AP - 37

STAGE 1 & 2 REPORTS

DATE: 8/2004

PLAINS
ALL AMERICAN
PIPELINE, L.P.

STAGE 1 AND STAGE 2 ABATEMENT PLAN

Revision #1

FOR THE

LOVINGTON DEEP 6"

Ref. # 2002-10312

SE¼ of the NE¼ Unit Letter H
Section 6, T17S, R36E,
approximately 5 miles south Lovington
Lea County New Mexico
Latitude: 32° 52' 1.132" N Longitude: 103° 23' 16.570"W

August 2004

Prepared by

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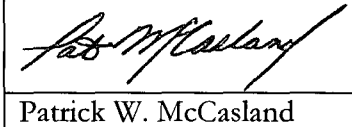
STANDARD OF CARE

Environmental Assessment and Remediation Report

LOVINGTON DEEP 6"
REF. # 2002-10312

The information provided in this report was collected consistent with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993), the NMOCD Unlined Surface Impoundment Closure Guidelines (February 1993), and the Environmental Plus, Inc. (EPI) Standard Operating Procedures and Quality Assurance/Quality Control Plan. The conclusions are based on field observations and laboratory analytical reports as presented in the report. Recommendations follow NMOCD guidance and represent the professional opinions of EPI staff. These opinions were arrived at with currently accepted geologic, hydrogeologic and engineering practices at this time and location. The report was prepared or reviewed by a certified or registered EPI professional with a background in engineering, environmental, and/or the natural sciences.

This report was prepared by:		
		August 2, 2004
Patrick W. McCasland		Date
This report was reviewed by:		
Iain Olness, P.G. Hydrogeologist		Date

1.0 PURPOSE OF REVISION

The purpose of this revision is to correct date errors in the data summaries, provide a more detailed discussion of vertical stratification of the site relative to the New Mexico Oil Conservation Division (NMOCD) ranking criteria, supplement the current risk assessment with a computer generated model that simulates the efficacy or need for additional removal of 10 vertical feet of impacted soil, clarify monitor well numbering, and propose an emplacement criteria for the partially remediated excavated soil intended to be used as backfill that relies on EPA SW 846 Method 1312 Synthetic Precipitation Leaching Procedure (SPLP) to determine the leachability of residual Total Petroleum Hydrocarbon 8015m (TPH^{8015m}) and BTEX, i.e., the mass sum of Benzene, Toluene, Ethyl Benzene, and m, o, & p Xylenes using EPA method 8020. References to EOTT Energy and Link Energy should be considered synonymous with Plains All American Pipeline, the current owner of the site.

2.0 INTRODUCTION

Environmental Plus, Inc. (EPI) on behalf of Ms. Camille Reynolds, District Environmental Supervisor, Link Energy, submits this Stage 1 and Stage 2 Abatement Plan to the NMOCD for the continuing investigation and remediation of the Link Energy Lovington Deep 6" Ref.#2002-10312. This plan will serve as a "Work Plan Supplement" referenced in the draft "General Work Plan for Remediation of EOTT Pipeline Spills, Leaks, and Releases in New Mexico" approved by the New Mexico Oil Conservation Division (NMOCD) on August 1, 2000, and will supplement the previously submitted and approved work plan that addresses soil remediation at the site, i.e., EOTT Energy Soil Remediation and Risk Assessment Proposal, Lovington Deep 6" Ref. # 2002-10312, July 21, 2003. During site delineation, phase separated hydrocarbon (PSH) was observed on the surface of the groundwater at approximately approximately 65'bgs in excess of 20 NMAC 6.2.3103, i.e., "Non-aqueous phase liquid shall not be present floating atop or immersed within groundwater, as can be reasonably measured." Link subsequently notified the landowner and the NMOCD offices in Santa Fe and Hobbs, New Mexico on December 30, 2002. The Stage 1 and Stage 2 Abatement Plans are being submitted together to facilitate coincident development of investigatory boreholes into monitor, pollution abatement, extraction or fluid recovery well locations as site remediation progresses.

3.0 "RESPONSIBLE PERSON"

The "Responsible Person" for the Stage 1 and Stage 2 Abatement Plans is:

Ms. Camille Reynolds
District Environmental Supervisor
Link Energy
5805 East Highway 80
PO Box 1660
Midland, Texas 79702

4.0 STAGE 1 ABATEMENT PLAN

The initial form C-141 submitted to the NMOCD by Link Energy, formerly EOTT Energy and currently Plains All American Pipeline, reported that approximately 25 bbls barrels of crude oil was released with 10 bbls barrels recovered. Initial remediation activities included excavation and disposal of 1,102 cubic yards (yd^3), i.e., contaminated soil within the visible spill area to approximately 3 feet below ground surface ('bgs). Subsequent to the initial response activities, approximately 10,500 yd^3 of visibly contaminated soil from a depth of approximately 3'bgs in the flowpath to a depth of

approximately 14'bgs in and around the leak origin was excavated and stockpiled on site. This soil was processed through a mechanical soil shredder to aerate and separate landfarmable soil from rock and is now temporarily stockpiled on site. The soil remediation work plan approved by the NMOCD in August 2003, i.e., EOTT Energy Soil Remediation and Risk Assessment Proposal, Lovington Deep 6" Ref. # 2002-10312, July 21, 2003, provides details of the soil investigation and 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 (API) VADSAT 3.0 computer model.

4.1 Background

The Link Energy site reference identification number is #2002-10312. The crude oil leak was discovered, repaired, and reported on 12-12-02@ 10:00 AM and estimated to be approximately 25 bbls barrels with 10 bbls barrels recovered.

4.2 Initial Spill Mitigation

Environmental Plus, Inc. of Eunice, New Mexico responded to the release and mitigated the spill. Link personnel repaired the leak.

4.3 Stage 1 Abatement Plan Objectives as per New Mexico Oil Conservation Division Regulation 19.E(3)

Using site delineation information, Link developed the EOTT Energy Soil Remediation and Risk Assessment Proposal, Lovington Deep 6" Ref. # 2002-10312, July 21, 2003. This plan satisfies the requirements of the Stage I Abatement Plan and provides adequate information to develop the Stage II Abatement Plan, i.e., characterized the horizontal and vertical extents of hydrocarbon impact in the vadose zone and groundwater and identified site-specific geologic and hydrologic metrics. The Quality Assurance Plan included as Attachment III, guided implementation of critical protocols and ensured credibility and usability of all data and information. The primary objective of this investigation was to collect adequate information to bound the vertical and horizontal extent of crude oil contamination in the vadose zone and initially determine the areal distribution in the groundwater underlying the site. This Abatement Plan provides the following information;

- Designates "responsible person" relative to plan submittal
- Describes and maps site, provides historical information including previous investigations
- Characterizes Site:
  1. Define Geology and Hydrogeology, i.e., Hydraulic Conductivity, Transmissivity, and Storativity
  2. Determines vertical and horizontal extent and magnitude of vadose-zone and groundwater contamination.
     a) Collects discrete soil samples with a sample probe from depths as necessary below ground surface (bgs) to determine vertical extent of hydrocarbon contamination.
     b) Screens all samples using a Photoionization Detector (PID) and records results.
     c) Analyzes all samples for Total Petroleum Hydrocarbon (TPH^{8015m}), i.e., Gasoline Range Organics (GRO) and Diesel Range Organics (DRO) using EPA method 8015M and Benzene, Toluene, Ethyl Benzene, and m, o, & p Xylenes (BTEX) using EPA method 8020.
     d) When appropriate, selected soil samples will be analyzed for TPH^{8015m} and BTEX by standard methods after undergoing the Synthetic Precipitation Leaching Procedure (SPLP) as prescribed in EPA SW 846 Method 1312.

3. Determine rate and direction of contaminant migration.
4. Provide inventory of water wells inside and within one (1) mile from the perimeter of the three-dimensional body where the standards are exceeded.
5. Provide location and number of wells actually or potentially affected by the impact.
6. Define surface-water hydrology.
7. Determine seasonal stream flow characteristics.
8. Determine groundwater/surface water relationships.
9. Determine the vertical and horizontal extent and magnitude of contamination and impacts to surface water and stream sediments.

- Establish Monitoring Program
  1. Sampling station locations
  2. Sampling frequencies
- Establish a Quality Assurance Plan consistent with 20 NMAC 6.3107.B and 20 NMAC 6.1 for all work pursuant to this abatement plan.
- Submit a schedule of Stage 1 abatement plan activities, i.e., submission of quarterly progress reports and the detailed final site investigation report.

4.3.1 Project Organization and Responsibility

Environmental Plus, Inc., Eunice, New Mexico (EPI) conducted the field investigation with Link personnel providing operational support and coordination. AnalySys, Inc. of Austin, Texas performed the laboratory analyses and provided analytical reports.

4.3.2 Project Safety

Hazards at this site included the following;

- Moving equipment
- Buried pipelines
- Rotary Equipment
- Highway ingress/egress
- Excavation
- Potential Hydrogen Sulfide Gas

Employees and subcontractors will be required to confirm current training in these hazards. Standard personal protective equipment will include;

- Personal H_2S Monitor
- Safety glasses with side shields
- Hard-hat
- Steel Toed Boots/Shoes and gloves

Prior to drilling or excavation, NEW MEXICO ONE CALL was and will be notified of activities, which will then provide a list of Companies they will notify and a ONE CALL confirmation number.

4.3.3 Site Description

Driving Directions: From the intersection of New Mexico State Roads 18 and 82 in Lovington, New Mexico, go south on 18 for 7.0 miles, then right on Lea County Stiles Road 6.6 miles, then right 0.7 miles to work location.

4.3.3.1 Historical Use

The area has been used historically for livestock grazing and access to oil and gas production facilities.

4.3.3.2 Legal Description

The site is owned by Darr Angell and located approximately 5 miles south of Lovington, Lea County, New Mexico in the SE¼ of the NE¼ in Unit Letter H of Section 6, T17S, R36E at latitude 32° 52' 1.132" N and longitude 103° 23' 16.570"W.

4.3.3.3 Photographic documentation

Photographs are provided in Attachment II.

4.3.3.4 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 (Querqus 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.

4.3.4 Environmental Media Characterization

Chemical parameters of the soil and groundwater were and will be characterized consistent with the NMOCD guidelines published in the following documents as applicable;

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

Normally acceptable thresholds for contaminants of concern (CoC), i.e., TPH and BTEX are determined based on the following;

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

Notwithstanding, site specific risk based thresholds may be developed and supported with a conservative risk assessment.

4.3.4.1 Area Groundwater Levels

Groundwater was encountered at approximately 65'bgs during the preliminary site investigation and is consistent with the New Mexico Office of the State Engineer records database.

4.3.4.2 Water Well Inventory

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 be 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
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	?	?	?

4.3.4.3 Water Wells Actually or Potentially Affected by the Impact

There are no known water wells currently at risk from the crude oil impact.

4.3.4.4 Geology

According to "Ground-Water Report 6, Geology and Ground-Water Conditions in Southern Lea County, New Mexico, A. Nicholson, Jr. and A. Clebsch, Jr., United State Geological Survey, 1961," (USGS Report #6) the Ogallala formation mantles the High Plains Physiographic Region in the area of Lea County north of Hobbs, New Mexico, where it ranges in thickness from 100 to 250 feet. The saturated thickness of the Ogallala formation on the High Plains ranges from 25 feet to 175 feet because of the very irregular Triassic erosion surface which underlies it. The Ogallala sands are overlain with an indurated and fractured calcium carbonate caliche cap up to 18 meters thick. The hydraulic conductivity of the fine to medium Ogallala sand ranges from 1 to 10 gallons per day/ft^2.

4.3.4.5 Aquifer Recharge

Soil borings identified a 6" surface layer of sandy clay loam, underlain by a 20' thick interbed of indurated and fractured caliche that overlays the fine to medium grained sand of the Ogallala Formation. No impermeable clay interbeds were encountered down to saturation, suggesting that the upper most unconfined aquifer is capable of being recharged from the surface. This observation is consistent with USGS Report #6, i.e., "The recharge of the Ogallala on the High Plains is due entirely to precipitation, as the formation is topographically high and isolated."

4.3.4.6 Depth to Groundwater Calculation

The NMOCD requires the site be ranked to determine which soil TPH remedial goals will apply and defines depth to groundwater as, "the vertical distance from the lowermost contaminants to the seasonal high water elevation of the groundwater." The uppermost occurrence of groundwater is at approximately 65'bgs. The lower most contamination occurs at the interface of the vadose zone and the water table. The calculated NMOCD depth to groundwater is essentially 0.0' bgs since the lowermost contamination occurs at the groundwater interface.

4.3.4.7 Groundwater Gradient

The monitor wells installed at the site were surveyed and the groundwater gradient trigonometrically determined to be 45° from north, i.e., to the northeast. The calculated groundwater gradient of 0.005 feet/foot gives a maximum groundwater transport velocity of 0.25 feet per day or 91.25 feet per year, assuming a hydraulic conductivity of 10 gallons per day/ft^2 and an effective porosity of 0.2., i.e.,

$$(0.005 \times 10) \div 0.2 = 0.25 \textbf{ feet per day or } \textbf{91.25 feet per year}$$

As groundwater monitoring information is collected and plume movement determined, the groundwater transport velocity will be better defined. Refer to the groundwater gradient map and engineered survey in Attachment I.

4.3.4.8 Wellhead Protection Area

There are no water wells within 1,000' horizontal feet of the site.

4.3.4.9 Distance to Nearest Surface Water Body

There are no surface water bodies within 1,000' horizontal feet of the site.

4.3.4.10 Seasonal Stream Flow Characteristics

There are no streams or well defined drainages located near the site.

4.3.5 Delineation of Nature, Extent, and Magnitude of Contamination (19NMAC15.A.19.E(3)(b)(i), (ii))

Refer to the previously submitted document, EOTT Energy Soil Remediation and Risk Assessment Proposal, Lovington Deep 6" Ref. # 2002-10312, July 21, 2003, for delineation details.

4.3.5.1 Highly Contaminated/Saturated Soils

The highly contaminated/saturated soils occurred in the near surface and have either been disposed of off-site or attenuated by the mechanical shredding process. A total of 1,102 cubic yards of saturated soils were excavated and disposed of in the NMOCD approved and permitted South Monument Surface Waste Management Facility #NM-01-0032. The limits of the shallow highly impacted soils have successfully remediated by excavation and disposal or treatment.

4.3.5.2 Unsaturated Contaminated Soils

Approximately 10,500 yd^3 of the unsaturated impacted soils have been excavated and mechanically shredded and are stockpiled on site pending use as backfill. The remaining unsaturated impacted soils represent an area known as the leak zone and occurs in the immediated vicinity beneath the leak origin. The exact dimensions of this leak zone area have not been defined; however, the upper portion of the zone appears to have been delineated during excavation of the upper 14 feet of soil from the leak zone. Experience show that these leak zones are typically spherical in shape and follow vertical fractures to the groundwater. The estimated surface dimension of the remaining impacted soil is approximately 120 feet east to west and 60 feet north to south. The TPH concentrations of the soils remaining in place range from 6,300 mg/Kg at 15'bgs diminishing vertically to 2,601 mg/Kg at 55'bgs, the lower most viable sampling point above the saturated zone. This plan proposes additional soil boring to further delineate the extent of unsaturated soils.

4.3.5.3 Groundwater Contamination

The groundwater at this site is impacted. A total of five monitor wells have been installed at the site. One monitor wells was installed near the leak origin, two monitor wells were installed in what was the assumed down gradient direction (assumed gradient was the regional gradient which is to the southeast), one monitor well was installed upgradient and one monitor well was installed cross-gradient. Phase separated hydrocarbon (PSH) is present in monitor well MW2 and as of April 14, 2004 the measured PSH thickness was 6.74 feet. The benzene concentrations in the remaining wells range from 26.2 µg/L in MW4 approximately 125 feet southeast of MW2 to 4,600 µg/L in MW3 approximately 60 feet southeast of MW2. This plan proposes additional groundwater monitor wells to delineate the extent of PSH and dissolved phase constituents.

4.3.5.4 Other Relevant Media Contamination

Other than the soil and groundwater, there are no other media contaminated.

4.3.5.5 Background (Up-gradient) Sample Results

A near surface background soil sample has not been collected up gradient of the site but is assumed to be unimpacted. A background water sample has not been collected as of yet and it is assumed that upgradient background concentrations will also be unimpacted.

4.3.6 Identification of Benchmark Remedial Action Levels

Remedial goals for soil in this area are based on NMOCD site ranking and are relative to the proximity to groundwater and surface water bodies and water wells within 1,000 horizontal feet of the site. No surface water bodies or water wells have been identified within 1,000 horizontal feet of the site. These benchmark remedial goals may be increased if justified through risk assessment.

4.3.6.1 Site Ranking and Benchmark Soil Remediation Action Levels

During the preliminary investigation, groundwater was measured at approximately 65'bgs giving soil to the 15'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}) 1,000 mg/Kg

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

- Benzene 10 mg/Kg
- BTEX 50 mg/Kg
- TPH^{8015m} 100 mg/Kg

4.3.6.2 Groundwater Remedial Action Levels

The groundwater remedial action levels for this site are consistent with the New Mexico Water Quality Control Commission (WQCC) groundwater Maximum Contaminant Levels for the CoCs. The following WQCC groundwater standards will apply to the site;

- Benzene - 0.01 mg/L (10.0 µg/L)
- Ethylbenzene - 0.75 mg/L (750 µg/L)
- Xylenes Total - 0.62 mg/L (620 µg/L)
- Toluene - 0.75 mg/L (750 µg/L)

4.3.7 Proposed Borehole Sampling Locations

A large portion of the contaminated soil has been removed from the surface and subsurface. Additional boreholes, if deemed appropriate, will be utilized to identify the horizontal extent of impacted soils in the vicinity of the leak zone to delineate the extent of PSH in the groundwater, and to delineate the extent of dissolved phase constituents in the groundwater.

4.3.8 Monitoring Program (19NMAC15.A.19.E(3)(c)

The groundwater will be monitored quarterly is a part of the Stage 2 Abatement Plan Groundwater Monitoring Program. The monitor wells installed at the site will be sampled at least quarterly for the BTEX compounds. Product extracted/recovered volumes will be routinely logged and reported along with disposition information. The remediation systems installed at the site will be checked at least every two weeks. Data will be summarized into an annual report documenting progress and status and submitted to the NMOCD Environmental Bureau Santa Fe and Hobbs offices. Currently, PSH is being recovered manually on a biweekly basis from MW2 and the monitor wells without PSH are sampled quarterly. Monitor wells PSH and groundwater levels are collected and logged during each reconnaissance.

