

AP - 37

STAGE 1 & 2 WORKPLANS

DATE:

7/21/2003



SOIL REMEDIATION AND RISK ASSESSMENT PROPOSAL

Lovington Deep 6"
Ref. # 2002-10312

UL-H, SE¼ of the NE¼ of Section 6, R36E, T17S
Latitude 32° 52' 1.132" N and Longitude 103° 23' 16.570"W
Elevation ~3,918 'amsl

~5 miles south of Lovington
Lea County, New Mexico

July 21, 2003

Prepared by

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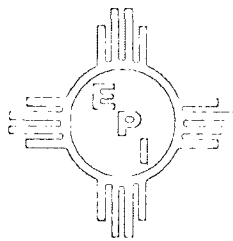


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1.0 SUMMARY AND PROPOSAL

This EOTT Energy LLC (EOTT) Lovington Deep 6" site, is located in UL-H in the SE¼ of the NE¼ of Section 6, R36E, T17S at Latitude 32°52'1.132"N and Longitude 103°23'16.570"W approximately ~5 miles south of Lovington Lea County, New Mexico on property owned by Darr Angell. Site maps are included in Attachment I. The estimated 25 bbls (bbl) crude oil leak attributed to internal/external corrosion, occurred on 12-12-02 @ 8:00 AM in the Lovington Deep 6" steel pipeline with 10 bbls recovered and reintroduced to the system. Approximately 6,000 sqft ft² (~150' x 75') of surface was affected. Photographs are included in Attachment II. During the preliminary investigation, ground water was measured at ~65'bgs'below ground surface ('bgs) giving soil to the 15'below ground surface ('bgs) interval a 10 point New Mexico Oil Conservation Division (NMOCD) site ranking score that applies the following soil remedial guidelines;

- Benzene 10 mg/Kg
- BTEX 50 mg/Kg
(BTEX is the mass sum of Benzene, Toluene, Ethyl Benzene, and Xylenes)
- Total Petroleum Hydrocarbon 8015m(TPH^{8015m}) 1000 mg/Kg

For contaminated soil >15'bgs, i.e., <50 from the ground water surface the site ranking score is 20 with the following remedial guidelines;

- Benzene 10 mg/Kg
 - BTEX 50 mg/Kg
 - TPH^{8015m} 1000 mg/Kg
- Should Be 100*

It was determined during subsurface delineation that crude oil had impacted the ground water at the "leak origin" borehole (BH1), also known as Monitor Well 1 (MW1). Subsequently, to bound the horizontal and vertical extents in the soil and ground water, BH2, BH4, BH5, and BH6 were advanced, sampled, and installed as perimeter observation/monitor wells, respectively, MW2 (~65' southeast transverse gradient), MW3 (150' down gradient), MW4 (~125 southeast transverse gradient), and MW5 (~100' northwest up gradient). EOTT, the NMOCD, and the land owner were notified immediately of the impact. Weekly product recovery from the MW1 began immediately as did quarterly perimeter monitor well sampling. Initial sampling results indicate that all wells have been impacted above the New Mexico Water Quality Control Commission (WQCC) Benzene standard of 0.01 mg/L but only MW1 exhibits "Phase Separated Hydrocarbon" (PSH). A Rule 19 Abatement Plan will be submitted within 90 days that will address ground water delineation/characterization and remediation.

After discussions with the NMOCD and land owner, EOTT made the decision to remove a portion of the soil known to be contaminated above the regulatory thresholds and dispose of in the nearest NMOCD permitted facility.

Approximately 1,102 yd³, i.e., approximately a 3 feet thickness within the spill area perimeter was disposed of in the NMOCD approved and permitted South Monument Surface Waste Management Facility NM-01-0032. Excavation

continued with approximately 10,500 yd³ of contaminated soil removed from ~3'bgs in the flow path to ~10'bgs near the leak origin. This soil was processed through a soil shredder to separate rocks from landfarmable soil and to promote attenuation by aeration and volatilization. The table below shows the relative effectiveness of the process;

Units	TPH ^{8015m}	BTEX	Benzene
	mg/Kg	µg/Kg	µg/Kg
Processed Spoils Pile Soil	1270	2884	<25
Contaminated Spoils Pile Soil	3565	10970	<25

The excavation exposed the top of the contaminated soil column and effectively delineated the horizontal extent of crude oil impact in the near surface and provided a conceptual visualization of the remaining impacted area, i.e. an inverted cone tapering from ~10'bgs to the ground water interface at ~65'bgs. Bottom and sidewall samples indicate that all soil down to ~10'bgs around the contaminated soil column perimeter are at acceptable levels. Results from analysis of a grab sample from just beneath the surface in the center of the impacted soil column are as follows;

Units	TPH ^{8015m}	BTEX	Benzene
	mg/Kg	µg/Kg	µg/Kg
Excavation Bottom Point of Release	8380	256990	2690

All data is summarized and presented in Attachment III.

Based on information collected during the soil delineation phase of the project, EOTT proposes to isolate the remaining crude oil source term by installing an engineered and tested clay barrier supported by a computer simulated risk assessment using the American Petroleum Institute VADSAT 3.0 computer model. Details of the risk assessment are provided in Section 6.0.

2.0 ENVIRONMENTAL MEDIA CHARACTERIZATION

Chemical parameters of the soil and ground water were characterized consistent with the characterization and remediation/abatement goals and objectives set forth in the New Mexico Oil Conservation Division (NMOCD) approved **"General Work Plan for Remediation of E.O.T.T. Pipeline Spills, Leaks and Releases in New Mexico, July 2000"** and the NMOCD guidelines published in the following documents;

- Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993)
- Unlined Surface Impoundment Closure Guidelines (February 1993)

Acceptable thresholds for **contaminants/constituents of concern** (CoCs), i.e., TPH, Benzene, and the mass sum of Benzene, Toluene, Ethyl Benzene, and total Xylene (BTEX), were established based on the NMOCD Ranking Criteria as follows;

- Depth to Ground water, i.e., distance from the lower most acceptable concentration to the ground water.
- Wellhead Protection Area, i.e., distance from fresh water supply wells.
- Distance to Surface Water Body, i.e., horizontal distance to all down gradient surface water bodies.

2.1 GEOLOGICAL DESCRIPTION

This site is located in the physiographic/geographic subdivision known as the High Plains. The near surface geology is relatively flat in this part of Lea County, surfaced with a thin grayish brown sandy clay overlying a resistant, typically fractured and indurated caliche interbed of varying thickness, i.e., 4-20'. The Cenozoic Ogallala formation consisting of finely graded sand underlies the caliche, bottoming between 200 and 250'bgs. Typically, the interface between the vadose zone and the saturated zone of the Ogallala formation occurs in the area generally between 50-75'bgs.

2.2 ECOLOGICAL DESCRIPTION

The area is typical of the transition between the High Plains and the Upper Chihuahuan Desert Biomes consisting primarily of flat to gently rolling hills covered with desert grasses and shrubs interspersed with Harvard Shin Oak (*Quercus harvardi*) and Honey Mesquite (*Prosopis glandulosa*). Mammals represented, include Orrd's and Merriam's Kangaroo Rat, Deer Mouse, White Throated Wood Rat, Cottontail Rabbit, Black Tailed Jackrabbit, Pronghorn Antelope and the Mule Deer. Reptiles, Amphibians, and Birds are numerous and typical of area. A survey of Listed, Threatened, or Endangered species was not conducted.

2.3 AREA GROUND WATER

Ground water was encountered at ~65'bgs during the preliminary site investigation and is consistent with the New Mexico Office of the State Engineer records database. Site information suggests also that the ground water elevation decreases generally to the northeast but will be confirmed by survey.

2.4 AREA WATER WELLS

The New Mexico Office of the State Engineer records water well L09892 approximately 4,500 feet southwest of the site with a 1982 water level of 50'bgs, well L05225, water level 80'bgs, is 2,100 feet north, and well L01723 1800 feet southeast of the site, is listed but does not show a water level. No water wells appear to currently at risk from the impact at the site. Area wells are plotted on the USGS topographical map in Attachment I.

NMOSE Well Number	Tws	Rng	Sec	q	Q	q	Zn	Easting	Northing	Date	Well 'bgs	Water 'bgs
L02339	16S	35E	36	1	3		13	648084	3638919	9/12/1953	82	50
L09953	17S	35E	1	4	2	1	13	649226	3637015	9/25/1987	150	50
L09944	16S	35E	36	4	4		13	649302	3638127	8/17/1987	90	55
L09892	17S	36E	6	3	1	3	13	649630	3636820	1/30/1987	135	50
L04442	16S	36E	31	1			13	649895	3639143	5/25/1960	90	62

NMOSE Well Number	Tws	Rng	Sec	q	Q	q	Zn	Easting	Northing	Date	Well 'bgs	Water 'bgs
L02145	16S	36E	31	3	2		13	650076	3638543	4/7/1953	120	78
L05225	16S	36E	31	4	4		13	650889	3638154	9/18/1963	110	80
L06875	16S	36E	32	1	4	1	13	651579	3639074	11/16/1971	131	90
L06695	16S	36E	32	2	2		13	652479	3639392	6/17/1970	90	45
L05616	17S	36E	4	3	2		13	653324	3636994	5/2/1965	130	65
L01723	17S	36E	5	3	1	1	13	651211	3637049	?	?	?
L01723 S	17S	36E	5	3	2	4	13	651813	3636858	?	?	?
L01723 S-2	17S	36E	5	3	2	1	13	651613	3637058	?	?	?
L01723 S-3	17S	36E	5	4	1	2	13	652215	3637067	?	?	?

2.5 AREA SURFACE WATER BODIES

There are no permanent or intermittent surface water bodies within 1000 horizontal feet of the site.

3.0 NMOCD SITE RANKING

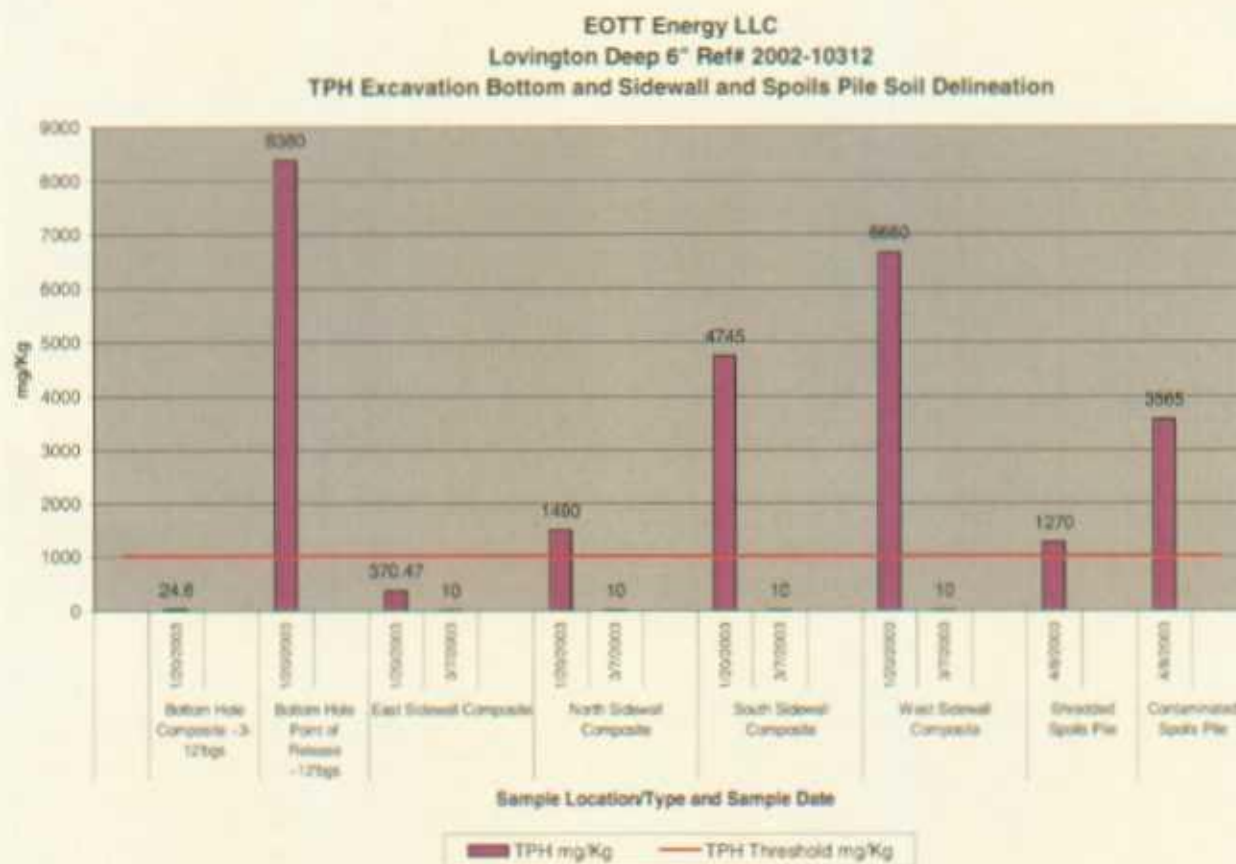
Based on the proximity of the site to protectable area water wells, surface water bodies, and depth to ground water, the site has an NMOCD ranking score of 10 points for soil from the surface to 15'bgs and 20 points for soil from 15'bgs to the ground water interface at 65'bgs. The respective soil remedial goals are 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: 10 points				200-100 horizontal feet: 10 points	
If Depth to GW >100 feet: 0 points		If >1000' from water source, or; >200' from private domestic water source: 0 points		>1000 horizontal feet: 0 points	
Ground water Score = 10		Wellhead Protection Area Score= 10		Surface Water Score= 0	
Site Rank (1+2+3) = 10 + 10 + 0 = 20 points					
Total Site Ranking Score and Acceptable Remedial Goal Concentrations					
Parameter	>19 (15 to 65'bgs)	10-19 (surface to 15'bgs)		0-9	
Benzene ¹	10 ppm	10 ppm		10 ppm	
BTEX ¹	50 ppm	50 ppm		50 ppm	
TPH	100 ppm	1000 ppm		5000 ppm	

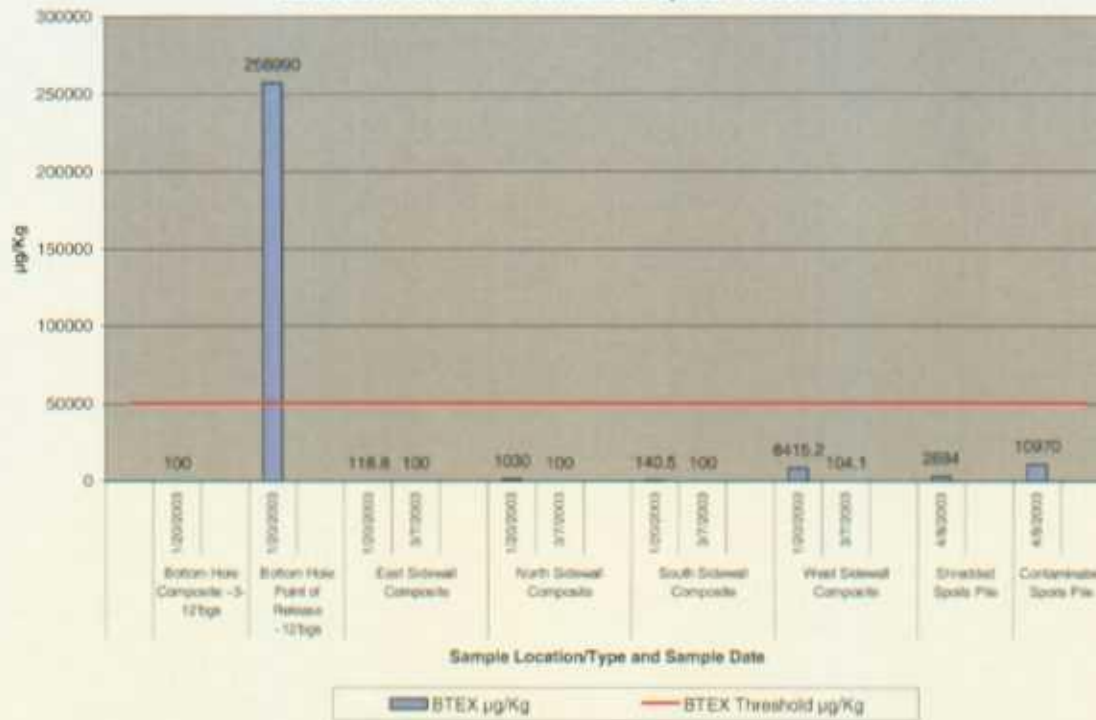
4.0 SUBSURFACE SOIL INVESTIGATION

The preliminary investigation advanced and sampled 6 boreholes, 5 of which were converted into observation/monitor wells. Soils observed from Borehole 1 (BH1), the leak origin borehole impacted to the ground water interface where product was observed floating atop the aquifer. BH1 was developed into a 4" PVC case recovery well. BH2, BH4, BH5, and BH6 were advanced and sampled at perimeter locations and, to bound the extent of the PSH and dissolved phase hydrocarbon impact, installed as observation/monitor wells, i.e., MW2 (~65' southeast transverse gradient), MW3 (150' down gradient), MW4 (~125 southeast transverse

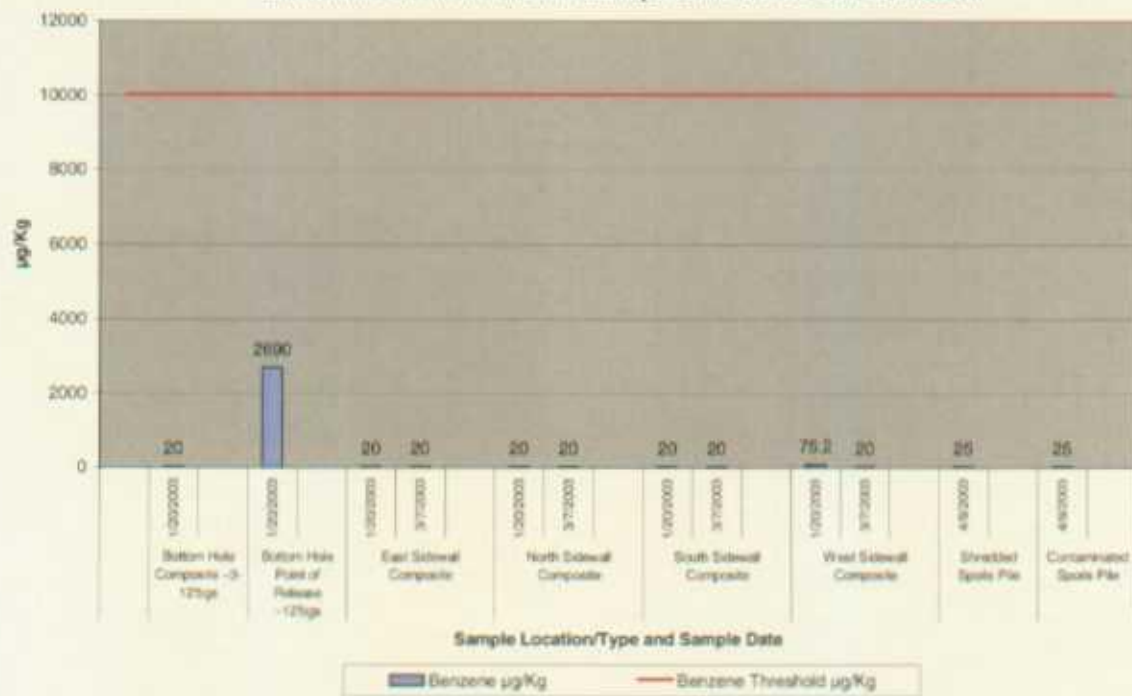
gradient), and MW5 (~100' northwest up gradient). Refusal was encountered at BH3 with BH4 being successfully advanced in the same area. Soil sample analytical data in these soil borings were less than the soil remedial guideline thresholds. During excavation of the contaminated soil, the horizontal extent of CoC impact was observed to taper from the visible surface spill perimeter to the area immediately below the leak origin. The top of the contaminated soil vertical column at 10' bgs is 8,018 ft² in the south end of the 19,230 ft² excavation. The excavation bottom outside the contaminated soil column area and the sidewalls tested to be at acceptable levels for the CoCs. The site map showing excavation and soil column areas is included in Attachment I. The analytical results are presented and summarized in Attachment III and illustrated below.



