AP - 54

STAGE 1 & 2 WORKPLANS

DATE:

Aug 2004

PLAINS
ALL AMERICAN
PIPELINE, L.P.

STAGE 1 AND STAGE 2 ABATEMENT PLAN

FOR THE

HOBBS JUNCTION MAINLINE

Ref. #2003-00017

~~1R-3844~~ AP-54

SW¼ of the SW¼ Unit Letter M of
Section 26, T18S, R37E,
~3 miles west Hobbs
Lea County, New Mexico
Latitude: 32°42'40.85"N Longitude: 103°13'42.01"W

August 2004

Prepared by

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STANDARD OF CARE

Environmental Assessment and Remediation Report

Hobbs Junction Mainline
Ref. # 2003-00017

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:

Patrick W. McCasland — Date

This report was reviewed by:

Iain Olness, P.G. Hydrogeologist — Date

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1.0 INTRODUCTION

Environmental Plus, Inc. (EPI) on behalf of Plains All American Pipeline (Plains), submits this Stage 1 and Stage 2 Abatement Plan, in accordance with 19.15.1.19 NMAC (Rule 19), to the New Mexico Oil Conservation Division (NMOCD) for the investigation and remediation of the Plains Hobbs Junction Mainline crude oil release site Ref. #2003-00017. The initial release occurred in January of 2003 under the ownership of EOTT Energy Pipeline (EOTT changed its' name to Link Energy in September 2003) and as of April 1, 2004, Plains All American Pipeline purchased the assets from Link Energy.

2.0 "RESPONSIBLE PERSON"

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

Ms. Camille Reynolds
District Environmental Coordinator
Plains All American Pipeline
5805 East Highway 80
PO Box 1660
Midland, Texas 79702
Email - CJReynolds@paalp.com

3.0 STAGE 1 ABATEMENT PLAN

Plains has achieved, with NMOCD consensus and participation, many of the Rule 19 Stage 1 & Stage 2 Abatement Plan objectives by delineating the soil and groundwater impacted by the crude oil release, removing accessible impacted soil, and recovering free crude oil product, i.e., phase separated hydrocarbon (PSH) from the surface of the groundwater. This information will form the strategic basis for selecting viable groundwater and soil remediation alternatives.

3.1 BACKGROUND

The leak originated in Unit Letter (UL) M Section 26, T18S, R37E on land owned by the State of New Mexico with the flowpath ingressing into UL-D Section 35, T18S, R37E, property owned by Faye Klein dba Klein-Linam Ranches. The site is located ~3 miles west of Hobbs, Lea County, New Mexico at latitude 32°42'40.85"N and longitude 103°13'42.01"W. Driving directions are: From the intersection of NMSR 18 and US 62/180 in Hobbs NM, go west on US 62/180 4.0 miles, then right on the caliche road 0.4 miles, then left 1.5 miles along the pipeline right-of-way, then left on the pipeline right-of-way 0.3 miles to the location. The Plains site reference identification number is #2003-00017. The site information and metrics form and the initial NMOCD C-141 are included in Attachment VI. The initial NMOCD notification form C-141 submitted to the NMOCD by EOTT Energy Pipeline reported that, on January 23, 2003, approximately 50 barrels of crude oil were released with 24 barrels recovered and reintroduced into the system and was based solely on the conditions observed at the surface at the time. The 10-inch diameter steel pipeline that began leaking due to internal corrosion, was initially shutdown and repaired with a line clamp, and subsequently replaced with new pipe, tested, and returned to service. Approximately 12,500 square feet (50' x 470') of surface area were affected. Remediation activities as of August 2004 include; excavation and disposal of approximately 84 cubic yards (yd^3) of impacted soil from around the leak origin and the flowpaths and recovery of approximately 560 barrels of crude oil. Approximately 30 yd^3 of impacted soil remains stockpiled on site. Delineation of the areal extents of crude oil impact at the site began in February 2003 under the provisions of the "General Work Plan for Remediation