4.3.9 Schedule for Stage 1 Abatement Plan Implementation

The NMOCD approved soil remediation work plan, i.e., EOTT Energy Soil Remediation and Risk Assessment Proposal, Lovington Deep 6" Ref. # 2002-10312, July 21, 2003 is the basis and is being supplanted by this Stage I Abatement Plan with final implementation upon NMOCD approval. The initial subsurface soil investigation and excavation activities conducted to date have delineated the areal distribution of the hydrocarbon impacted soils and provided partial information regarding the distribution of PSH and dissolved phase constituents.

5.0 Stage 2 Abatement Plan

The objective of the Stage 2 Abatement Plan will be to abate soil and groundwater contamination to acceptable levels as delineated and identified during site delineation. The information collected to date provides information sufficient to select an abatement strategy and develop a remediation plan for the site.

5.1 Preliminary Soil Investigation and Remediation Strategy

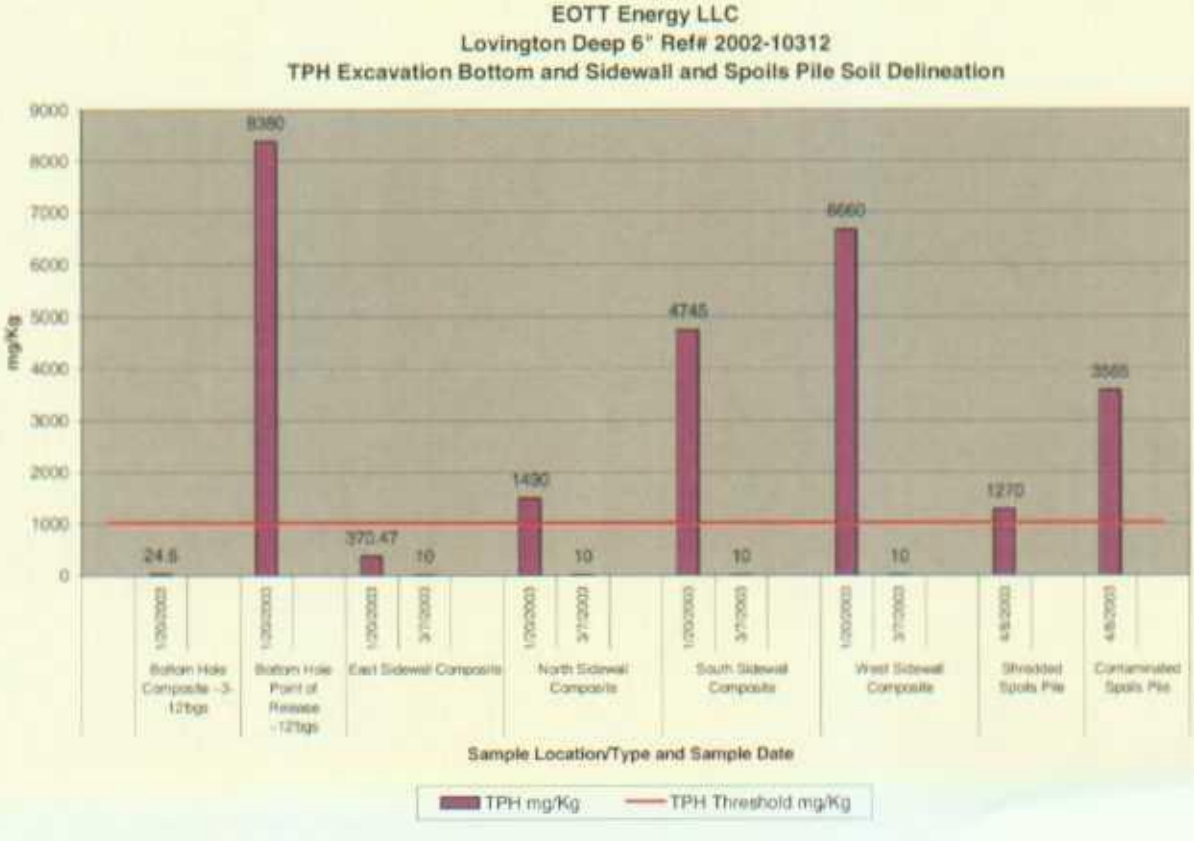
Based on information collected during the preliminary soil delineation phase of the project, Link proposes to isolate the remaining crude oil source term by installing an engineered and tested clay barrier supported by a computer simulated risk assessment using the American Petroleum Institute (API) VADSAT 3.0 computer model. The comprehensive risk assessment is provided in the Link document approved by the NMOCD in September 2003, Soil Remediation and Risk Assessment Proposal for the Lovington Deep 6", Ref. # 2002-10312, July 21, 2003 and is summarized below. This report also includes model output that simulates CoC migration after the removal of an additional 10 vertical feet of impacted soil.

5.1.1 Subsurface Soil Investigation

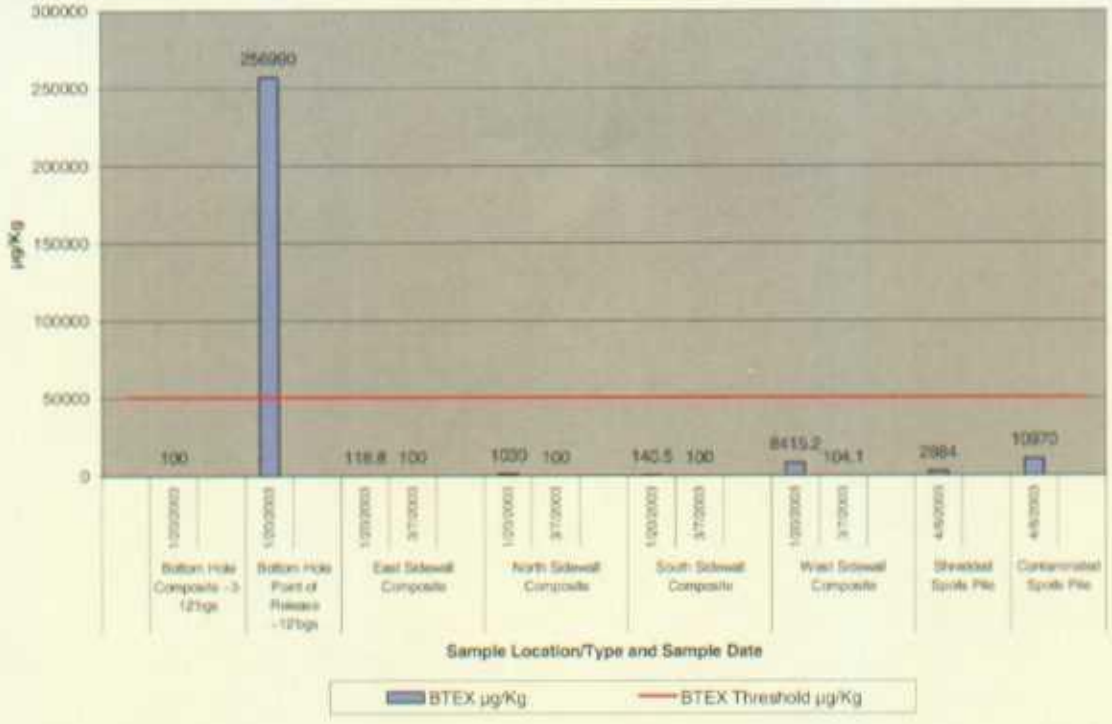
The initial investigation advanced and sampled 6 boreholes, 5 of which were converted into observation/monitor wells. Soil from Borehole 1 (BH1) at the leak origin, was impacted to the groundwater interface where product was observed floating atop the aquifer. BH1 was developed into a 4" PVC case recovery well, i.e., MW2. BH2, BH4, BH5, and BH6 were advanced and sampled at perimeter locations and, to bound the extent of the PSH and dissolved phase hydrocarbon groundwater impact, installed as observation/monitor wells, i.e., respectively,

- MW3(BH2/initially MW2) approximately 65' southeast transverse gradient of the leak origin,
- MW5(BH4/initially MW3) approximately 150' upgradient from the leak origin,
- MW4(BH5/initially MW4) approximately 125 southeast transverse gradient to the leak origin, and
- MW1(BH6/initially MW5) approximately 100' northwest transverse gradient to the leak origin.

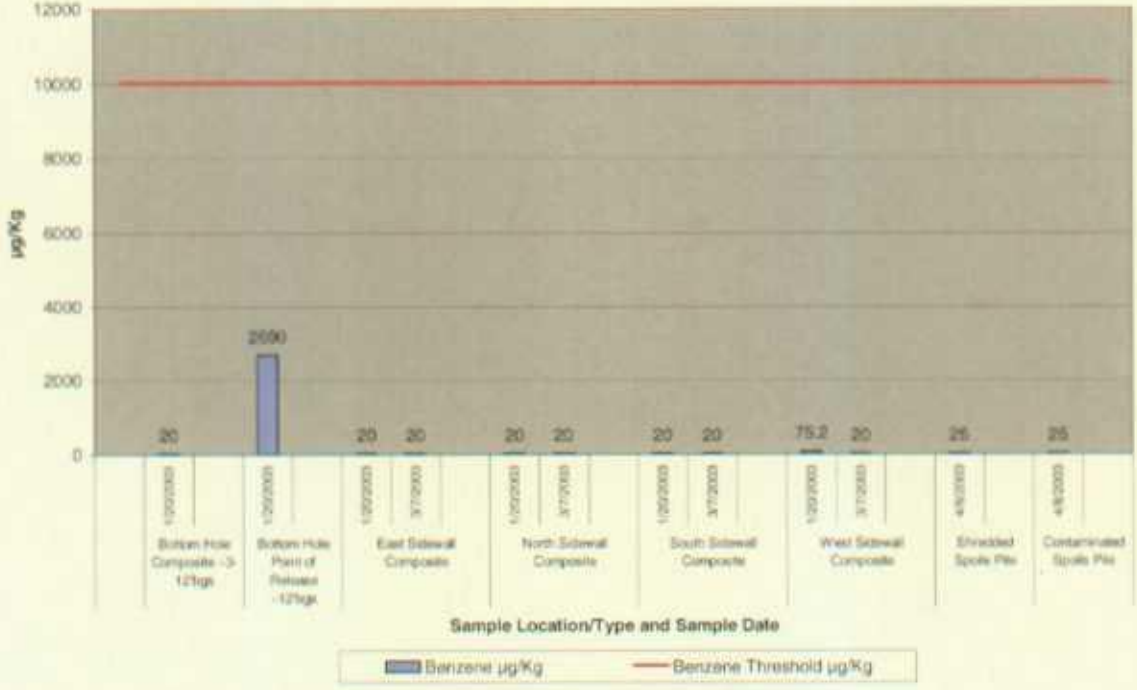
Refusal was initially encountered at BH3 with BH4 being successfully advanced in the same area. Soil sample analytical data in soil borings BH2 through BH6 were below the NMOCD soil remedial guideline thresholds. During excavation of the contaminated soil, the horizontal extent of CoC impact was observed to taper from the visible surface spill perimeter to the area immediately below the leak origin. The visible surface area perimeter of the top of the impacted soil column at 10'bgs to 13'bgs is 8,018 ft^2 located in the south end of the 19,230 ft^2 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.



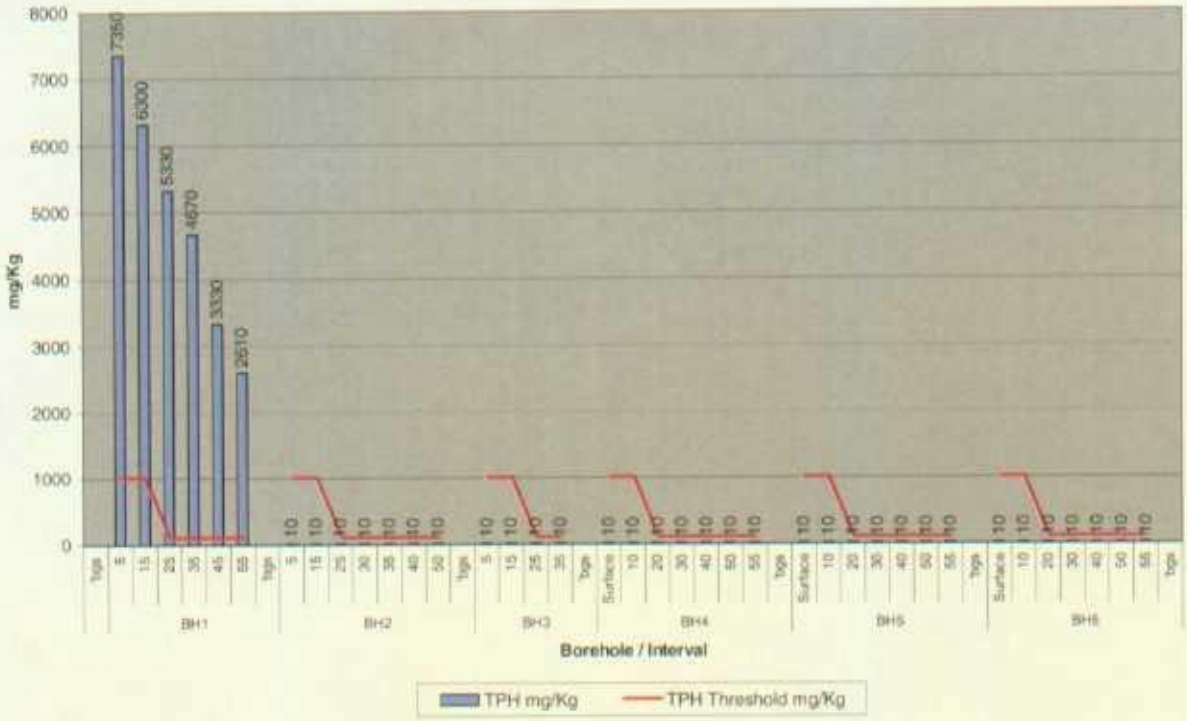
EOTT Energy LLC
Lovington Deep 6" Ref# 2002-10312
Excavation Bottom and Sidewall and Spoils Pile Soil BTEX Delineation



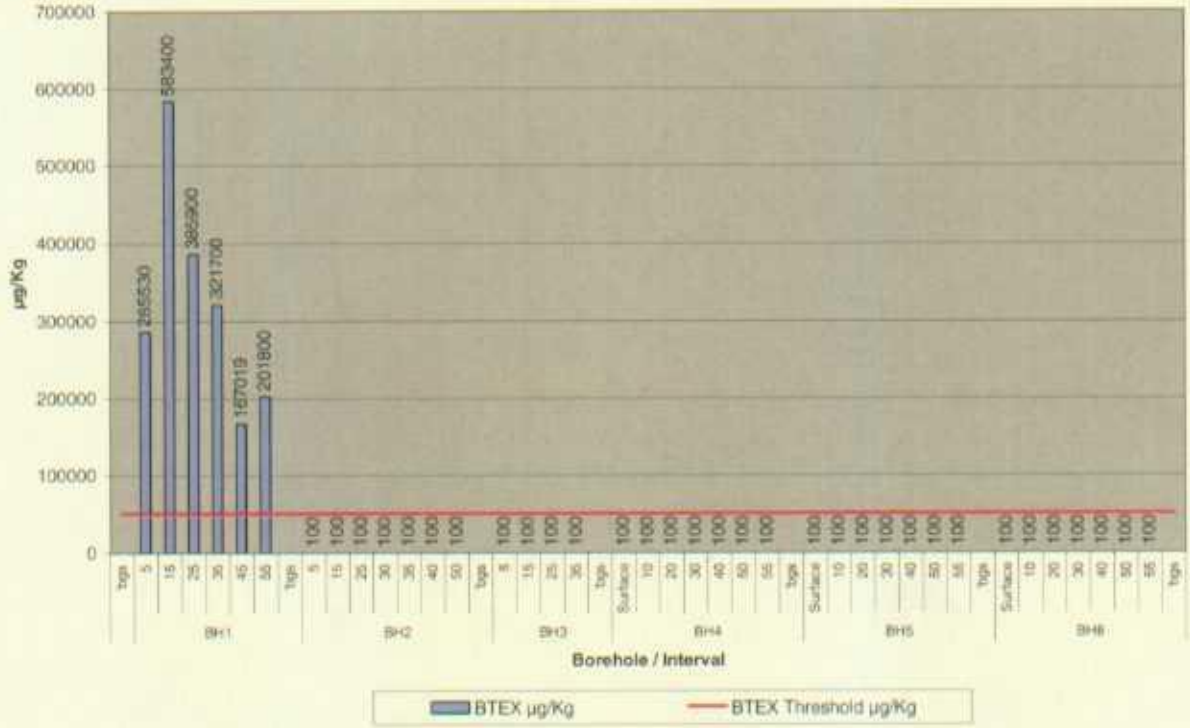
EOTT Energy LLC
Lovington Deep 6" Ref# 2002-10312
Excavation Bottom and Sidewall and Spoils Pile Soil Benzene Delineation