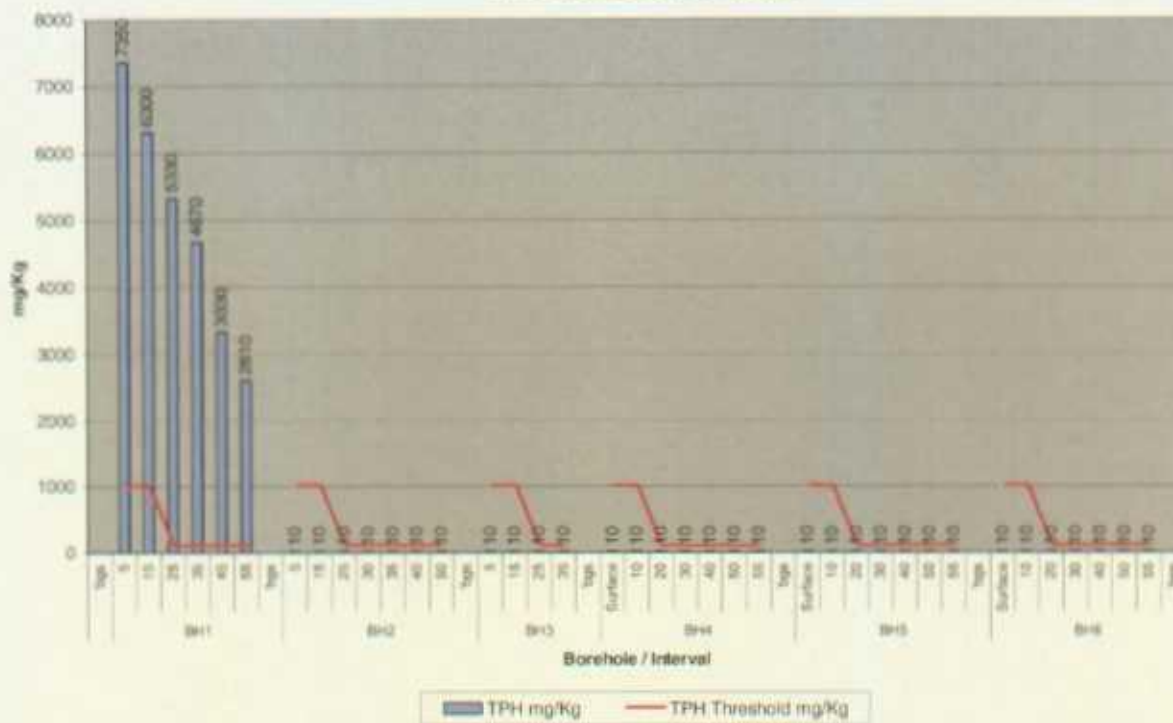
EOTT Energy LLC
Lovington Deep 6" Ref# 2002-10312
Excavation Bottom and Sidewall and Spoils Pile Soil BTEX Delineation



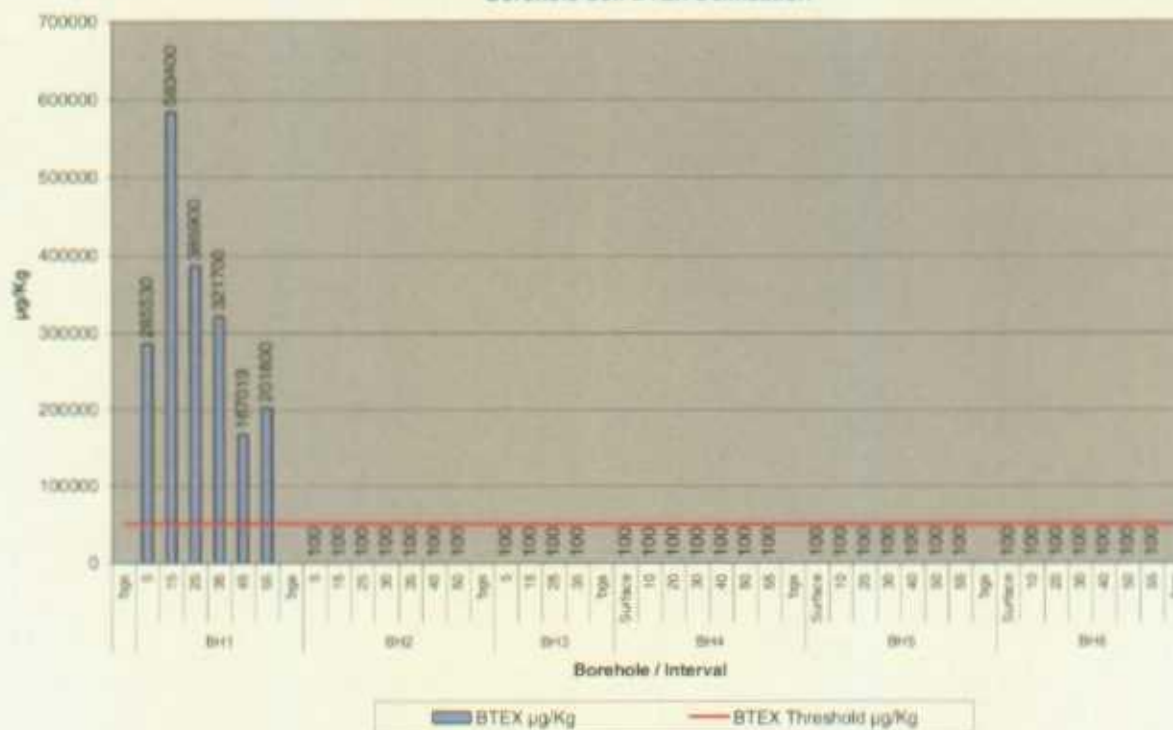
EOTT Energy LLC
Lovington Deep 6" Ref# 2002-10312
Excavation Bottom and Sidewall and Spoils Pile Soil Benzene Delineation



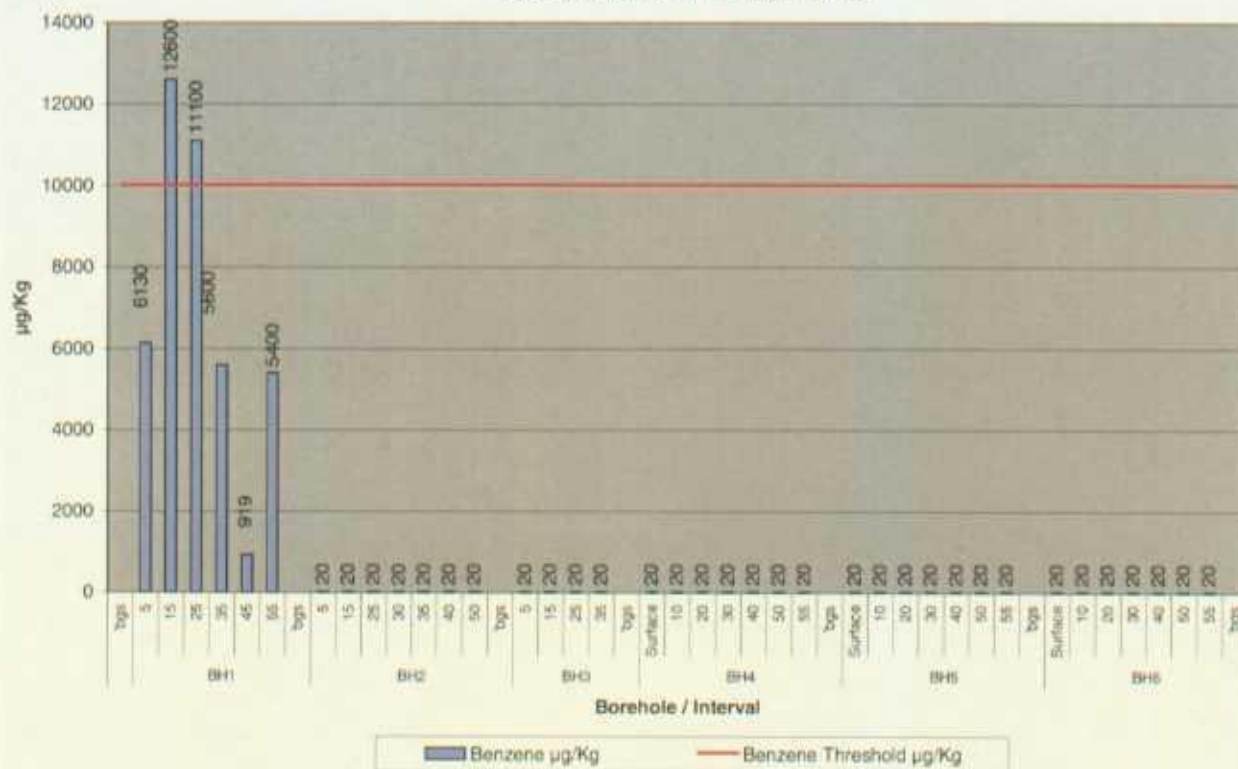
EOTT Energy LLC
Lovington Deep 6" Ref# 2002-10312
TPH Borehole Soil Delineation



EOTT Energy LLC
Lovington Deep 6" Ref# 2002-10312
Borehole Soil BTEX Delineation



**EOTT Energy LLC
Lovington Deep 6" Ref# 2002-10312
Borehole Soil Benzene Delineation**



5.0 GROUND WATER INVESTIGATION

The preliminary investigation identified ground water impact in excess of the WQCC standards. EOTT will submit a Rule 19 Abatement Plan within 90 days that will address ground water delineation/characterization and remediation.

6.0 SOIL REMEDIATION AND RISK ASSESSMENT PROPOSAL

Impacted soil down to the 10' bgs interval has been excavated with 1,102 yd³ disposed of and the remaining 10,500 yd³ processed through a shredder to separate rocks from landfarmable soil, as well as, agitate and aerate so as to homogenize and promote attenuation through blending and volatilization. The table below shows the relative effectiveness of the process;

	Units	TPH ^{ND/100}	BTEX	Benzene
		mg/Kg	µg/Kg	µg/Kg
Processed Spoils Pile Soil		1270	2884	<25
Contaminated Spoils Pile Soil		3565	10970	<25

The excavation exposed the top of the contaminated soil column and effectively delineated the horizontal extent of crude oil impact in the near surface and provided a conceptual visualization of the remaining impacted area, i.e. an inverted cone with a defined area of 8,018 ft² tapering from ~10' bgs to ~65' bgs,

the ground water interface. The perimeter soil borings suggesting no impact also support the conceptual model. Bottom and sidewall samples indicate that all soil down to ~10' bgs around the contaminated soil column perimeter are at acceptable levels. Results from analysis of a grab sample from just beneath the surface in the center of the soil column are as follows;

Units	TPH ^{8015m}	BTEX	Benzene
	mg/Kg	µg/Kg	µg/Kg
Excavation Bottom Point of Release	8380	256990	2690

All data is summarized and presented in Attachment III.

6.6 VADSAT RISK ASSESSMENT

Based on information collected during the soil delineation phase of the project, EOTT proposes to isolate the remaining crude oil impacted soil by installing an engineered and tested clay barrier supported by a computer simulated risk assessment using the American Petroleum Institute VADSAT 3.0 computer model. To ensure that the simulations are conservative, the highest TPH and BTEX mass concentrations will be used to maximize force of transport. The BTEX mass will be substituted for Benzene, the parameter of transport. Likewise, the infiltration rate will be inputted as positive to accommodate the model, when in reality the local evaporation rate is negative. Given that the ground water has already been impacted by crude oil, the depth of contamination will be set 5' above the ground water interface. All model input variables are presented in Attachment V.

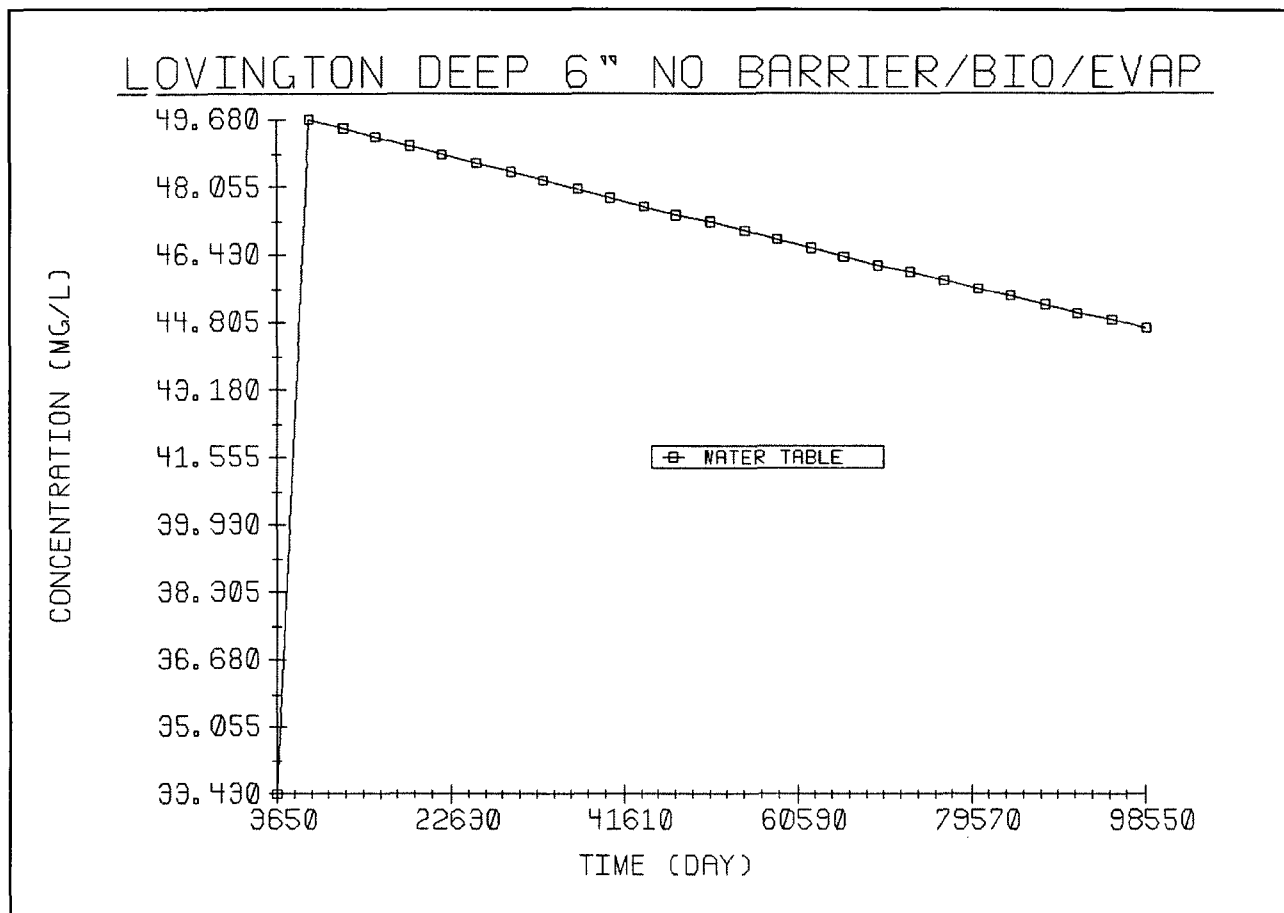
6.7 SIMULATIONS

Simulations will be conducted under the following conditions;

- Barrier not present, No Bio-attenuation, No Evaporation
- Barrier present, No Bio-attenuation, No Evaporation
- Barrier present, with Bio-attenuation, with Evaporation

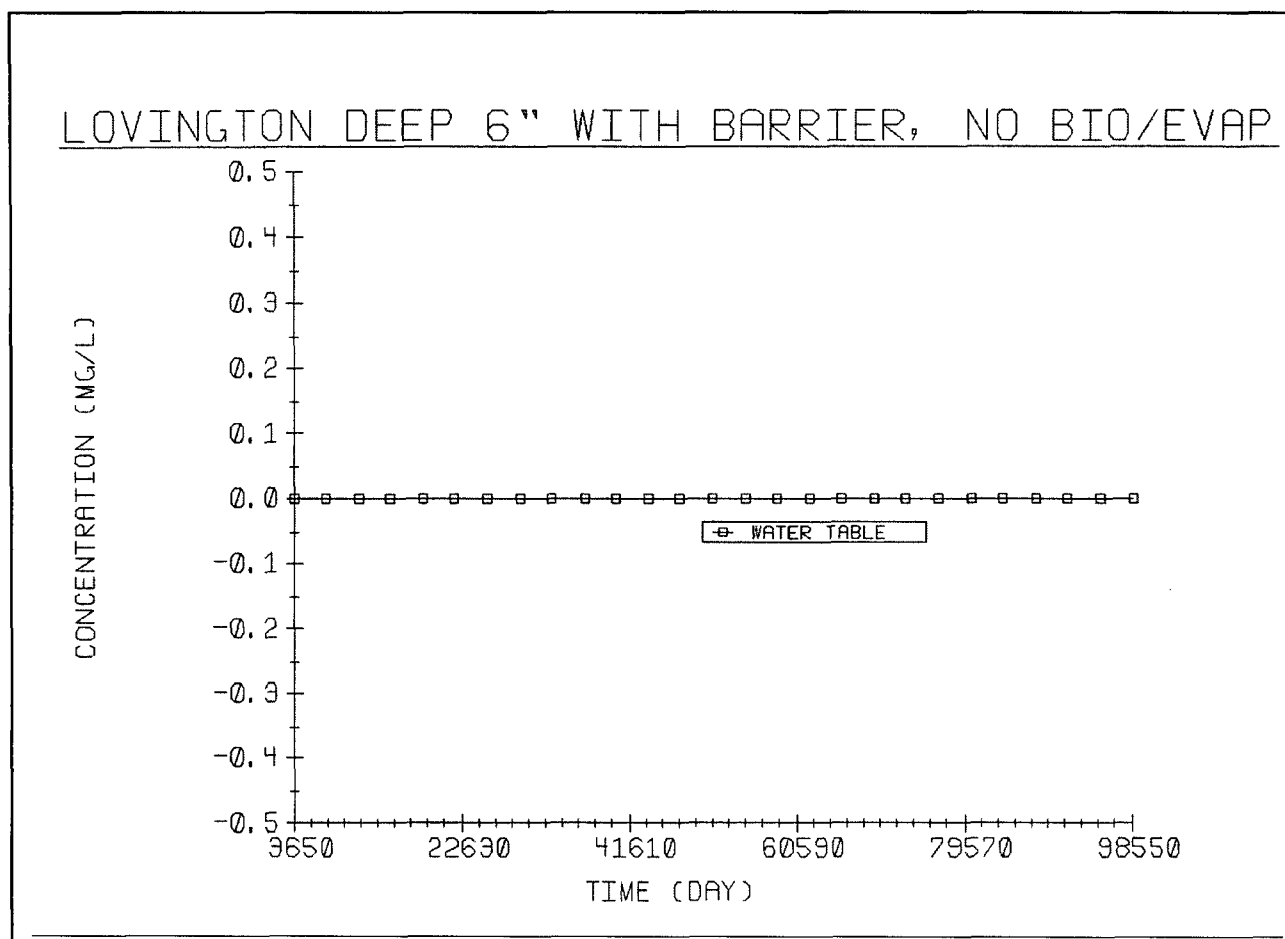
6.7.1 SIMULATION WITH NO BARRIER, BIO-DECAY, OR EVAPORATION

This simulation shows that in 25-30 years, without an engineered barrier, bio-decay, or evaporation, the Benzene source term will impact the ground water at 49.680 mg/L and decrease linearly by dispersion. The chart below illustrates the results.