of EOTT Pipeline Spills, Leaks, and Releases in New Mexico" approved by the NMOCD on August 1, 2000. The initial soil boring (BH1) revealed soil and groundwater impact in excess of the NMOCD soil remedial guidelines and the New Mexico Water Quality Control Commission (WQCC) standards as codified in 20 NMAC 6.2.3103 A, i.e., "Non-aqueous phase liquid shall not be present floating atop or immersed within ground water, as can be reasonably measured." Soil boring BH1 was subsequently completed as monitor well MW1 to verify the initial groundwater impact observation. The landowners and the NMOCD offices in Santa Fe and Hobbs, New Mexico were notified verbally of the impact on February 13, 2003 pursuant to Subsection B of 19.15.3.116 NMAC and followed with written documentation and is included in Attachment VII. On June 10, 2003, the NMOCD approved implementation of the "EOTT Energy Preliminary Ground Water Contamination Investigation and Delineation Plan, Hobbs Junction Mainline 012303, EOTT Ref.#2003-00017, March 26, 2003." This plan proposed installation of 8 additional monitor wells. With approval from the landowners and the NMOCD, five of the proposed monitor wells were installed and developed in June 2003. These monitor wells, i.e., MW2, MW3, MW4, MW5, and MW6, were impacted with measurable thicknesses of PSH. In August 2003, a remote gasoline powered product recovery system was deployed and in October 2003, electrical power was installed at the site and a skid mounted recovery system deployed. In January 2004, with approval from the NMOCD and the landowners, 7 additional delineation wells were installed, i.e., MW7, MW8, MW9, MW10, MW11, MW12, and MW13. Benzene, toluene, ethylbenzene, and xylenes (BTEX) were <u>not</u> detected above the method detection limits in any of the wells <u>except</u> MW12. These wells bounded the dissolved phase impact to the north, east, and west. MW13 was installed between the leak origin and the private irrigation well located approximately 600' west of the leak origin. The irrigation well will be sampled when the irrigation system is in operation. Monitor wells MW14, MW15, MW16, and MW17 were installed and developed in May 2004. MW14 and MW17 are additional interior recovery wells with measurable thicknesses of PSH. BTEX compounds were not detected above the method detection limits in MW15 and MW16, bounding the dissolved phase impact on the south side of the site. Water Development Easement GW-118 has been issued to Plains allowing for installation and monitoring of the monitor wells located on New Mexico State Land Office property and Plains is currently negotiating an agreement with Faye Klein for the monitor wells located on Klein-Linam Ranch property. In April 2004, Plains submitted the "Hobbs Junction Mainline 012303 ref. #2003-00017 2003 Annual Monitoring Report" that provided detailed maps, comprehensive analytical information, and PSH recovery information. The water and PSH levels and analytical summary table is included in Attachment V. Routine quarterly monitoring continues along with continuous product recovery. The PSH thickness is declining as the table in Section 4.2.1 indicates.

3.2 Initial Spill Mitigation

The 10-inch diameter steel pipeline that began leaking due to internal corrosion, was initially shutdown and repaired with a line clamp, and subsequently replaced with new pipe, tested, and returned to service. Initial response mitigation activities included; recovering pooled crude oil, depressuring the line, exposing the leak origin and installation of a line repair clamp. Approximately 84 cubic yards (yd^3) of impacted soil from the leak origin excavation and the flowpath were disposed of in the NMOCD approved and permitted Environmental Plus, Inc. landfarm #NM-01-0013. Approximately 30 yd^3 of impacted soil remains stockpiled on plastic approximately 30 feet west of the leak origin. At this time, the pipeline system junction and infrastructure are fenced and remain exposed.

3.3 STAGE 1 ABATEMENT PLAN OBJECTIVES AS PER NEW MEXICO OIL CONSERVATION DIVISION REGULATION 19.E(3)

On June 10, 2003, the NMOCD approved implementation of the "EOTT Energy Preliminary Ground Water Contamination Investigation and Delineation Plan, Hobbs Junction Mainline 012303, EOTT Ref.#2003-00017, March 26, 2003." This plan, and subsequent delineation activities approved by the NMOCD, has provided adequate information to characterize and bound the hydrocarbon impact, i.e., horizontal and vertical extents, of the vadose zone and ground water and has established site-specific geologic and hydrologic metrics for this site. The Quality Assurance Plan included as Attachment IV guided implementation of critical protocols and ensured the credibility and usability of all data and information. The primary objective of the investigation was to collect adequate information to bound the vertical and horizontal extent of crude oil contamination in the vadose zone and the areal distribution in the ground water underlying the site and is discussed below. The focus and scope of this Stage I Abatement Plan is to provide more comprehensive information and includes:

- Designate "responsible person" relative to plan submittal
- Describe and map the site, provide historical information including previous investigations
- Characterize Site:
  1. Define Geology and Hydrogeology, i.e., Hydraulic Conductivity, Transmissivity, and Storativity
  2. Determine vertical and horizontal extent and magnitude of vadose-zone and ground water contamination.
     a) Collect discrete soil samples with a sample probe from depths as necessary below ground surface (bgs) to determine vertical extent of hydrocarbon contamination.
     b) Screen all samples using a Photoionization Detector (PID) and record results.
     c) Analyze 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) Samples may be collected from the interval exhibiting the highest TPH^{8015m} concentrations for synthetic precipitate leaching procedure (SPLP) analyses for TPH^{8015m} and BTEX.
  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 pollution.
  6. Define surface-water hydrology.
  7. Determine seasonal stream flow characteristics.
  8. Determine ground water/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.

