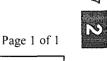
E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound





100-41-4

1330-20-7

CAS No.

1868-53-7

2037-26-5

460-00-4

Ethylbenzene

Xylene (total)

Toluene-D8

17060-07-0 1,2-Dichloroethane-D4

Surrogate Recoveries

Dibromofluoromethane

4-Bromofluorobenzene

			Repo	rt of A	nalysis			Page 1 of 1
Client Sar Lab Samp Matrix: Method: Project:	ole ID: T12176 SO - So SW846	-8 il 8260B	hes/205071/20	00-10807	Date F	Sampled: Received nt Solids	: 12/21/05	
Run #1 Run #2	File ID Z20604.D	DF 1	Analyzed 12/23/05	By RR	Prep D n/a	ate	Prep Batch n/a	Analytical Batch VZ1079
Run #1 Run #2	Initial Weight 5.20 g	Final Vo 5.0 ml	lume					
Purgeable	e Aromatics							
CAS No.	Compound		Result	RL	MDL	Units	Q	
71-43-2 108-88-3	Benzene Toluene		ND ND	5.6 5.6	1.6 1.4	ug/kg ug/kg		

5.6

17

Run# 2

1.4

4.2

Limits

75-137%

88-147%

82-154%

62-135%

ug/kg

ug/kg

ND

ND

Run# 1

92%

104%

103%

75%

ND = Not detected MDL - Meth	od Detection Limit
------------------------------	--------------------

RL = Reporting Limit

THE F

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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Report of Analysis

Client San Lab Samp Matrix: Method: Project:	le ID: T12176 SO - Sc SW846	-8 511 8015	hes/205071/200	0-10807	Date F	Sampled: Received: nt Solids:	12/21/05	
Run #1 Run #2	File ID EE023309.D	DF 1	Analyzed 12/28/05	By JH	Prep D n/a	ate	Prep Batch n/a	Analytical Batch GEE1035
Run #1 Run #2	Initial Weight 5.04 g	Final Vo 5.0 ml	lume Metha 100 ul	nol Aliquo	t			
CAS No.	Compound		Result	RL	MDL	Units	Q	
	TPH-GRO (C6	o-C10)	ND	6.6	3.3	mg/kg		
CAS No.	Surrogate Rec	overies	Run# 1	Run# 2	Lim	its		
460-00-4 98-08-8	4-Bromofluoro aaa-Trifluoroto		74% 79%			39% 36%		

ND = Not detected MDL - Method Detection Limit

1

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



Report of Analysis

Client San Lab Samp Matrix: Method: Project:		MW3-4 T12176- SO - So SW846 Delrose	-8 il 8015 M	SW846 3550B hes/205071/200	00-10807	Da	ate F	Sampled: Received: nt Solids:		
Run #1 Run #2	File ID CC1081	9.D	DF 1	Analyzed 12/28/05	By RC		27/0		Prep Batch OP5356	Analytical Batch GCC512
Run #1 Run #2	Initial V 30.1 g	Weight	Final Vo 1.0 ml	lume						
CAS No.	Comp	ound		Result	RL	MI)L	Units	Q	
	TPH (C10-C28)	ND	9.7	3.9		mg/kg		
CAS No.	Surrog	gate Rec	overies	Run# 1	Run# 2		Lim	its		
84-15-1	o-Terp	henyl		73%			41-1	53%		

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

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E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



108-88-3

Toluene

Report of Analysis

Client Sample ID: MW3-45' Lab Sample ID: T12176-9 Date Sampled: 12/20/05 Matrix: SO - Soil **Date Received:** 12/21/05 Method: SW846 8260B Percent Solids: 80.8 **Project:** Delrose Scott Hughes/205071/2000-10807 File ID DF By **Prep Date Prep Batch** Analyzed **Analytical Batch** Run #1 B117791.D 12/22/05 1 LJ VB1179 n/a n/a Run #2 **Initial Weight Final Volume** Run #1 5.26 g 5.0 ml Run #2 **Purgeable Aromatics** CAS No. Compound Result RL MDL Units Q 71-43-2 Benzene ND 5.9 ug/kg 1.6

5.9

1.5

ug/kg

100-41-4	Ethylbenzene	ND	5.9	1.5 ug/kg	
1330-20-7	Xylene (total)	ND	18	4.4 ug/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
1868-53-7	Dibromofluoromethane	93%		75-137%	
2037-26-5	Toluene-D8	113%		88-147%	
460-00-4	4-Bromofluorobenzene	113%		82-154%	
17060-07-0	1,2-Dichloroethane-D4	85%		62-135%	

ND

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

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E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



Report of Analysis

Client Sample ID: MW3-45' Lab Sample ID: T12176-9 **Date Sampled:** 12/20/05 Matrix: SO - Soil **Date Received:** 12/21/05 Method: SW846 8015 Percent Solids: 80.8 Delrose Scott Hughes/205071/2000-10807 **Project:** File ID DF By **Prep Date Prep Batch Analytical Batch** Analyzed Run #1 EE023310.D 12/28/05 JH 1 GEE1035 n/a n/a Run #2 **Initial Weight Final Volume Methanol Aliquot** Run #1 100 ul 5.12 g 5.0 ml Run #2 CAS No. Compound Result RL MDL Units Q TPH-GRO (C6-C10) 7.2 ND 3.6 mg/kg CAS No. Run# 1 Run# 2 **Surrogate Recoveries** Limits 460-00-4 4-Bromofluorobenzene 76% 56-139% 98-08-8 aaa-Trifluorotoluene 80% 46-136%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