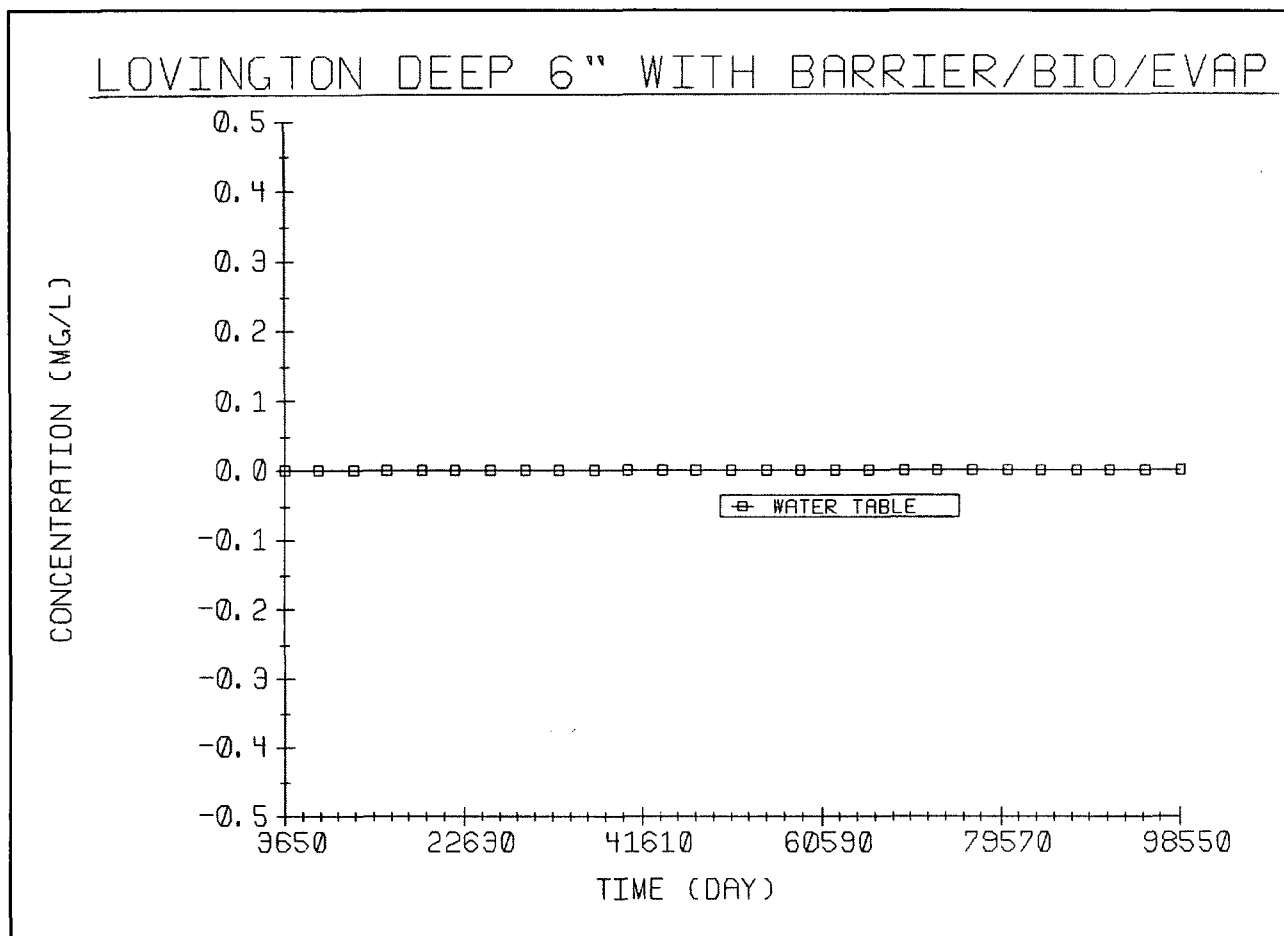
6.7.2 SIMULATION WITH BARRIER, BUT NO BIO-DECAY OR EVAPORATION

This simulation indicates that the barrier alone will prevent the ground water from being impacted further. The chart below illustrates the results.



6.7.3 SIMULATION WITH BARRIER, BIO-DECAY, AND EVAPORATION

This is the most realistic simulation and supports the conclusion that the barrier and natural processes will prevent the remaining crude oil source term from increasing the current ground water contamination. The chart below illustrates the results.



6.8 ENGINEERED BARRIER INSTALLATION AND CERTIFICATION

The perimeter of the barrier will be at least 5' beyond the contaminated soil and be at least 1 foot thick after compaction and installed between the 9'bgs and 10'bgs intervals on top of the contaminated soil column. The barrier will be constructed of clay and compacted to 95% of the Proctor Density as determined by ASTM-D-698. The clay will be tested by an engineering firm to certify and verify acceptable compaction and moisture content. The lift will be tested in two locations at points central to each lateral half of the barrier. The clay barrier will be contoured to shed water.

6.9 BACKFILLING

After the clay barrier is certified as adequate, it is proposed to backfill the excavation with the remediated soil and rock. Every 1,000 yd³ batch will be tested to ensure the Data Objectives in Section 6.9.2 have been achieved.

6.9.1 SAMPLING PRIOR TO EMPLACEMENT

Prior to testing, approximately 1,000 yd² of contaminated soil will be spread into a 6" lift and a VOC headspace survey conducted at 5 points within the lift, i.e., the 4 quadrants and the center. If the VOC headspace of all samples from a lift are <100.0 ppm, the soil will be deemed acceptable for emplacement and emplaced in the excavation, if >100.0 ppm, then the two sites with the highest headspace reading will be grab sampled, refrigerated and sent to the laboratory for TPH^{8015m} and BTEX analysis. Soil that exceeds the Data Objectives in Section 6.9.2 will be managed separately.

6.9.2 DATA OBJECTIVES

- Contaminated soil that is monitored to have a VOC headspace reading of <100.0 ppm will be deemed acceptable and placed in the excavation.
- It is proposed that soil determined by laboratory testing to be <2,000 mg/Kg TPH^{8015m}, <10.00 mg/Kg Benzene, and <50.00 mg/Kg BTEX be deemed acceptable and placed in the excavation.

6.9.3 EMPLACEMENT AND COMPACTION

The soil will be emplaced in 2 yd³ increments with a front-end loader and spread. Compaction will occur during the backfilling process as the loader motors back and forth.

6.10 ROOT ZONE RESTORATION

Approximately 1,102 yd³ of local clean soil will top off the area followed by contouring to the natural grade. At a time acceptable to the landowner, the site will be reseeded with a seed mix preferred by the landowner.

6.11 QUALITY ASSURANCE/QUALITY CONTROL

To ensure viable unperturbed samples and credibility of the laboratory results the following quality parameters must be achieved to warrant acceptability and usability of data.

6.11.1 SAMPLE HANDLING

Soil and water samples will be collected and prepared in accordance with accepted ASTM and EPA SW846 methods.

6.11.2 SAMPLING PROTOCOLS

1. Decontaminate sampling equipment and area with Alconox and distilled water after each sample.
2. Prepare samples and refrigerate as soon as practicable.

Duplicates or blanks may be submitted to the laboratory to establish reproducibility and identify laboratory contamination, respectively.

6.11.3 SAMPLE CONTAINERS

Laboratory and field analyses of soil and water require specific containers and are listed in the matrix below.

	TPH	BTEX	VOC Headspace	Metals	PAH	General Chemistry
Soil	4 oz. Jars with Teflon seal	4 oz. Jars with Teflon seal	1-gallon Ziplock® bags			
Water	1 liter amber glass w/HCL	2-40 ml VOA vials w/ HCL		16 oz. Plastic w/ 1ml HNO ₃	1 liter Amber Glass	1 liter Plastic

6.11.4 SAMPLE CUSTODY

All analytical request forms will be completed and signed by EPI as sampler. EPI personnel will ascension the samples to the laboratory sample-receiving personnel under chain-of-custody signature.

6.11.5 QUALITY CONTROL SAMPLES

Quality control samples will be analyzed to ensure data quality.

6.11.5.1 Field Blank

A field blank for soil or water is not deemed necessary.

6.11.5.2 Equipment Blank

None will be collected.

6.11.5.3 Field Duplicate or Co-located Samples

For water and soil samples, one random duplicate or co-located sample will be collected for analysis for every 1-10 samples or each day a sampling event occurs.

6.11.5.4 Laboratory Duplicate

The laboratory will be asked to use one of the soil samples as part of the lab's internal Quality Control analyses and report the results for reproducibility of reported results, i.e., to verify duplicate preparation and analysis.

6.11.5.5 Trip Blank

A laboratory prepared trip blank will accompany each water sample batch.

6.12 FIELD MEASUREMENTS

The VOC Headspace concentration for each soil sample will be measured. The instrument used will be the Ultra-Rae PID manufactured by Rae Systems. The calibration gas will be 100.0 ppm isobutylene standard from Scott Specialty Gases, Freemont, Colorado.

6.12.1 EQUIPMENT CALIBRATION AND QUALITY CONTROL

The PID will be calibrated at least 3 times daily and checked with the calibration gas hourly. When a check with the calibration gas indicates the instrument reading is 10 ppm too high or low it will be calibrated. Variation in the daytime ambient temperature will cause the variation.

6.12.2 EQUIPMENT MAINTENANCE AND DECONTAMINATION

All sampling and survey equipment will be routinely decontaminated between samples. Nitrile gloves will be worn and changed with each sampling iteration.

6.13 GROUND WATER LEVEL MEASUREMENTS

Ground water and PSH level measurement will be collected with an accurate interface meter at each borehole where ground water is encountered and each observation/monitor well. Levels will be recorded as "feet below ground surface" to the nearest ".01 ft." and will be recorded as "TOC," i.e., top of north side of casing. Decontamination will occur before and after each well measurement.

6.14 ANALYSES

Soil and ground water will be analyzed in accordance with the following EPA Methods.

The analytical suite for soil samples will include;

- TPH (EPA method 8015M)
- BTEX (EPA method 8020 or equivalent)

The analytical suite for water samples may include:

- Total Organic Carbon SW846-9056
- Metals (EPA method 600/4-79-020) New Mexico WQCC and EPA RCRA as listed
- BTEX (EPA method 8021B)
- Total Dissolved Solids (EPA method 150.1)
- Polynuclear Aromatic Hydrocarbon (PAH) (EPA method 8270)

6.15 SAMPLE IDENTIFICATION

An example of the sample identification scheme is as follows

Medium- Soil or Water	Company- EOTT	Site: Lovington Deep 6"	Date 6-3-2003	Location: Lift#-Quad	Designation: Duplicate
S	E	LD6	60303	L2-SW	D

Example: SELD660303L2-SWD

6.16 DATA QUALITY OBJECTIVES

All data will be reviewed within the context of documented and verified analytical information derived from quality control samples. If data is within the

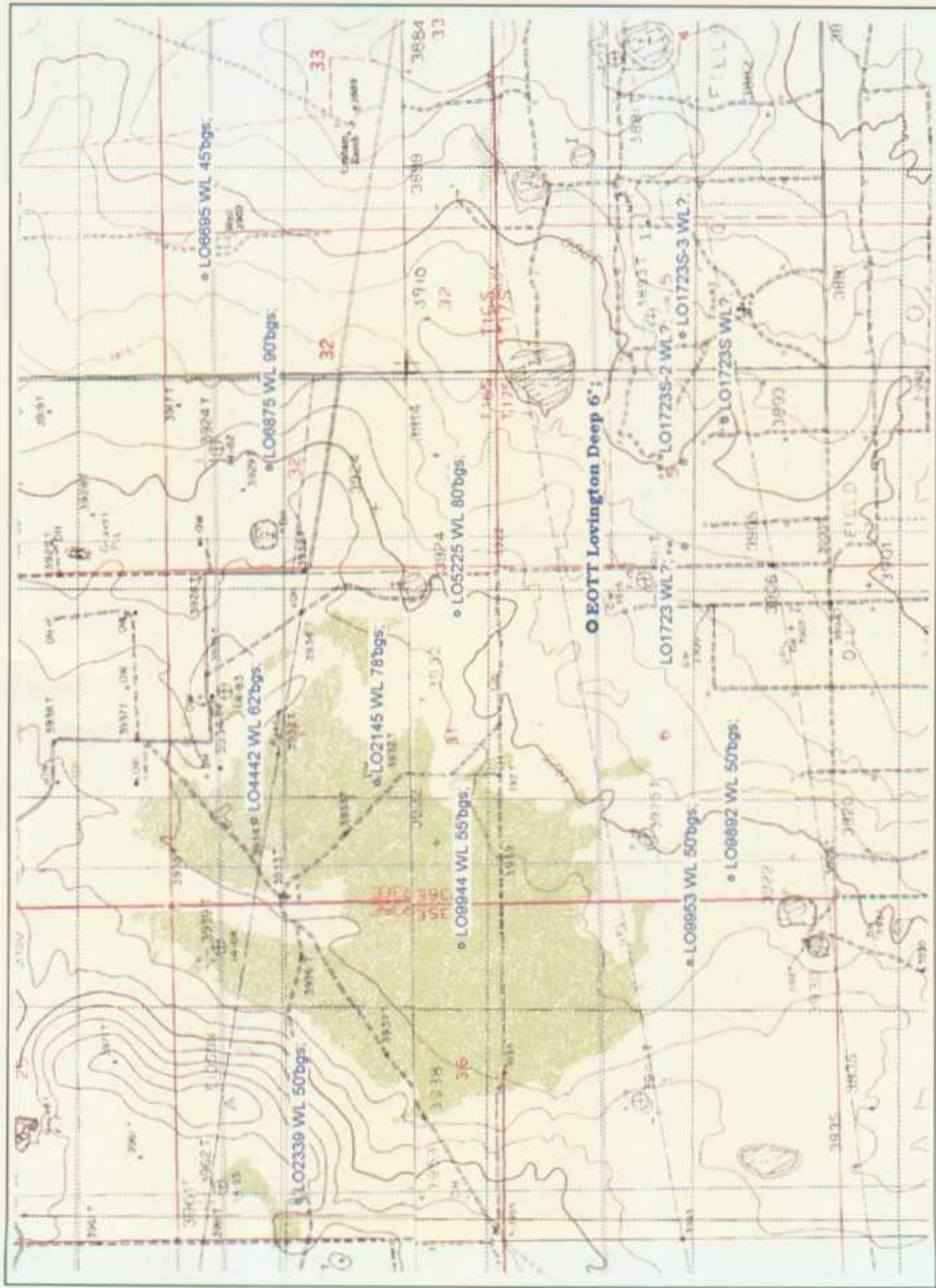
specifications it will be deemed quantitative and acceptable for use in making environmental management decisions.

- Laboratory data must have extraction recovery for TPH, BTEX and general chemistry parameters $\leq 25.0\%$. Or a "%Extraction Accuracy" between 75 and 125%.
- Laboratory data must have $<25\%$ Relative Percent Difference or a "%Instrument Accuracy" between 75 and 125% for field or laboratory duplicates.
- Field headspace analyses must be supported with instrument calibration data and calibration gas certification.

7.0 CONCLUDING COMMENTS AND REQUEST

On-site remediation of contaminated soil down to 10'bgs has been effective in reducing the CoC concentrations. Isolating the remaining crude oil contaminated soil with a clay barrier will be protective of the ground water and is supported by the conservative risk assessment. The barrier will also serve to isolate the remediated soil proposed to be used as backfill. Lastly, the root zone soil removed from the site will be replaced; restoring the site to agricultural productivity. This soil remediation risk assessment proposal will be protective of the local ground water and will restore the site to agricultural productivity. It is requested that the NMOCD approve this plan, also acknowledging that EOTT will be submitting a Rule 19 Abatement Plan to address the ground water issues.

ATTACHMENT I: SITE MAPS



EOtt ENERGY
PIPELINE
LOVINGTON DEEP
6"

UL-H
SE/4 OF THE
NE/4

SECTION 6
T17S R36E
LEA CO. NM
AFFECTED AREA
~6,000 SQFT

N ↑

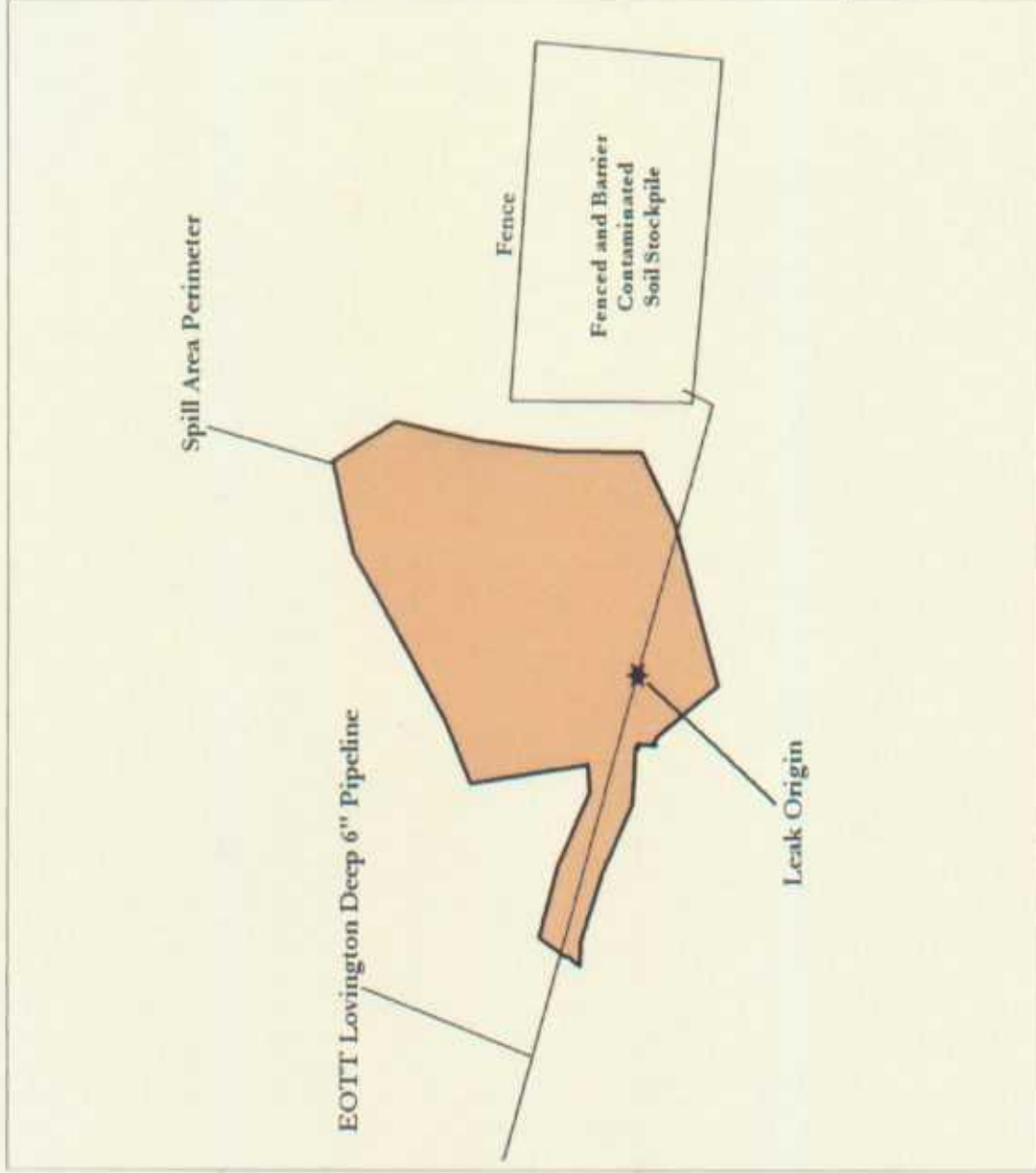
SCALE 1:500



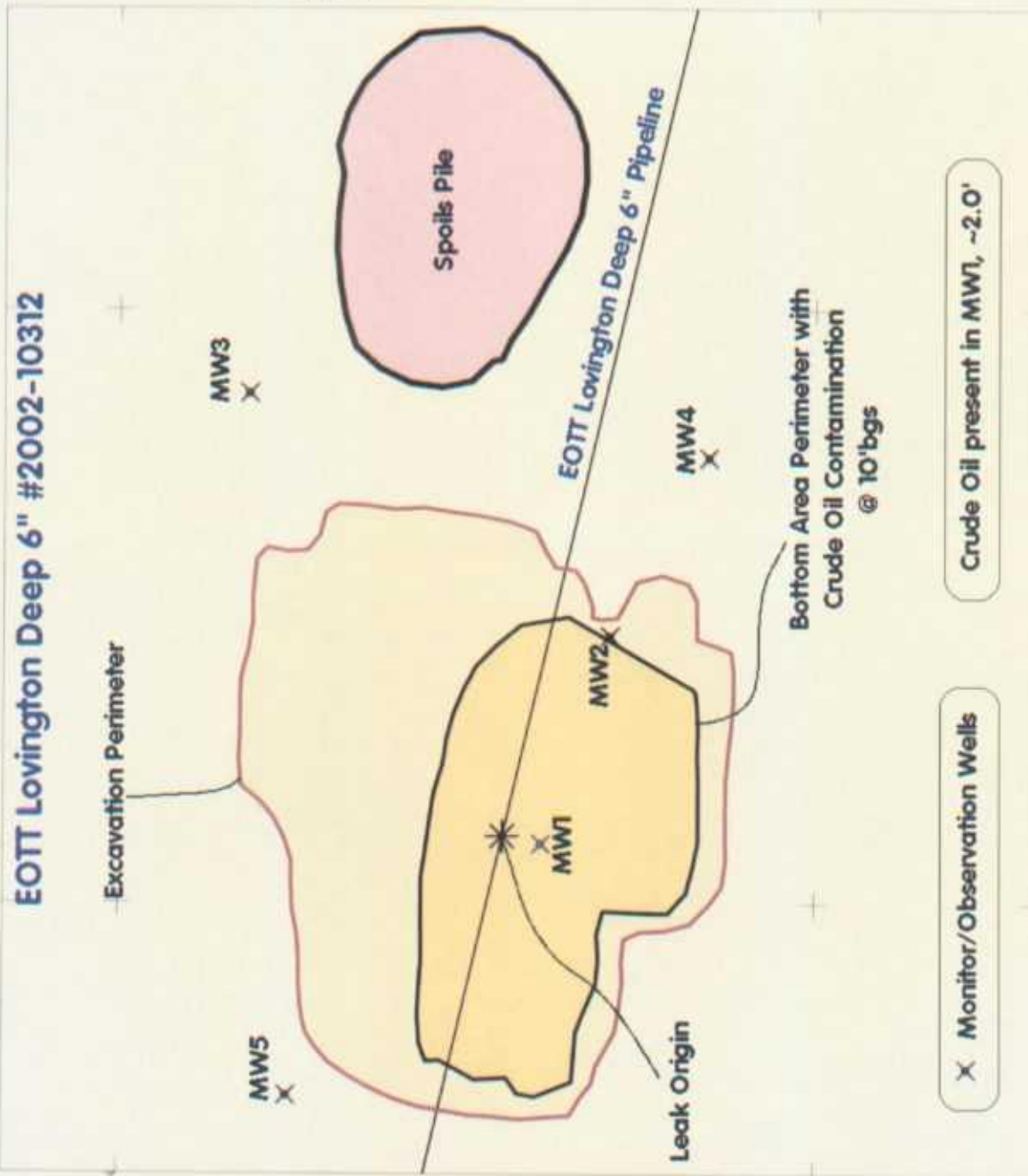
FEET

UNIVERSAL TRANSVERSE MERCATOR
3 NORTH
NAD 1983 ZONE 12N (NEW MEXICO)