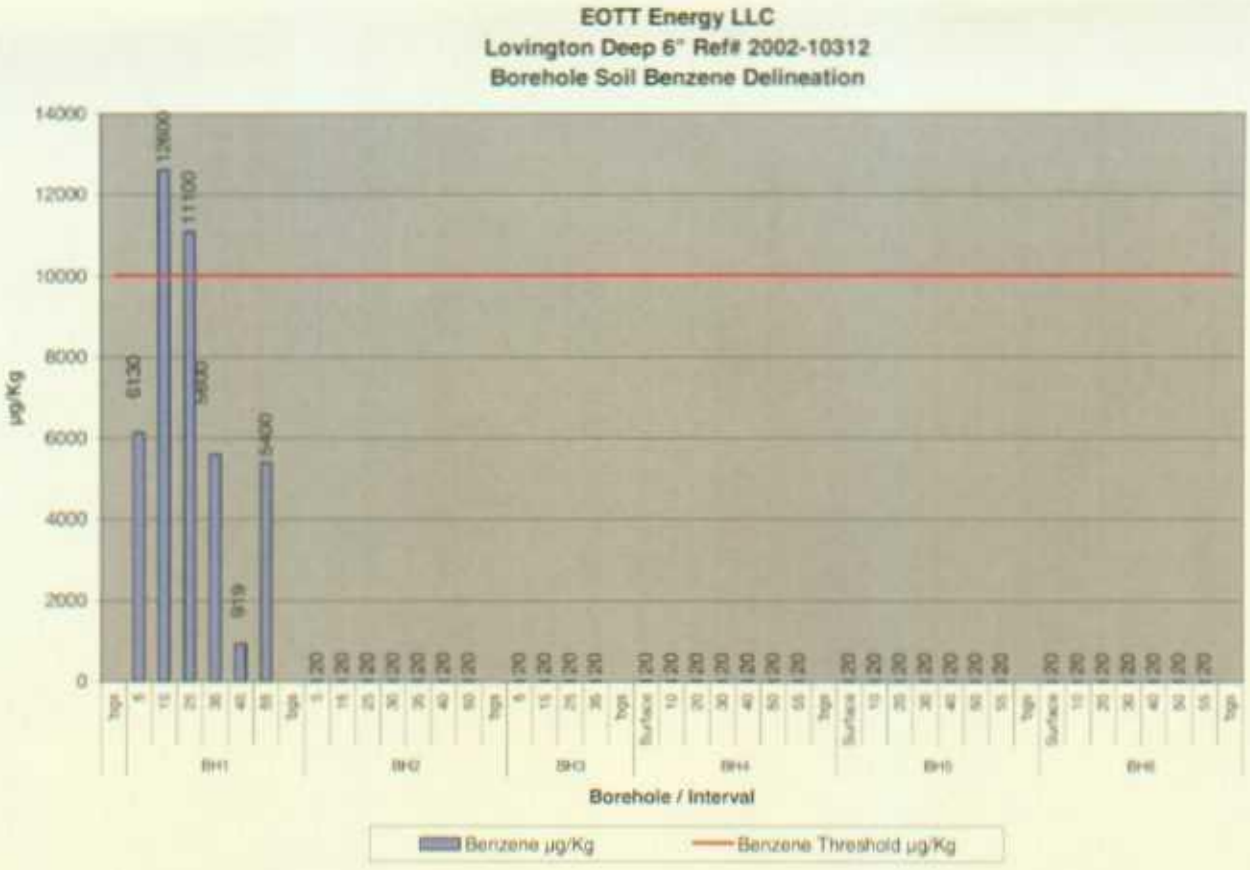


EOTT Energy LLC
Lovington Deep 6" Ref# 2002-10312
TPH Borehole Soil Delineation



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





5.2 Soil Remediation and Risk Assessment Proposal

Impacted soil in the area of the leak origin down to the 13'bgs interval has been excavated with 1,102 yd^3 disposed and the remaining 10,500 yd^3 processed through a mechanical 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;

	TPH[8015m]	BTEX	Benzene
Units	mg/Kg	µg/Kg	µg/Kg
Processed Spoils Pile Soil 4-8-03	1270	2884	<25
Contaminated Spoils Pile Soil 4-8-03	3565	10970	<25

The excavation exposed the top of the contaminated leak zone 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 ft^2 at the surface tapering from approximately 13'bgs to approximately 65'bgs, the groundwater interface. The perimeter soil borings suggesting no impact also support the conceptual model. Bottom and sidewall samples indicate that soil down to approximately 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 and summarized and presented in Attachment III;

	TPH[8015m]	BTEX	Benzene
Units	mg/Kg	µg/Kg	µg/Kg
Excavation Bottom - Point of Release	8380	256990	2690

5.2.1 VADSAT version 3.0 Risk Assessment

Based on information collected during the soil delineation phase of the project, Link 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 were used to maximize force of transport, i.e., 8380 mg/Kg and 257.0 mg/Kg, respectively. The BTEX mass was substituted for Benzene, the parameter of transport. Likewise, the infiltration rate, i.e., 0.00011 m/day, was inputted as positive to accommodate the model, when in reality the local evaporation rate is negative. Given that the groundwater has already been impacted by crude oil, the depth of contamination was set at 1.524 meters above the groundwater interface. Simulations are provided for a waste zone thickness of 15.24 meters, representing the current excavated level, and 12.24 meters, that represents an additional removal of 10' of soil. The model input variables are presented in Attachment V.

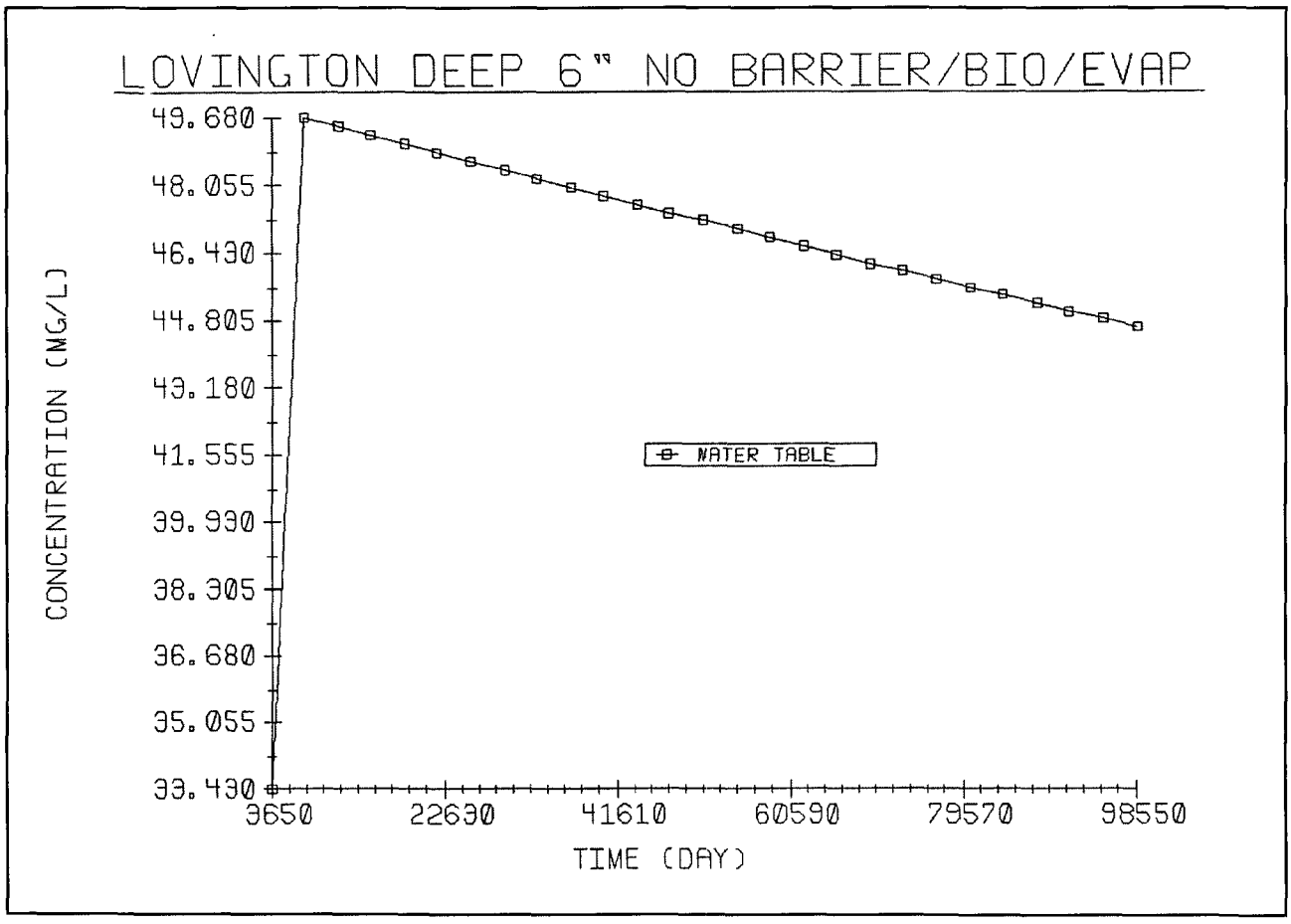
5.2.1.1 Simulations with a Waste Zone Thickness of 15.24 meters

Simulations were 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

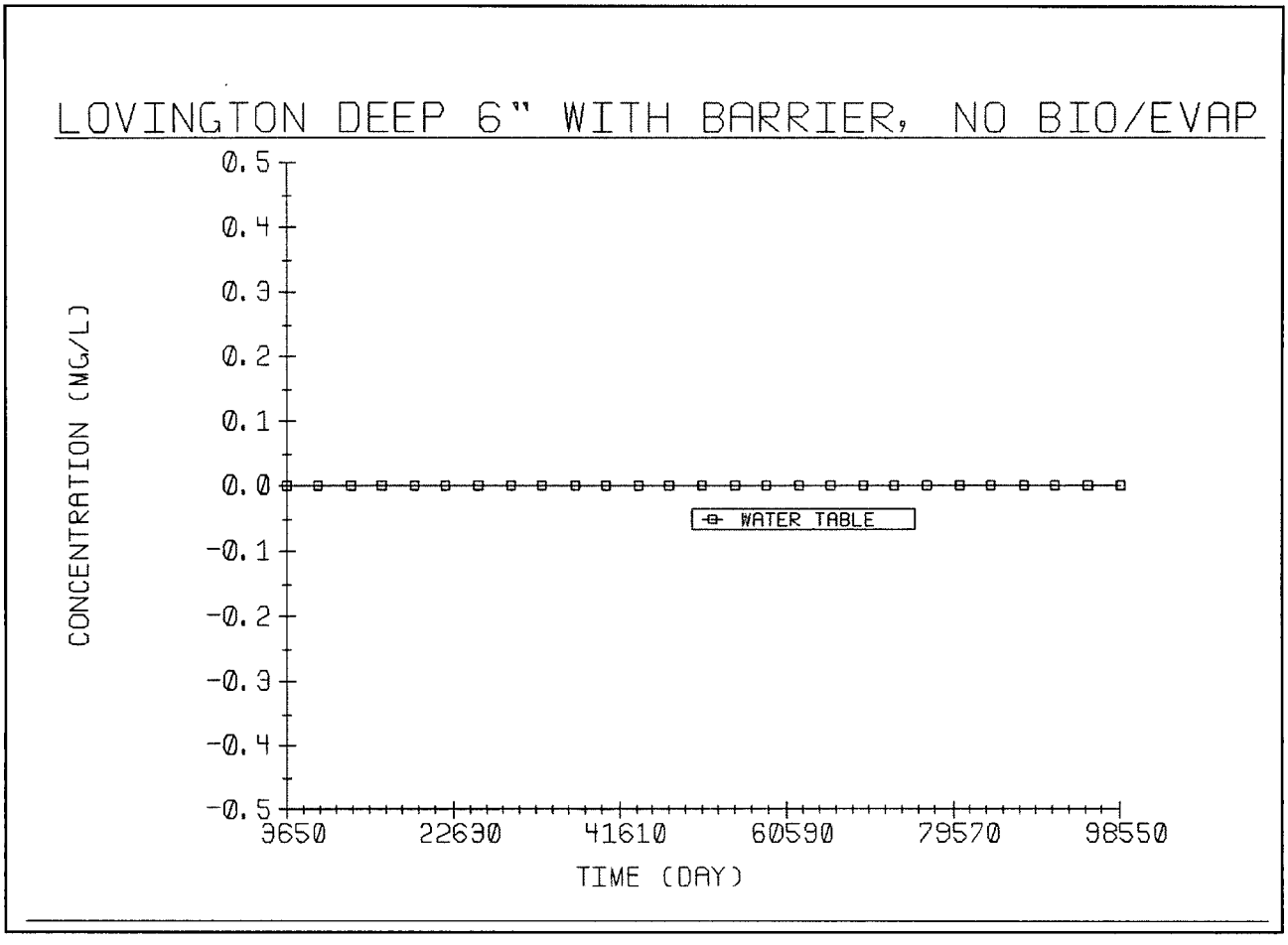
5.2.1.1.1 Simulation with No Barrier, Bio-decay, or Evaporation

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



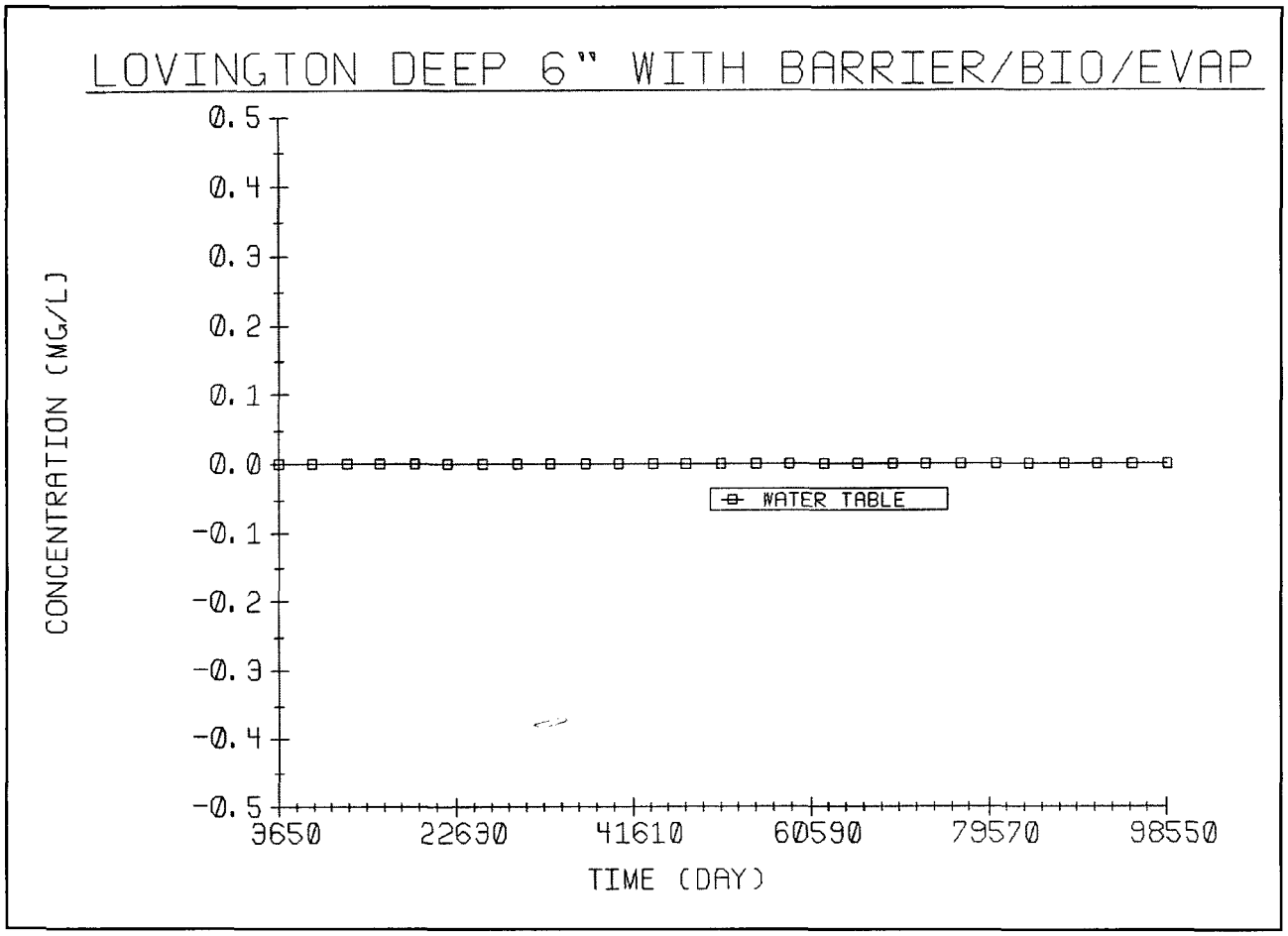
5.2.1.1.2 Simulation with Barrier, but no Bio-decay or Evaporation

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



5.2.1.1.3 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 groundwater contamination. The chart below illustrates the results.



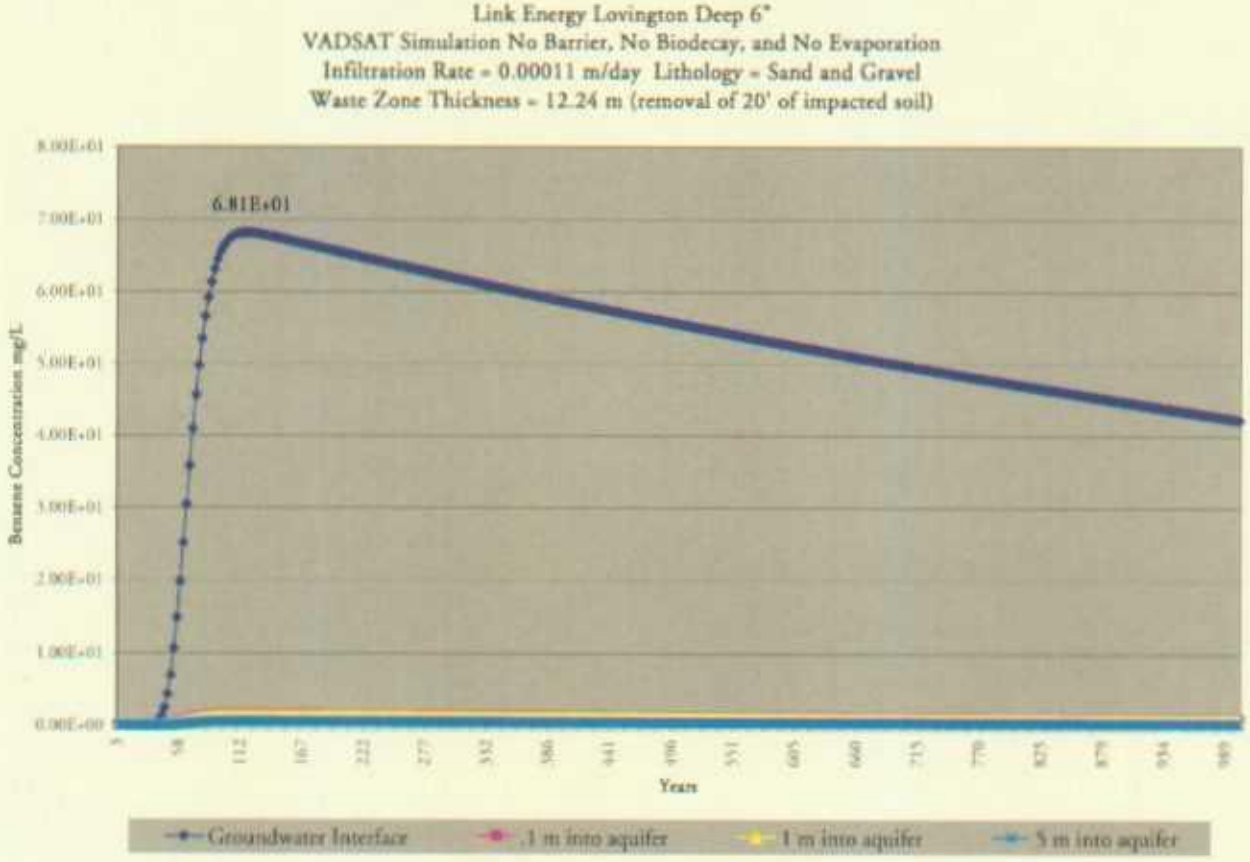
5.2.1.2 Simulations with a Waste Zone Thickness of 12.24 meters