Report of Analysis

Client Sample ID: MW3-45' Lab Sample ID: T12176-9 Date Sampled: 12/20/05 Matrix: SO - Soil **Date Received:** 12/21/05 Method: SW846 8015 M SW846 3550B Percent Solids: 80.8 **Project:** Delrose Scott Hughes/205071/2000-10807 File ID DF **Prep Batch Analytical Batch** Analyzed By **Prep Date** CC10820.D 12/28/05 RC Run #1 1 12/27/05 **OP5356** GCC512 Run #2 Initial Weight **Final Volume** Run #1 1.0 ml 30.0 g Run #2 CAS No. RL MDL Q Compound Result Units TPH (C10-C28) ND 10 4.1 mg/kg CAS No. Run#1 Run# 2 **Surrogate Recoveries** Limits 84-15-1 o-Terphenyl 88% 41-153%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

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E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound





CAS No.

1868-53-7

17060-07-0

2037-26-5

460-00-4

			Repo	rt of Ai	nalysis			Page 1 of 1
Client Sam Lab Sampl Matrix: Method: Project:	e ID: T1217 AQ - T SW846	Frip Blank 6 8260B	Soil 1910-1205071/20	00-10807	Date F	Sampled: Received nt Solids	: 12/21/05	
Run #1 Run #2	File ID F0068862.D	DF 1	Analyzed 12/23/05	B y RR	Prep D n/a	ate	Prep Batch n/a	Analytical Batch VF1734
Run #1 Run #2	Purge Volume 5.0 ml	2						
Purgeable	Aromatics							
CAS No.	Compound		Result	RL	MDL	Units	Q	
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)		ND ND ND ND	2.0 2.0 2.0 6.0	0.47 0.54 0.48 2.0	ug/l ug/l ug/l ug/l		

Run# 2

Limits

73-139%

66-139%

77-148%

84-150%

Run#1

102%

103%

104%

112%

ND = Not detected M	ADL - Method Detection I	Limit
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RL = Reporting Limit

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DET

E = Indicates value exceeds calibration range

Surrogate Recoveries

Dibromofluoromethane

1,2-Dichloroethane-D4

4-Bromofluorobenzene

Toluene-D8

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

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• Chain of Custody



E.E.J

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T12176: Chain of Custody Page 1 of 2



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T12176: Chain of Custody Page 2 of 2



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GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



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Limits

The QC reported here applies to the following samples:

Method: SW846 8260B

T12176-2, T12176-3, T12176-4, T12176-5, T12176-9

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2	Benzene	ND	5.0	1.4	ug/kg
100-41-4	Ethylbenzene	ND	5.0	1.3	ug/kg
108-88-3	Toluene	ND	5.0	1.3	ug/kg
1330-20-7	Xylene (total)	ND	15	3.8	ug/kg

CAS No. Surrogate Recoveries

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1868-53-7	Dibromofluoromethane	102%	75-137%
2037-26-5	Toluene-D8	106%	88-147%
460-00-4	4-Bromofluorobenzene	115%	82-154%
17060-07-0	1,2-Dichloroethane-D4	99%	62-135%



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Job Number: Account: Project:			nvironmental Se s/205071/2000-1				Ū.
Sample	File ID	DF	Analyzed 12/23/05	By	Prep Date	Prep Batch	Analytical Batch
VZ1079-MB	Z20590.D	1		RR	n/a	n/a	VZ1079

Limits

The QC reported here applies to the following samples:

Method: SW846 8260B

T12176-1, T12176-2, T12176-6, T12176-7, T12176-8

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2	Benzene	ND	5.0	1.4	ug/kg
100-41-4	Ethylbenzene	ND	5.0	1.3	ug/kg
108-88-3	Toluene	ND	5.0	1.3	ug/kg
1330-20-7	Xylene (total)	ND	15	3.8	ug/kg

CAS No. Surrogate Recoveries

1868-53-7	Dibromofluoromethane	100%	75-137%
2037-26-5	Toluene-D8	101%	88-147%
460-00-4	4-Bromofluorobenzene	100%	82-154%
17060-07-0	1,2-Dichloroethane-D4	86%	62-135%



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Job Number: Account: Project:			Environmental Se s/205071/2000-1					
Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch	
VF1734-MB	F0068861.D	1	12/23/05	RR	n/a	n/a	VF1734	

The QC reported here applies to the following samples:

T12176-10

460-00-4

CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2	Benzene	ND	2.0	0.47	ug/l
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/1
108-88-3	Toluene	ND	2.0	0.54	ug/l
1330-20-7	Xylene (total)	ND	6.0	2.0	ug/l

112%

84-150%

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	99%	73-139%
17060-07-0	1,2-Dichloroethane-D4	98%	66-139%
2037-26-5	Toluene-D8	102%	77-148%

4-Bromofluorobenzene

38 of 52 **ACCUTEST.** T12176

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Page 1 of 1

Method: SW846 8260B

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Job Number: Account: Project:			Environmental Se s/205071/2000-1				
Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB1179-BS	B117779.D	1	12/22/05	LJ	n/a	n/a	VB1179

The QC reported here applies to the following samples:

Method: SW846 8260B

T12176-2, T12176-3, T12176-4, T12176-5, T12176-9

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	50.6	101	64-136
100-41-4	Ethylbenzene	50	51.5	103	71-135
108-88-3	Toluene	50	47.8	96	70-136
1330-20-7	Xylene (total)	150	157	105	74-135

CAS No.	Surrogate Recoveries	BSP	Limits	
1868-53-7	Dibromofluoromethane	105%	75-137%	
2037-26-5	Toluene-D8	106%	88-147%	
460-00-4	4-Bromofluorobenzene	92%	82-154%	
17060-07-0	1.2-Dichloroethane-D4	91%	62-135%	

39 of 52 **ACCUTEST** T12176



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Job Number: Account: Project:			Environmental Se s/205071/2000-1				
Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VZ1079-BS	Z20589.D	1	12/23/05	RR	n/a	n/a	VZ1079

The QC reported here applies to the following samples:

Method: SW846 8260B

T12176-1, T12176-2, T12176-6, T12176-7, T12176-8

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	47.4	95	64-136
100-41-4	Ethylbenzene	50	47.6	95	71-135
108-88-3	Toluene	50	46.5	93	70-136
1330-20-7	Xylene (total)	150	144	96	74-135

CAS No.	Surrogate Recoveries	BSP	Limits	
1868-53-7	Dibromofluoromethane	97%	75-137%	
2037-26-5	Toluene-D8	100%	88-147%	
460-00-4	4-Bromofluorobenzene	87%	82-154%	
17060-07-0	1,2-Dichloroethane-D4	81%	62-135%	

40 of 52 ACCUTEST. T12176

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Job Number: Account: Project:		T12176 PESTXST Premier Environmental Services Delrose Scott Hughes/205071/2000-10807									
Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch				
VF1734-BS	F0068860.D	1	12/23/05	RR	n/a	n/a	VF1734				

The QC reported here applies to the following samples:

T12176-10

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CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	26.1	104	67-118
100-41-4	Ethylbenzene	25	25.0	100	71-119
108-88-3	Toluene	25	25.2	101	70-121
1330-20-7	Xylene (total)	75	75.5	101	72-120

CAS No.	Surrogate Recoveries	BSP	Limits	
1868-53-7	Dibromofluoromethane	98%	73-139%	
17060-07-0	1,2-Dichloroethane-D4	101%	66-139%	
2037-26-5	Toluene-D8	101%	77-148%	
460-00-4	4-Bromofluorobenzene	101%	84-150%	

Method: SW846 8260B



Page 1 of 1

Job Number:	T12176
Account:	PESTXST Premier Environmental Services
Project:	Delrose Scott Hughes/205071/2000-10807

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12176-9MS	B117796.D	1	12/22/05	LĴ	n/a	n/a	VB1179
T12176-9MSD	B117797.D	1	12/22/05	LJ	n/a	n/a	VB1179
T12176-9	B117791.D	1	12/22/05	LJ	n/a	n/a	VB1179
T12176-9	B117791.D	1	12/22/05	LJ	n/a	n/a	VB1179

The QC reported here applies to the following samples:

Method: SW846 8260B

T12176-2, T12176-3, T12176-4, T12176-5, T12176-9

		T12176-9	Spike	MS	MS	MSD	MSD		Limits
CAS No.	Compound	ug/kg Q	ug/kg	ug/kg	%	ug/kg	%	RPD	Rec/RPD
71-43-2	Benzene	ND	61.3	55.4	90	53.2	86	4	50-125/26
100-41-4	Ethylbenzene	ND	61.3	57.0	93	54.4	88	5	46-129/25
108-88-3	Toluene	ND	61.3	54.4	89	49.1	80 ·	10	51-127/24
1330-20-7	Xylene (total)	ND	184	175	95	167	90	5	48-130/25
CAS No.	Surrogate Recoveries	MS	MSD	T1	2176-9	Limits			
1868-53-7	Dibromofluoromethane	95%	96%	939	%	75-1379	%		
2037-26-5	Toluene-D8	101%	102%	113	3%	88-1479	%		
460-00-4	4-Bromofluorobenzene	87%	90%	113	3%	82-1549	%		
17060-07-0) 1,2-Dichloroethane-D4	85%	81%	859	%	62-1359	%		



Page 1 of 1

Job Number:	T12176
Account:	PESTXST Premier Environmental Services
Project:	Delrose Scott Hughes/205071/2000-10807

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12196-1MS	Z20596.D	1	12/23/05	RR	n/a	n/a	VZ1079
T12196-1MSD	Z20598.D	1	12/23/05	RR	n/a	n/a	VZ1079
T12196-1	Z20591.D	1	12/23/05	RR	n/a	n/a	VZ1079
2							

The QC reported here applies to the following samples:

Method: SW846 8260B

T12176-1, T12176-2, T12176-6, T12176-7, T12176-8

CAS No.	Compound	T12196-1 ug/kg Q	Spike ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	58.3	53.3	91	50.3	86	6	50-125/26
100-41-4	Ethylbenzene	ND	58.3	53.6	92	50.5	86	6	46-129/25
108-88-3	Toluene	ND	58.3	53.2	91	52.3	89	2	51-127/24
1330-20-7	Xylene (total)	ND	175	166	95	157	89	6	48-130/25
CAS No.	Surrogate Recoveries	MS	MSD	T1	2196-1	Limits			
1868-53-7	Dibromofluoromethane	87%	88%	939	%	75-1379	%		
2037-26-5	Toluene-D8	99%	102%	10	1%	88-1479	%		
460-00-4	4-Bromofluorobenzene	82%	86%	104	4%	82-1549	%		
17060-07-0	1,2-Dichloroethane-D4	73%	72%	849	%	62-1359	%		