LOVINGTON DEEP 6" INCH SSP
12/12/2002



EOTT Lovington Deep 6" #2002-10312



EOTT ENERGY

UL-H SEC 6

T17S R36E

LEA CO NM

EXCAVATED

AREA

~19,230 SQFT

BOTTOM STAINED

AREA @ ~10' BGS

~8,018 SQFT

SCALE 1:600



FEET

LAT/LONG
WGS 1984

LD6 4-B-03 COMBINED SSF
4/8/2003



Crude Oil present in MW1, ~2.0'

Monitor/Observation Wells

03/23/04

03/23/04

ATTACHMENT II: SITE PHOTOGRAPHS







EOTT Lovington Deep 6" MW locations
(looking west)

ATTACHMENT III: ANALYTICAL REPORTS AND SUMMARIES

EOTT Energy LLC

Lovington Deep 6" #2002-10312

Excavation Bottom and Sidewall and Spoils Pile Soil Delineation Data

Sample Location	Sampling Interval "Bgs"	Sample Identification	Sample Date	Lithology	HEADSPACE VOC ² (ppm)	GRO ³ mg/Kg	DRO ⁴ mg/Kg	TPH ⁵ mg/Kg	BTEX µg/Kg	Benzene µg/Kg	Toluene µg/Kg	Ethyl Benzene µg/Kg	m,p- Xylene µg/Kg	o-Xylene µg/Kg
Bottom Hole Excavation	Composite	SELD612003BHFC	1/19/1999	Caliche/Sand	N/A	5	19.6	24.6	100	20	20	20	20	20
Bottom Hole Point of Release	Grab	SELD612003BHPOR	1/19/1999	Caliche/Sand	N/A	4070	4310	8380	256990	2690	69600	39700	105000	40000
East Sidewall	Composite	SELD612003ESW	1/19/1999	Caliche/Sand	N/A	6.47	364	370.47	118.8	20	20	20	38.8	20
	Composite	SELD6030703ESW	3/6/1999	Caliche/Sand	N/A	5	5	10	100	20	20	20	20	20
North Sidewall	Composite	SELD612003NSW	1/19/1999	Caliche/Sand	N/A	400	1090	1490	1030	20	145	162	447	256
	Composite	SELD6030703NSW	3/6/1999	Caliche/Sand	N/A	5	5	10	100	20	20	20	20	20
South Sidewall	Composite	SELD612003SSW	1/19/1999	Caliche/Sand	N/A	435	4310	4745	140.5	20	20	20	42.7	37.8
	Composite	SELD6030703SSW	3/6/1999	Caliche/Sand	N/A	5	5	10	100	20	20	20	20	20
West Sidewall	Composite	SELD612003WSW	1/19/1999	Caliche/Sand	N/A	740	5920	6660	8415.2	75.2	1210	1010	4270	1850
	Composite	SELD6030703WSW	3/6/1999	Caliche/Sand	N/A	5	5	10	104.1	20	24.1	20	20	20
Shredded Spoils Pile	Composite	SELD64803CSP	4/7/1999	Caliche/Sand	N/A	180	1090	1270	2884	25	117	283	1550	909
Contaminated Spoils Pile	Composite	SELD64803SSP	4/7/1999	Caliche/Sand	N/A	495	3070	3565	10970	25	815	1140	5890	3100

100 ppm Isobutylene calibration gas = 101 ppm.

¹Bgs = feet below ground surface

²VOC = Volatile Organic Compounds

³GRO = Gasoline Range Organics (C₆-C₁₀)

⁴DRO = Diesel Range Organics (C₁₁-C₂₁)

Reported detection limits are considered "de minimis" values and are included in the GRO/DRO and BTEX summations.

⁵TPH: Total Petroleum Hydrocarbon = GRO+DRO

⁶Added values are in excess of the New Mexico Oil Conservation Division guideline threshold for the parameter

⁷Indicated values are a the institution detection limit

⁸N/A Not Analyzed

EOTT Energy LLC
Lovington Deep 6" #2002-10312
Borehole (BH) Soil Delineation Data

Borehole#	Sampling Interval (ft)	Sample Identification	Sample Date	Lithology	HEADSPACE VOC ² (ppm)	GRO ³ mg/Kg	DRO ⁴ mg/Kg	TPH ⁵ mg/Kg	BTEX µg/Kg	Benzene µg/Kg	Toluene µg/Kg	Ethyl Benzene µg/Kg	m,p-Xylene µg/Kg	o-Xylene µg/Kg
BH1	5	SEL6122702BH1 5'	12/27/2002	Caliche/Sand	1028	3380	3970	7350	285550	6130	60200	20200	137000	62000
	15	SEL6122702BH1 15'	12/27/2002	Caliche	1200	3250	3050	6300	583400	12600	204000	95300	201000	70500
	25	SEL6122702BH1 25'	12/27/2002	Caliche	1100	2610	2720	5330	385900	11100	136000	61800	131000	46000
	35	SEL6122702BH1 35'	12/27/2002	Sand	1056	2000	2670	4670	321700	5600	102000	53700	116000	42400
	45	SEL6122702BH1 45'	12/27/2002	Sand	657	1330	2000	3330	167019	919	42200	29800	68500	25600
BH2	5	SEL6122702BH1 5'	12/27/2002	Sand	700	1100	1510	2610	201800	5400	70500	31700	68700	25500
	15	SEL6123002BH2 15'	12/30/2002	Caliche/Sand	3.1	5	5	10	100	20	20	20	20	20
	25	SEL6123002BH2 25'	12/30/2002	Caliche	2.6	5	5	10	100	20	20	20	20	20
	30	SEL6123002BH2 30'	12/30/2002	Caliche	1	5	5	10	100	20	20	20	20	20
	35	SEL6123002BH2 35'	12/30/2002	Sand	0	5	5	10	100	20	20	20	20	20
BH3	40	SEL6123002BH2 40'	12/30/2002	Sand	0.2	5	5	10	100	20	20	20	20	20
	45	SEL6123002BH2 45'	12/30/2002	Sand	0.5	5	5	10	100	20	20	20	20	20
	50	SEL6123002BH2 50'	12/30/2002	Sand	0.7	5	5	10	100	20	20	20	20	20
	5	SEL6123002BH3 5'	12/30/2002	Caliche/Sand	2	5	5	10	100	20	20	20	20	20
	15	SEL6123002BH3 15'	12/30/2002	Caliche	1.5	5	5	10	100	20	20	20	20	20
BH4	25	SEL6123002BH3 25'	12/30/2002	Caliche	0.1	5	5	10	100	20	20	20	20	20
	35	SEL6123002BH3 35'	12/30/2002	Sand	0.2	5	5	10	100	20	20	20	20	20
	Surface	SEL6123102BH4 SUR	12/30/1998	Caliche/Sand	0	5	5	10	100	20	20	20	20	20
	10	SEL6123102BH4 10'	12/30/1998	Caliche	0	5	5	10	100	20	20	20	20	20
	20	SEL6123102BH4 20'	12/30/1998	Caliche	0	5	5	10	100	20	20	20	20	20
BH5	30	SEL6123102BH4 30'	12/30/1998	Sand	0	5	5	10	100	20	20	20	20	20
	40	SEL6123102BH4 40'	12/30/1998	Sand	0	5	5	10	100	20	20	20	20	20
	50	SEL6123102BH4 50'	12/30/1998	Sand	0	5	5	10	100	20	20	20	20	20
	55	SEL6123102BH4 55'	12/30/1998	Sand	0	5	5	10	100	20	20	20	20	20
	Surface	SEL61203BH5SUR	1/1/1999	Caliche/Sand	0	5	5	10	100	20	20	20	20	20
BH6	10	SEL61203BH5 10'	1/1/1999	Caliche	0	5	5	10	100	20	20	20	20	20
	20	SEL61203BH5 20'	1/1/1999	Caliche	0	5	5	10	100	20	20	20	20	20
	30	SEL61203BH5 30'	1/1/1999	Sand	0	5	5	10	100	20	20	20	20	20
	40	SEL61203BH5 40'	1/1/1999	Sand	0	5	5	10	100	20	20	20	20	20
	50	SEL61203BH5 50'	1/1/1999	Sand	0	5	5	10	100	20	20	20	20	20
BH16	55	SEL61203BH5 55'	1/1/1999	Sand	0	5	5	10	100	20	20	20	20	20
	Surface	SEL61203BH16SUR	1/1/1999	Caliche/Sand	0	5	5	10	100	20	20	20	20	20
	10	SEL61203BH16 10'	1/1/1999	Caliche	0	5	5	10	100	20	20	20	20	20
	20	SEL61203BH16 20'	1/1/1999	Caliche	0	5	5	10	100	20	20	20	20	20
	30	SEL61203BH16 30'	1/1/1999	Sand	0	5	5	10	100	20	20	20	20	20
	40	SEL61203BH16 40'	1/1/1999	Sand	0	5	5	10	100	20	20	20	20	20
	50	SEL61203BH16 50'	1/1/1999	Sand	0	5	5	10	100	20	20	20	20	20
	55	SEL61203BH16 55'	1/1/1999	Sand	0	5	5	10	100	20	20	20	20	20
	Surface	SEL61203BH16SUR	1/1/1999	Caliche/Sand	0	5	5	10	100	20	20	20	20	20
	10	SEL61203BH16 10'	1/1/1999	Caliche	0	5	5	10	100	20	20	20	20	20

100 ppm hydrocarbon calibration gas = 100 ppm
 (ft) - feet below ground surface
¹VOC - Volatile Organic Constituents/Constituents
²VOC-Gasoline Range Organics (C₆-C₁₀)
³DRO - Diesel Range Organics (C₁₀-C₂₈)
 Reported detection limits are considered "de minimus" values and are included in the GRO/DRO and BTEX summations.
⁴TPH - Total Petroleum Hydrocarbon + GRO/DRO
⁵Added values are in excess of the New Mexico Oil Conservation Division guideline threshold for the parameter
 Unlisted values are < the instrument detection limit
 *N/A Not Analyzed



3512 Montpelier Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M. St. Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 137985 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6122702BH1 3'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/27/2002 **Time:** 08:40

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA¹

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	3.970	mg/Kg	50	<50	01/06/03	8015 mod.	---	12.9	84.4	114.3	95.7
TPH by GC (as diesel-exst)	---	---	---	---	01/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	3.380	mg/Kg	50	<50	01/06/03	8015 mod.	---	10.3	77.9	95.4	106.7
Volatile organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	0.130	µg/Kg	500	<500	01/07/03	8260b	---	7	82.6	97.1	94.9
Ethylbenzene	2.0200	µg/Kg	500	<500	01/07/03	8260b	---	4.1	94.7	105.4	106.8
m,p-Xylenes	1.37000	µg/Kg	500	<500	01/07/03	8260b	---	4	91.6	105.4	106.3
o-Xylene	0.2000	µg/Kg	500	<500	01/07/03	8260b	---	4.7	93.6	106.7	105.5
Toluene	0.0200	µg/Kg	500	<500	01/07/03	8260b	---	5.4	89.9	103.5	100.5

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

Richard Laster

Richard Laster

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than (" $<$ ") values reflect minimal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are 1 = analyte potentially present between the PQL and the MDL. B = Analyte detected in associated method blank(s). S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.



3512 Montepalis Drive, Austin, TX 78744 &
2208 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 388-5886 • FAX (512) 388-7411

Client: Environmental Plus, Inc.
Attn: Pat McCasland

Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6122702BH1 3"

Report#/Lab ID#: 137985
Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	none/diluted	diluted @ 5X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 5X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 25X	D
Toluene-d8	8260b	none/diluted	diluted @ 25X	D

Data Qualifiers: D= Surrogates diluted and N= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 137985	Matrix: soil	Attn: Pat McCauley
Client: Environmental Plus, Inc.		
Project ID: 2002-10312	Lovington Deep 6"	
Sample Name: SEL6122702BH1 5'		

Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
- ☐ Sample received in appropriate container(s). State of sample preservation unknown.
- ☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantization limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
1,2-Dichloroethane-d4	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
1,2-Dichloroethane-d4	D	
Nitrobenzene-d5	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
Nitrobenzene-d5	D	
p-Terphenyl	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
p-Terphenyl	D	
Toluene-d8	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
Toluene-d8	D	

Notes:



Client: Environmental Plank, Inc.
Attn: Pat McCasland
Address: 1324 M St Po Box
Eunice

Phone: (505) 394-3481 FAX: (505) 394-2601

NM 88231

3512 Montipally Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-9888 FAX (512) 385-7411

Report/Lab ID#: 137986 Report Date: 01/13/03

Project ID: 2002-10312 Lovington Deep 6"

Sample Name: SEL6122702BH1 15'

Sample Matrix: soil

Date Received: 01/03/2003 Time: 09:00

Date Sampled: 12/27/2002 Time: 08:56

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	30.50	mg/Kg	50	<50	01/06/03	8015 mod.	---	12.9	84.4	95.7
TPH by GC (as diesel-ext)	---	---	---	---	01/06/03	3540	---	---	---	---
TPH by GC (as gasoline)	32.60	mg/Kg	50	<50	01/06/03	8015 mod.	---	10.3	77.9	106.7
Volatiles organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---
Benzene	120.00	µg/Kg	5000	<5000	01/07/03	8260b	---	7	82.6	94.9
Ethylbenzene	95.100	µg/Kg	5000	<5000	01/07/03	8260b	---	4.1	94.7	105.4
m,p-Xylenes	201.000	µg/Kg	5000	<5000	01/07/03	8260b	---	4	93.6	105.4
o-Xylene	70.500	µg/Kg	5000	<5000	01/07/03	8260b	---	4.7	93.6	105.5
Toluene	204.000	µg/Kg	5000	<5000	01/07/03	8260b	---	5.4	89.9	103.5

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

Richard Laster

Richard Laster

QUALITY ASSURANCE DATA¹

Method ⁶	Data Qual ⁷	Recov. ³	CCV ⁴	LCS ⁴
8015 mod.	---	12.9	84.4	95.7
3540	---	---	---	---
8015 mod.	---	10.3	77.9	106.7
8260b	---	---	---	---
8260b	---	7	82.6	94.9
8260b	---	4.1	94.7	105.4
8260b	---	4	93.6	105.4
8260b	---	4.7	93.6	105.5
8260b	---	5.4	89.9	103.5

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than (%) values reflect internal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are 1 = analyte potentially present between the PQL and the MDL. B = Analyte detected in associated method blank(s). S1 = MS and/or MSD recovery exceed advisory limits. S2 = Post digestion spike (PDS) recovery exceeds advisory limit. S3 = MS and/or MSD recoveries exceed advisory limits. P = Precision higher than advisory limit. M = Matrix interferences.



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Lovington Deep 6" Sample Name: SEL6122702BH1 15'	Report/Lab ID#: 137986 Sample Matrix: soil
---	--	---

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	none diluted	diluted @ 5X	D
p-Terphenyl	8015 mod.	none diluted	diluted @ 5X	D
1,2-Dichloroethane-d4	8260b	none diluted	diluted @ 250X	D
Toluene-d8	8260b	none diluted	diluted @ 250X	D

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 137986	Matrix: soil	Attn: Pat MacCand
Client: Environmental Plus, Inc.		
Project ID: 2002-10312 Lovington Deep 6"		
Sample Name: SEL6122702BHF 15'		

Sample Temperature/Condition <6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is < 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt issues) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
- ☐ Sample received in appropriate container(s). State of sample preservation unknown.
- ☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentrations in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
1,2-Dichloroethane-d4	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovery not accurately quantifiable.
1,2-Dichloroethane-d4	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovery not accurately quantifiable.
Nitrobenzene-d5	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovery not accurately quantifiable.
Nitrobenzene-d5	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovery not accurately quantifiable.
p-Terphenyl	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovery not accurately quantifiable.
p-Terphenyl	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovery not accurately quantifiable.
Toluene-d8	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovery not accurately quantifiable.
Toluene-d8	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovery not accurately quantifiable.

Notes:



3512 Montegut Drive, Austin, TX 78744-6
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plan, Inc.
Attn: Pat McCasland
Address: 1324 M St. Po Box
Eaton
Phone: (505) 394-3481 **FAX:** (505) 394-2601
NM 88231

Report/Lab ID: 137087 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6122702BH1 25"
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/27/2002 **Time:** 09:16

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Pre ³	Recov ³	CCV ⁸	LCS ⁴
TPH by GC (as diesel)	2.7 (0)	mg/Kg	50	<50	01/06/03	8015 mod.	---	12.9	84.4	114.3	95.7
TPH by GC (as diesel-ex)	---	---	---	---	01/06/03	3140	---	---	---	---	---
TPH by GC (as gasoline)	2.6 (0)	mg/Kg	50	<50	01/06/03	8015 mod.	---	10.3	77.9	95.4	106.7
Volatile organics-8260b-BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	1.1 (0)	µg/Kg	5000	<5000	01/07/03	8260b	---	7	82.6	97.1	94.9
Ethylbenzene	6.1 (0)	µg/Kg	5000	<5000	01/07/03	8260b	---	4.1	94.7	105.4	106.8
m,p-Xylenes	1.3 (0)	µg/Kg	5000	<5000	01/07/03	8260b	---	4	93.6	105.4	106.3
o-Xylene	4.6 (0)	µg/Kg	5000	<5000	01/07/03	8260b	---	4.7	93.6	106.7	105.5
Toluene	1.3 (0)	µg/Kg	5000	<5000	01/07/03	8260b	---	5.4	89.9	103.5	100.5

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance-Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

Richard Laster

Richard Laster

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are: J = analyte potentially present between the PQL and the MDL, B = Analyte detected in associated method blank(s). S1 = MS and/or MSD recovery exceed advisory limits. S2 = Post digestion spike (PDFS) recovery exceeds advisory limit. S3 = MS and/or MSD and PDFS recoveries exceed advisory limits. P = Precision higher than advisory limit. M = Matrix interference.



3512 Montepalis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(812) 385-5886 • FAX (812) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCauley	Project ID: 2002-10312 Lovington Deep 6"	Report/Lab ID#: 137987
	Sample Name: SEL6122702BH1 25'	Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	none diluted	diluted @ 5X	D
p-Terphenyl	8015 mod.	none diluted	diluted @ 5X	D
1,2-Dichloroethane-d4	8260b	none diluted	diluted @ 250X	D
Toluene-d8	8260b	none diluted	diluted @ 250X	D

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID# 137987	Matrix: soil
Client: Environmental Plus, Inc.	Attn: Pat McCasland
Project ID: 2002-10312 Lovington Deep 6"	
Sample Name: SEL6122702BH1 25'	

Sample Temperature/Condition <=0°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
- ☐ Sample received in appropriate container(s). State of sample preservation unknown.
- ☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
1,2-Dichloroethane-d4	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovers not accurately quantifiable.
1,2-Dichloroethane-d4	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovers not accurately quantifiable.
Nitrobenzene-d3	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovers not accurately quantifiable.
Nitrobenzene-d3	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovers not accurately quantifiable.
p-Terphenyl	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovers not accurately quantifiable.
p-Terphenyl	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovers not accurately quantifiable.
Toluene-d8	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovers not accurately quantifiable.
Toluene-d8	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recovers not accurately quantifiable.

Notes:



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M. St. Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report# / Lab ID#: 137988 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6'
Sample Name: SEL6122702BH1 35'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/27/2002 **Time:** 09:40

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA¹

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ³	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	26.78	mg/kg	50	<50	01/06/03	8015 mod.	---	12.9	84.4	114.3	95.7
TPH by GC (as diesel-ext)	---	---	---	---	01/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	20.00	mg/kg	50	<50	01/06/03	8015 mod.	---	10.3	77.9	95.4	106.7
Volatile organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	56.00	µg/kg	5000	<5000	01/07/03	8260b	---	7	82.6	97.1	94.9
Ethylbenzene	55.70	µg/kg	5000	<5000	01/07/03	8260b	---	4.1	94.7	105.4	106.8
m,p-Xylenes	11.80	µg/kg	5000	<5000	01/07/03	8260b	---	4	93.6	105.4	106.3
o-Xylene	42.40	µg/kg	5000	<5000	01/07/03	8260b	---	4.7	93.6	106.7	105.5
Toluene	102.00	µg/kg	5000	<5000	01/07/03	8260b	---	5.4	89.9	103.5	100.5

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

Richard Laster
Richard Laster

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect minimal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are: J = analyte potentially present between the PQL and the MDL. B = Analyte detected in associated method blank(s). S1 = MS and/or MSD recovery exceed advisory limits. S2 = Post digestion spike (PDS) recovery exceeds advisory limit. S3 = MS and/or MSD and PDS recoveries exceed advisory limits. P = Precision higher than advisory limit. M = Matrix interference.