Simulations were 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

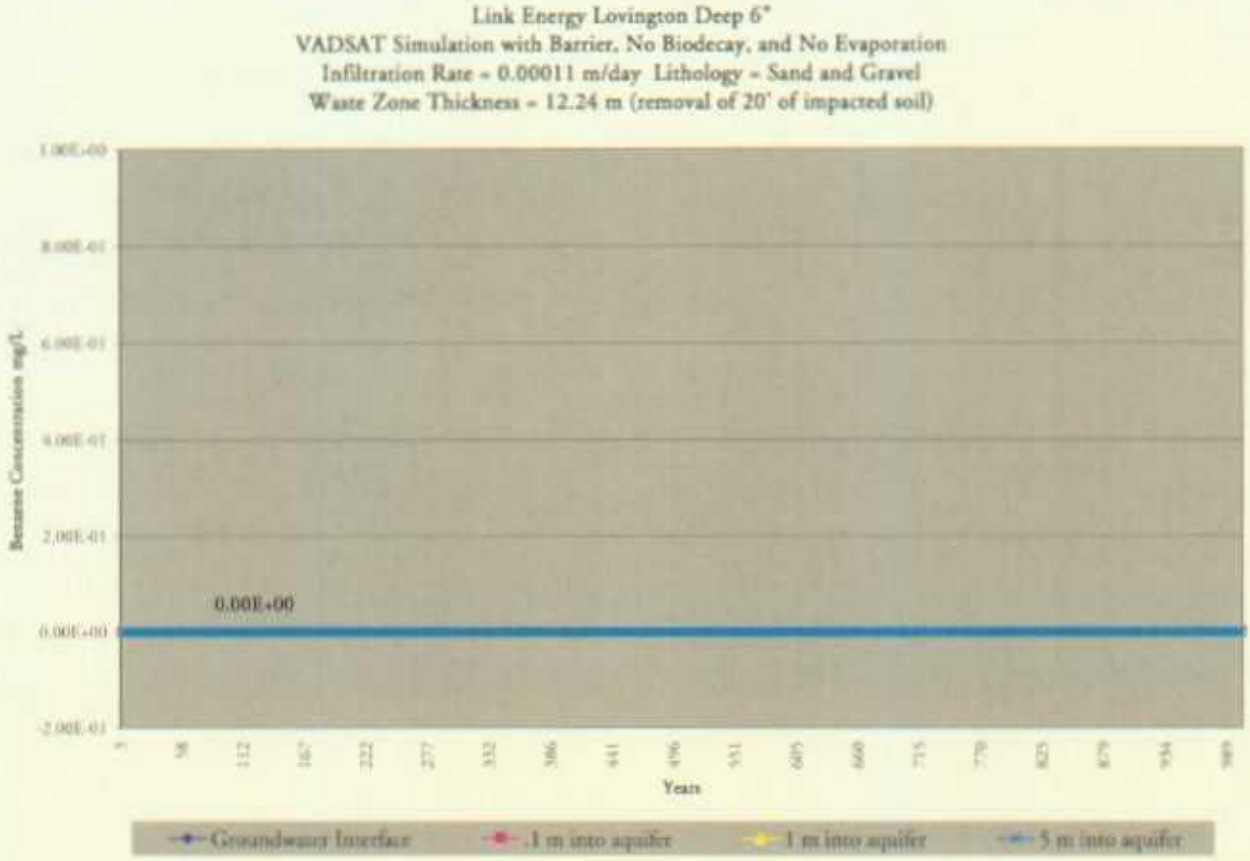
5.2.1.2.1 Barrier not present, No Bio-attenuation, and No Evaporation

This simulation unrealistically negates natural attenuation processes, i.e., bio-decay and evaporation, illustrating that in approximately 100 years, without an engineered barrier, the Benzene source term will impact the groundwater interface at a maximum concentration of 68.10 mg/L and decrease linearly by dispersion. The maximum impact 0.1 meter into the aquifer is projected to be 1.44 mg/L, at 1 meter 1.256 mg/L, and at 5 meters into the aquifer 0.5955 mg/L. The chart below illustrates the results.



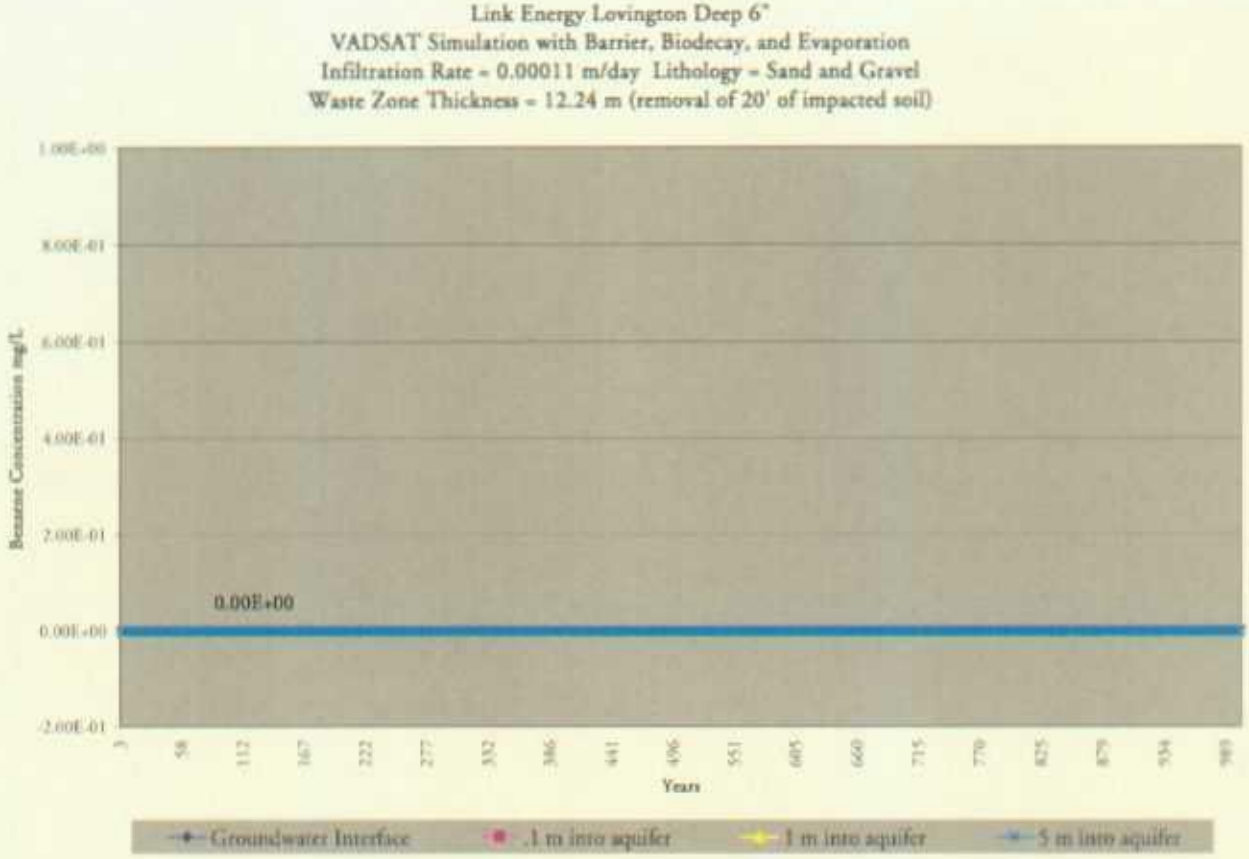
5.2.1.2.2 Barrier present, No Bio-attenuation, and No Evaporation

This simulation unrealistically negates natural attenuation processes, i.e., bio-decay and evaporation, illustrating that an engineered barrier will prevent the Benzene source term from impacting the groundwater and supports the efficacy of barrier installation. The chart below illustrates the results.



5.2.1.2.3 Barrier present, with Bio-attenuation, with Evaporation

This simulation realistically applies natural attenuation processes, i.e., bio-decay and evaporation, illustrating that an engineered barrier will prevent the Benzene source term from impacting the groundwater and supports the efficacy of barrier installation. The chart below illustrates the results.



5.2.1.3 Risk Assessment Conclusions

The VADSAT simulations support the conclusion that without the installation of an impermeable barrier, the residual Benzene source term in the leak zone soil column will continue to migrate vertically and impact the local groundwater confounding and protracting ground water remediation efforts. No impact is predicted by the simulations with a barrier installed but do not acknowledge bio-decay and evaporation, unrealistically maximizing the force of transport of the Benzene source term. This also supports the efficacy of installation of an impermeable barrier. It is also concluded that removal of an additional 10 feet of impacted soil in the leak zone soil column will not have any discernable benefits.

5.2.2 Engineered Barrier Installation and Certification

The perimeter of the barrier will be at least 5' beyond the contaminated soil perimeter and will be at least 1-feet 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.

5.3 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 yd^3 batch will be tested to ensure the Data Objectives in Section 5.3.2 have been achieved.

5.3.1 Sampling prior to emplacement

Prior to testing, approximately 1,000 yd^2 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 sample locations 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 5.3.2 will be managed separately.

5.3.2 Data Objectives

- Impacted 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 with a VOC headspace >100.0 ppm and after having been determined by laboratory testing to be <1,000 mg/Kg TPH^{8015m}, <10.00 mg/Kg Benzene, and <50.00 mg/Kg BTEX be deemed acceptable and placed in the excavation.

- It is proposed that for soil with a VOC headspace >100.0 ppm and after having been determined by laboratory testing to exceed 1,000 mg/Kg TPH^{8015m}, 10.00 mg/Kg Benzene, and/or 50.00 mg/Kg BTEX, that the soil be subjected to the EPA SW 846 Method 1312 Synthetic Precipitation Leaching Procedure (SPLP) to determine the non-leachability of residual TPH^{8015m} and Benzene and BTEX using EPA method 8020. The remediated soil will be acceptable for backfill if the SPLP results do not exceed 100 mg/L TPH^{8015m}, Benzene - 0.01 mg/L (10.0 µg/L), Ethylbenzene - 0.75 mg/L (750 µg/L), Xylenes Total - 0.62 mg/L (620 µg/L), and Toluene - 0.75 mg/L (750 µg/L).

- It is proposed that for soil that exceeds 100 mg/L TPH^{8015m}, Benzene - 0.01 mg/L (10.0 µg/L), Ethylbenzene - 0.75 mg/L (750 µg/L), Xylenes Total - 0.62 mg/L (620 µg/L), and Toluene - 0.75 mg/L (750 µg/L) by SPLP, that it be placed in the excavation provided that it be isolated from infiltrating precipitation by an impermeable barrier installed above (cap).

5.3.3 Clay Cap Installation

A 1-foot thick compacted and tested engineered clay barrier, capping the emplaced soil, will be installed at the 2-4'bgs interval if the decision is made to emplace soil that exhibits SPLP results in excess of the following criteria.

- SPLP TPH^{8015m} - 100 mg/L
- SPLP Benzene - 0.01 mg/L (10.0 µg/L),
- SPLP Ethylbenzene - 0.75 mg/L (750 µg/L),
- SPLP Xylenes Total - 0.62 mg/L (620 µg/L), and
- SPLP Toluene - 0.75 mg/L (750 µg/L)

5.3.4 Soil Emplacement and Compaction

The soil will be emplaced in 2 yd^3 increments with a front-end loader and spread. Compaction will occur during the backfilling process as the loader motors back and forth.

5.4 Root Zone Restoration

Approximately 1,102 yd^3 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.

5.5 Product Recovery and Groundwater Monitoring and Remediation

The free phase hydrocarbon will be removed via extraction wells using an eductor type circulating recovery system. The number and locations of the extraction/recovery and monitoring wells are proposed below and utilize information collected during the preliminary site investigation. Recovered crude oil will be reintroduced into the Link pipeline system. It is proposed that the contaminated groundwater will be remediated using groundwater sparging.

5.5.1 Monitor well numbering change

For administrative purposes and to accommodate the engineering survey, the initial monitor wells numbers are being permanently changed as follows;

Initial Borehole Number	Initial MW Number	Stage II Abatement Plan MW Number
BH1	MW1	MW2
BH2	MW2	MW3
BH3	-	-
BH4	MW3	MW5
BH5	MW4	MW4
BH6	MW5	MW1

5.5.2 Dissolved Phase Organics (BTEX) Plume Delineation

Link proposes to install at least 4 additional monitor wells to bound the BTEX plume identified during the initial groundwater investigation. Refer to the Benzene Delineation map in Attachment I. The existing monitor wells will be offset approximately 75' to 100' radially from MW1, MW2, MW4, and MW5. If this set of monitor wells fails to adequately delineate the plume, additional monitor wells will be proposed and installed. Refer to the monitor well location map in Attachment I.

5.5.3 Product Recovery

At least three additional recovery wells will be installed in a ring with a radius of 25 feet around the leak origin well (MW2) for the purpose of recovering product and secondarily as groundwater sparge wells after product has been adequately removed. Refer to the monitor well location map in Attachment I.

5.5.4 Groundwater Sparging

After the recoverable free phase product has been removed from the groundwater interface, the extraction/recovery wells will be converted to air injection/sparge wells. Being screened in the upper 10 feet of the saturated zone of the subsurface, the injected oxygen will promote natural attenuation

that can be monitored. This method will also aerate the contaminated smear and vadose zones and promote attenuation. Blower/compressor system design specifications will be provided to the NMOCD prior to installation.

5.5.5 Site Surface Restoration

During the spring of the year, the surface will be reseeded with grasses native to the area, i.e., blue gramma and black gramma or a seed mix agreeable with the landowner.

5.5.6 Abatement and Monitoring Schedule

Initial gauging of the monitor wells (wells not containing PSH) will be weekly. Groundwater samples will be collected from monitor wells not containing PSH on a quarterly basis and quarterly monitoring reports submitted to the NMOCD Environmental Bureau offices in Hobbs and Santa Fe, New Mexico. It is proposed to cease abatement of the groundwater after receipt of 4 consecutive quarters of monitoring well data below regulatory limits. At that time the monitor wells will be abandoned.

5.5.7 Public Notification

Prior to issuance of the Public Notice, the following individuals and entities will be notified in writing of the Stage 1 and Stage 2 Abatement Plans.

- Surface owners of record within one (1) mile of the perimeter of the affected area.
- The Lea County Commission
- Individuals or organizations requesting notification.
- The New Mexico Trustee for Natural Resources and other affected agencies.
- Other entities as directed by the Director of the New Mexico Energy Minerals and Natural Resources Department.

Within fifteen days after receiving notice from the NMOCD that the Stage 1 Abatement Plan or the Stage 2 Abatement Plan are administratively complete, Link Energy will issue public notice in newspapers with county and state wide circulation's, i.e., Hobbs Daily News Sun, Lovington Leader, and Albuquerque Journal.

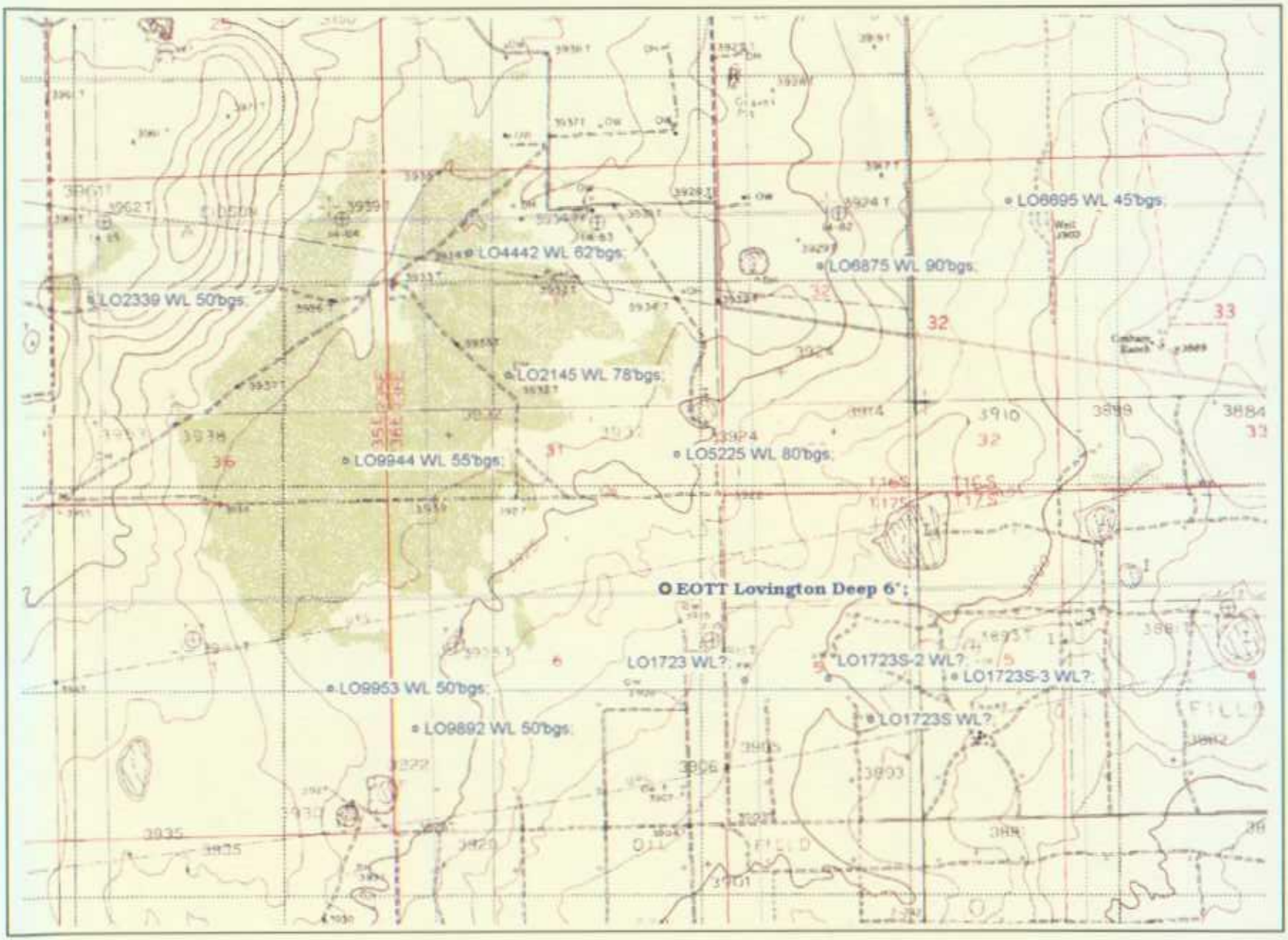
The Public Notice will be developed to include:

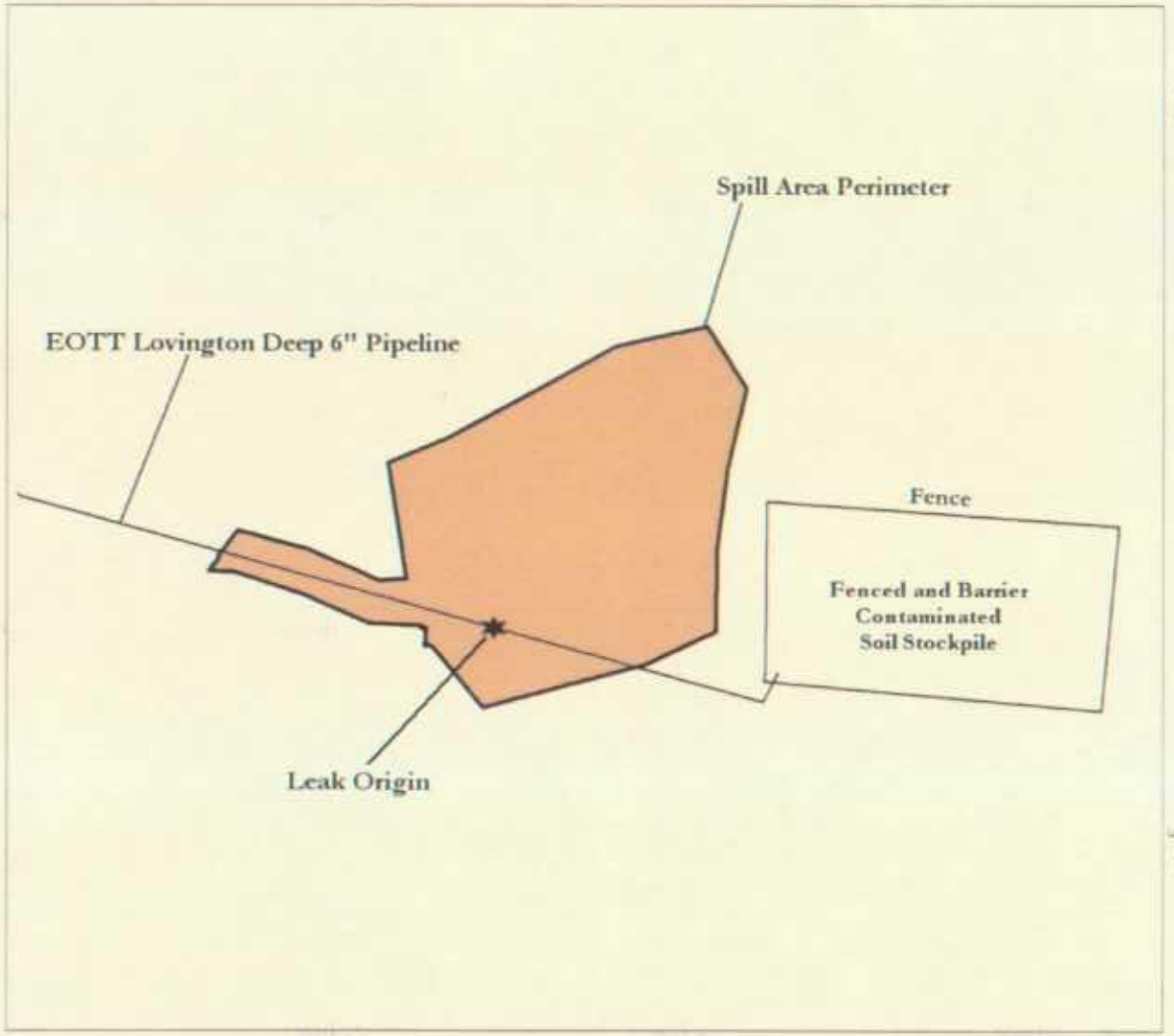
- Name and address of the responsible person
- Location of the proposed abatement
- Descriptions of the source extent, release volume, and affected environmental media.
- Description of the Stage 1 and Stage 2 Abatement Plans
- Description of the procedure required by the Director before making a final determination.
- State that the abatement plan can be viewed at the Division office in Hobbs or electronically from a Division maintained site.
- State that the Director will consider the following comments and requests if received within 30 days after publication of the public notice.
    a) Written comments on the abatement plan.
    b) For a Stage 2 abatement plan, written requests for a public hearing that includes reasons why a hearing should be held.
    c) Address and telephone number at which interested persons may obtain further information.

6.0 CONCLUDING COMMENTS AND REQUEST

On-site remediation of contaminated soil down to 10'bgs to 13'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 groundwater and is supported by the conservative risk assessment. The barrier will also serve to isolate the remediated soil proposed to be used as backfill. Similarly, if emplaced soil exhibits SPLP CoC concentrations above the Data Quality Objectives in section 5.3.2, a clay barrier will be installed on top of the emplaced soil, i.e., a cap. The model outputs from the additional risk assessment calculation for the scenario where an additional 10 feet of soil would be removed from the impacted soil column, did not show any environmental advantage to further excavation. 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 groundwater and will restore the site to agricultural productivity. The proposed Stage II Abatement Plan will delineate the dissolved and free phase groundwater impacts, provide for recovery of PSH, and provide information necessary to develop an effective groundwater remediation strategy and plan.

ATTACHMENT I: SITE MAPS AND FIGURES


LO6695 WL 45'bgs.
LO4442 WL 62'bgs.
LO6875 WL 90'bgs.
LO2339 WL 50'bgs.
LO2145 WL 78'bgs.
LO9944 WL 55'bgs.
LO5225 WL 80'bgs.
EOTT Lovington Deep 6";
LO1723 WL?.
LO1723S-2 WL?.
LO1723S-3 WL?.
LO9953 WL 50'bgs.
LO1723S WL?.
LO9892 WL 50'bgs.



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

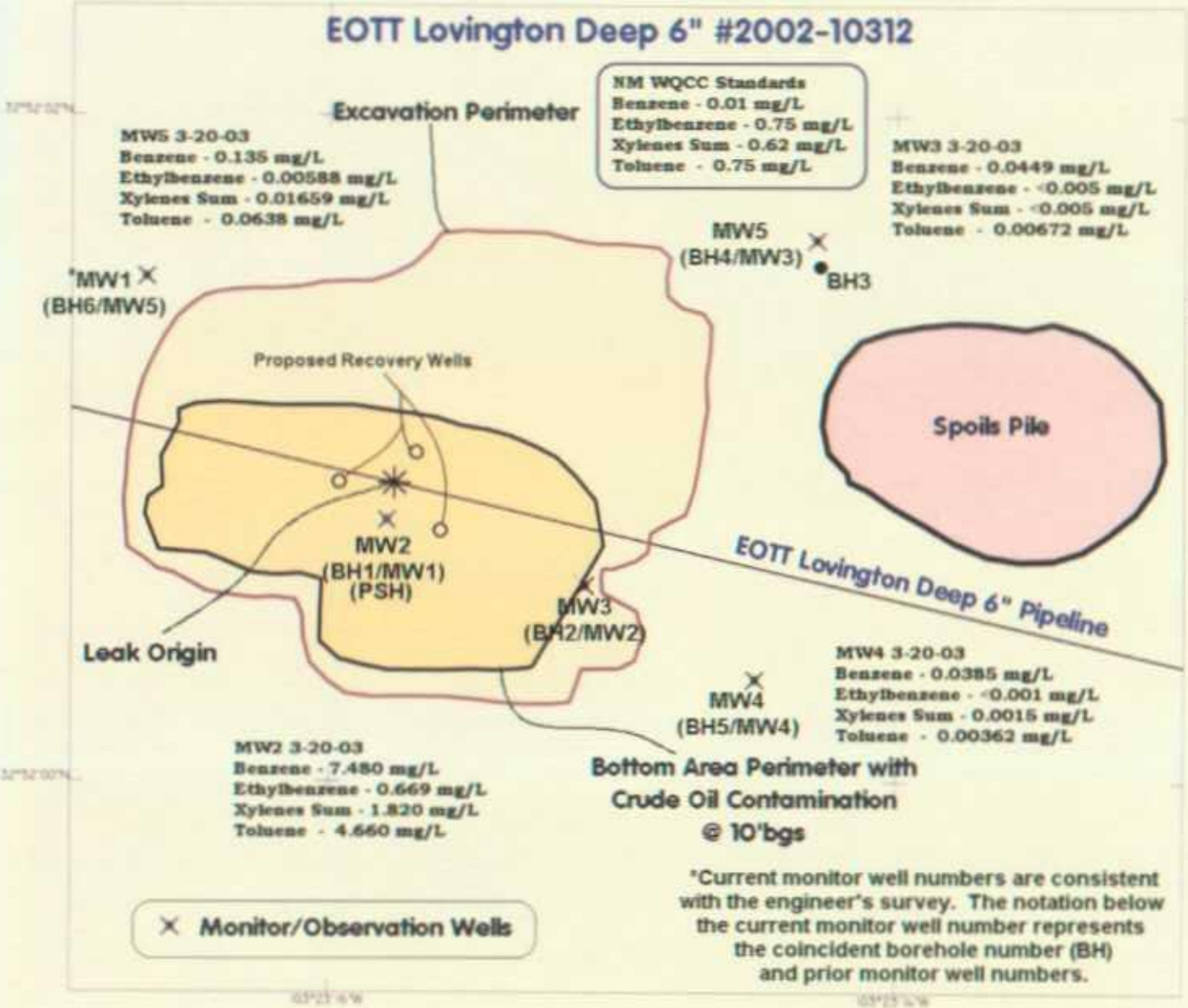
0 50.00

FEET

UNIVERSAL TRANSVERSE MERCATOR
13 NORTH
NAD 1983 HPGN (NEW MEXICO)

LOVINGTONDEEP6INCH.SSF

12/12/2002



EOTT Energy
UL-H Sec 6
T17S R36E
Lea Co NM
Excavated
Area
~19,230 sqft
Bottom Stained
Area @ ~10'bgs
~8,018 sqft

N

Scale 1:600

0 60.00

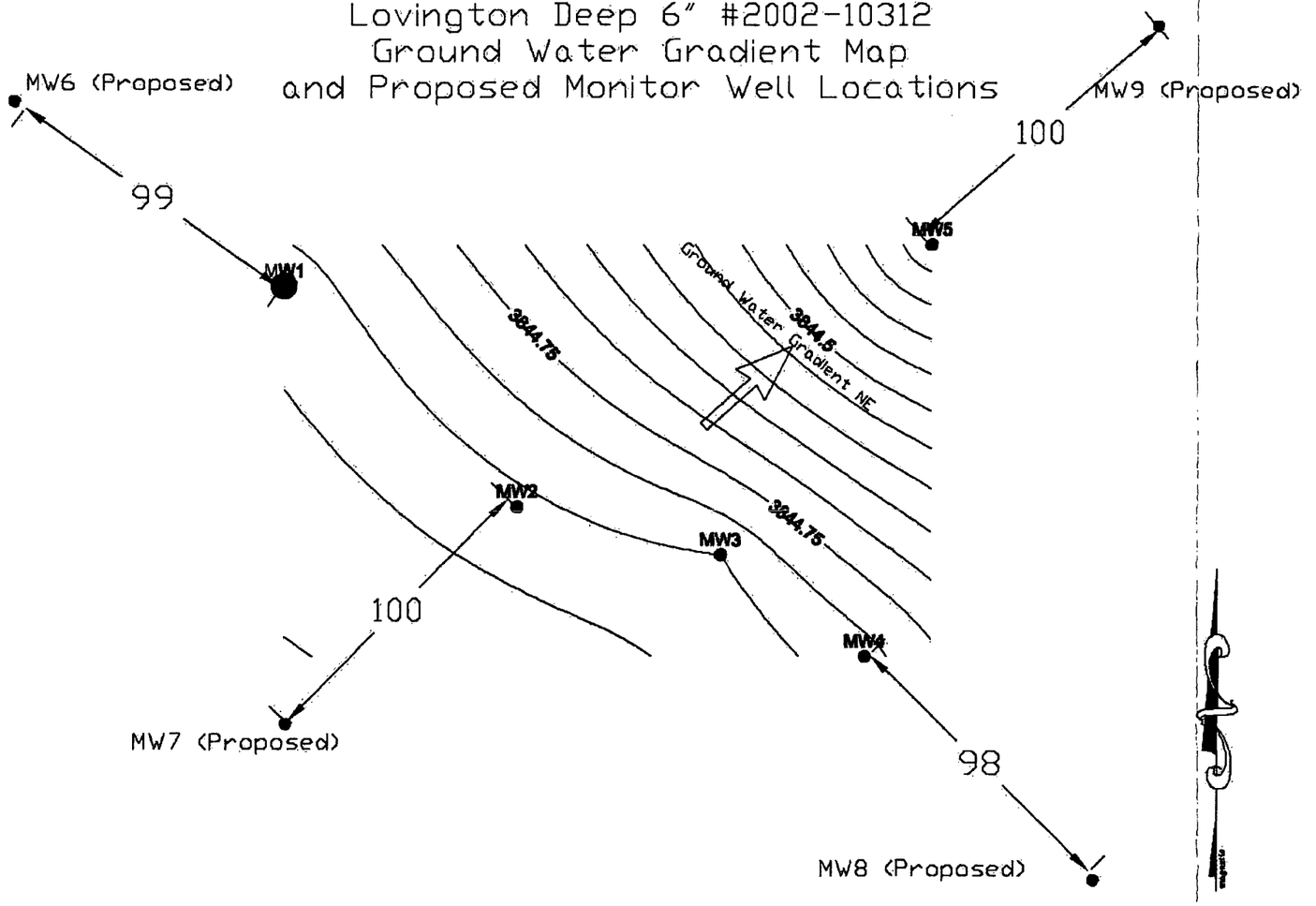
Feet

LAT/LONG
WGS 1984

LD6 4-8-03 combined.shp

4/8/2003

Link Energy
Lovington Deep 6" #2002-10312
Ground Water Gradient Map
and Proposed Monitor Well Locations



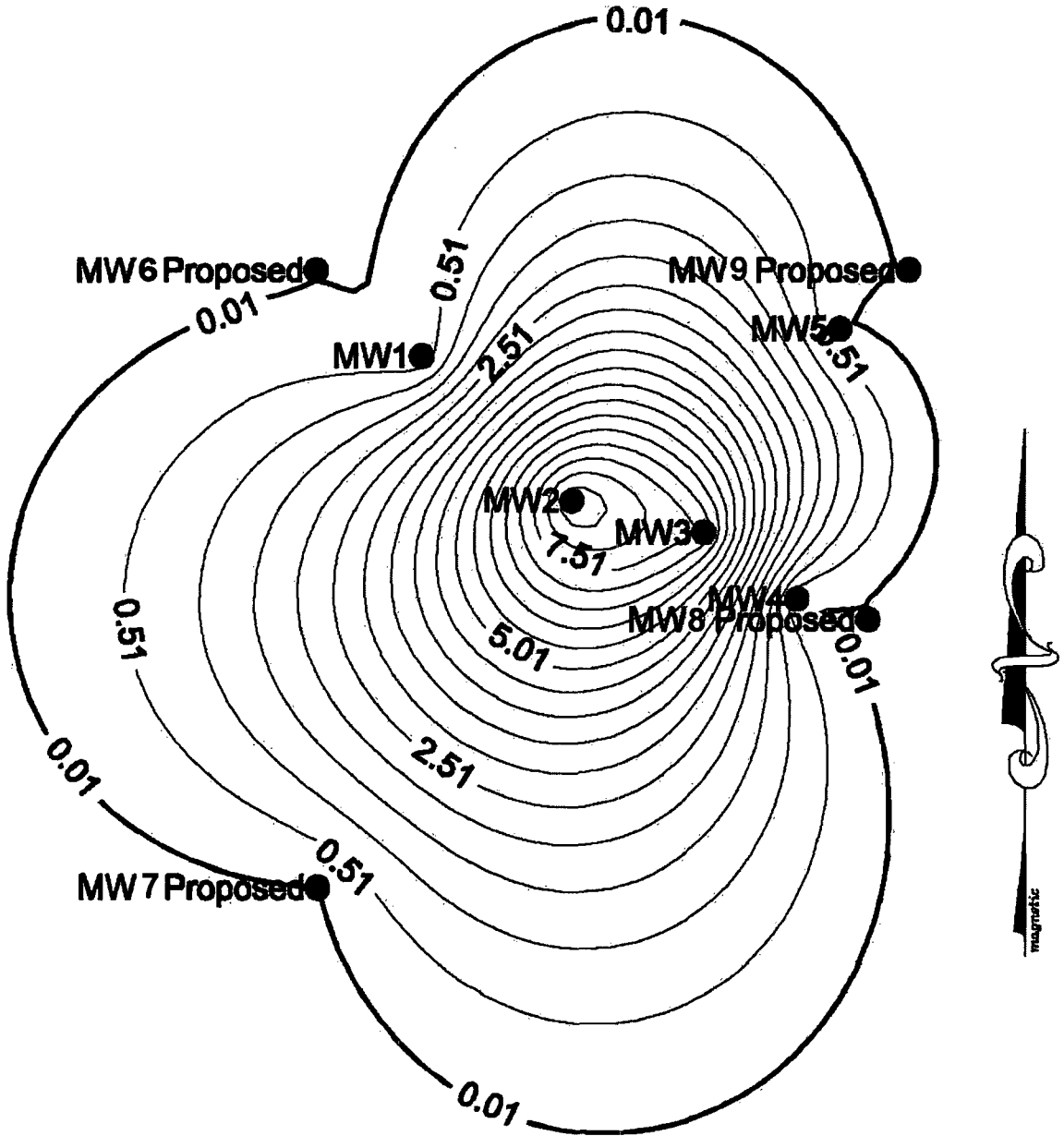
GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