Page 1 of 1

Job Number:	T12176
Account:	PESTXST Premier Environmental Services
Project:	Delrose Scott Hughes/205071/2000-10807

Sample	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
T12186-1MS	F0068865.D	1	12/23/05	RR	n/a	n/a	VF1734
T12186-1MSD	F0068866.D	1	12/23/05	RR	n/a	n/a	VF1734
T12186-1	F0068864.D	1	12/23/05	RR	n/a	n/a	VF1734

The QC reported here applies to the following samples:

T12176-10

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CAS No.	Compound	T12186-1 ug/l Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	25	26.9	108	26.6	106	1	65-122/15
100-41-4	Ethylbenzene	ND	25	25.0	100	25.1	100	0	70-123/18
108-88-3	Toluene	ND	25	25.0	100	24.9	100	0	70-123/18
1330-20-7	Xylene (total)	ND	75	76.4	102	75.7	101	1	71-122/16
CAS No.	Surrogate Recoveries	MS	MSD	T1	2186-1	Limits			
1868-53-7	Dibromofluoromethane	106%	102%	10	3%	73-139	%		
17060-07-0	1,2-Dichloroethane-D4	109%	107%	10	5%	66-139	%		
2037-26-5	Toluene-D8	102%	100%	10	3%	77-148	%		
460-00-4	4-Bromofluorobenzene	99%	97%	114	4%	84-150	%		



Page 1 of 1

Method: SW846 8260B

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries

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• Matrix Spike and Duplicate Summaries



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Method Bl Job Number: Account: Project:	T12176 PESTXST Pi	remier E	205071/2000-1				Page 1 o
Sample GEE1035-MB	File ID EE023303.D	DF 1	Analyzed 12/28/05	Ву JH	Prep Date n/a	Prep Batch n/a	Analytical Batch GEE1035
						M (1 - 1 - C)	

The QC reported here applies to the following samples:

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Method: SW846 8015

Т12176-1, Т12176-2, Т12176-3, Т12176-4, Т12176-5, Т12176-6, Т12176-7, Т12176-8, Т12176-9

CAS No.	Compound	Result	RL	MDL	Units Q
·	TPH-GRO (C6-C10)	ND	5.0	2.5	mg/kg
CAS No.	Surrogate Recoveries		Limits		



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Job Number:	T12176									
Account:	PESTXST Premier Environmental Services									
Project:	Delrose Scott Hughes/205071/2000-10807									
Sample	File ID	DF	Analyzed 12/28/05	Ву	Prep Date	Prep Batch	Analytical Batch			
GEE1035-BS	EE023304.E	D 1		JH	n/a	n/a	GEE1035			
			fallowing game			M-4h-di Cili	V0.4.4. 0.0.1.5			

The QC reported here applies to the following samples:

Method: SW846 8015

T12176-1, T12176-2, T12176-3, T12176-4, T12176-5, T12176-6, T12176-7, T12176-8, T12176-9

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	18.9	95	70-119
CAS No.	Surrogate Recoveries	BSP	Limits		
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	107% 116%		.39% .36%	



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Job Number:	T12176
Account:	PESTXST Premier Environmental Services
Project:	Delrose Scott Hughes/205071/2000-10807

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
T12176-9MS	EE023311.D	1	12/28/05	JH	n/a	n/a	GEE1035
T12176-9MSD	EE023312.D	1	12/28/05	JH	n/a	n/a	GEE1035
T12176-9	EE023310.D	1	12/28/05	JH	n/a	n/a	GEE1035

The QC reported here applies to the following samples:

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Method: SW846 8015

Т12176-1, Т12176-2, Т12176-3, Т12176-4, Т12176-5, Т12176-6, Т12176-7, Т12176-8, Т12176-9

CAS No.	Compound	T12176-9 mg/kg Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	28.9	25.5	88	24.8	86	3	66-122/21
CAS No.	Surrogate Recoveries	MS	MSD	T12	2176-9	Limits			
460-00-4 98-08-8	4-Bromofluorobenzene aaa-Trifluorotoluene	88% 96%	86% 93%	76% 80%	-	56-139% 46-136%	-		

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GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

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- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries





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Job Number:	T12176									
Account:	PESTXST Premier Environmental Services									
Project:	Delrose Scott Hughes/205071/2000-10807									
Sample	File ID	DF	Analyzed	By	Prep Date 12/27/05	Prep Batch	Analytical Batch			
OP5356-MB	CC10803.D	1	12/28/05	RC		OP5356	GCC512			
The QC repor	ted here applies to the following samples:					Method: SW846 8015 M				

Т12176-1, Т12176-2, Т12176-3, Т12176-4, Т12176-5, Т12176-6, Т12176-7, Т12176-8, Т12176-9

CAS No.	Compound	Result	RL	MDL	Units Q
	ТРН (С10-С28)	ND	8.3	3.3	mg/kg
CAS No.	Surrogate Recoveries		Limits	ŝ	
84-15-1	o-Terphenyl	84%	41-153	3%	