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(512) 388-5886 • FAX (512) 388-7411

Client: Environmental Plus, Inc.
Attn: Pat McCasland

Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6122702BH1 35'

Report# / Lab ID#: 137988
Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	none/diluted	diluted @ 5X	D
	8015 mod.	none/diluted	diluted @ 5X	D
1,2-Dichloroethane-d4 Toluene-d8	8260b	none/diluted	diluted @ 250X	D
	8260b	none/diluted	diluted @ 250X	D

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID# 137988 Matrix: soil	Attn: Pat McCandless
Client: Environmental Plus, Inc.	
Project ID: 2002-10312 Lovington Deep 6"	
Sample Name: SEL6122702BH1 35'	

Sample Temperature/Condition <=4°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 4°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (e.g., in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
- ☐ Sample received in appropriate container(s). State of sample preservation unknown.
- ☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (e.g., the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualifier	Comment
1,2-Dichloroethane-d4	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
1,2-Dichloroethane-d4	D	
Nitrobenzene-d5	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
Nitrobenzene-d5	D	
p-Terpinenyl	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
p-Terpinenyl	D	
Toluene-d8	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
Toluene-d8	D	

Notes:



3512 Montopolis Drive, Austin, TX 78744 &
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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M. St. Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report# / Lab ID#: 137989 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6122702BH1 45
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/27/2002 **Time:** 10:00

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA¹

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	280.0	mg/Kg	50	<50	01/06/03	8015 mod.	---	12.9	84.4	114.3	95.7
TPH by GC (as diesel-ext)	---	---	---	---	01/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	133.0	mg/Kg	50	<50	01/06/03	8015 mod.	---	10.3	77.9	95.4	106.7
Volatile organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	93.9	µg/Kg	500	<500	01/07/03	8260b	---	7	82.6	97.1	94.9
Ethylbenzene	298.0	µg/Kg	500	<500	01/07/03	8260b	---	4.1	94.7	105.4	106.8
m,p-Xylenes	685.0	µg/Kg	500	<500	01/07/03	8260b	---	4	93.6	105.4	106.3
o-Xylene	256.0	µg/Kg	500	<500	01/07/03	8260b	---	4.7	93.6	106.7	105.5
Toluene	423.0	µg/Kg	500	<500	01/07/03	8260b	---	5.4	89.9	103.5	100.5

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

Richard Laster

Richard Laster

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3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 76408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Lovington Deep 6" Sample Name: SEL6122702BH1.45'	Report#/Lab ID#: 137989 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	none/diluted	diluted @ 5X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 5X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 25X	D
Toluene-d8	8260b	none/diluted	diluted @ 25X	D

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 137989	Matrix: soil	Attn: Pat McCasland
Client: Environmental Plus, Inc.		
Project ID: 2002-10312 Lovington Deep 6"		
Sample Name: SEL6122702BH1 45'		

Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (not sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
- ☐ Sample received in appropriate container(s). State of sample preservation unknown.
- ☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualifier	Comment
1,2-Dichloroethane-d4	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
1,2-Dichloroethane-d4	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
Nitrobenzene-d5	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
Nitrobenzene-d5	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
p-Toluenyl	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
p-Toluenyl	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
Toluene-d8	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
Toluene-d8	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.

Notes:



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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5866 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Pat McCauley
Address: 1324 M. St. Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report# / Lab ID#: 137990 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6122702BH1 55"
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/27/2002 **Time:** 10:15

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA¹

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ³	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	1510	mg/Kg	50	<50	01/06/03	8015 mod.	---	12.9	84.4	114.3	95.7
TPH by GC (as diesel-ext)	---	---	---	---	01/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	1100	mg/Kg	50	<50	01/06/03	8015 mod.	---	10.3	77.9	95.4	106.7
Volatile organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	5400	µg/Kg	500	<500	01/07/03	8260b	---	7	82.6	97.1	94.9
Ethylbenzene	31700	µg/Kg	500	<500	01/07/03	8260b	---	4.1	94.7	105.4	106.8
m,p-Xylenes	68700	µg/Kg	500	<500	01/07/03	8260b	---	4	93.6	105.4	106.3
o-Xylene	25500	µg/Kg	500	<500	01/07/03	8260b	---	4.7	93.6	106.7	105.5
Toluene	70500	µg/Kg	500	<500	01/07/03	8260b	---	5.4	89.9	103.5	100.5

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Respectfully Submitted,

Richard Laster
Richard Laster

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3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-8866 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Lovington Deep 6" Sample Name: SEL6122702BH1 55'	Report# / Lab ID#: 137990 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	none/diluted	diluted @ 5X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 5X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 25X	D
Toluene-d8	8260b	none/diluted	diluted @ 25X	D

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 137990	Matrix: soil	Attn: Pat McCasland
Client: Environmental Plus, Inc.		
Project ID: 2002-10312 Lovington Deep 6"		
Sample Name: SEL6122702BH1 55'		

Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
☐ Sample received in appropriate container(s). State of sample preservation unknown.
☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
1,2-Dichloroethane-d4	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
1,2-Dichloroethane-d4	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
Nitrobenzene-d5	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
Nitrobenzene-d5	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
p-Terphenyl	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
p-Terphenyl	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
Toluene-d8	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.
Toluene-d8	D	Sample diluted to assure quantitation within calibration range or due to Matrix interferences or other matrix effects (eg. high non-target organic levels). Surrogate recoveries not accurately quantifiable.

Notes:

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

ANALYSIS

Client: Environmental Plus, Inc.		Report# / Lab ID#: 137991		Report Date: 01/13/03	
Attn: Pat McCasland		Project ID: 2002-10312 Lovington Deep 6"			
Address: 1324 M. St Po Box Eunice		Sample Name: SEL6123002BH2 5'			
Phone: (505) 394-3481		Date Received: 01/03/2003		Time: 09:00	
FAX: (505) 394-2601		Date Sampled: 12/30/2002		Time: 08:30	
		Sample Matrix: soil			

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/06/03	8015 mod.	---	12.9	84.4	114.3	95.7
TPH by GC (as diesel-ext)	---	---	---	---	01/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/06/03	8015 mod.	---	10.3	77.9	95.4	106.7
Volatiles organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	6.5	98	81	94.1
Ethylbenzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.1	117.9	117.9	116.6
m,p-Xylenes	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.2	109.1	108.6	106
o-Xylene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.6	116.5	115	113.6
Toluene	<20	µg/Kg	20	<20	01/07/03	8260b	---	7.2	102.5	84.5	97.5

QUALITY ASSURANCE DATA¹

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Respectfully Submitted,

Richard Laster

Richard Laster

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3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Lovington Deep 6" Sample Name: SEL6123002BH2 5'	Report#/Lab ID#: 137991 Sample Matrix: soil
---	---	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	58.8	50-150	---
	8015 mod.	57.9	50-150	---
1,2-Dichloroethane-d4 Toluene-d8	8260b	106	65-115	---
	8260b	101	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

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QUALITY

Report#/Lab ID#: 137992 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH2 15'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/30/2002 **Time:** 09:00

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M.St Po Box
Emice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/06/03	8015 mod.	---	12.9	84.4	114.3	95.7
TPH by GC (as diesel-ext)	---	---	---	---	01/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/06/03	8015 mod.	---	10.3	77.9	95.4	106.7
Volatiles organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	6.5	98	81	94.1
Ethylbenzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.1	117.9	117.9	116.6
m,p-Xylenes	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.2	109.1	108.6	106
o-Xylene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.6	116.5	115	113.6
Toluene	<20	µg/Kg	20	<20	01/07/03	8260b	---	7.2	102.5	84.5	97.5

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Richard Laster

Richard Laster

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(512) 385-5886 • FAX (512) 385-7411



Client: Environmental Plus, Inc.
Attn: Pat McCasland

Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH2 15'

Report#/Lab ID#: 137992
Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	83.9	50-150	---
p-Terphenyl	8015 mod.	94	50-150	---
1,2-Dichloroethane-d4	8260b	102	65-115	---
Toluene-d8	8260b	104	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

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ANALYSIS

Report# / Lab ID#: 137993 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH2 25'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/30/2002 **Time:** 09:30

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M. St Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA¹

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/06/03	8015 mod.	---	12.9	84.4	114.3	95.7
TPH by GC (as diesel-ext)	---	---	---	---	01/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/06/03	8015 mod.	---	10.3	77.9	95.4	106.7
Volatile organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	6.5	98	81	94.1
Ethylbenzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.1	117.9	117.9	116.6
m,p-Xylenes	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.2	109.1	108.6	106
o-Xylene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.6	116.5	115	113.6
Toluene	<20	µg/Kg	20	<20	01/07/03	8260b	---	7.2	102.5	84.5	97.5

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Richard Laster

Richard Laster

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QTECH
Environmental Plus, Inc.

Attn: Pat McCasland

Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH2 25'

Report#/Lab ID#: 137993
Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	61	50-150	---
p-Terphenyl	8015 mod.	63.9	50-150	---
1,2-Dichloroethane-d4	8260b	104	65-115	---
Toluene-d8	8260b	106	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

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QUALITY

Report# / Lab ID#: 137994 **Report Date:** 01/14/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH2 30'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/30/2002 **Time:** 10:00

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M.Si Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/06/03	8015 mod.	---	12.9	84.4	114.3	95.7
TPH by GC (as diesel-ext)	---	---	---	---	01/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/06/03	8015 mod.	---	10.3	77.9	95.4	106.7
Volatiles organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	7.7	90.5	100.2	97.6
Ethylbenzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	2	109.1	111.4	116
m,p-Xylenes	<20	µg/Kg	20	<20	01/07/03	8260b	---	0.3	101	103.1	105.1
o-Xylene	<20	µg/Kg	20	<20	01/07/03	8260b	---	1.1	106.8	110.1	112.7
Toluene	<20	µg/Kg	20	<20	01/07/03	8260b	---	7	93.9	103.9	100.6

QUALITY ASSURANCE DATA¹

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Richard Laster

Richard Laster

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(512) 385-5886 • FAX (512) 385-7411

QTECH
QTECH

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Lovington Deep 6" Sample Name: SEL6123002BH2 30'	Report#/Lab ID#: 137994 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	68.6	50-150	---
p-Terphenyl	8015 mod.	73.6	50-150	---
1,2-Dichloroethane-d4	8260b	92.4	65-115	---
Toluene-d8	8260b	97.4	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

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(512) 385-5886 • FAX (512) 385-7411

ANALYSIS

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M. St Po Box
Eumice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 137995 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH2 35'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/30/2002 **Time:** 10:30

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/06/03	8015 mod.	---	12.9	84.4	114.3	95.7
TPH by GC (as diesel-ext)	---	---	---	---	01/06/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/06/03	8015 mod.	J	10.3	77.9	95.4	106.7
Volatiles organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	7	82.6	97.1	94.9
Ethylbenzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.1	94.7	105.4	106.8
m,p-Xylenes	<20	µg/Kg	20	<20	01/07/03	8260b	J	4	93.6	105.4	106.3
o-Xylene	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.7	93.6	106.7	105.5
Toluene	<20	µg/Kg	20	<20	01/07/03	8260b	---	5.4	89.9	103.5	100.5

QUALITY ASSURANCE DATA¹

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Respectfully Submitted,

Richard Laster

Richard Laster

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Lovington Deep 6" Sample Name: SEL6123002BH2 35'	Report#/Lab ID#: 137995 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	105	50-150	---
	8015 mod.	113	50-150	---
1,2-Dichloroethane-d4 Toluene-d8	8260b	115	65-115	---
	8260b	114	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 137995 Matrix: soil Attn: Pat McCasland
 Client: Environmental Plus, Inc.
 Project ID: 2002-10312 Lovington Deep 6"
 Sample Name: SEL6123002BH2 35'

Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
- ☐ Sample received in appropriate container(s). State of sample preservation unknown.
- ☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
TPH by GC (as gasoline)	J	See J-flag discussion above.
m,p-Xylenes	J	See J-flag discussion above.

Notes:

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

ANALYSIS

Report# / Lab ID#: 137996 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH2 40'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/30/2002 **Time:** 11:00

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M. St. Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/08/03	8015 mod.	---	7.1	79.9	103.1	71.5
TPH by GC (as diesel-ext)	---	---	---	---	01/08/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/08/03	8015 mod.	---	8.7	86.7	90.2	79
Volatile organics-8260b/BTEX	---	---	---	---	01/08/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/08/03	8260b	---	6.5	98	81	94.1
Ethylbenzene	<20	µg/Kg	20	<20	01/08/03	8260b	---	3.1	117.9	117.9	116.6
m,p-Xylenes	<20	µg/Kg	20	<20	01/08/03	8260b	---	4.2	109.1	108.6	106
o-Xylene	<20	µg/Kg	20	<20	01/08/03	8260b	---	3.6	116.5	115	113.6
Toluene	<20	µg/Kg	20	<20	01/08/03	8260b	---	7.2	102.5	84.5	97.5

QUALITY ASSURANCE DATA¹

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B = Analyte detected in associated method blank(s). S1 =MS and/or MSD recovery exceeds advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,
Richard Laster
Richard Laster

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Q7025025

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Lovington Deep 6" Sample Name: SEL6123002BH2 40'	Report#/Lab ID#: 137996 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	93.1	50-150	---
	8015 mod.	96.8	50-150	---
1,2-Dichloroethane-d4 Toluene-d8	8260b	92.6	65-115	---
	8260b	101	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

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Report#/Lab ID#: 137997 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH2 50'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/30/2002 **Time:** 11:15

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M.St. Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/08/03	8015 mod.	---	7.1	79.9	103.1	71.5
TPH by GC (as diesel-ext)	---	---	---	---	01/08/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/08/03	8015 mod.	---	8.7	86.7	90.2	79
Volatile organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/07/03	8260b	J	6.5	98	81	94.1
Ethylbenzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.1	117.9	117.9	116.6
m,p-Xylenes	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.2	109.1	108.6	106
o-Xylene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.6	116.5	115	113.6
Toluene	<20	µg/Kg	20	<20	01/07/03	8260b	J	7.2	102.5	84.5	97.5

QUALITY ASSURANCE DATA¹

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Richard Laster
Richard Laster

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Report#/Lab ID#: 137997
Sample Matrix: soil

Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH2 50'

Client: Environmental Plus, Inc.
Attn: Pat McCasland

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	99.7	50-150	---
p-Terphenyl	8015 mod.	105	50-150	---
1,2-Dichloroethane-d4	8260b	92	65-115	---
Toluene-d8	8260b	100	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 137997	Matrix: soil	Attn: Pat McCasland
Client: Environmental Plus, Inc.		
Project ID: 2002-10312 Lovington Deep 6"		
Sample Name: SEL6123002BH2 50'		

Sample Temperature/Condition <= 6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
- ☐ Sample received in appropriate container(s). State of sample preservation unknown.
- ☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Benzene	J	See J-flag discussion above.
Toluene	J	See J-flag discussion above.

Notes:

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

ANALYSIS

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M. St. Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 137998 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH3 5"
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/30/2002 **Time:** 01:30

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/08/03	8015 mod.	---	7.1	79.9	103.1	71.5
TPH by GC (as diesel-ext)	---	---	---	---	01/08/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/08/03	8015 mod.	---	8.7	86.7	90.2	79
Volatile organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	6.5	98	81	94.1
Ethylbenzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.1	117.9	117.9	116.6
m,p-Xylenes	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.2	109.1	108.6	106
o-Xylene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.6	116.5	115	113.6
Toluene	<20	µg/Kg	20	<20	01/07/03	8260b	J	7.2	102.5	84.5	97.5

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Respectfully Submitted,
Richard Laster
Richard Laster

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(512) 385-5886 • FAX (512) 385-7411

QTS
Environmental Plus, Inc.
Pat McCasland

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Lovington Deep 6" Sample Name: SEL6123002BH3 5'	Report#/Lab ID#: 137998 Sample Matrix: soil
---	---	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	87.7	50-150	---
p-Terphenyl	8015 mod.	93.7	50-150	---
1,2-Dichloroethane-d4	8260b	95.4	65-115	---
Toluene-d8	8260b	102	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 137998	Matrix: soil	Attn: Pat McCasland
Client: Environmental Plus, Inc.		
Project ID: 2002-10312 Lovington Deep 6"		
Sample Name: SEL6123002BH3 5'		

Sample Temperature/Condition $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
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J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualifier	Comment
Toluene	J	See J-flag discussion above.

Notes:

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M.St Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 137999 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH3 15'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/30/2002 **Time:** 02:00

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/08/03	8015 mod.	---	7.1	79.9	103.1	71.5
TPH by GC (as diesel-ext)	---	---	---	---	01/08/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/08/03	8015 mod.	---	8.7	86.7	90.2	79
Volatiles organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/07/03	8260b	J	6.5	98	81	94.1
Ethylbenzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.1	117.9	117.9	116.6
m,p-Xylenes	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.2	109.1	108.6	106
o-Xylene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.6	116.5	115	113.6
Toluene	<20	µg/Kg	20	<20	01/07/03	8260b	J	7.2	102.5	84.5	97.5

QUALITY ASSURANCE DATA¹

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Respectfully Submitted,
Richard Laster
Richard Laster



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Lovington Deep 6" Sample Name: SEL6123002BH3 15'	Report#/Lab ID#: 137999 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	97	50-150	---
p-Terphenyl	8015 mod.	104	50-150	---
1,2-Dichloroethane-d4	8260b	95.2	65-115	---
Toluene-d8	8260b	99.1	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 137999 Matrix: soil
 Client: Environmental Plus, Inc. Attn: Pat McCasland
 Project ID: 2002-10312 Lovington Deep 6"
 Sample Name: SEL6123002BH3 15'

Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

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Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Benzene	J	See J-flag discussion above.
Toluene	J	See J-flag discussion above.

Notes:

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

ANALYSIS

Report#/Lab ID#: 138000 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH3 25'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/30/2002 **Time:** 02:30

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M. St Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA¹

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/08/03	8015 mod.	---	7.1	79.9	103.1	71.5
TPH by GC (as diesel-ext)	---	---	---	---	01/08/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/08/03	8015 mod.	---	8.7	86.7	90.2	79
Volatile organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/07/03	8260b	J	6.5	98	81	94.1
Ethylbenzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.1	117.9	117.9	116.6
m,p-Xylenes	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.2	109.1	108.6	106
o-Xylene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.6	116.5	115	113.6
Toluene	<20	µg/Kg	20	<20	01/07/03	8260b	J	7.2	102.5	84.5	97.5

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Respectfully Submitted,
Richard Laster
Richard Laster

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3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Lovington Deep 6" Sample Name: SEL6123002BH3 25'	Report#/Lab ID#: 138000 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	68.2	50-150	---
	8015 mod.	59.1	50-150	---
1,2-Dichloroethane-d4 Toluene-d8	8260b	103	65-115	---
	8260b	104	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 138000 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH3 25'

Sample Temperature/Condition <=6°C

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Sample Bottles & Preservation

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Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Benzene	J	See J-flag discussion above.
Toluene	J	See J-flag discussion above.

Notes:

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Report#/Lab ID#: 138001 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH3 35'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/30/2002 **Time:** 03:00

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M. St. Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/08/03	8015 mod.	---	7.1	79.9	103.1	71.5
TPH by GC (as diesel-ext)	---	---	---	---	01/08/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/08/03	8015 mod.	---	8.7	86.7	90.2	79
Volatiles organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/07/03	8260b	J	6.5	98	81	94.1
Ethylbenzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.1	117.9	117.9	116.6
m,p-Xylenes	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.2	109.1	108.6	106
o-Xylene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.6	116.5	115	113.6
Toluene	<20	µg/Kg	20	<20	01/07/03	8260b	J	7.2	102.5	84.5	97.5

QUALITY ASSURANCE DATA¹

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

Richard Laster

Richard Laster

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than ("<") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B = Analyte detected in associated method blank(s). S1 = MS and/or MSD recovery exceed advisory limits. S2 = Post digestion spike (PDS) recovery exceeds advisory limit. S3 = MS and/or MSD and PDS recoveries exceed advisory limits. P = Precision higher than advisory limit. M = Matrix interference.