DRAWN BY: PWM	DATE: 11-9-03
CHECKED BY: PWM	DRAWING NO.: 2a
JOB NO.: #2002-10312	SHEET 1 OF 1

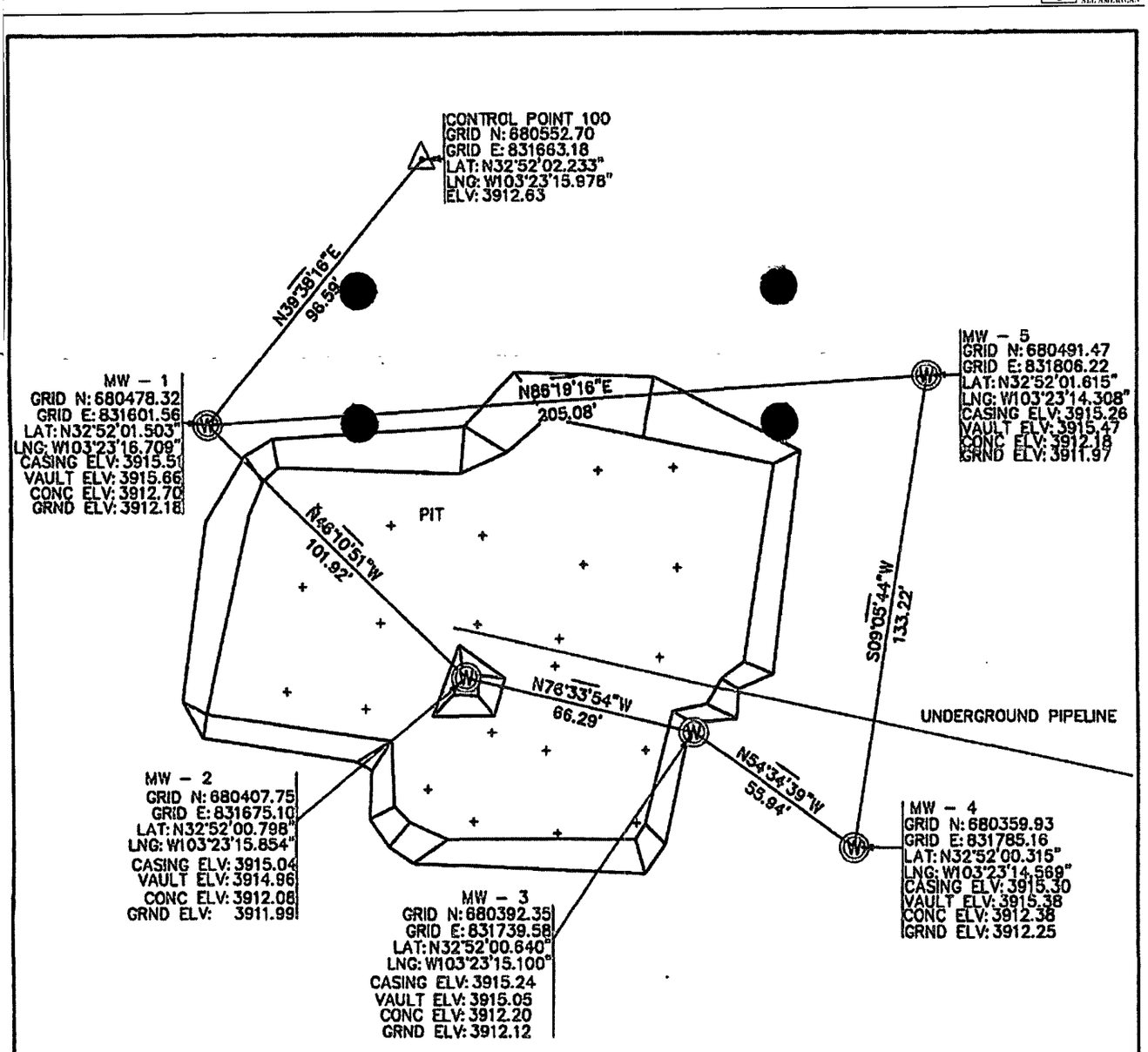
Link Energy
Lovington Deep 6" #2002-10312
Benzene Gradient Map
Gradient Values are in mg/Liter



GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

DRAWN BY:	PWM	DATE:	11-9-03
CHECKED BY:	PWM	DRAWING NO.:	2b
JOB NO.:	#2002-10312	SHEET	1 of 1



DANIEL R. MUTH
NEW MEXICO
13239
REGISTERED PROFESSIONAL SURVEYOR
9/23/03

PETTIGREW AND ASSOCIATES		
1110 N. GRIMES HOBBS, N.M. 88240 (505) 393-5827		
0	9/23/03	PLOTTED
00	9/23/03	PRELIMINARY PLAT
9/23/03		DATE OF SURVEY
REV	DATE	DESCRIPTION

INDEXING INFORMATION FOR COUNTY CLERK
OWNER: DAR ANGLE
LOC: SE1/4, SE1/4
T17SR36E, SEC. 6

PLAT OF MONITOR WELL SURVEY FOR ENVIRONMENTAL PLUS INC. EUNICE, NM.			
PROJ. No.	2003.1109	DRN BY:	DRM
DWG	ACAD EPI MW4\...\EPI MW4.DWG		
BOOK	LEA CO. #1	SHT.	1

ATTACHMENT II: SITE PHOTOGRAPHS


Lea County New Mexico
12/12/2002 12:20pm


12/12/2002 11:09am


Lea County New Mexico
12/12/2002 11:09am


12/12/2002 11:09am

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 [1]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	SELD612003BHC	1/20/2003	Caliche/Sand	N/A	5	19.6	24.6	*100*	*20*	*20*	*20*	*20*	*20*
Bottom Hole Point of Release	Grab	SELD612003BHPOR	1/20/2003	Caliche/Sand	N/A	4070	4310	**8380**	**256990**	2690	69600	39700	105000	40000
East Sidewall	Composite	SELD612003ESW	1/20/2003	Caliche/Sand	N/A	6.47	364	370.47	118.8	*20*	*20*	*20*	38.8	*20*
	Composite	SELD6030703ESW	3/7/2003	Caliche/Sand	N/A	5	5	*10*	*100*	*20*	*20*	*20*	*20*	*20*
North Sidewall	Composite	SELD612003NSW	1/20/2003	Caliche/Sand	N/A	400	1090	**1490**	1030	*20*	145	162	447	256
	Composite	SELD6030703NSW	3/7/2003	Caliche/Sand	N/A	5	5	*10*	*100*	*20*	*20*	*20*	*20*	*20*
South Sidewall	Composite	SELD612003SSW	1/20/2003	Caliche/Sand	N/A	435	4310	**4745**	140.5	*20*	*20*	*20*	42.7	37.8
	Composite	SELD6030703SSW	3/7/2003	Caliche/Sand	N/A	5	5	*10*	*100*	*20*	*20*	*20*	*20*	*20*
West Sidewall	Composite	SELD612003WSW	1/20/2003	Caliche/Sand	N/A	740	5920	**6660**	8415.2	75.2	1210	1010	4270	1850
	Composite	SELD6030703WSW	3/7/2003	Caliche/Sand	N/A	5	5	*10*	104.1	*20*	24.1	*20*	*20*	*20*
Shredded Spoils Pile	Composite	SELD64803CSP	4/8/2003	Caliche/Sand	N/A	180	1090	1270	2884	*25*	117	283	1550	909
Contaminated Spoils Pile	Composite	SELD64803SSP	4/8/2003	Caliche/Sand	N/A	495	3070	3565	10970	*25*	815	1140	5890	3100

100 ppm Isobutylene calibration gas = 101 ppm

[1]bgs - feet below ground surface

[2]VOC-Volatile Organic Contaminants/Constituents

[3]GRO-Gasoline Range Organics (C_6-C_{12})

[4]DRO-Diesel Range Organics (C_{12}-C_{28})

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

[5]TPH-Total Petroleum Hydrocarbon = GRO+DRO.

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

[7]Italicized values are < the instrument detection limit.

[8]N/A Not Analyzed

Plains All American Pipeline (formerly Link and EOTT)
Lovington Deep 6" #2002-10312
Borehole (BH) Soil Delineation Data

Borehole#	Sampling Interval bgs[1]	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	SEL61227'02BH1 5'	12/27/2002	Caliche/Sand	1028	5380	3570	**7350**	**285530**	6130	60200	20200	137000	62000
	15	SEL61227'02BH1 15'	12/27/2002	Caliche	1200	3250	3050	**6300**	**585400**	**12600**	204000	95300	201000	70500
	25	SEL61227'02BH1 25'	12/27/2002	Caliche	1100	2610	2720	**5330**	**585900**	**11100**	136000	61800	131000	46000
	35	SEL61227'02BH1 35'	12/27/2002	Sand	1056	2000	2670	**4670**	**521700**	9600	102000	53700	118000	42400
	45	SEL61227'02BH1 45'	12/27/2002	Sand	657	1550	2000	**3550**	**167019**	919	42200	25800	68500	25660
	55	SEL61227'02BH1 55'	12/27/2002	Sand	700	1100	1510	**2610**	**201800**	5400	70500	31700	68700	25500
BH2	5	SEL612300'2BH2 5'	12/30/2002	Caliche/Sand	3.1	5	5	10	100	20	20	20	20	20
	15	SEL612300'2BH2 15'	12/30/2002	Caliche	2.6	5	5	10	100	20	20	20	20	20
	25	SEL612300'2BH2 25'	12/30/2002	Caliche	1	5	5	10	100	20	20	20	20	20
	30	SEL612300'2BH2 30'	12/30/2002	Sand	0	5	5	10	100	20	20	20	20	20
	35	SEL612300'2BH2 35'	12/30/2002	Sand	0.2	5	5	10	100	20	20	20	20	20
	40	SEL612300'2BH2 40'	12/30/2002	Sand	0.5	5	5	10	100	20	20	20	20	20
	50	SEL612300'2BH2 50'	12/30/2002	Sand	0.7	5	5	10	100	20	20	20	20	20
BH3	5	SEL612300'2BH3 5'	12/30/2002	Caliche/Sand	2	5	5	10	100	20	20	20	20	20
	15	SEL612300'2BH3 15'	12/30/2002	Caliche	1.5	5	5	10	100	20	20	20	20	20
	25	SEL612300'2BH3 25'	12/30/2002	Caliche	0.1	5	5	10	100	20	20	20	20	20
	35	SEL612300'2BH3 35'	12/30/2002	Sand	0.2	5	5	10	100	20	20	20	20	20
BH4	Surface	SEL612510'2BH4 SUR	12/31/2002	Caliche/Sand	0	5	5	10	100	20	20	20	20	20
	10	SEL612310'2BH4 10'	12/31/2002	Caliche	0	5	5	10	100	20	20	20	20	20
	20	SEL612310'2BH4 20'	12/31/2002	Caliche	0	5	5	10	100	20	20	20	20	20
	30	SEL612310'2BH4 30'	12/31/2002	Sand	0	5	5	10	100	20	20	20	20	20
	40	SEL612310'2BH4 40'	12/31/2002	Sand	0	5	5	10	100	20	20	20	20	20
	50	SEL612310'2BH4 50'	12/31/2002	Sand	0	5	5	10	100	20	20	20	20	20
	55	SEL612310'2BH4 55'	12/31/2002	Sand	0	5	5	10	100	20	20	20	20	20
BH5	Surface	SEL61203BH5SUR	1/2/2003	Caliche/Sand	0	5	5	10	100	20	20	20	20	20
	10	SEL61203BH5 10'	1/2/2003	Caliche	0	5	5	10	100	20	20	20	20	20
	20	SEL61203BH5 20'	1/2/2003	Caliche	0	5	5	10	100	20	20	20	20	20
	30	SEL61203BH5 30'	1/2/2003	Sand	0	5	5	10	100	20	20	20	20	20
	40	SEL61203BH5 40'	1/2/2003	Sand	0	5	5	10	100	20	20	20	20	20
	50	SEL61203BH5 50'	1/2/2003	Sand	0	5	5	10	100	20	20	20	20	20
	55	SEL61203BH5 55'	1/2/2003	Sand	0	5	5	10	100	20	20	20	20	20
BH6	Surface	SEL61203BH6SUR	1/2/2003	Caliche/Sand	0	5	5	10	100	20	20	20	20	20
	10	SEL61203BH6 10'	1/2/2003	Caliche	0	5	5	10	100	20	20	20	20	20
	20	SEL61203BH6 20'	1/2/2003	Caliche	0	5	5	10	100	20	20	20	20	20
	30	SEL61203BH6 30'	1/2/2003	Sand	0	5	5	10	100	20	20	20	20	20
	40	SEL61203BH6 40'	1/2/2003	Sand	0	5	5	10	100	20	20	20	20	20
	50	SEL61203BH6 50'	1/2/2003	Sand	0	5	5	10	100	20	20	20	20	20
	55	SEL61203BH6 55'	1/2/2003	Sand	0	5	5	10	100	20	20	20	20	20

100 ppm Isobutylene calibration gas = 101 ppm

[1]bgs = feet below ground surface

[2]VOC-Volatile Organic Contaminants/Constituents

[3]GRO-Gasoline Range Organics (C_6-C_{10})

[4]DRO-Diesel Range Organics (C_{10}-C_{28})

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

[5]TPH-Total Petroleum Hydrocarbon = GRO+DRO

[6]Bolded values are in excess of the New Mexico Oil Conservation Division guideline threshold for the parameter.

[7]Indented values are < the instrument detection limit.

[8]NA-Not Analyzed

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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 5'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/27/2002 **Time:** 08:40

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)		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)		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		µg/Kg	500	<500	01/07/03	8260b	---	7	82.6	97.1	94.9
Ethylbenzene		µg/Kg	500	<500	01/07/03	8260b	---	4.1	94.7	105.4	106.8
m,p-Xylenes		µg/Kg	500	<500	01/07/03	8260b	---	4	93.6	105.4	106.3
o-Xylene		µg/Kg	500	<500	01/07/03	8260b	---	4.7	93.6	106.7	105.5
Toluene		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.

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

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

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.		diluted @ 5X	D
p-Terphenyl	8015 mod.		diluted @ 5X	D
1,2-Dichloroethane-d4	8260b		diluted @ 25X	D
Toluene-d8	8260b		diluted @ 25X	D

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

Exceptions Report:

Report #/Lab ID#: 137985 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
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 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 1,2-Dichloroethane-d4	D 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 Nitrobenzene-d5	D 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 p-Terphenyl	D 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 Toluene-d8	D 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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Address: 1324 M.St Po Box
Eunice NM 88231

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

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

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)		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)		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		µg/Kg	5000	<5000	01/07/03	8260b	---	7	82.6	97.1	94.9
Ethylbenzene		µg/Kg	5000	<5000	01/07/03	8260b	---	4.1	94.7	105.4	106.8
m,p-Xylenes		µg/Kg	5000	<5000	01/07/03	8260b	---	4	93.6	105.4	106.3
o-Xylene		µg/Kg	5000	<5000	01/07/03	8260b	---	4.7	93.6	106.7	105.5
Toluene		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.

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Richard Laster

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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.		diluted @ 5X	D
p-Terphenyl	8015 mod.		diluted @ 5X	D
1,2-Dichloroethane-d4	8260b		diluted @ 250X	D
Toluene-d8	8260b		diluted @ 250X	D

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

Exceptions Report:

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

Sample Temperature/Condition <=6°C

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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
1,2-Dichloroethane-d4 1,2-Dichloroethane-d4	D 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 Nitrobenzene-d5	D 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 p-Terphenyl	D 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 Toluene-d8	D 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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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#: 137987 **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[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)		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)		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		µg/Kg	5000	<5000	01/07/03	8260b	---	7	82.6	97.1	94.9
Ethylbenzene		µg/Kg	5000	<5000	01/07/03	8260b	---	4.1	94.7	105.4	106.8
m,p-Xylenes		µg/Kg	5000	<5000	01/07/03	8260b	---	4	93.6	105.4	106.3
o-Xylene		µg/Kg	5000	<5000	01/07/03	8260b	---	4.7	93.6	106.7	105.5
Toluene		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.

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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:** SEL6122702BH1 25'	**Report#/Lab ID#:** 137987 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.		diluted @ 5X	D
p-Terphenyl	8015 mod.		diluted @ 5X	D
1,2-Dichloroethane-d4	8260b		diluted @ 250X	D
Toluene-d8	8260b		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 <=6°C

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Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
1,2-Dichloroethane-d4 1,2-Dichloroethane-d4	D 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 Nitrobenzene-d5	D 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 p-Terphenyl	D 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 Toluene-d8	D 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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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 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)		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)		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		µg/Kg	5000	<5000	01/07/03	8260b	---	7	82.6	97.1	94.9
Ethylbenzene		µg/Kg	5000	<5000	01/07/03	8260b	---	4.1	94.7	105.4	106.8
m,p-Xylenes		µg/Kg	5000	<5000	01/07/03	8260b	---	4	93.6	105.4	106.3
o-Xylene		µg/Kg	5000	<5000	01/07/03	8260b	---	4.7	93.6	106.7	105.5
Toluene		µg/Kg	5000	<5000	01/07/03	8260b	---	5.4	89.9	103.5	100.5

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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	8015 mod.		diluted @ 5X	D
p-Terphenyl	8015 mod.		diluted @ 5X	D
1,2-Dichloroethane-d4	8260b		diluted @ 250X	D
Toluene-d8	8260b		diluted @ 250X	D

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

Exceptions Report:

Report #/Lab ID#: 137988 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6122702BH1 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
1,2-Dichloroethane-d4 1,2-Dichloroethane-d4	D 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 Nitrobenzene-d5	D 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 p-Terphenyl	D 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 Toluene-d8	D 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

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 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)		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)		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		µg/Kg	500	<500	01/07/03	8260b	---	7	82.6	97.1	94.9
Ethylbenzene		µg/Kg	500	<500	01/07/03	8260b	---	4.1	94.7	105.4	106.8
m,p-Xylenes		µg/Kg	500	<500	01/07/03	8260b	---	4	93.6	105.4	106.3
o-Xylene		µg/Kg	500	<500	01/07/03	8260b	---	4.7	93.6	106.7	105.5
Toluene		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.