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Job Number:	T12176								
Account:	PESTXST Premier Environmental Services								
Project:	Delrose Scott Hughes/205071/2000-10807								
Sample	File ID	DF	Analyzed	By	Prep Date 12/27/05	Prep Batch	Analytical Batch		
OP5356-BS	CC10804.D	1	12/28/05	RC		OP5356	GCC512		
The QC repor	ted here appli	ies to the	Method: SW	/846 8015 M					

T12176-1, T12176-2, T12176-3, T12176-4, T12176-5, T12176-6, T12176-7, T12176-8, T12176-9

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	25.1	75	55-131
CAS No.	Surrogate Recoveries	BSP	Limits		
84-15-1	o-Terphenyl	81%	41-1	53%	



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Job Number:	T12176
Account:	PESTXST Premier Environmental Services
Project:	Delrose Scott Hughes/205071/2000-10807

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP5356-MS	CC10821.D	1	12/28/05	RC	12/27/05	OP5356	GCC512
OP5356-MSD	CC10822.D	1	12/28/05	RC	12/27/05	OP5356	GCC512
T12176-9	CC10820.D	1	12/28/05	RC	12/27/05	OP5356	GCC512

The QC reported here applies to the following samples:

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Method: SW846 8015 M

Т12176-1, Т12176-2, Т12176-3, Т12176-4, Т12176-5, Т12176-6, Т12176-7, Т12176-8, Т12176-9

CAS No.	Compound	T12176-9 mg/kg Q	Spike mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	ТРН (С10-С28)	ND	41.2	30.3	73	33.5	82	10	49-139/24
CAS No.	Surrogate Recoveries	MS	MSD	T12	2176-9	Limits			
84-15-1	o-Terphenyl	97%	91%	88%	6	41-153%	ó		

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December 2005 – Groundwater Samples – Analytical Results

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e-Hardcopy 2.0 Automated Report

12/27/05

Technical Report for

Premier Environmental Services

Delrose Scott Hughes/205071/2000-10807

Accutest Job Number: T12186

Sampling Date: 12/21/05

Report to:

Premier Environmental Services

cpatel@premiercorp-usa.com

ATTN: Chan Patel

Total number of pages in report: 13



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.

Ron Martino Laboratory Manager

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Sections:

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Sample Summary

Premier Environmental Services

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Job No: T12186

Delrose Scott Hughes/205071/2000-10807

Sample Number	Collected Date	l Time By	Received	Matr Code		Client Sample ID
T12186-1	12/21/05	15:10 KG	12/22/05	AQ	Ground Water	MW-2
T12186-2	12/21/05	15:15 KG	12/22/05	AQ	Ground Water	MW-3
T12186-3	12/21/05	00:00 KG	12/22/05	AQ	Trip Blank Water	TRIP BLANK



CAS No.

1868-53-7

17060-07-0

2037-26-5

460-00-4

			Repo	rt of A	nalysis			Page 1 of 1
Client Sam Lab Sampl Matrix: Method: Project:	le ID: T1218 AQ - Q SW84	6-1 Ground Wa 6 8260B	1ter ghes/205071/20	00-10807	Date I	Sampled: Received nt Solids	: 12/22/05	
Run #1 Run #2	File ID F0068864.D	DF • 1	Analyzed 12/23/05	B y RR	Prep D n/a	ate	Prep Batch n/a	Analytical Batch VF1734
Run #1 Run #2	Purge Volume 5.0 ml	2						
Purgeable	Aromatics							
CAS No.	Compound		Result	RL	MDL	Units	Q	
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)		ND ND ND ND	2.0 2.0 2.0 6.0	0.47 0.54 0.48 2.0	ug/l ug/l ug/l ug/l		

Run# 2

Limits

73-139%

66-139%

77-148%

84-150%

Run#1

103%

105%

103%

114%

ND = Not detectedMDL - Method Detection Limit

RL = Reporting Limit

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E = Indicates value exceeds calibration range

Surrogate Recoveries

Dibromofluoromethane

1,2-Dichloroethane-D4

4-Bromofluorobenzene

Toluene-D8

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound



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Report of Analysis

Client Sample ID: MW-3 Lab Sample ID: T12186-2 **Date Sampled:** 12/21/05 Matrix: AQ - Ground Water **Date Received:** 12/22/05 Method: SW846 8260B Percent Solids: n/a **Project:** Delrose Scott Hughes/205071/2000-10807 File ID DF **Analytical Batch** Analyzed By **Prep Date Prep Batch** F0068872.D Run #1 1 12/23/05 RR VF1734 n/a n/a Run #2 **Purge Volume** Run #1 5.0 ml Run #2 **Purgeable Aromatics** CAS No. Compound Result RL MDL Units Q 71-43-2 Benzene ND 2.0 0.47 ug/l

108-88-3 100-41-4 1330-20-7	Toluene Ethylbenzene Xylene (total)	ND ND ND	2.0 2.0 6.0	0.54 0.48 2.0	ug/l ug/l ug/l
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Lim	its
1868-53-7 17060-07-0 2037-26-5 460-00-4	Dibromofluoromethane 1,2-Dichloroethane-D4 Toluene-D8 4-Bromofluorobenzene	106% 106% 99% 107%		66-1 77-1	39% 39% 48% 50%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