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(512) 385-5886 • FAX (512) 385-7411

Q771-1543

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Lovington Deep 6" Sample Name: SEL6123002BH3 35'	Report#/Lab ID#: 138001 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	88.3	50-150	---
p-Terphenyl	8015 mod.	92.8	50-150	---
1,2-Dichloroethane-d4	8260b	93	65-115	---
Toluene-d8	8260b	98.8	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 138001	Matrix: soil	Attn: Pat McCasland
Client: Environmental Plus, Inc.		
Project ID: 2002-10312 Lovington Deep 6"		
Sample Name: SEL6123002BH3 35'		

Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
- ☐ Sample received in appropriate container(s). State of sample preservation unknown.
- ☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Benzene	J	See J-flag discussion above.
Toluene	J	See J-flag discussion above.

Notes:

UNLESS SPECIFIED AS:

Company Name EPI
 Address PO BOX 1558
 City EVANES State NM Zip 87431
 ATTN: Pat McClelland
 Phone 505 241 3441 Fax 505 241 2003

SHIP TO (IF DIFFERENT):

Company Name Eott Energy
 Address 4221 Freidrich Lane, Suite 100
 City Meloland State TX Zip 75401
 ATTN: Frank Hernandez
 Phone 972 444 5896 Fax 972 444 5896

Rush Status (must be confirmed with lab mgr.):

Project Name/PO#: 2002-10212 Sampler: Geog Metals

LOVINGTON DEEP 6"

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers	Soil	Water	Waste	Lab I.D. # (Lab only)	Comments
SEL6122702-BH15'	12/2/02	8:40	1	✓			137985	✓
SEL6122702-BH15'	12/2/02	8:54	1	✓			137986	✓
SEL6122702-BH15'	12/2/02	9:16	1	✓			137987	✓
SEL6122702-BH15'	12/2/02	9:40	1	✓			137988	✓
SEL6122702-BH145'	12/2/02	10:00	1	✓			137989	✓
SEL6122702-BH15'	12/2/02	10:15	1	✓			137990	✓
SEL6123002-BH15'	12/2/02	9:30	1	✓			137991	✓
SEL6123002-BH15'	12/2/02	9:30	1	✓			137992	✓
SEL6123002-BH15'	12/2/02	9:30	1	✓			137993	✓
SEL6123002-BH15'	12/2/02	10:00	1	✓			137994	✓

(1) Unless specifically requested otherwise on this Chain-of-custody and/or attached documentation, all analyses will be conducted using ASI's method of choice and all data will be reported to ASI's normal limits (MDL/PQL). For GC/MS volatiles and extractables, unless specific analytical parameter lists are specified on this chain-of-custody or attached to this chain-of-custody, ASI will default to Priority Poll ASI's HSL list at ASI's option. Specific compound lists must be supplied for all GC procedures.

Temp: 50°C

Sample Relinquished By			Sample Received By		
Name	Affiliation	Date	Name	Affiliation	Date
Geog Metals	EPI	12/2/02	Patricia Hernandez	ASI	1/3/03

[Tendering of above described samples to AnalySys, Inc. for analytical testing constitutes agreement by buyer/sampler to AnalySys, Inc.'s standard terms.]

USE TO (if unknown):

Company Name EA
 Address PO Box 1558
 City Union State TX Zip 78231
 ATTN: Pat McElwaine
 Phone (502) 241-3781 Fax (502) 241-2001

4221 Freidrich Lane, Sui.
 0, Austin, TX
 (512) 444-5896

City Austin State TX Zip
 ATTN: Frank McElwaine
 Phone Fax

Rush Status (must be confirmed with lab mgr.):

Project Name/PO#: 202-10312 Sampler: Andy McElwaine

Analyses Requested (1)
 Please attach explanatory information as to

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers	Soil	Water	Waste	Lab I.D. # (Lab only)	Comments
SEL 612302 BH 235'	12/20/02	10:30	1	✓			137995	✓
SEL 612302 BH 240'	12/20/02	11:00	1	✓			137996	✓
SEL 612302 BH 250'	12/20/02	11:15	1	✓			137997	✓
SEL 612302 BH 235'	12/20/02	13:00	1	✓			137998	✓
SEL 612302 BH 315'	12/30/02	2:00	1	✓			137999	✓
SEL 612302 BH 325'	12/30/02	2:30	1	✓			138000	✓
SEL 612302 BH 335'	12/31/02	3:00	1	✓			138001	✓
SEL 612302 BH 345'	12/30/02	3:30	1	✓				✓
SEL 612302 BH 350'	12/30/02	4:00	1	✓				✓

(1) Unless specifically requested otherwise on this Chain-of-custody and/or attached documentation, all analyses will be conducted using ASI's method of choice and all data will be reported to ASI's normal limits (MDL/PQL). For GC/MS volatiles and extractables, unless specific analytical parameter lists are specified on this chain-of-custody or attached to this chain-of-custody, ASI will default to Priority Poll ASI's HSL list at ASI's option. Specific compound lists must be supplied for all GC procedures.

Temp. 5.0°C

Sample Relinquished By			Sample Received By		
Name	Affiliation	Date	Name	Affiliation	Date
Andy McElwaine	EA	12/20/02	Pat McElwaine	ASI	1/3/03
					090

[Tendering of above described samples to AnalySys, Inc. for analytical testing constitutes agreement by buyer/sampler to AnalySys, Inc.'s standard terms.]

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QUALITY ASSURANCE

Report# / Lab ID#: 140347 **Report Date:** 03/25/03
Project ID: 2002-10312
Sample Name: SELD6030703WSW
Sample Matrix: soil
Date Received: 03/12/2003 **Time:** 09:00
Date Sampled: 03/07/2003 **Time:** 11:35

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 2100 Ave. O
Eumice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA¹

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	03/21/03	8015 mod.	J	4	122.4	121.2	107.6
TPH by GC (as diesel-ext)	---	---	---	---	03/21/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	03/21/03	8015 mod.	---	8.9	91.3	97.6	84.3
Volatiles organics-8260b/BTEX	---	---	---	---	03/15/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	03/15/03	8260b	---	5.2	97	95.9	100.4
Ethylbenzene	<20	µg/Kg	20	<20	03/15/03	8260b	J	1.9	100.6	100.1	101.3
m,p-Xylenes	<20	µg/Kg	20	<20	03/15/03	8260b	J	4.3	95.3	91.9	95.7
o-Xylene	<20	µg/Kg	20	<20	03/15/03	8260b	---	4.1	101.1	98.3	101.2
Toluene	24.1	µg/Kg	20	<20	03/15/03	8260b	---	0.4	86.2	89.6	93.2

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

Richard Laster

Richard Laster

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Exceptions Report:

Report #/Lab ID#: 138005	Matrix: soil	Attn: Pat McCasland
Client: Environmental Plus, Inc.		
Project ID: 2002-10312 Lovington Deep 6"		
Sample Name: SEL6123102BH4 30'		

Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
- ☐ Sample received in appropriate container(s). State of sample preservation unknown.
- ☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

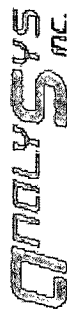
J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Toluene	J	See J-flag discussion above.

Notes:



3512 Montopolis Drive, Austin, TX 78744 &
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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M. St Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 138006 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123102BH4 40'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/31/2002 **Time:** 10:30

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA¹

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/09/03	8015 mod.	---	7.1	79.9	103.1	71.5
TPH by GC (as diesel-ext)	---	---	---	---	01/08/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/09/03	8015 mod.	---	8.7	86.7	90.2	79
Volatiles organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	7	82.6	97.1	94.9
Ethylbenzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.1	94.7	105.4	106.8
m,p-Xylenes	<20	µg/Kg	20	<20	01/07/03	8260b	---	4	93.6	105.4	106.3
o-Xylene	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.7	93.6	106.7	105.5
Toluene	<20	µg/Kg	20	<20	01/07/03	8260b	J	5.4	89.9	103.5	100.5

This analytical report is respectfully submitted by ANALYSIS, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with ANALYSIS, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, ANALYSIS, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of ANALYSIS, Inc.

Respectfully Submitted,
Richard Laster
Richard Laster

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Lovington Deep 6" Sample Name: SEL6123102BH4 40'	Report#/Lab ID#: 138006 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	80.2	50-150	---
	8015 mod.	77.7	50-150	---
1,2-Dichloroethane-d4 Toluene-d8	8260b	87.5	65-115	---
	8260b	95.9	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 138006	Matrix: soil	Attn: Pat McCasland
Client: Environmental Plus, Inc.		
Project ID: 2002-10312 Lovington Deep 6"		
Sample Name: SEL6123102BH4 40'		

Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
- ☐ Sample received in appropriate container(s). State of sample preservation unknown.
- ☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

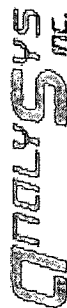
J flag Discussion

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Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Toluene	J	See J-flag discussion above.

Notes:



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M. St Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 138007 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123102BH4 50'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/31/2002 **Time:** 11:00

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/09/03	8015 mod.	---	7.1	79.9	103.1	71.5
TPH by GC (as diesel-ext)	---	---	---	---	01/08/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/09/03	8015 mod.	---	8.7	86.7	90.2	79
Volatiles organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	7	82.6	97.1	94.9
Ethylbenzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.1	94.7	105.4	106.8
m,p-Xylenes	<20	µg/Kg	20	<20	01/07/03	8260b	---	4	93.6	105.4	106.3
o-Xylene	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.7	93.6	106.7	105.5
Toluene	<20	µg/Kg	20	<20	01/07/03	8260b	J	5.4	89.9	103.5	100.5

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Respectfully Submitted,
Richard Laster
Richard Laster

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Lovington Deep 6" Sample Name: SEL6123102BH4 50'	Report#/Lab ID#: 138007 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	92.2	50-150	---
	8015 mod.	94.6	50-150	---
1,2-Dichloroethane-d4 Toluene-d8	8260b	86.8	65-115	---
	8260b	89.2	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 138007	Matrix: soil	Attn: Pat McCasland
Client: Environmental Plus, Inc.		
Project ID: 2002-10312 Lovington Deep 6"		
Sample Name: SEL6123102BH4 50'		

Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

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- ☐ Sample received in appropriate container(s). State of sample preservation unknown.
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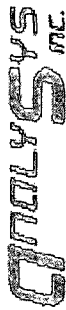
J flag Discussion

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Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Toluene	J	See J-flag discussion above.

Notes:



Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M.St Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Report#/Lab ID#: 138008 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123102BH4 55'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/31/2002 **Time:** 11:30

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/09/03	8015 mod.	---	7.1	79.9	103.1	71.5
TPH by GC (as diesel-ext)	---	---	---	---	01/08/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/09/03	8015 mod.	---	8.7	86.7	90.2	79
Volatiles organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	7	82.6	97.1	94.9
Ethylbenzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.1	94.7	105.4	106.8
m,p-Xylenes	<20	µg/Kg	20	<20	01/07/03	8260b	---	4	93.6	105.4	106.3
o-Xylene	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.7	93.6	106.7	105.5
Toluene	<20	µg/Kg	20	<20	01/07/03	8260b	J	5.4	89.9	103.5	100.5

QUALITY ASSURANCE DATA¹

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Respectfully Submitted,

Richard Laster

Richard Laster

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than (" $<$ ") values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B = Analyte detected in associated method blank(s). S1 =MS and/or MSD recovery exceed advisory limits. S2 =Post digestion spike (PDS) recovery exceeds advisory limit. S3 =MS and/or MSD and PDS recoveries exceed advisory limits. P =Precision higher than advisory limit. M =Matrix interference.



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Pat McCasland

Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123102BH4 55'

Report#/Lab ID#: 138008
Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	94.1	50-150	---
	8015 mod.	99.4	50-150	---
1,2-Dichloroethane-d4 Toluene-d8	8260b	94	65-115	---
	8260b	95.6	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 138008	Matrix: soil	Attn: Pat McCasland
Client: Environmental Plus, Inc.		
Project ID: 2002-10312 Lovington Deep 6"		
Sample Name: SEL6123102BH4 55'		

Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
- ☐ Sample received in appropriate container(s). State of sample preservation unknown.
- ☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Toluene	J	See J-flag discussion above.

Notes:

City _____
State _____
City _____

Rush Status (must be confirmed with job order).

LOVINGTON DERE 6" Very little

Client Sample No.		Date	Time	N	A	E
801	525					

Description/Identification	Date	Time	No. of	Lab I.D. #	
				1	2
Sample No. 1					
Sample No. 2					
Sample No. 3					
Sample No. 4					
Sample No. 5					
Sample No. 6					
Sample No. 7					
Sample No. 8					
Sample No. 9					
Sample No. 10					
Sample No. 11					
Sample No. 12					
Sample No. 13					
Sample No. 14					
Sample No. 15					
Sample No. 16					
Sample No. 17					
Sample No. 18					
Sample No. 19					
Sample No. 20					
Sample No. 21					
Sample No. 22					
Sample No. 23					
Sample No. 24					
Sample No. 25					
Sample No. 26					
Sample No. 27					
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Sample No. 80					
Sample No. 81					
Sample No. 82					
Sample No. 83					
Sample No. 84					
Sample No. 85					
Sample No. 86					
Sample No. 87					
Sample No. 88					
Sample No. 89					
Sample No. 90					
Sample No. 91					

Location	Sampled Containers	Water Waste (Lab only)	Comments

[illegible]

13000Z	✓	✓
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[illegible][illegible][illegible][illegible]

1000	2/3/17	✓	138005	✓
------	--------	---	--------	---

12/24/20	1030	✓	12000-	✓	SE 66123102 284 40'
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138006	✓
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[illegible][illegible][illegible][illegible][illegible][illegible][illegible][illegible]

Unless specifically requested otherwise on this Chain-of-custody and/or attached documentation all evidence must

For GC/MS volatiles and extractables, unless specific analytical parameter lists are specified on this chain of custody, all analyses will be conducted using ASI's method of choice and all data will be reported to ASI's normal reporting format (MDL/PQL).

of 18 HSL list at ASI's option. Specific compound lists must be supplied for all GC procedures. Specific compound lists must be supplied to this chain-of-custody, ASI will default to Priority Polt

Temp: 50°C

Sample Relinquished By

Name	Amplitude	D.A.
Sample Received By		

Amputation	Date	Time	Name	Affiliation
01-21-76				

Date	Time
11/1/19	1:00

[illegible][illegible]

g.

....., 59, 111, standard terms.]

[illegible]

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LOVINGTON DEEP 6" #2002-10312



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 1324 M.St Po Box
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 138002 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123102BH4 SUR
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/31/2002 **Time:** 08:30

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA 1

Parameter	Result	Units	RQL 5	Blank	Date	Method 6	Data Qual 7	Prec. 2	Recov. 3	CCV 4	LCS 4
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/09/03	8015 mod.	---	7.1	79.9	103.1	71.5
TPH by GC (as diesel-ext)	---	---	---	---	01/08/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/09/03	8015 mod.	---	8.7	86.7	90.2	79
Volatile organics-8260b/BTEX	---	---	---	---	01/07/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	6.5	98	81	94.1
Ethylbenzene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.1	117.9	117.9	116.6
m,p-Xylenes	<20	µg/Kg	20	<20	01/07/03	8260b	---	4.2	109.1	108.6	106
o-Xylene	<20	µg/Kg	20	<20	01/07/03	8260b	---	3.6	116.5	115	113.6
Toluene	<20	µg/Kg	20	<20	01/07/03	8260b	J	7.2	102.5	84.5	97.5

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Respectfully Submitted,

Richard Laster

Richard Laster

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QUALITYS

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.	Project ID: 2002-20312 Lovington Deep 6"	Report#/Lab ID#: 138119
Attn: Pat McCasland	Sample Name: SEL61203BH5SUR	Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	71.3	50-150	---
	8015 mod.	72.5	50-150	---
1,2-Dichloroethane-d4 Toluene-d8	8260b	92	65-115	---
	8260b	101	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Q
ANALYSIS

Client: Environmental Plus, Inc.	Report# / Lab ID#: 138120	Report Date: 01/20/03
Attn: Pat McCasland	Project ID: 2002-20312 Lovington Deep 6"	
Address: 2100 Ave. O	Sample Name: SEL61203BH5 10'	
Phone: (505) 394-3481	Sample Matrix: soil	
FAX: (505) 394-2601	Date Received: 01/09/2003	Time: 12:00
	Date Sampled: 01/02/2003	Time: 09:00

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	3.6	75.4	99	73.6
TPH by GC (as diesel-ext)	---	---	---	---	01/09/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	0.3	82.1	86.3	79.7
Volatiles organics-8260b/BTEX	---	---	---	---	01/10/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	12.2	85.6	99.7	93.3
Ethylbenzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	4.4	94.8	100.7	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	01/10/03	8260b	---	10.4	88.9	98.9	100.4
o-Xylene	<20	µg/Kg	20	<20	01/10/03	8260b	---	9.1	95	102.2	101.7
Toluene	<20	µg/Kg	20	<20	01/10/03	8260b	---	6.1	94.1	103.4	98.1

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Richard Laster

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.	Project ID: 2002-20312 Lovington Deep 6"	Report#/Lab ID#: 138120
Attn: Pat McCasland	Sample Name: SEL61203BH5 10'	Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	72.5	50-150	---
	8015 mod.	73	50-150	---
1,2-Dichloroethane-d4 Toluene-d8	8260b	96.9	65-115	---
	8260b	96.5	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.



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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 2100 Ave. O
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 138121 **Report Date:** 01/20/03
Project ID: 2002-20312 Lovington Deep 6"
Sample Name: SEL61203BH5 20'
Sample Matrix: soil
Date Received: 01/09/2003 **Time:** 12:00
Date Sampled: 01/02/2003 **Time:** 09:15

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA¹

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	3.6	75.4	99	73.6
TPH by GC (as diesel-ext)	---	---	---	---	01/09/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	0.3	82.1	86.3	79.7
Volatiles organics-8260b/BTEX	---	---	---	---	01/10/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	12.2	85.6	99.7	93.3
Ethylbenzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	4.4	94.8	100.7	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	01/10/03	8260b	---	10.4	88.9	98.9	100.4
o-Xylene	<20	µg/Kg	20	<20	01/10/03	8260b	---	9.1	95	102.2	101.7
Toluene	<20	µg/Kg	20	<20	01/10/03	8260b	---	6.1	94.1	103.4	98.1

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Respectfully Submitted,

Richard Laster

Richard Laster

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Q7Elys

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-20312 Lovington Deep 6" Sample Name: SEL61203BH5 20'	Report#/Lab ID#: 138121 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	76.3	50-150	---
p-Terphenyl	8015 mod.	80.7	50-150	---
1,2-Dichloroethane-d4	8260b	92.2	65-115	---
Toluene-d8	8260b	90.9	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

QUALITY
INC

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 2100 Ave. O
Euine NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report# Lab ID# 138122 **Report Date:** 01/20/03
Project ID: 2002-20312 Lovington Deep 6"
Sample Name: SEL61203BH5 30'
Sample Matrix: soil
Date Received: 01/09/2003 **Time:** 12:00
Date Sampled: 01/02/2003 **Time:** 09:30

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	3.6	75.4	99	73.6
TPH by GC (as diesel-ext)	---	---	---	---	01/09/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	0.3	82.1	86.3	79.7
Volatile organics-8260b/BTEX	---	---	---	---	01/10/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	12.2	85.6	99.7	93.3
Ethylbenzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	4.4	94.8	100.7	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	01/10/03	8260b	---	10.4	88.9	98.9	100.4
o-Xylene	<20	µg/Kg	20	<20	01/10/03	8260b	---	9.1	95	102.2	101.7
Toluene	<20	µg/Kg	20	<20	01/10/03	8260b	---	6.1	94.1	103.4	98.1

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Respectfully Submitted,
Richard Laster
Richard Laster

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

QUALITY
INC.