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 &
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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:** 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.		diluted @ 5X	D
p-Terphenyl	8015 mod.		diluted @ 5X	D
1,2-Dichloroethane-d4	8260b		diluted @ 25X	D
Toluene-d8	8260b		diluted @ 25X	D

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

Exceptions Report:

Report #/Lab ID#: 137989 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
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 (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
1,2-Dichloroethane-d4 1,2-Dichloroethane-d4	D 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 Nitrobenzene-d5	D 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 p-Terphenyl	D 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 Toluene-d8	D 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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Attn: Pat McCasland
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 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)		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)		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		µg/Kg	500	<500	01/07/03	8260b	---	7	82.6	97.1	94.9
Ethylbenzene		µg/Kg	500	<500	01/07/03	8260b	---	4.1	94.7	105.4	106.8
m,p-Xylenes		µg/Kg	500	<500	01/07/03	8260b	---	4	93.6	105.4	106.3
o-Xylene		µg/Kg	500	<500	01/07/03	8260b	---	4.7	93.6	106.7	105.5
Toluene		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

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 &
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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:** 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.		diluted @ 5X	D
p-Terphenyl	8015 mod.		diluted @ 5X	D
1,2-Dichloroethane-d4	8260b		diluted @ 25X	D
Toluene-d8	8260b		diluted @ 25X	D

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

Exceptions Report:

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

Sample Temperature/Condition <=6°C

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Sample Bottles & Preservation

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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 1,2-Dichloroethane-d4	D 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 Nitrobenzene-d5	D 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 p-Terphenyl	D 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 Toluene-d8	D 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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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#: 137991 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH2 5'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/30/2002 **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	01/06/03	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

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.

Respectfully Submitted,

Richard Laster

Richard Laster

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3512 Montopolis Drive, Austin, TX 78744 &
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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 5'	**Report#/Lab ID#:** 137991 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

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

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

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Address: 1324 M.St Po Box
Eunice NM 88231

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

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

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	01/06/03	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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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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Eunice NM 88231

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

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

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	01/06/03	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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Client: 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.

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#: 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

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	01/06/03	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	---	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

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.

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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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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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#: 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

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	01/06/03	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
Volatile 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

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.

Respectfully Submitted,

Richard Laster

Richard Laster

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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	8015 mod.	105	50-150	---
p-Terphenyl	8015 mod.	113	50-150	---
1,2-Dichloroethane-d4	8260b	115	65-115	---
Toluene-d8	8260b	114	50-120	---

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

Exceptions Report:

Report #/Lab ID#: 137995 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
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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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#: 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

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	01/08/03	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

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.

Respectfully Submitted,

Richard Laster

Richard Laster

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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	8015 mod.	93.1	50-150	---
p-Terphenyl	8015 mod.	96.8	50-150	---
1,2-Dichloroethane-d4	8260b	92.6	65-115	---
Toluene-d8	8260b	101	50-120	---

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

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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#: 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

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	01/08/03	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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Client: Environmental Plus, Inc. **Attn:** Pat McCasland	**Project ID:** 2002-10312 Lovington Deep 6" **Sample Name:** SEL6123002BH2 50'	**Report#/Lab ID#:** 137997 **Sample Matrix:** soil

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
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
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.
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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
Benzene	J	See J-flag discussion above.
Toluene	J	See J-flag discussion above.

Notes:

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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

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	01/08/03	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
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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:** 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
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123002BH3 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).

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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:

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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

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	01/08/03	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

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:** 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).

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:

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#: 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

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	01/08/03	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

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.

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:** SEL6123002BH3 25'	**Report#/Lab ID#:** 138000 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

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

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.
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- ☐ 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:

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#: 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

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	01/08/03	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

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.

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:** 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
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
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:

[redacted]

Company Name EPI
Address PO Box 1558
City Eunice State NM Zip 88231
ATTN: Pat McCasland
Phone 5053943481 Fax 5053942601
Rush Status (must be confirmed with lab mgr.):
Project Name/PO#: 2002-10312 Lovington Deep 6" Sampler: Cody Mills

[redacted] to [redacted]:
Company Name Eott Energy
Address
City Midland State Tx Zip
ATTN: Frank Hernandez
Phone Fax

[redacted] 4221 Freidrich Lane, Suit[redacted], Austin, TX [redacted]
(512) 444-5896

Analyses Requested (1)
Please attach explanatory information as re

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers	Soil	Water	Waste	Lab I.D. # (Lab only)	TPH 8015M	BTEX 8021B						Comments
SEL6122702BH15'	12/27/02	840	1	✓			137985	✓	✓						
SEL6122702BH115'	12/27/02	854	1	✓			137986	✓	✓						
SEL6122702BH125'	12/27/02	916	1	✓			137987	✓	✓						
SEL6122702BH135'	12/27/02	940	1	✓			137988	✓	✓						
SEL6122702BH145'	12/27/02	10:00	1	✓			137989	✓	✓						
SEL6122702BH155'	12/27/02	10:15	1	✓			137990	✓	✓						
SEL6123002BH25'	12/30/02	8:30	1	✓			137991	✓	✓						
SEL6123002BH215'	12/30/02	9:00	1	✓			137992	✓	✓						
SEL6123002BH225'	12/30/02	9:30	1	✓			137993	✓	✓						
SEL6123002BH230'	12/30/02	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 r 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	Time	Name	Affiliation	Date	Tim
Cody Mills	EPI	12/30/02		Melanie Humphrey	ASI	1/3/03	0900

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

Send Reports To:

Company Name: EPI

Address: PO Box 1558

City: EUNICE State: NM Zip: 88231

ATTN: Pat McCasland

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

Bill to (if different):

Company Name: Eott

Address:

City: Midland State: TX Zip:

ATTN: Frank Hernandez

Phone: Fax:

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

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

Project Name/PO#: 2002-10312 Sampler: Cody Mills

Lovington Deep 6"

Analyses Requested (1

Please attach explanatory information as r

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers	Soil	Water	Waste	Lab I.D. # (Lab only)	TPH 8015M	BTEX 8021B	Comments
SEL612302BH25'	12-30-02	10:30	1	✓			137995	✓	✓	
SEL612302BH240'	12/30/02	11:00	1	✓			137996	✓	✓	
SEL612302BH250'	12/30/02	11:15	1	✓			137997	✓	✓	
SEL612302BH35'	12/30/02	130	1	✓			137998	✓	✓	
SEL612302BH315'	12/30/02	200	1	✓			137999	✓	✓	
SEL612302BH325'	12/30/02	230	1	✓			138000	✓	✓	
SEL612302BH335'	12/30/02	300	1	✓			138001	✓	✓	
SEL612302BH345'	12/30/02	330	1	✓				✓	✓	
SEL612302BH350'	12/30/02	400	1	✓				✓	✓	
			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 r 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	Time	Name	Affiliation	Date	Tim
Cody Mills	EPI	12/30/02		Melanie Humphrey	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.]

ANALYSYS 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.
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

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.

Respectfully Submitted,

Richard Laster

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ANALYSYS 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.
Attn: Pat McCasland

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

Report#/Lab ID#: 138002
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.	86.8	50-150	---
1,2-Dichloroethane-d4	8260b	93.3	65-115	---
Toluene-d8	8260b	96.6	50-120	---

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

Exceptions Report:

Report #/Lab ID#: 138002 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123102BH4 SUR

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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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:

AnalySys 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.
Attn: Pat McCasland
Address: 1324 M.St Po Box
Eunice NM 88231

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

Report#/Lab ID#: 138003 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123102BH4 10'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/31/2002 **Time:** 09:00

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	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

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.

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.

ANALYSYS 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 Lovington Deep 6"	**Report#/Lab ID#:** 138003
Attn: Pat McCasland	**Sample Name:** SEL6123102BH4 10'	**Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	97.7	50-150	---
p-Terphenyl	8015 mod.	96.1	50-150	---
1,2-Dichloroethane-d4	8260b	106	65-115	---
Toluene-d8	8260b	103	50-120	---

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

Exceptions Report:

Report #/Lab ID#: 138003 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123102BH4 10'

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:

ANALYSYS INC.

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2209 N. Padre Island Dr., Corpus Christi, TX 78408
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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#: 138004 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123102BH4 20'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/31/2002 **Time:** 09:30

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	---	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	J	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.

Respectfully Submitted,

Richard Laster

Richard Laster

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Client: Environmental Plus, Inc.
Attn: Pat McCasland

Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123102BH4 20'

Report#/Lab ID#: 138004
Sample Matrix: soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	76.6	50-150	---
p-Terphenyl	8015 mod.	77.6	50-150	---
1,2-Dichloroethane-d4	8260b	99	65-115	---
Toluene-d8	8260b	107	50-120	---

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

Exceptions Report:

Report #/Lab ID#: 138004 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123102BH4 20'

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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J flag Discussion

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Comments pertaining to Data Qualifiers and QC data:

Parameter	Qualif	Comment
m,p-Xylenes	J	See J-flag discussion above.
Toluene	J	See J-flag discussion above.

Notes:

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Attn: Pat McCasland
Address: 1324 M.St Po Box
Eunice NM 88231

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

Report#/Lab ID#: 138005 **Report Date:** 01/13/03
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123102BH4 30'
Sample Matrix: soil
Date Received: 01/03/2003 **Time:** 09:00
Date Sampled: 12/31/2002 **Time:** 10:00

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	---	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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Client: Environmental Plus, Inc. **Attn:** Pat McCasland	**Project ID:** 2002-10312 Lovington Deep 6" **Sample Name:** SEL6123102BH4 30'	**Report#/Lab ID#:** 138005 **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.	87.8	50-150	---
1,2-Dichloroethane-d4	8260b	94.6	65-115	---
Toluene-d8	8260b	106	50-120	---

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

Exceptions Report:

Report #/Lab ID#: 138005 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
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

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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:

ANALYSYS INC.

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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 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	---	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,

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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	8015 mod.	80.2	50-150	---
p-Terphenyl	8015 mod.	77.7	50-150	---
1,2-Dichloroethane-d4	8260b	87.5	65-115	---
Toluene-d8	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
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
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

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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:

ANALYSYS INC.

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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

QUALITY ASSURANCE DATA[1]

Parameter	Result	Units	RQL[5]	Blank	Date	Method[6]	Data Qual[7]	Prec.[2]	Recov.[3]	CCV[4]	LCS[4]
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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	---	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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(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	8015 mod.	92.2	50-150	---
p-Terphenyl	8015 mod.	94.6	50-150	---
1,2-Dichloroethane-d4	8260b	86.8	65-115	---
Toluene-d8	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
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
Project ID: 2002-10312 Lovington Deep 6"
Sample Name: SEL6123102BH4 50'

Sample Temperature/Condition <=6°C

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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:

ANALYSYS 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.
Attn: Pat McCasland
Address: 1324 M.St Po Box
Eunice NM 88231

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

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

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	---	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 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.

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.

ANALYSYS INC.

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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: SEL6123102BH4 55'

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

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	94.1	50-150	---
p-Terphenyl	8015 mod.	99.4	50-150	---
1,2-Dichloroethane-d4	8260b	94	65-115	---
Toluene-d8	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
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
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:

Company Name: ENVIRONMENTAL PLUS INC.
Address: PO BOX 1658
City: EUNICE State: NM Zip: 88231
ATTN: PAT MCCLELLAND
Phone: 9055943481 Fax: 9053942601

Company Name: EOH
Address:
City: MIDLAND State: TX Zip:
ATTN: FRANK HERNANDEZ
Phone: Fax:

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

Rush Status (must be confirmed with lab mgr.):
Project Name/PO#: 2002-10312 LOVINGTON DEEP 6" Sampler: Cody Miller

Analyses Requested (1)
Please attach explanatory information as r

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers	Soil	Water	Waste	Lab I.D. # (Lab only)	TPH 8015M	BTEX 8021B	Comments
SEL6123102 BH4 SUR	12/31/02	830	1	✓			138002	✓	✓	
SEL6123102 BH4 10'	12/31/02	900	1	✓			138003	✓	✓	
SEL6123102 BH4 20'	12/31/02	930	1	✓			138004	✓	✓	
SEL6123102 BH4 30'	12/31/02	1000	1	✓			138005	✓	✓	
SEL6123102 BH4 40'	12/31/02	1030	1	✓			138006	✓	✓	
SEL6123102 BH4 50'	12/31/02	1100	1	✓			138007	✓	✓	
SEL6123102 BH4 55'	12/31/02	1130	1	✓			138008	✓	✓	

(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 Po 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	Time	Name	Affiliation	Date	Ti
Cody Miller	EOH	1/31/02		Melonie Humphrey	ASI	1/3/03	09

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

AnalySys Inc.

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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#: 138119 **Report Date:** 01/20/03
Project ID: 2002-20312 Lovington Deep 6"
Sample Name: SEL61203BH5SUR
Sample Matrix: soil
Date Received: 01/09/2003 **Time:** 12:00
Date Sampled: 01/02/2003 **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	01/10/03	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

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.

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:** 2002-20312 Lovington Deep 6" **Sample Name:** SEL61203BH5SUR	**Report#/Lab ID#:** 138119 **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.	72.5	50-150	---
1,2-Dichloroethane-d4	8260b	92	65-115	---
Toluene-d8	8260b	101	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#: 138120 **Report Date:** 01/20/03
Project ID: 2002-20312 Lovington Deep 6"
Sample Name: SEL61203BH5 10'
Sample Matrix: soil
Date Received: 01/09/2003 **Time:** 12:00
Date Sampled: 01/02/2003 **Time:** 09:00

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	01/10/03	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

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.

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

REPORT OF SURROGATE RECOVERY

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

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

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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 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	01/10/03	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

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.

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:** 2002-20312 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.

AnalySys

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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#: 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

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	01/10/03	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

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.

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:** 2002-20312 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	8015 mod.	72.2	50-150	---
p-Terphenyl	8015 mod.	69.5	50-150	---
1,2-Dichloroethane-d4	8260b	92.2	65-115	---
Toluene-d8	8260b	98.8	50-120	---

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

ANALYSYS

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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 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	01/10/03	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

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.

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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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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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

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	01/10/03	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

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.

Respectfully Submitted,

Richard Laster

Richard Laster

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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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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#: 138125 **Report Date:** 01/20/03
Project ID: 2002-20312 Lovington Deep 6"
Sample Name: SEL61203BH5 55'
Sample Matrix: soil
Date Received: 01/09/2003 **Time:** 12:00
Date Sampled: 01/02/2003 **Time:** 11:00

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	01/10/03	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

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.

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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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.

ANALYSYS

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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

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	01/10/03	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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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	8015 mod.	60.9	50-150	---
p-Terphenyl	8015 mod.	58.2	50-150	---
1,2-Dichloroethane-d4	8260b	82.1	65-115	---
Toluene-d8	8260b	88.8	50-120	---

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

ANALYSYS INC

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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#: 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

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	01/10/03	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

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.

Respectfully Submitted,

Richard Laster

Richard Laster

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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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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

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	01/13/03	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

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.

Respectfully Submitted,

Richard Laster

Richard Laster

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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	8015 mod.	63.6	50-150	---
p-Terphenyl	8015 mod.	61.7	50-150	---
1,2-Dichloroethane-d4	8260b	105	65-115	---
Toluene-d8	8260b	102	50-120	---

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

AnalySys, Inc.
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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#: 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

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	01/13/03	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

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:** 2002-20312 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
(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#: 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 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	01/13/03	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

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.

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:** 2002-20312 Lovington Deep 6" **Sample Name:** SEL61203BH6 40'	**Report#/Lab ID#:** 138130 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

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

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

ANALYSYS 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.
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

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	01/14/03	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

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.

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:** SEL61203BH6 50'	**Report#/Lab ID#:** 138131 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

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

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 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	01/13/03	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	---		---		01/14/03	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

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.

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:** SEL61203BH6 55'	**Report#/Lab ID#:** 138132 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

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

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

[redacted] Inc.

4221 Freidrich Lane, Suite 190, Austin, TX 787
(512) 444-5896
512-385-7411

Company Name: Environmental Plus Inc
Address: PO Box 1558
City: Eunice State: NM Zip: 88231
ATTN: Pat McElvaney
Phone: _____ Fax: _____

Bill to (if different):
Company Name: Eott Energy
Address: _____
City: _____ State: ___ Zip: _____
ATTN: Frank Hernandez
Phone: _____ Fax: _____

Rush Status (must be confirmed with lab mgr.): _____
Project Name/PO#: 2002-10312 Lovington Deep 6" Sampler: Cody Mills

Analyses Requested (1)
Please attach explanatory information as requi

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers	Soil	Water	Waste	Lab I.D. # (Lab only)	TPH 8015m	BTEX 8021B	Comments
SEL61203BH5SUR	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	1030	1	✓			138124	✗	✗	
SEL61203BH555'	1/2/03	1100	1	✓			138125	✗	✗	
SEL61203BH6SUR	1/2/03	1:00	1	✓			138126	✗	✗	
SEL61203BH610'	1/2/03	1:15	1	✓			138127	✗	✗	
SEL61203BH620'	1/2/03	1:30	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 reporti 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 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	Time	Name	Affiliation	Date	Time
Cody Mills	EPI	1/2/03		Melanie Humphrey	ASI	1/9/03	12:00

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

Company Name: Environmental PVS
Address: PO Box 1558
City: Eunice State: NM Zip: 88231
ATTN: Pat McCasland
Phone: _____ Fax: _____

Bill to (if different):
Company Name: Eott Energy
Address: _____
City: _____ State: ___ Zip: _____
ATTN: Frank Hernandez
Phone: _____ Fax: _____

4221 Freidrich Lane, Suite 190, Austin, TX 787
(512) 444-5896
512 384 7411

Rush Status (must be confirmed with lab mgr.): _____
Project Name/PO#: 2002-10312 Lovington Deep 6" Sampler: Cody Mills

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers	Soil	Water	Waste	Lab I.D. # (Lab only)	TPH 8015M	BTEX 8021B	Comments
SEL1203BH630'	1/2/03	1:45	1	✓			138129			
SEL1203BH640'	1/2/03	200	1	✓			138130			
SEL1203BH650'	1/2/03	230	1	✓			138131			
SEL1203BH655'	1/2/03	300	1	✓			138132			

Analyses Requested (1)
Please attach explanatory information as requi

(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 reporti 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 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	Time	Name	Affiliation	Date	Time
Cody Mills	EPI	1/2/03		Melanie Humphrey	ASI	1/9/03	12:00

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

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.