- E = Indicates value exceeds calibration range
- J = Indicates an estimated value
- B = Indicates analyte found in associated method blank
- N = Indicates presumptive evidence of a compound



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			Repo	rt of An	alysis			Page 1 of 1
Client San Lab Samp Matrix: Method: Project:	le ID: T1218 AQ - SW84	Trip Blank 6 8260B	Water ghes/205071/20	00-10807	Date I	Sampled: Received: nt Solids:	: 12/22/05	
Run #1 Run #2	File 1D F0068873.D	DF 1	Analyzed 12/23/05	By RR	Prep D n/a	ate	Prep Batch n/a	Analytical Batch VF1734
Run #1 Run #2	Purge Volume 5.0 ml	•						
Purgeable	Aromatics							
CAS No.	Compound		Result	RL	MDL	Units	Q	
71-43-2 108-88-3 100-41-4 1330-20-7	Benzene Toluene Ethylbenzene Xylene (total)		ND ND ND ND	2.0 2.0 2.0 6.0	0.47 0.54 0.48 2.0	ug/l ug/l ug/l ug/l		
CAS No.	Surrogate Ro	ecoveries	Run# 1	Run# 2	Lim	its		

CAB NO.	Surrogate Recoveries	Kull# 1	Kull# 2	Dimits
1868-53-7	Dibromofluoromethane	104%		73-139%
17060-07-0	1,2-Dichloroethane-D4	109%		66-139%
2037-26-5	Toluene-D8	98%		77-148%
460-00-4	4-Bromofluorobenzene	108%		84-150%

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

- E = Indicates value exceeds calibration range
- J = Indicates an estimated value

B = Indicates analyte found in associated method blank

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N = Indicates presumptive evidence of a compound



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Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

• Chain of Custody



	101/F II 0 1/ 170	.										•		FED-EX Tri	uking #				Order Cr			
	10165 Harwin, Suite 150 -	Houston,	FX 77	J36 - 1	713-271	-4700) fay	K: 7]	13-2	7]-4	477	0		Acculet Q	iote #			Accut	218	6		
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pany Na	me			Project I	Name / No.		<u>viinen</u>								T							W - Onnking Wate
	vironmental Services			Delros	e Scott Hu	ghes/20)5071/2	2000-	10807												F 1	GW - Ground Wate
ect Cont		E-Mail	1	Bill to				1	nvoice	Attn.												WW · Waslewsler
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				Address															1 1			OI - Oil
Nest In	dustrial Loop, Suite I State		Zip	City				State				z										LIG - Other Liquid
	Midland, TX 79701		Цр	City				8 LI 19				2	ιþ									SOL - Other Solid
ne No.	432-230-1414	Fax	No.	Phone N							Fai	r No,										
piers's N	ame			Client Pr	urchase Ord	or#																
cutest	Field ID / Point of Collectio		T	Collecti	on			Nu	mber	T . 1	20	X 1 .	1									
mple #	Field 107 Point of Collectio	n		ate	Time	Matrix	# of bottles	₽	NO.	062	NO N		N	BTEX								AB USE ONL
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	4 Day RUSH					ced Tier 1		H	EDD f				-									
	3 Day EMERGENCY					ata Pack		لسما					-									
	2 Day <i>EMERGENCY</i>						•													_		
	1 Day EMERGENCY				Comm	ercial "A"	= Resu	its Onl	y													
	Other				Comm	erciai "B"	= Resu	its 2 S	tendar	QC							-					
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	led by Sampler:		Date Time		Received B	r		12		Retir	nquishe	d By:	UCLUD	NG COOK	Date T	ime:		Recei	ved By:	-		
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Relinquisi	red by:		Data Time		Received B	r		·		Cust	lody Se	al #		Pe	served wh		able			On Ice	Cooler Te	mp.
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T12186: Chain of Custody Page 1 of 2

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JOB #: 112186	1	DATE/TIME RECEIVED: [2]22[05	IVED: [2]21	07 140			
CLIENT: Promier Env	٨٣			INITIALS: BN	z	,	
Condition/Variance (Cir 1. ON Sample rece 3. Y Sample rece 5. ON Sample volu	Variance (Circle "Y" for yes and "N" for Sample received in undarnaged condi Sample received with proper pH. Sample volume sufficient for analysis.	 Ition/Variance (Circle "Y" for yes and "N" for no or NA. If "N" is Sample received in undamaged condition. Sample received with proper pH. Sample volume sufficient for analysis. 	L If "N" is circ	led, see vari N Samples N Sample N Sample	 N" is circled, see variance for explanation): 2. ON Samples received within temp. range. 4. ON Sample received in proper containers. 6. ON Sample received with chain of custody. 	ination): iin temp. ran oper contain chain of cus	nge. ters. stody.
zzz SSS	stody matches sa seal received inta seal received inta	Chain of Custody matches sample IDs and analysis on containers. NA Custody seal received intact and tamper not evident on cooler. NA Custody seal received intact and tamper not evident on bottles.	alysis on cont evident on co evident on bo	ainers. oler. ttles.			
SAMPLE or FIELD ID	BOTTLE #	DATE SAMPLED	MATRIX	VOLUME	LOCATION	PRESERV.	Hd
1-2	[-3	12/21/05	GW	40.00	VRGF	1 233,4,5,6	& <2, >12, NA
3	2-1	7	Trupbik	-1	7	1 23.4.5,6	d <2, >12, NA
						1,2,3,4,5,6	U, <2, XA
						1,2,3,4,5,8	U, <2. >12, NA
						r,2,3,4,5,6	U, <2, >12, NA
					\setminus	1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
			-			1,2,3,4,5,6	U, <2, >12, NA
			A.e.			1,2,3,4,5,6	U, <2, >12, NA
		A March	×0.12			1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
$\overline{}$						1,2,3,4,5,6	U, <2, >12, NA
						1,2,3,4,5,6	U, <2, >12, NA
N						123456	ANGRE
LOCATION: WI: Walk-in VR: Volatile PRESERVATIVES: 1: None 2: HCL 3: pH of waters checked excluding volatiles	VR: Volatile Refrig. e 2: HCL 3: HNO3 uding volatiles	 B. SUB: Subcontract EF: En- 3 4: H2SO4 5: NAOH 6: Other Comments: 	act EF: Encore Freezer DH 6: Other Comments:	e Freezar			
pH or souls NIA Delivery method: Courier:_	er: fed Ey	ł		COOLER TEMP:	1.92	COOLER TEMP	NP
Tracking#:	Ě.			COOLER TEMP:	á	COOLER TEMP:	MP:

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T12186: Chain of Custody Page 2 of 2



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GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries



Method Blank Summary

Job Number: Account: Project:			nvironmental Se s/205071/2000-1				
Sample	File ID	DF	Analyzed 12/23/05	By	Prep Date	Prep Batch	Analytical Batch
VF1734-MB	F0068861.D	1		RR	n/a	n/a	VF1734

The QC reported here applies to the following samples:

Method: SW846 8260B

T12186-1, T12186-2, T12186-3

460-00-4

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CAS No.	Compound	Result	RL	MDL	Units Q
71-43-2	Benzene	ND	2.0	0.47	ug/l
100-41-4	Ethylbenzene	ND	2.0	0.48	ug/l
108-88-3	Toluene	ND	2.0	0.54	ug/l
1330-20-7	Xylene (total)	ND	6.0	2.0	ug/l

112%

84-150%

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 CAS No.
 Surrogate Recoveries
 Limits

 1868-53-7
 Dibromofluoromethane
 99%
 73-139%

 17060-07-0
 1,2-Dichloroethane-D4
 98%
 66-139%

 2037-26-5
 Toluene-D8
 102%
 77-148%

4-Bromofluorobenzene



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Blank Spike Summary

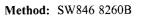
Sample File	ID I	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VF1734-BS F00	68860.D 1	1	12/23/05	RR	n/a	n/a	VF1734

The QC reported here applies to the following samples:

T12186-1, T12186-2, T12186-3

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	26.1	104	67-118
100-41-4	Ethylbenzene	25	25.0	100	71-119
108-88-3	Toluene	25	25.2	101	70-121
1330-20-7	Xylene (total)	75	75.5	101	72-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	73-139%
17060-07-0	1,2-Dichloroethane-D4	101%	66-139%
2037-26-5	Toluene-D8	101%	77-148%
460-00-4	4-Bromofluorobenzene	101%	84-150%





Page 1 of 1

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Matrix Spike/Matrix Spike Duplicate Summary Job Number: T12186

Account:	PESTXST Premier Environmental Services
Project:	Delrose Scott Hughes/205071/2000-10807

Sample	File ID	DF	Analyzed	Ву	Prep Date	Prep Batch	Analytical Batch
T12186-1MS	F0068865.D	1	12/23/05	RR	n/a	n/a	VF1734
T12186-1MSD	F0068866.D	1	12/23/05	RR	n/a	n/a	VF1734
T12186-1	F0068864.D	1	12/23/05	RR	n/a	n/a	VF1734

The QC reported here applies to the following samples:

T12186-1, T12186-2, T12186-3

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CAS No.	Compound	T12186-1 ug/l Q	Spike ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	25	26.9	108	26.6	106	1	65-122/15
100-41-4	Ethylbenzene	ND	25	25.0	100	25.1	100	0	70-123/18
108-88-3	Toluene	ND	25	25.0	100	24.9	100	0	70-123/18
1330-20-7	Xylene (total)	ND	75	76.4	102	75.7	101	1	71-122/16
CAS No.	Surrogate Recoveries	MS	MSD	T1	2186-1	Limits			
1868-53-7	Dibromofluoromethane	106%	102%	10	3%	73-1399	%		
17060-07-0	1,2-Dichloroethane-D4	109%	107%	10	5%	66-1399	%		
2037-26-5	Toluene-D8	102%	100%	10	3%	77-1489	%		
460-00-4	4-Bromofluorobenzene	99%	97%	11-	4%	84-150	%		



Page 1 of 1

Method: SW846 8260B

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Appendix D

New Mexico Office of State Engineer Water Well Reports



New Mexico Office of the State Engineer

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	<i>New Mexico O</i> Well Rep	<i>ffice of the S</i> orts and Do		eer		
Township: 22S	Range: 37E	Sections:	14			
NAD27 X:	Y:	Zone:	, S	earch Rad	ius:	
County: LE B	asin:		Number:		Suffix:	
Owner Name: (First)	(Last)		\bigcirc N	on-Domes	tic ODome	estic •All
Well / Surface Data Report	Clear Form	Depth to Wa	Menu H	lelp	Vater Column	Report
		COLUMN RE	PORT 07/0	5/2005		
(quarters a Well Number Tws F	are l=NW 2=NE are biggest to ang Sec q q q 37E 14 2 2 2		x	Dept Y Wel 12	l Water	Water (in Column 60