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-20312 Lovington Deep 6" Sample Name: SEL61203BH5 30'	Report#/Lab ID#: 138122 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	72.2	50-150	---
	8015 mod.	69.5	50-150	---
1,2-Dichloroethane-d4 Toluene-d8	8260b	92.2	65-115	---
	8260b	98.8	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

ANALYSIS

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 2100 Ave. O
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report# / Lab ID#: 138123 **Report Date:** 01/20/03
Project ID: 2002-20312 Lovington Deep 6"
Sample Name: SEL61203BH5 40'
Sample Matrix: soil
Date Received: 01/09/2003 **Time:** 12:00
Date Sampled: 01/02/2003 **Time:** 10:00

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA¹

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	3.6	75.4	99	73.6
TPH by GC (as diesel-ext)	---	---	---	---	01/09/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	0.3	82.1	86.3	79.7
Volatile organics-8260b/BTEX	---	---	---	---	01/10/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	12.2	85.6	99.7	93.3
Ethylbenzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	4.4	94.8	100.7	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	01/10/03	8260b	---	10.4	88.9	98.9	100.4
o-Xylene	<20	µg/Kg	20	<20	01/10/03	8260b	---	9.1	95	102.2	101.7
Toluene	<20	µg/Kg	20	<20	01/10/03	8260b	---	6.1	94.1	103.4	98.1

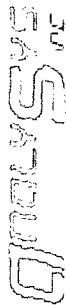
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Respectfully Submitted,

Richard Laster

Richard Laster

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3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-20312 Lovington Deep 6" Sample Name: SEL61203BH5 40'	Report#/Lab ID#: 138123 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	63.6	50-150	---
p-Terphenyl	8015 mod.	61.1	50-150	---
1,2-Dichloroethane-d4	8260b	87	65-115	---
Toluene-d8	8260b	93.7	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

QUALITY

Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 138124 **Report Date:** 01/20/03

Project ID: 2002-20312 Lovington Deep 6"

Sample Name: SEL61203BH5 50'

Sample Matrix: soil

Date Received: 01/09/2003 **Time:** 12:00

Date Sampled: 01/02/2003 **Time:** 10:30

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	3.6	75.4	99	73.6
TPH by GC (as diesel-ext)	---	---	---	---	01/09/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	0.3	82.1	86.3	79.7
Volatle organics-8260b/BTEX	---	---	---	---	01/10/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	12.2	85.6	99.7	93.3
Ethylbenzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	4.4	94.8	100.7	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	01/10/03	8260b	---	10.4	88.9	98.9	100.4
o-Xylene	<20	µg/Kg	20	<20	01/10/03	8260b	---	9.1	95	102.2	101.7
Toluene	<20	µg/Kg	20	<20	01/10/03	8260b	---	6.1	94.1	103.4	98.1

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Respectfully Submitted,

Richard Laster

Richard Laster

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3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Pat McCasland

Project ID: 2002-20312 Lovington Deep 6"
Sample Name: SEL61203BH5 50'

Report#/Lab ID#: 138124
Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	64.4	50-150	---
p-Terphenyl	8015 mod.	64	50-150	---
1,2-Dichloroethane-d4	8260b	97.6	65-115	---
Toluene-d8	8260b	98.2	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.



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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 2100 Ave. O
Eumice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 138125 **Report Date:** 01/20/03
Project ID: 2002-20312 Lovington Deep 6"
Sample Name: SEL61203BH5 5S'
Sample Matrix: soil
Date Received: 01/09/2003 **Time:** 12:00
Date Sampled: 01/02/2003 **Time:** 11:00

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	3.6	75.4	99	73.6
TPH by GC (as diesel-ext)	---	---	---	---	01/09/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	0.3	82.1	86.3	79.7
Volatile organics-8260b/BTEX	---	---	---	---	01/10/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	12.2	85.6	99.7	93.3
Ethylbenzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	4.4	94.8	100.7	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	01/10/03	8260b	---	10.4	88.9	98.9	100.4
o-Xylene	<20	µg/Kg	20	<20	01/10/03	8260b	---	9.1	95	102.2	101.7
Toluene	<20	µg/Kg	20	<20	01/10/03	8260b	---	6.1	94.1	103.4	98.1

QUALITY ASSURANCE DATA¹

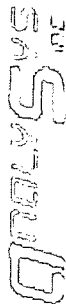
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Respectfully Submitted,

Richard Laster

Richard Laster

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3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-20312 Lovington Deep 6" Sample Name: SEL61203BH5 55'	Report#/Lab ID#: 138125 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	62.1	50-150	---
p-Terphenyl	8015 mod.	60.2	50-150	---
1,2-Dichloroethane-d4	8260b	94.5	65-115	---
Toluene-d8	8260b	96.2	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
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ANALYSIS

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 2100 Ave. O
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 138126 **Report Date:** 01/20/03
Project ID: 2002-20312 Lovington Deep 6"
Sample Name: SEL61203BH6SUR
Sample Matrix: soil
Date Received: 01/09/2003 **Time:** 12:00
Date Sampled: 01/02/2003 **Time:** 01:00

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	QUALITY ASSURANCE DATA ¹			
							Data Qual ⁷	Prec. ²	Recov. ³	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	3.6	75.4	99
TPH by GC (as diesel-ext)	---	---	---	---	01/09/03	3540	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	0.3	82.1	86.3
Volatiles organics-8260b/BTEX	---	---	---	---	01/10/03	8260b	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	12.2	85.6	99.7
Ethylbenzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	4.4	94.8	100.7
m,p-Xylenes	<20	µg/Kg	20	<20	01/10/03	8260b	---	10.4	88.9	98.9
o-Xylene	<20	µg/Kg	20	<20	01/10/03	8260b	---	9.1	95	102.2
Toluene	<20	µg/Kg	20	<20	01/10/03	8260b	---	6.1	94.1	103.4

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Respectfully Submitted,
Richard Laster
Richard Laster

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QUALITY
INC.

Client: Environmental Plus, Inc.
Attn: Pat McCasland

Project ID: 2002-20312 Lovington Deep 6"
Sample Name: SEL61203BH6SUR

Report#/Lab ID#: 138126
Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	60.9	50-150	---
	8015 mod.	58.2	50-150	---
1,2-Dichloroethane-d4 Toluene-d8	8260b	82.1	65-115	---
	8260b	88.8	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.



Client: Environmental Plus, Inc.

Attn: Pat McCasland

Address: 2100 Ave. O

Eunice

NM 88231

Phone: (505) 394-3481

FAX: (505) 394-2601

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Report#/Lab ID#: 138127 **Report Date:** 01/20/03

Project ID: 2002-20312 Lovington Deep 6"

Sample Name: SEL61203BH6 10'

Sample Matrix: soil

Date Received: 01/09/2003 **Time:** 12:00

Date Sampled: 01/02/2003 **Time:** 01:15

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	3.6	75.4	99	73.6
TPH by GC (as diesel-ext)	---	---	---	---	01/09/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	0.3	82.1	86.3	79.7
Volatiles organics-8260b/BTEX	---	---	---	---	01/10/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	12.2	85.6	99.7	93.3
Ethylbenzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	4.4	94.8	100.7	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	01/10/03	8260b	---	10.4	88.9	98.9	100.4
o-Xylene	<20	µg/Kg	20	<20	01/10/03	8260b	---	9.1	95	102.2	101.7
Toluene	<20	µg/Kg	20	<20	01/10/03	8260b	---	6.1	94.1	103.4	98.1

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Respectfully Submitted,

Richard Laster

Richard Laster

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QUALITY

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-20312 Lovington Deep 6" Sample Name: SEL61203BH6 10'	Report#/Lab ID#: 138127 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	71.3	50-150	---
p-Terphenyl	8015 mod.	54.5	50-150	---
1,2-Dichloroethane-d4	8260b	90.1	65-115	---
Toluene-d8	8260b	100	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

QUALYS
INC

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 2100 Ave. O
Eunice NM 88231

Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 138128 **Report Date:** 01/20/03
Project ID: 2002-20312 Lovington Deep 6"
Sample Name: SEL61203BH6 20'
Sample Matrix: soil
Date Received: 01/09/2003 **Time:** 12:00
Date Sampled: 01/02/2003 **Time:** 01:30

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/13/03	8015 mod.	---	4.8	70.1	85.5	70.3
TPH by GC (as diesel-ext)	---	---	---	---	01/13/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/13/03	8015 mod.	---	6.9	85.5	86.9	90.1
Volatile organics-8260b/BTEX	---	---	---	---	01/10/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	12.2	85.6	99.7	93.3
Ethylbenzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	4.4	94.8	100.7	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	01/10/03	8260b	---	10.4	88.9	98.9	100.4
o-Xylene	<20	µg/Kg	20	<20	01/10/03	8260b	---	9.1	95	102.2	101.7
Toluene	<20	µg/Kg	20	<20	01/10/03	8260b	---	6.1	94.1	103.4	98.1

QUALITY ASSURANCE DATA¹

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Respectfully Submitted,

Richard Laster

Richard Laster

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QUALITY

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-20312 Lovington Deep 6" Sample Name: SEL61203BH6 20'	Report#/Lab ID#: 138128 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	63.6	50-150	---
	8015 mod.	61.7	50-150	---
1,2-Dichloroethane-d4 Toluene-d8	8260b	105	65-115	---
	8260b	102	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

ANALYSIS

Client: Environmental Plus, Inc. Attn: Pat McCasland Address: 2100 Ave. O Eunice NM 88231 Phone: (505) 394-3481 FAX: (505) 394-2601		Report# / Lab ID#: 138129 Report Date: 01/20/03 Project ID: 2002-20312 Lovington Deep 6" Sample Name: SEL61203BH6 30' Sample Matrix: soil Date Received: 01/09/2003 Time: 12:00 Date Sampled: 01/02/2003 Time: 01:45
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REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPPH by GC (as diesel)	<5	mg/Kg	5	<5	01/13/03	8015 mod.	---	4.8	70.1	85.5	70.3
TPH by GC (as diesel-ext)	--	---	---	---	01/13/03	3540	---	---	---	---	---
TPPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/13/03	8015 mod.	---	6.9	85.5	86.9	90.1
Volatile organics-8260b/BTEX	---	---	---	---	01/10/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	12.2	85.6	99.7	93.3
Ethylbenzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	4.4	94.8	100.7	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	01/10/03	8260b	---	10.4	88.9	98.9	100.4
o-Xylene	<20	µg/Kg	20	<20	01/10/03	8260b	---	9.1	95	102.2	101.7
Toluene	<20	µg/Kg	20	<20	01/10/03	8260b	---	6.1	94.1	103.4	98.1

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Respectfully Submitted,
Richard Laster
 Richard Laster

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3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

QUALITY

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-20312 Lovington Deep 6" Sample Name: SEL61203BH6 30'	Report#/Lab ID#: 138129 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	71.6	50-150	---
p-Terphenyl	8015 mod.	72.8	50-150	---
1,2-Dichloroethane-d4	8260b	93	65-115	---
Toluene-d8	8260b	94.8	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
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ANALYSIS
iPC

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 2100 Ave. O
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 138130 **Report Date:** 01/20/03
Project ID: 2002-20312 Lovington Deep 6"
Sample Name: SEL61203BH6 40'
Sample Matrix: soil
Date Received: 01/09/2003 **Time:** 12:00
Date Sampled: 01/02/2003 **Time:** 02:00

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA¹

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/13/03	8015 mod.	---	4.8	70.1	85.5	70.3
TPH by GC (as diesel-ext)	---	---	---	---	01/13/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/13/03	8015 mod.	---	6.9	85.5	86.9	90.1
Volatile organics-8260b/BTEX	---	---	---	---	01/10/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	12.2	85.6	99.7	93.3
Ethylbenzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	4.4	94.8	100.7	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	01/10/03	8260b	---	10.4	88.9	98.9	100.4
o-Xylene	<20	µg/Kg	20	<20	01/10/03	8260b	---	9.1	95	102.2	101.7
Toluene	<20	µg/Kg	20	<20	01/10/03	8260b	---	6.1	94.1	103.4	98.1

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Respectfully Submitted,

Richard Laster

Richard Laster

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QTELYSYS

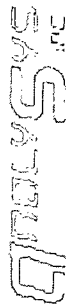
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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.	Project ID: 2002-20312 Lovington Deep 6"	Report#/Lab ID#: 138130
Attn: Pat McCasland	Sample Name: SEL61203BH6 40'	Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	58.2	50-150	---
	8015 mod.	52.5	50-150	---
1,2-Dichloroethane-d4 Toluene-d8	8260b	99.6	65-115	---
	8260b	104	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.



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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 2100 Ave. O
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 138131 **Report Date:** 01/20/03
Project ID: 2002-20312 Lovington Deep 6"
Sample Name: SEL61203BH6 50'
Sample Matrix: soil
Date Received: 01/09/2003 **Time:** 12:00
Date Sampled: 01/02/2003 **Time:** 02:30

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/14/03	8015 mod.	---	4.8	70.1	85.5	70.3
TPH by GC (as diesel-ext)	---	---	---	---	01/13/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/14/03	8015 mod.	---	6.9	85.5	86.9	90.1
Volatile organics-8260b/BTEX	---	---	---	---	01/14/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/14/03	8260b	---	7.7	90.5	100.2	97.6
Ethylbenzene	<20	µg/Kg	20	<20	01/14/03	8260b	---	2	109.1	111.4	116
m,p-Xylenes	<20	µg/Kg	20	<20	01/14/03	8260b	---	0.3	101	103.1	105.1
o-Xylene	<20	µg/Kg	20	<20	01/14/03	8260b	---	1.1	106.8	110.1	112.7
Toluene	<20	µg/Kg	20	<20	01/14/03	8260b	---	7	93.9	103.9	100.6

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Respectfully Submitted,

Richard Laster

Richard Laster

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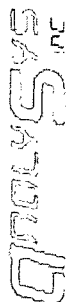
QTECHS
INC

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-20312 Lovington Deep 6" Sample Name: SEL61203BH6 50'	Report#/Lab ID#: 138131 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	51.7	50-150	---
	8015 mod.	50.7	50-150	---
1,2-Dichloroethane-d4 Toluene-d8	8260b	103	65-115	---
	8260b	104	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.



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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 2100 Ave. O
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 138132 **Report Date:** 01/20/03
Project ID: 2002-20312 Lovington Deep 6"
Sample Name: SEL61203BH6 55'
Sample Matrix: soil
Date Received: 01/09/2003 **Time:** 12:00
Date Sampled: 01/02/2003 **Time:** 03:00

REPORT OF ANALYSIS

QUALITY ASSURANCE DATA¹

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/13/03	8015 mod.	---	4.8	70.1	85.5	70.3
TPH by GC (as diesel-ext)	---	---	---	---	01/13/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/13/03	8015 mod.	---	6.9	85.5	86.9	90.1
Volatle organics-8260b/BTEX	---	---	---	---	01/14/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/14/03	8260b	---	7.7	90.5	100.2	97.6
Ethylbenzene	<20	µg/Kg	20	<20	01/14/03	8260b	---	2	109.1	111.4	116
m,p-Xylenes	<20	µg/Kg	20	<20	01/14/03	8260b	---	0.3	101	103.1	105.1
o-Xylene	<20	µg/Kg	20	<20	01/14/03	8260b	---	1.1	106.8	110.1	112.7
Toluene	<20	µg/Kg	20	<20	01/14/03	8260b	---	7	93.9	103.9	100.6

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Richard Laster
Richard Laster

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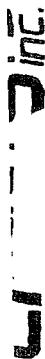
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2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-20312 Lovington Deep 6" Sample Name: SEL61203BH6 55'	Report#/Lab ID#: 138132 Sample Matrix: soil
---	--	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5 p-Terphenyl	8015 mod.	57.9	50-150	---
	8015 mod.	55.3	50-150	---
1,2-Dichloroethane-d4 Toluene-d8	8260b	105	65-115	---
	8260b	103	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.



4221 Freidrich Lane, Suite 150, Austin, TX 787
(512) 444-5896
512-385-7411

Company Name Environmental Plus Inc

Address Box 1558

City San Jose State CA Zip 95121

ATTN: Art McQuinn

Phone Fax

City State Zip

ATTN: Frank Hernandez

Phone Fax

City State Zip

ATTN:

Phone Fax

City State Zip

ATTN:

Phone Fax

City State Zip

ATTN:

Phone Fax

City State Zip

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Phone Fax

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Rush Status (must be confirmed with lab mgr.):

Project Name/PO#: 2002-10312 Sampler: Andy Miller

Location: Livingston Deep 6"

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers	Water Waste	Lab I.D. # (Lab only)	Comments
SEL61203BH550K	1/2/03	830	1	✓	138119	✓
SEL61203BH510'	1/2/03	900	1	✓	138120	✓
SEL61203BH520'	1/2/03	915	1	✓	138121	✓
SEL61203BH530'	1/2/03	930	1	✓	138122	✓
SEL61203BH540'	1/2/03	1000	1	✓	138123	✓
SEL61203BH550'	1/2/03	1130	1	✓	138124	✓
SEL61203BH555'	1/2/03	1100	1	✓	138125	✓
SEL61203BH560K	1/2/03	1100	1	✓	138126	✓
SEL61203BH5610'	1/2/03	1115	1	✓	138127	✓
SEL61203BH5620'	1/2/03	1130	1	✓	138128	✓

(1) Unless specifically requested otherwise on this Chain-of-custody and/or attached documentation, all analyses will be conducted using ASI's method of choice and all data will be reported to ASI's normal reporting limits (MDL/POL). For GC/MS volatiles and extractables, unless specific analytical parameter lists are specified on this chain-of-custody or attached to this chain-of-custody, ASI will default to Priority Pollutants ASI's HSL list at ASI's option. Specific compound lists must be supplied for all GC procedures.

Temp: 4.2 C

Sample Relinquished By			Sample Received By		
Name	Affiliation	Date	Name	Affiliation	Date
Andy Miller	EPI	1/2/03	Valerie Humphrey	ASI	1/9/03

[Tendering of above described samples to AnalySys, Inc. for analytical testing constitutes agreement by buyer/sampler to AnalySys, Inc.'s standard terms.]

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QUALITY ASSURANCE

Report#/Lab ID#: 138119 **Report Date:** 01/20/03
Project ID: 2002-20312 Lovington Deep 6"
Sample Name: SEL61203BHSSUR
Sample Matrix: soil
Date Received: 01/09/2003 **Time:** 12:00
Date Sampled: 01/02/2003 **Time:** 08:30

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 2100 Ave. O
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	3.6	75.4	99	73.6
TPH by GC (as diesel-ext)	---	---	---	---	01/09/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/10/03	8015 mod.	---	0.3	82.1	86.3	79.7
Volatiles organics-8260b/BTEX	---	---	---	---	01/10/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	12.2	85.6	99.7	93.3
Ethylbenzene	<20	µg/Kg	20	<20	01/10/03	8260b	---	4.4	94.8	100.7	102.5
m,p-Xylenes	<20	µg/Kg	20	<20	01/10/03	8260b	---	10.4	88.9	98.9	100.4
o-Xylene	<20	µg/Kg	20	<20	01/10/03	8260b	---	9.1	95	102.2	101.7
Toluene	<20	µg/Kg	20	<20	01/10/03	8260b	---	6.1	94.1	103.4	98.1

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Richard Laster

Richard Laster

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Sample Name: SELD6030703WSW	Report#/Lab ID#: 140347 Sample Matrix: soil
---	---	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
I-chlorooctane	8015 mod.	111	50-150	---
p-Terphenyl	8015 mod.	65.8	50-150	---
1,2-Dichloroethane-d4	8260b	106	65-115	---
Toluene-d8	8260b	119	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 140347	Matrix: soil	Attn: Pat McCasland
Client: Environmental Plus, Inc.		
Project ID: 2002-10312		
Sample Name: SELD6030703WSW		

Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
- ☐ Sample received in appropriate container(s). State of sample preservation unknown.
- ☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
TPH by GC (as diesel)	J	See J-flag discussion above.
Ethylbenzene	J	See J-flag discussion above.
m,p-Xylenes	J	See J-flag discussion above.

Notes:

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QUALITY ASSURANCE

Report# / Lab ID#: 140348 **Report Date:** 03/25/03
Project ID: 2002-10312
Sample Name: SELD6030703ESW
Sample Matrix: soil
Date Received: 03/12/2003 **Time:** 09:00
Date Sampled: 03/07/2003 **Time:** 11:40

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 2100 Ave. O
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

QUALITY ASSURANCE DATA¹

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	03/21/03	8015 mod.	---	4	122.4	121.2	107.6
TPH by GC (as diesel-ext)	---	---	---	---	03/21/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	03/21/03	8015 mod.	---	8.9	91.3	97.6	84.3
Volatiles organics-8260b/BTEX	---	---	---	---	03/13/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	03/13/03	8260b	---	7.7	117.5	94	113.5
Ethylbenzene	<20	µg/Kg	20	<20	03/13/03	8260b	J	0.8	116.5	113	126.4
m,p-Xylenes	<20	µg/Kg	20	<20	03/13/03	8260b	---	0.4	119.5	118.6	127.2
o-Xylene	<20	µg/Kg	20	<20	03/13/03	8260b	---	7.7	109.8	116.6	128.5
Toluene	<20	µg/Kg	20	<20	03/13/03	8260b	---	8.9	125.1	103.3	118.7

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

Richard Laster

Richard Laster

1. Quality assurance data is for the sample batch which included this sample. 2. Precision (PREC) is the absolute value of the relative percent (%) difference between duplicate measurements. 3. Recovery (Recov.) is the percent (%) of analyte recovered from a spiked sample. 4. Calibration Verification (CCV) and Laboratory Control Sample (LCS) results are expressed as the percent (%) recovery of analyte from a known standard or matrix. 5. Reporting Quantitation Limits (RQL), typically at or above the Practical Quantitation Limit (PQL) of the analytical method. 6. Method numbers typically denote USEPA procedures. Less than (<) values reflect nominal quantitation limits adjusted for any required dilutions. 7. Data Qualifiers are J = analyte potentially present between the PQL and the MDL. B = Analyte detected in associated method blank(s). S1 = MS and/or MSD recovery exceed advisory limits. S2 = Post digestion spike (PDS) recovery exceeds advisory limit. S3 = MS and/or MSD and PDS recoveries exceed advisory limits. P = Precision higher than advisory limit. M = Matrix interference.