Lab ID:	Sample :	Matrix:	Date / Time Collected	Date / Time Received	Container	Preservative
0306193-01	SELD64803CSP	SOIL	4/8/03 9:00	4/8/03 13:45	4 oz glass	Ice
	Lab Testing:	**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
	Lab Testing:	**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

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	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

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

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

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

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.%	

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.%	
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.%	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.%	
Toluene-mg/kg	0005183-05		0.1	0.104	104.%	
Ethylbenzene-mg/kg	0005183-05		0.1	0.103	103.%	
p/m-Xylene-mg/kg	0005183-05		0.2	0.212	106.%	
o-Xylene-mg/kg	0005183-05		0.1	0.100	100.%	

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: Roland K Tuttle Date: 4-12-03

Environmental Lab of Texas I, Ltd.

Environmental Lab of Texas, Inc.

12600 West I-20 East
Odessa Texas 79763

Phone: 915-563-1800
Fax: 915-563-1713

Project Manager: FRANK HERNANDEZ

Company Name: EOTT ENERGY PIPELINE

Company Address: 5805 E. HIGHWAY 80

City/State/Zip: MIDLAND TX 79701

Telephone No: 713-253-7006

Sampler Signature: C Mabb

Project Name: Lovington 6" Deep Gathering

Project #: 2002-10312

Project Loc:

PO#:

030693		Date Sampled	Time Sampled	No. of Containers	ICE	HNO	HCl	NaOH	HSO	None	Other (Specify)	Water	Sludge	Soil	Other (Specify)	Analyze For: TCLP / TOTAL: TDS/CL/SAR/EC	TPH 418.1	TPH TX 1005/1006	TPH 8015M GRO/DRO	Metals	Volatiles	Semivolatiles	BTEX 8021B/5030	Reactivity	Corrosivity	Ignitiability				RUSH TAT	Standard TAT
01	SELD64803CSP	04/08/2003	9:00	1	X									X					X				X								
02	SELD64803SSP	04/08/2003	9:15	1	X									X					X				X								

Special Instructions

FAX RESULTS TO PAT MCCASLAND ASAP

Sample Containers Intact? (Y) N

Temperature Upon Request

Laboratory Comments: 2.0°C

Relinquished:	Date	Time	Received by:	Date	Time
C Mabb	4/8/03	1345			
Relinquished:	Date	Time	Received by:	Date	Time
			Jeanne McMurrey	4-8-3	1345

AnalySys 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.
Attn: Pat McCasland
Address: 2100 Ave. O
Eunice NM 88231
Phone: (505) 394-3481 **FAX:** (505) 394-2601

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

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	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
Volatile 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.

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:** SELD6030703WSW	**Report#/Lab ID#:** 140347 **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.	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
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
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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Address: 2100 Ave. O
Eunice NM 88231

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

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

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	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

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.

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

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Comments pertaining to Data Qualifiers and QC data:

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

Notes: _____

ANALYSYS 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.
Attn: Pat McCasland
Address: 2100 Ave. O
Eunice 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

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	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

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

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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Comments pertaining to Data Qualifiers and QC data:

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

Notes:

ANALYSYS 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.
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

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	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

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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 **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
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
Project ID: 2002-10312
Sample Name: SELD6030703SSW

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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Comments pertaining to Data Qualifiers and QC data:

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

Notes: _____

nd Repor. To:
ompany Name Environmental Plus Inc
ddress P.O. Box 1558
ty Eunice State NM Zip 88231
TTN: Pat McCasland
one 505 394-3481 Fax 505 394-2601
ush Status (must be confirmed with lab mgr.):
oject Name/PO#: 2002-10312 Sampler: Conrad Falcon

Bill to (if differ):
Company Name Eo ft
Address
City State Zip
ATTN:
Phone Fax

AnalySys, Inc.
4221 Freidrich Lane, Suite 190, Austin, TX 7874
(512) 444-5896

Analyses Requested (1)
Please attach explanatory information as requir

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers	Soil	Water	Waste	Lab I.D. # (Lab only)	BTEX 8021B	TPH 8015 Mod. Ext.								Comments
SELD6030703WSW	3-7-03	11:35	1	✓			140347	X	X								
SELD6030703 ESW	3-7-03	11:40	1	✓			140348	X	X								
CLD6030703 NSW	3-7-03	11:45	1	✓			140349	X	X								
CLD6030703 SSW	3-7-03	11:50	1	✓			140350	X	X								

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 reporti its (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 Pollutant I's HSL list at ASI's option. Specific compound lists must be supplied for all GC procedures.

T=5.2°C

Sample Relinquished By				Sample Received By			
Name	Affiliation	Date	Time	Name	Affiliation	Date	Time
Conrad Falcon	EPI	3-10-03	0700	Melanie Humphrey	ASI	3/12/03	0900

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

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"
Waste Zone Thickness = 15.24 meters

SOURCE AND CHEMICAL DATA ****
FKSWM, MEAN WASTE ZONE SAT. CONDUC. (m/day) = 0.00000
SDFKSW, STD.DEV. OF WASTE ZONE SAT. CONDUC. = 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 (m^2) = 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 (cm^3/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, HYDCARBON MASS FRAC. IN WASTE (mg/kg)= 8380.00000
HCCONS, STD OF HYDCARBON MASS FRAC. IN WASTE = 0.00000

CHEMICAL SPECIES: **Benzene**

MOLW, MOLECULAR WT. OF CONTAMINANT (g/mole) = 78.1,0000

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

RHO, DENSITY OF CONTAMINANT (g/cm^3) = 0.87600

RHOG, AVERAGE DENSITY OF HYDROCARBON (g/cm^3) = 0.90000

SOL, AQUEOUS SOLUB. OF CONTAMINANT (g/m^3) = 1790.00000

HENRYC, HENRY'S CONSTANT (-) = 0.23000

DIFFA, DIFFUSION COEF. IN FREE AIR (m^2/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
QINSTD, STD.DEV. OF INFILTRATION RATE = 0.00

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"
Waste Zone Thickness = 12.24 meters

SOURCE AND CHEMICAL DATA ****
FKSWM, MEAN WASTE ZONE SAT. CONDUC. (m/day) = 0.00000
SDFKSW, STD.DEV. OF WASTE ZONE SAT. CONDUC. = 0.00000

DEPTHM, MEAN THICKNESS OF WASTE ZONE (m) = 12.24000
DEPSTD, STD.DEV. OF THICKNESS OF WASTE ZONE = 0.00000

AREAM, MEAN WASTE ZONE AREA (m^2) = 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) = 5.00000
CVRTHS, STD.DEV. OF COVER THICKNESS = 0.00000

KOCM, MEAN ORG. CARBON PARTITION COEF (cm^3/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, HYDCARBON MASS FRAC. IN WASTE (mg/kg)= 8380.00000
HCCONS, STD OF HYDCARBON MASS FRAC. IN WASTE = 0.00000

CHEMICAL SPECIES benzene

MOLW, MOLECULAR WT. OF CONTAMINANT (g/mole) = 78.1,0000

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

RHO, DENSITY OF CONTAMINANT (g/cm^3) = 0.87600

RHOG, AVERAGE DENSITY OF HYDROCARBON (g/cm^3)= 0.90000

SOL, AQUEOUS SOLUB. OF CONTAMINANT (g/m^3) = 1790.00000

HENRYC, HENRY'S CONSTANT (-) = 0.23000

DIFFA, DIFFUSION COEF. IN FREE AIR (m^2/day) = 0.77000

HYDROGEOLOGICAL PROPERTIES

** UNSATURATED ZONE INPUT PARAMETERS **
GAMMAM, MEAN UNSAT ZONE DECAY COEF (1/day) = 0.00000
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) = 7.12800
STDFKS, STD.DEV. OF SAT. CONDUCTIVITY = 0.000

DISTM, MEAN DEPTH TO GROUNDWATER (m) = 10.30000
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 (-) = 1.09000
SDPARN, STD.DEV. OF VG PARAMETER N = 0.00000

RESWCM, MEAN RESIDUAL WATER CONTENT (-) = 0.06800
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) = 0.00100
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. (-) = 0.00029
STDFOC, STD.DEV. SAT. ZONE ORG. CARBON FRAC.= 0.00000

ALRLTM, MEAN DISPERS, RATIO LONG/TRANSV. (-) = 1.00000
SALRLT, STD.DEV. OF DISP. RATIO LONG/TRANSV. = 0.00000

ALRTVM, MEAN DISPERS. RATIO TRANSV/VERT. (-) = 1.00000
SALRTV, STD.DEV. OF DISP. RATIO TRANSV/VERT. = 0.00000

ALPHXX, HORIZONTAL DISPERSIVITY (m) = 1.00000
SALPHX, STD.DEV. OF HOR. DISPERSIVITY (m) = 0.00000

CONDS, SAT. HYDRAULIC COND. (m/day) = 0.90000
SCONDS, STD.DEV. OF SAT HYDRAULIC COND. = 0.00000

GRADS, HYDRAULIC GRADIENT (m/m) = 0.02600
SGRADS, STD.DEV. OF HYDRAULIC GRADIENT = 0.00000

HMEAN, MEAN AQUIFER THICKNESS (m) = 20.90000
STDH, STD.DEV. OF AQUIFER THICKNESS = 0.00000

QINM, MEAN INFILTRATION RATE (m/day) = 0.00011
QINSTD, STD.DEV. OF INFILTRATION RATE = 0.00000

LOCATION OF RECEPTORS:

	X (M)	Y (M)	Z (M)
RECEPTOR(1)	0.1	0.1	0.1
RECEPTOR(2)	1.0	1.0	1.0
RECEPTOR(3)	5.0	5.0	5.0

ATTACHMENT V: QUALITY ASSURANCE PLAN

1.0 QUALITY ASSURANCE PROJECT PLAN

This Quality Assurance Plan (QAP) will ensure the quality and usability of information and data used to support a successful site investigation and subsequent environmental management decisions.

1.1.1 Data Quality Objectives

For analytical information derived from samples, the following quality controls will be documented and verified. 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 ≤30.0%. Or a "%Extraction Accuracy " between 70 and 130%.
- Laboratory data must have <30% Relative Percent Difference or a "%Instrument Accuracy" between 70 and 130%.
- Field headspace analyses must be supported with instrument calibration data and calibration gas certification.

1.1.2 Methodology

Collecting representative site samples and information requires that the sampling and observational processes and procedures be implemented within strict bounds. These control procedures will further ensure the quality of site data and information and are consistent with the EOTT standard operating procedures as referenced in the NMOCD approved "General Work Plan for Remediation of EOTT Pipeline Spills, Leaks, and Releases in New Mexico." Likewise, personnel will implement standard environmental and occupational safety protocols.

1.1.2.1 Borehole Drilling, Lithologic Sampling, Logging, and Abandonment

Boreholes will be located strategically to best determine vertical and horizontal extent of contamination in the vadose zone and groundwater. Borelogs will be developed for each boring noting site lithology. Likewise, laboratory samples may be collected to determine more detailed lithologic characteristics, i.e., porosity, transmissivity, etc. Each borehole not developed into a permanent monitor well will be plugged with Sodium Bentonite in accordance with the NMOCD guidelines.

1.1.2.1.1 General Drilling Procedures

The investigation will use the Environmental Plus, Inc. drill rig with hollow stem auger and "thin-wall probe" method of discrete sampling.

1.1.2.1.2 Soil Sampling and Logging

Upon advancing to the desired sampling interval the probe will be extended through the end of the hollow stem auger and pushed into the soil matrix to collect the sample. As the 1.5" X 48" stainless steel probe with a vinyl sampling sleeve is detached from the sampling bar, it will be immediately placed on the rack and logged. A 4 oz. sample will then be decanted into the sample jar for refrigeration and preparation with the remainder (approximately1 Kg) placed in a 1 gallon Ziplock bag, warmed to ambient approximately 70-80 °F and VOC Headspace concentration measured and recorded. All pertinent information will be recorded on the field borelog data sheet.

1.1.2.1.3 Monitor and Pollution Abatement Well Installation

Boreholes exhibiting contamination from the surface to groundwater will be abandoned. Those advanced down gradient of the site for the purpose of plume delineation and found to be unimpacted will be completed and developed as monitor wells. Some boreholes may be temporarily abandoned, i.e., covered but not plugged, for future development as pollution abatement wells. The New Mexico State Engineers Office will be notified in writing of all pollution abatement well installations. All monitor and pollution abatement wells will be installed and developed in accordance with the NMOCD guidelines.

1.1.2.1.4 Groundwater Sampling

Groundwater will be sampled within 24 hours of well development using a new and certifiably clean one-liter weighted baler. The water will be immediately decanted into the appropriate containers and prepared for ascension to the laboratory.

1.1.2.1.5 Borehole Abandonment

The boreholes will be filled with a mixture of distilled water and Sodium Bentonite and a wooden marker denoting the borehole number driven into the center of each backfilled hole.

1.1.2.2 Sample Handling

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

1.1.2.3 Sampling protocols

1. Decontaminate sampling equipment and area with Alconox 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.

1.1.2.4 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

1.1.2.5 Sample Custody

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

1.1.2.6 Quality Control Samples

Quality control samples will be analyzed to ensure data quality.

1.1.2.6.1 Field Blank

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

1.1.2.6.2 Equipment Blank

None will be collected.

1.1.2.6.3 Field Duplicate or Co-located Samples

For water and soil samples, one duplicate or co-located sample will be collected for analysis every 10^{th} sample.

1.1.2.6.4 Trip Blank

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

1.1.2.7 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.

1.1.2.7.1 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.

1.1.2.7.2 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.

1.1.2.7.3 Groundwater Level Measurements

Groundwater levels will be taken with an accurate water level meter at each borehole where groundwater is encountered and may require the use of an interface meter. Levels will be recorded as "feet below ground surface" to the nearest ".1 ft."

1.1.2.8 Analyses

Soil and groundwater 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)
- SPLP for selected samples

The analytical suite for water samples will include:

- TPH (EPA method 8015B)
- BTEX (EPA method 8021B)
- Total Dissolved Solids (EPA method 150.1)
- PAH (EPA method 8270)

1.1.2.9 Sample Identification

Sample identification numbers will be designated as follows;

Site: Link Energy Lovington Deep 6"	Geoprobe	Borehole #	Interval bgs	Qualification: Cutting/Probe Sample
LELD6	GP	1	20'	C or P

Example: LELD6GP1-20C

1.1.2.10 Data Evaluation

All data will be reviewed based on the Data Quality Objectives in section 3.8.1.

ATTACHMENT VI: NMOCD FORM C-141 AND SITE INFORMATION AND METRICS FORM

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1,000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-141
Revised March 17, 1999

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

OPERATOR "INFORMATION ONLY NON-REPORTABLE" ☒ Initial Report ☐ Final Report

Name of Company	Contact
EOTT Energy Pipeline	Frank Hernandez
Address 5805 East Highway 80 / P.O. Box 1660, Midland, TX 79703	Telephone No. 915.638.3799
Facility Name: Lovington Deep 6"	Facility Type Crude Oil Pipeline

Surface Owner	Mineral Owner	Lease No.
Darr Angell		

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea Lat.: 32°52'1.132"N Lon:103°23'16.570"W
H	6	17S	36E					

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Crude Oil	25 bbls	10 bbls
Source of Release 6" steel pipeline	Date and Hour of Occurrence 12-12-02 8:00 AM	Date and Hour of Discovery 12-12-02 10:00 AM
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? Paul Sheeley and Sylvia Dickie, Hobbs NMOCD (left messages) Confirmed with Sylvia Dickie at 11:45 AM 12-12-02	
By Whom? Pat McCasland (Environmental Plus, Inc.)	Date and Hour: NMOCD notified on 12-12-02 10:30 AM	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
The cause of the leak was internal/external corrosion. The contaminated soil was stockpiled on a plastic barrier. Disposing at South Monument SWF

Describe Area Affected and Cleanup Action Taken.*

Spill Area = approximately6,000 ft² Near surface soil will be characterized in accordance with 40 CFR 261 and with NMOCD approval, disposed of in a NMOCD approved facility. The site will be delineated and remediated.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Frank Hernandez	OIL CONSERVATION DIVISION
Printed Name: Frank Hernandez	Approved by District Supervisor:
Title: District Environmental Supervisor	Approval Date: / Expiration Date:
Date: December 12, 2002 Phone: 915.638.3799	Conditions of Approval: / Attached ☐

* Attach Additional Sheets If Necessary

EOTT Energy Pipeline Site Information and Metrics	**Incident Date and NMOCD Notified?** Discovered 12-12-02 NMOCD verbally notified on 12-12-02
SITE: Lovington Deep 6"	Assigned Site Reference #: #2002-10312
Company: EOTT Energy Pipeline	
Street Address: 5805 East Highway 80	
Mailing Address: P.O. Box 1660	
City, State, Zip: Midland, Texas 79703	
Representative: Frank Hernandez, District Environmental Supervisor	
Representative Telephone: 915.638.3799	
Telephone:	
Fluid volume released (bbls): 25 bbls	Recovered (bbls): 10
>25 bbls : Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas)	
5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)	
Leak, Spill, or Pit (LSP) Name: Lovington Deep 6"	
Source of contamination: 6" Steel Crude Oil Pipeline	
Land Owner, i.e., BLM, ST, Fee, Other: Darr Angell	
LSP Dimensions 140' X 75'	
LSP Area: Spill Area approximately6,000 ft^2	
Location of Reference Point (RP)	
Location distance and direction from RP	
Latitude: 32° 52' 1.132"N	
Longitude: 103° 23' 16.570"W	
Elevation above mean sea level: approximately3,918 'amsl	
Feet from South Section Line	
Feet from West Section Line	
Location- Unit or ¼¼: UL-H SE ¼ of the NE ¼	
Location- Section: 6	
Location- Township: 17S	
Location- Range: 36E	
Surface water body within 1,000 ' radius of site: None	
Domestic water wells within 1,000' radius of site: None	
Agricultural water wells within 1,000' radius of site: None	
Public water supply wells within 1,000' radius of site: None	
Depth from land surface to groundwater (DG) approximately65.0'below ground surface	
Depth of contamination (DC) – ?	
Depth to groundwater (DG – DC = DtGW) - 0'bgs	

1. Groundwater	**2. Wellhead Protection Area**	**3. Distance to Surface Water Body**
If Depth to GW <50 feet: *20 points*	If <1,000' 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 >1,000' from water source, or; >200' from private domestic water source: *0 points*	>1,000 horizontal feet: *0 points*
Groundwater Score = 10	*Wellhead Protection Area Score= 0*	*Surface Water Score= 0*
Site Rank (1+2+3) = 10		

Total Site Ranking Score and Acceptable Concentrations

Parameter	**>19 (soil from 15'bgs to 65'bgs)**	**10-19 (soil from 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**	**1,000 ppm**	5000 ppm

[1]100 ppm field VOC headspace measurement may be substituted for lab analysis