3.3.1 Project Organization and Responsibility

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

3.3.2 Project Safety

Site hazards include:

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

Prior to drilling or excavation, NEW MEXICO ONE CALL was notified of activities, which provided a list of Companies they notified and a ONE CALL confirmation number. Employees and subcontractors were required to confirm current training in regardsthese hazards. Standard personal protective equipment included:

- Personal H_2S Monitor
- Hard-hat and safety glasses
- Steel Toed Boots/Shoes and gloves

3.3.3 Site Description

The leak site is located approximately 3 miles west of Hobbs, New Mexico. Driving directions are: From the intersection of NMSR 18 and US 62/180 in Hobbs NM, go west on US 62/180 4.0miles, then right on the caliche road 0.4 miles, then left 1.5 miles along the pipeline right-of-way, then left on the pipeline right-of-way 0.3 miles to the location.

3.3.3.1 Historical Use

The affected area in Section 26, owned by the State of New Mexico, has been used historically for livestock grazing and access to oil and gas production and transmission facilities. The affected area to the south in Section 35 owned by Klein-Linam Ranches, is cultivated and irrigated farm land.

3.3.3.2 Legal Description

The north part of the site is located in UL-M Section 26, T18S, R37E on land owned by State of New Mexico with the south flowpath ingressing on UL-D Section 35, T18S, R37E, property owned by Faye Klein (dba Klein-Linam Ranches). The leak originated on the state land in UL-M Section 26, T18S, R37E at latitude 32°42'40.85"N and longitude 103°13'42.01"W.

3.3.3.3 Photographic documentation

Photographs of the spill site are provided in Attachment II.

3.3.3.4 Ecological Description

The area is typical of the Lower Great Plains Biome consisting primarily of Honey Mesquite (Prosopis glandulosa) along with typical desert grasses and weeds. Netleaf Hackberry trees occur in the isolated depressions and drainages. 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.

3.3.4 Environmental Media Characterization

Chemical parameters of the soil and ground water were characterized consistent with the New Mexico Oil Conservation Division (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 (CoCs), i.e., TPH^{8015m} and BTEX were determined based on the following;

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

However, site specific risk based thresholds may be developed.

3.3.4.1 Area Ground Water Levels

According to The United States Geological Survey (USGS) Ground-Water Report 6, "Geology and Ground-Water Conditions in Southern Lea County, New Mexico," A. Nicholson and A Clebsch, 1961, and the New Mexico State Engineers Office, the uppermost aquifer occurs in the area between 33' and 65' bgs. The site water level was measured to be ~40'bgs. The New Mexico Office of the State Engineer website database report is included in Attachment V.

3.3.4.2 Water Well Inventory

The New Mexico State Engineers Office in Roswell, New Mexico has the following wells recorded for Sections 26 and 35, T18S, R37E.

State Engineer's Water Column Report
1/24/2003

Well #	Tws	Rng	Sec	q	q	q	Depth Well	Depth Water	Water Column
9326	18S	37E	27	4			75	42	33
3516	18S	37E	34	3	3		106	45	61
8012	18S	37E	35	1	4		100	38	62
10028	18S	37E	35	2	2		100	43	57
8846	18S	37E	35	3	4	3	140	65	75
7723	18S	37E	35	3	4	4	129	30	99
3081	18S	37E	35	3	4	4	135	44	91
9654	18S	37E	35	4			125	40	85
8011	18S	37E	35	4	1		100	38	62
8027	18S	37E	35	4	1		100	38	62
9005	18S	37E	35	4	1	1	135	65	70
8014	18S	37E	35	4	1	1	100	38	62
9572	18S	37E	35	4	3	1	140	33	107
8017	18S	37E	35	4	4	4	100	38	62
							Average	42.64	

3.3.4.3 Water Wells Actually or Potentially Affected by the Pollution

The only water well actually or potentially affected by the pollution is located approximately 600 feet west of the leak origin. This well is used to irrigate the Klein-Linam Ranches farm and is located transverse and up gradient to the established southeast groundwater gradient for the site. MW13, located 450 feet from the irrigation well, remains unimpacted above detectable concentrations for the dissolved phase BTEX compounds and was installed on a transect between the irrigation well and the leak origin to monitor potential expansion of the dissolved phase plume. The irrigation well will be sampled when in operation. The engineered survey map with the irrigation location is included in Attachment I.

3.3.4.4 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 west 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 59 feet thick. The hydraulic conductivity of the fine to medium grained Ogallala sand ranges from 1 to 10 gallons per day/ft^2.

3.3.4.5 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."