3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Sample Name: SELD6030703ESW	Report#/Lab ID#: 140348 Sample Matrix: soil
---	---	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-chlorooctane	8015 mod.	77	50-150	---
p-Terphenyl	8015 mod.	72.9	50-150	---
1,2-Dichloroethane-d4	8260b	103	65-115	---
Toluene-d8	8260b	111	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 140348	Matrix: soil	Attn: Pat McCasland
Client: Environmental Plus, Inc.		
Project ID: 2002-10312		
Sample Name: SELD6030703ESW		

Sample Temperature/Condition <=6°C

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is <= 6°C. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
- ☐ Sample received in appropriate container(s). State of sample preservation unknown.
- ☐ Sample received in inappropriate container(s) and/or with unknown state of preservation.

J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Ethylbenzene	J	See J-flag discussion above.

Notes:

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

QUALITYSYS
INC

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 2100 Ave. O
Emice NM 88231

Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 140349 **Report Date:** 03/25/03
Project ID: 2002-10312
Sample Name: SELD6030703NSW
Sample Matrix: soil
Date Received: 03/12/2003 **Time:** 09:00
Date Sampled: 03/07/2003 **Time:** 11:45

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	03/21/03	8015 mod.	---	4	122.4	121.2	107.6
TPH by GC (as diesel-ext)	---	---	---	---	03/21/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	03/21/03	8015 mod.	---	8.9	91.3	97.6	84.3
Volatiles organics-8260b/BTEX	---	---	---	---	03/13/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	03/13/03	8260b	---	7.7	117.5	94	113.5
Ethylbenzene	<20	µg/Kg	20	<20	03/13/03	8260b	J	0.8	116.5	113	126.4
m,p-Xylenes	<20	µg/Kg	20	<20	03/13/03	8260b	---	0.4	119.5	118.6	127.2
o-Xylene	<20	µg/Kg	20	<20	03/13/03	8260b	---	7.7	109.8	116.6	128.5
Toluene	<20	µg/Kg	20	<20	03/13/03	8260b	---	8.9	125.1	103.3	118.7

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,
Richard Laster
Richard Laster

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QUALYS
INC.

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.	Project ID: 2002-10312	Report#/Lab ID#: 140349
Attn: Pat McCasland	Sample Name: SELD6030703NSW	Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-chlorooctane	8015 mod.	90.4	50-150	---
p-Terphenyl	8015 mod.	76.4	50-150	---
1,2-Dichloroethane-d4	8260b	109	65-115	---
Toluene-d8	8260b	117	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 140349	Matrix: soil	Attn: Pat McCasland
Client: Environmental Plus, Inc.		
Project ID: 2002-10312		
Sample Name: SELD6030703NSW		

Sample Temperature/Condition $\leq 6^{\circ}\text{C}$

The typical sample temperature criteria (except for metals by ICP, GFAA and AA and a very few other tests) is $\leq 6^{\circ}\text{C}$. Possible exceptions include samples submitted to laboratory within such a short time after sampling that cooling measures used in the field and during transport had insufficient time to achieve desired temperatures in the samples (see sample collection and sample receipt times) and samples where the temperature could not be measured due to sample submission in a manner precluding temperature measurement without impacting sample integrity (ex. in a bottle with no cooler).

Sample Bottles & Preservation

- ☒ Sample received in appropriate container(s) and appear to be appropriately preserved.
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J flag Discussion

A J flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background levels/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. Because the reported result is below the quantitation limit for this project/sample (or test procedure), GC/MS organics results may or MAY NOT have been verified as to the presence and relative ratio of target ions (eg. the material causing the J flag "hit" in such situations may be nothing more than background ion-fragment noise.)

Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Ethylbenzene	J	See J-flag discussion above.

Notes:

3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

ANALYSIS
INC

Client: Environmental Plus, Inc.
Attn: Pat McCasland
Address: 2100 Ave. O
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 140350 **Report Date:** 03/26/03
Project ID: 2002-10312
Sample Name: SELD6030703SSW
Sample Matrix: soil
Date Received: 03/12/2003 **Time:** 09:00
Date Sampled: 03/07/2003 **Time:** 11:50

REPORT OF ANALYSIS

Parameter	Result	Units	RQL ⁵	Blank	Date	Method ⁶	Data Qual ⁷	Prec. ²	Recov. ³	CCV ⁴	LCS ⁴
TPH by GC (as diesel)	<5	mg/Kg	5	<5	03/21/03	8015 mod.	---	4	122.4	121.2	107.6
TPH by GC (as diesel-ext)	---	---	---	---	03/21/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	03/21/03	8015 mod.	---	8.9	91.3	97.6	84.3
Volatile organics-8260b/BTEX	---	---	---	---	03/13/03	8260b	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	03/13/03	8260b	---	7.7	117.5	94	113.5
Ethylbenzene	<20	µg/Kg	20	<20	03/13/03	8260b	J	0.8	116.5	113	126.4
m,p-Xylenes	<20	µg/Kg	20	<20	03/13/03	8260b	---	0.4	119.5	118.6	127.2
o-Xylene	<20	µg/Kg	20	<20	03/13/03	8260b	---	7.7	109.8	116.6	128.5
Toluene	<20	µg/Kg	20	<20	03/13/03	8260b	---	8.9	125.1	103.3	118.7

QUALITY ASSURANCE DATA¹

This analytical report is respectfully submitted by AnalySys, Inc. The enclosed results have been carefully reviewed and, to the best of my knowledge, the analytical results are consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program. © Copyright 2000, AnalySys, Inc., Austin, TX. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without the express written consent of AnalySys, Inc.

Respectfully Submitted,

Richard Laster

Richard Laster

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3512 Montopolis Drive, Austin, TX 78744 &
2209 N. Padre Island Dr., Corpus Christi, TX 78408
(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. Attn: Pat McCasland	Project ID: 2002-10312 Sample Name: SELD6030703SSW	Report#/Lab ID#: 140350 Sample Matrix: soil
---	---	--

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-chlorooctane	8015 mod.	111	50-150	---
p-Terphenyl	8015 mod.	101	50-150	---
1,2-Dichloroethane-d4	8260b	102	65-115	---
Toluene-d8	8260b	109	50-120	---

Data Qualifiers: D= Surrogates diluted and X= Surrogates outside advisory recovery limits.

Exceptions Report:

Report #/Lab ID#: 140350	Matrix: soil	Attn: Pat McCasland
Client: Environmental Plus, Inc.		
Project ID: 2002-10312		
Sample Name: SELD6030703SSW		

Sample Temperature/Condition <=6°C

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Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
Ethylbenzene	J	See J-flag discussion above.

Notes:

ANALYTICAL REPORT

Prepared for:

FRANK HERNANDEZ
EOTT ENERGY PIPELINE
P.O. BOX 1660
Midland, TX 79702

Project: Lovington 6" Deep Gathering
PO#: 2002-10312
Order#: G0306193
Report Date: 04/11/2003

Certificates

US EPA Laboratory Code TX00158

ENVIRONMENTAL LAB OF TEXAS

SAMPLE WORK LIST

EOTT ENERGY PIPELINE
P.O. BOX 1660
Midland, TX 79702
687-2713

Order#: G0306193
Project: 2002-10312
Project Name: Lovington 6" Deep Gathering
Location: None Given

The samples listed below were submitted to Environmental Lab of Texas and were received under chain of custody. Environmental Lab of Texas makes no representation or certification as to the method of sample collection, sample identification, or transportation/handling procedures used prior to the receipt of samples by Environmental Lab of Texas, unless otherwise noted.

<u>Lab ID:</u>	<u>Sample :</u>	<u>Matrix:</u>	<u>Date / Time</u> <u>Collected</u>	<u>Date / Time</u> <u>Received</u>	<u>Container</u>	<u>Preservative</u>
0306193-01	SELD64803CSP	SOIL	4/8/03 9:00	4/8/03 13:45	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 2.0 C		
	8015M					
	8021B/5030 BTEX					
0306193-02	SELD64803SSP	SOIL	4/8/03 9:15	4/8/03 13:45	4 oz glass	Ice
	<u>Lab Testing:</u>	Rejected: No		Temp: 2.0 C		
	8015M					
	8021B/5030 BTEX					

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

FRANK HERNANDEZ
EOTT ENERGY PIPELINE
P.O. BOX 1660
Midland, TX 79702

Order#: G0306193
Project: 2002-10312
Project Name: Lovington 6" Deep Gathering
Location: None Given

Lab ID: 0306193-01
Sample ID: SELD64803CSP

8015M

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
Blank	Prepared	Analyzed	Amount	Factor	CK	8015M
		4/9/03	1	1		

Parameter	Result mg/kg	RL
GRO, C6-C12	180	10.0
DRO, >C12-C35	1,090	10.0
TOTAL, C6-C35	1,270	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	102%	70	130
1-Chlorooctadecane	111%	70	130

8021B/5030 BTEX

<u>Method</u>	<u>Date</u>	<u>Date</u>	<u>Sample</u>	<u>Dilution</u>	<u>Analyst</u>	<u>Method</u>
Blank	Prepared	Analyzed	Amount	Factor	RKT	8021B
0005183-02		4/10/03	1	25		
		10:35				

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	0.117	0.025
Ethylbenzene	0.283	0.025
p/m-Xylene	1.55	0.025
o-Xylene	0.909	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	99%	80	120
Bromofluorobenzene	113%	80	120

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 1 of 2

ENVIRONMENTAL LAB OF TEXAS I, LTD. 12600 West I-20 East, Odessa, TX 79765 Ph: 915-563-1800

ENVIRONMENTAL LAB OF TEXAS

ANALYTICAL REPORT

FRANK HERNANDEZ
EOTT ENERGY PIPELINE
P.O. BOX 1660
Midland, TX 79702

Order#: G0306193
Project: 2002-10312
Project Name: Lovington 6" Deep Gathering
Location: None Given

Lab ID: 0306193-02
Sample ID: SELD64803SSP

8015M

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
		4/9/03	1	1	CK	8015M

Parameter	Result mg/kg	RL
GRO, C6-C12	495	10.0
DRO, >C12-C35	3,070	10.0
TOTAL, C6-C35	3,565	10.0

Surrogates	% Recovered	QC Limits (%)	
1-Chlorooctane	122%	70	130
1-Chlorooctadecane	138%	70	130

8021B/5030 BTEX

Method Blank	Date Prepared	Date Analyzed	Sample Amount	Dilution Factor	Analyst	Method
0005183-02		4/10/03 10:55	1	25	RKT	8021B

Parameter	Result mg/kg	RL
Benzene	<0.025	0.025
Toluene	0.815	0.025
Ethylbenzene	1.14	0.025
p/m-Xylene	5.89	0.025
o-Xylene	3.10	0.025

Surrogates	% Recovered	QC Limits (%)	
aaa-Toluene	157%	80	120
Bromofluorobenzene	117%	80	120

Approval: *Raland K. Tuttle* 4-12-03
 Raland K. Tuttle, Lab Director, QA Officer Date
 Celey D. Keene, Org. Tech. Director
 Jeanne McMurrey, Inorg. Tech. Director
 Sandra Biezugbe, Lab Tech.
 Sara Molina, Lab Tech.

DL = Diluted out N/A = Not Applicable RL = Reporting Limit

Page 2 of 2

ENVIRONMENTAL LAB OF TEXAS I, LTD.

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ENVIRONMENTAL LAB OF TEXAS**QUALITY CONTROL REPORT****8015M****Order#: G0306193**

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005165-02			<10.0		
CONTROL	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005165-03		952	803	84.3%	
CONTROL DUP	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005165-04		952	832	87.4%	3.5%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
TOTAL, C6-C35-mg/kg		0005165-05		1000	850	85.0%	

ENVIRONMENTAL LAB OF TEXAS

QUALITY CONTROL REPORT

8021B/5030 BTEX

Order#: G0306193

BLANK	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005183-02			< 0.025		
Toluene-mg/kg		0005183-02			< 0.025		
Ethylbenzene-mg/kg		0005183-02			< 0.025		
p/m-Xylene-mg/kg		0005183-02			< 0.025		
o-Xylene-mg/kg		0005183-02			< 0.025		
MS	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0306172-07	0.045	2.5	3.02	119.0%	
Toluene-mg/kg		0306172-07	0.432	2.5	3.12	107.5%	
Ethylbenzene-mg/kg		0306172-07	0.118	2.5	3.22	124.1%	
p/m-Xylene-mg/kg		0306172-07	0.522	5	6.35	116.6%	
o-Xylene-mg/kg		0306172-07	0.545	2.5	3.61	122.6%	
MSD	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0306172-07	0.045	2.5	2.65	104.2%	13.1%
Toluene-mg/kg		0306172-07	0.432	2.5	2.82	95.5%	10.1%
Ethylbenzene-mg/kg		0306172-07	0.118	2.5	3.03	116.5%	6.1%
p/m-Xylene-mg/kg		0306172-07	0.522	5	6.08	111.2%	4.3%
o-Xylene-mg/kg		0306172-07	0.545	2.5	3.52	119.0%	2.5%
SRM	SOIL	LAB-ID #	Sample Concentr.	Spike Concentr.	QC Test Result	Pct (%) Recovery	RPD
Benzene-mg/kg		0005183-05		0.1	0.104	104.0%	
Toluene-mg/kg		0005183-05		0.1	0.104	104.0%	
Ethylbenzene-mg/kg		0005183-05		0.1	0.103	103.0%	
p/m-Xylene-mg/kg		0005183-05		0.2	0.212	106.0%	
o-Xylene-mg/kg		0005183-05		0.1	0.100	100.0%	

CASE NARRATIVE

ENVIRONMENTAL LAB OF TEXAS

Prepared for:

EOTT ENERGY PIPELINE
P.O. BOX 1660
Midland, TX 79702

Order#: G0306193**Project: Lovington 6" Deep Gathering**

The following samples were received as indicated below and on the attached Chain of Custody record. All analyses were performed within the holding time and with acceptable quality control results unless otherwise noted.

SAMPLE ID	LAB ID	MATRIX	Date Collected	Date Received
SELD64803CSP	0306193-01	SOIL	04/08/2003	04/08/2003
SELD64803SSP	0306193-02	SOIL	04/08/2003	04/08/2003

Surrogate recoveries on 8015 TPH and 8021B BTEX are outside control limits due to matrix interference from coeluting compounds. (G0306193-02)

The enclosed results of analyses are representative of the samples as received by the laboratory. Environmental Lab of Texas makes no representations or certifications as to the methods of sample collection, sample identification, or transportation handling procedures used prior to our receipt of samples. To the best of my knowledge, the information contained in this report is accurate and complete.

Approved By:

Raland K. J. Webb
Environmental Lab of Texas I, Ltd.

Date:

4-12-03

12600 West I-20 East
Odessa Texas 79763
Phone: 915-563-1800
Fax: 915-563-1713

Project Name: Lovington 6" Deep Gathering

Project #: 2002-10312

Project Loc:

PO#:

1

ATTACHMENT IV: VADSAT RISK ASSESSMENT INFORMATION

VADSAT Version 3.0
A Monte Carlo Model for Assessing the Effects of Soil
Contamination on Groundwater Quality

Developed by: Environmental Systems and Technologies Inc.
Blacksburg, Virginia
Tel: 703-552-0685, Fax: 703-951-5307

for the
American Petroleum Institute

1995

PROJECT TITLE: EOTT Lovington Deep 6"

SOURCE AND CHEMICAL DATA ****

FKSWM, MEAN WASTE ZONE SAT. CONDUCT. (m/day) = 0.00000
 SDFKSW, STD.DEV. OF WASTE ZONE SAT. CONDUCT. = 0.00000

DEPTHM, MEAN THICKNESS OF WASTE ZONE (m) = 15.24000
 DEPSTD, STD.DEV. OF THICKNESS OF WASTE ZONE = 0.00000

AREAM, MEAN WASTE ZONE AREA (m²) = 744.90002
 STDA, STD.DEV. OF WASTE ZONE AREA = 0.00000

RLWM, MEAN L/W RATIO (-) = 1.00000
 STDRLW, STD.DEV. OF L/W RATIO = 0.00000

CVRTHM, MEAN VALUE OF COVER THICKNESS (m) = 3.04800
 CVRTHS, STD.DEV. OF COVER THICKNESS = 0.00000

KOCM, MEAN ORG. CARBON PARTITION COEF (cm³/g) = 83.20000
 STDKOC, STD.DEV. OF ORG. CARBON PARTITION COEF = 0.00000

FMOLM, MEAN INIT. VOL. FRAC. OF CONTAMINANT (-) = 0.03067
 FMOLSTD, STD.DEV. OF VOL. FRAC. OF CONTAMINANT = 0.00000

CMFM, MASS OF CONTAMINANT PER MASS OF WASTE (mg/kg) = 257.00000
 CMFSD, STD.DEV. OF MASS CONTAMINANT PER MASS WASTE = 0.00000

HCCONM, HYDROCARBON MASS FRAC. IN WASTE (mg/kg) = 8380.00000
 HCCONS, STD OF HYDROCARBON MASS FRAC. IN WASTE = 0.00000

CHEMICAL SPECIES: Benzene

MOLW, MOLECULAR WT. OF CONTAMINANT (g/mole) = 78.10000

AVERMW, AVG. MOL. WT. OF OILY WASTE (g/mole) = 100.00000

RHO, DENSITY OF CONTAMINANT (g/cm³) = 0.87600

RHOG, AVERAGE DENSITY OF HYDROCARBON (g/cm³) = 0.90000

SOL, AQUEOUS SOLUB. OF CONTAMINANT (g/m³) = 1790.00000

HENRYC, HENRY'S CONSTANT (-) = 0.23000

DIFFA, DIFFUSION COEF. IN FREE AIR (m²/day) = 0.77000

HYDROGEOLOGICAL PROPERTIES

***** UNSATURATED ZONE INPUT PARAMETERS *****

GAMMAM, MEAN UNSAT ZONE DECAY COEF (1/day) = 0.00010

STDGAM, STD.DEV. OF UNSAT ZONE DECAY COEF = 0.00000

UNFOCM, MEAN UNSAT ZONE ORGANIC CARBON FRACTION (-) = 0.00000

UNFOCS, STD.DEV. OF UNSAT ZONE ORGANIC CARBON FRAC. = 0.00000

FKSW, MEAN SAT. CONDUCTIVITY (m/day) = 0.02900

STDFKS, STD.DEV. OF SAT. CONDUCTIVITY = 0.000

DISTM, MEAN DEPTH TO GROUNDWATER (m) = 1.52400

STDDST, STD.DEV. OF DEPTH TO GROUNDWATER = 0.00000

UNPORM, MEAN VADOSE ZONE POROSITY (-) = 0.38000

SUNPOR, STD.DEV. OF VADOSE ZONE POROSITY = 0.00000

PARNM, MEAN VALUE OF VG PARAMETER N (-) = 1.23000

SDPARN, STD.DEV. OF VG PARAMETER N = 0.00000

RESWCM, MEAN RESIDUAL WATER CONTENT (-) = 0.01110

RESWCS, STD.DEV. OF RESIDUAL WATER CONTENT = 0.00000

ALFINM = 0, UNSAT DISPERSIVITY CALCULATED INTERNALLY

***** SATURATED ZONE INPUT PARAMETERS *****

LAMBW, MEAN SAT. ZONE DECAY COEFF. (1/day) = 0.00010

SLAMB, STD.DEV. OF SAT. ZONE DECAY COEFF. = 0.00000

PORM, MEAN SAT. ZONE POROSITY (-) = 0.20000

STDPOR, STD.DEV. OF SAT. ZONE POROSITY = 0.00000

FOCM, MEAN SAT. ZONE ORG. CARBON FRAC. (-) = 0.00000

STDFOC, STD.DEV. SAT. ZONE ORG. CARBON FRAC. = 0.00000

ALRLTM, MEAN DISPERS. RATIO LONG/TRANSV. (-) = 3.00000

SALRLT, STD.DEV. OF DISP. RATIO LONG/TRANSV. = 0.00000

ALRTVM, MEAN DISPERS. RATIO TRANSV/VERT. (-) = 87.00000

SALRTV, STD.DEV. OF DISP. RATIO TRANSV/VERT. = 0.00000

CONDS, SAT. HYDRAULIC COND. (m/day) = 1.03000

SCONDS, STD.DEV. OF SAT HYDRAULIC COND. = 0.00000

GRADS, HYDRAULIC GRADIENT (m/m) = 0.02700

SGRADs, STD.DEV. OF HYDRAULIC GRADIENT = 0.00000

HMEAN, MEAN AQUIFER THICKNESS (m) = 15.24000

STDH, STD.DEV. OF AQUIFER THICKNESS	=	0.00000
QINM, MEAN INFILTRATION RATE (m/day)	=	0.00011
QINST, STD.DEV. OF INFILTRATION RATE	=	0.00000