Record Count: 1

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New Mexico Office of the State Engineer

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		New Mexico O Well Rep	<i>ffice of the S</i> orts and Do	-		
Т	ownship: 22S	Range: 37E	Sections:	14		
NAI	D27 X:	Y:	Zone:	Searc	ch Radius:	
County: LE	В	asin:		Number:	Suffix:	
Owner Name:	(First)	(Last)		⊖Non-I	Domestic ODomes	stic ④All
Well / Su	rface Data Repor	t Avg Clear Form	Depth to Wa		Water Column F	Report
AVER	AGE DEPTH OF	WATER REPORT		Depth Water :	in Feet)	
Bsn Tws Rng CP 22S 37E	Sec Zone	X Y		Min Max 65 65	Avg 65	

Record Count: 1

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	New Mexico O Well Rep	<i>ffice of the St</i> eorts and Dow	•			
Township: 22S	Range: 37E	Sections: 14	4			
NAD27 X:	Y:	Zone:	Sear	ch Radius:		
County: LE E	Basin:		Number:	Su	ıffix:	
Owner Name: (First)	(Last)		⊖Non-I	Domestic	ODome	stic
Well / Surface Data Repo	rt Avg Clear Form	Depth to Wate		[Wate	er Column F	Report
	WATER	COLUMN REP	ORT 07/05/2	005		
(quarters Well Number Tws	are 1=NW 2=NE are biggest to Rng Sec q q q 37E 14 2 2 2		х у	Depth Well 125	Depth Water 65	Water (in Column 60

Record Count: 1

http://iwaters.ose.state.nm.us:7001/iWATERS/WellAndSurfaceDispatcher

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			•	<i>ffice of the</i> orts and D	-	ineer			
Te	ownship: 21S	Range	37E	Sections:	26				
NAC	027 X:	Y:		Zone:		Searc	h Radius:		
County:		Basin:			Numbe	er:	Su	iffix:	
Owner Name: ((First)		(Last)		0	Non-D	omestic	ODome	stic ©All
Well / Sur	face Data Repo			Depth to W			Wate	er Column f	Report
Well / Sur	face Data Repo	ort (Clear I		Depth to W		Help	Wate	er Column F	Report
Well / Sur	face Data Repo		orm		Menu	Help		er Column F	Report
Well / Sur	(quarters	Clear I	Form	WATERS COLUMN R 3=SW 4=SE	EPORT 07/	Help	05	· · · · ·	
	(quarters (quarters	Clear I are 1=N are bigg	WATER WATER W 2=NE gest to	WATERS COLUMN R 3=SW 4=SE smallest	EPORT 07/	Help /14/20	05 Depth	Depth	Water (in
Vell Number	(quarters (quarters Tws	Clear I are 1=M are bigg Rng Sec	WATER WATER W 2=NE gest to q q q	WATERS COLUMN R 3=SW 4=SE	EPORT 07/	Help	05 Depth Well	· · · · ·	Report Water (in Column
Well Number CP 00230	(quarters (quarters Tws 21S	are 1=N are big Rng Sec 37E 26	WATER W 2=NE gest to q q q 3 2 3	WATERS COLUMN R 3=SW 4=SE smallest	EPORT 07/	Help /14/20	05 Depth Well 85	Depth	Water (in
Well / Sur Well Number CP 00230 CP 00227 CP 00228	(quarters (quarters Tws	are 1=N are big Rng Sec 37E 26 37E 26	WATER WATER W 2=NE gest to q q q	WATERS COLUMN R 3=SW 4=SE smallest	EPORT 07/	Help /14/20	05 Depth Well	Depth	Water (in

Record Count: 4

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http://iwaters.ose.state.nm.us:7001/iWATERS/WellAndSurfaceDispatcher

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New Mexico Office of the State Engineer

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		<i>fice of the State</i> orts and Downlo	0		
Township: 22S	Range: 37E	Sections: 26			
NAD27 X:	Y :	Zone:	Search I	Radius:	
County:	Basin:	Νι	ımber:	Suffix:	
Owner Name: (First)	(Last)		⊖Non-Dor	nestic ODomes	stic ④All
Well / Surface Data Repo	ort Avg Clear Form	Depth to Water Re WATERS Menu		Water Column F	Report
AVERAGE DEPTH OF	F WATER REPORT (h Water in	Feet)	
Bsn Tws Rng Sec Zone CP 22S 37E 26	ХУ	Wells Min 1 65	Max	Avg 65	
Record Count: 1					

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	Town	ship: 22S	Range: 37	Έ	Sections:	26				
	NAD27	X:	Y:		Zone:		Search	Radius:		
Count	y:	В	asin:			Num	ber:	Su	ffix:	
)wner Na	ame: (First	t)	(L	.ast)		(⊖Non-Do	mestic	ODomestic	• All
(We	ell / Surface	Data Repor	t Clear Form		Depth to Wa WATERS		ort (Help	Wate	r Column Repo	nt
	AVERAGE	DEPTH OF	WATER REP	ORT 0			Water in	Feet)		
sn Tws P 22S	-	Zone	x	Y	Wells 1	Min 65	Max 65	Avg 65		
ecord C					-					

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