3.3.4.6 Depth to Ground Water Calculation

The NMOCD requires the site be ranked to determine which soil TPH threshold will apply and defines depth to ground water as, "the vertical distance from the lowermost contaminants to the seasonal high water elevation of the ground water." The uppermost occurrence of ground water is at ~40'bgs. The lower most contamination occurs at the interface of the vadose zone and the water table. The calculated NMOCD depth to ground water is essentially 0.0' bgs.

3.3.4.7 Ground Water Gradient

According to the USGS (Nicholson & Clebsch), the upper most aquifer occurs as the Ogallala formation with the flow gradient to the southeast and is consistent with the gradient derived from water level measurements at the site. The ground water gradient map, as of August 2004, is included in Attachment I.

3.3.4.8 Wellhead Protection Area

One water well, the irrigation well approximately 600 feet west, is within 1,000 horizontal feet of the site.

3.3.4.9 Distance to Nearest Surface Water Body

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

3.3.4.10 Seasonal Stream Flow Characteristics

There are no streams located at the site.

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

The crude oil released at the site has impacted soil vertically from the surface to the groundwater interface. Horizontally, near surface soils within a 40-foot radius of the leak origin are impacted. The total estimated soil volume impacted above the NMOCD remedial goals is approximately 7,443 yd^3. Soil data collected during the groundwater investigation are illustrated below and summarized and presented in Attachment III.

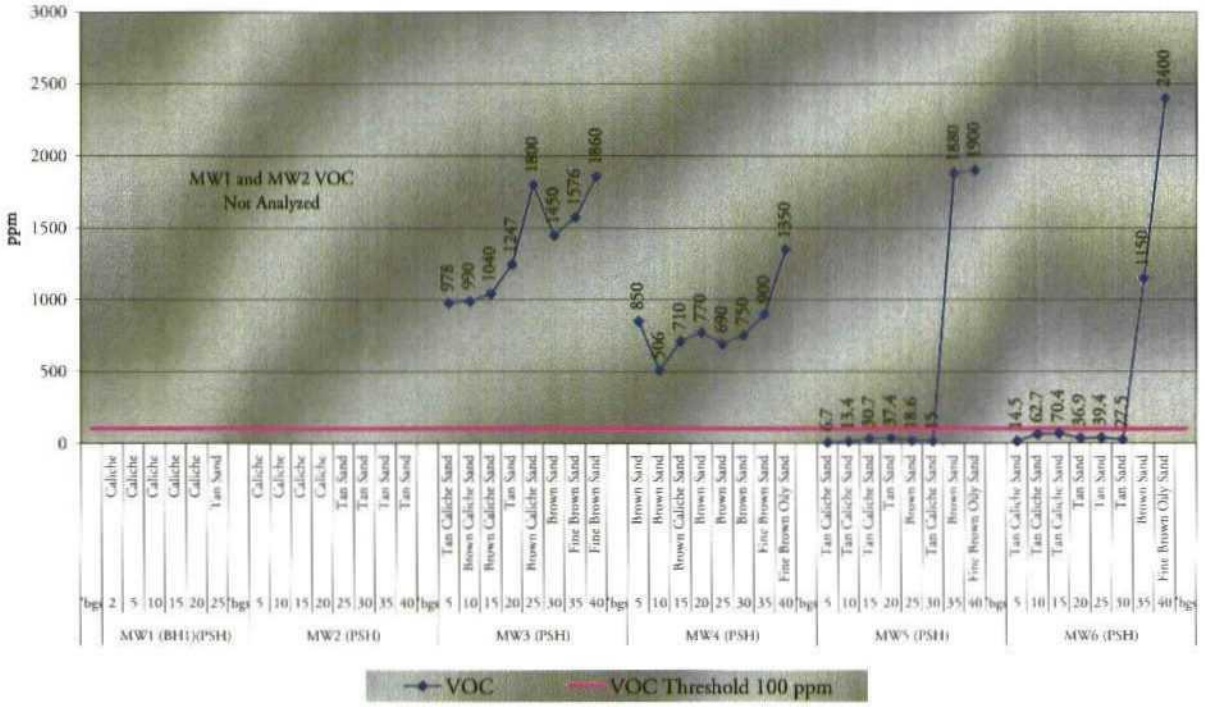
3.3.5.1 Highly Contaminated/Saturated Soils

Soil boring BH1 was advanced and ultimately installed and developed as monitor well MW1 approximately 20 feet south of the leak origin. In-situ soils within a radius of 20 feet of the leak origin down to the groundwater interface and the 30 yd^3 soil pile on a plastic barrier west of the leak origin can be considered highly contaminated/saturated soils. The volume of highly contaminated/saturated soil is estimated to be approximately 1,860 yd^3.

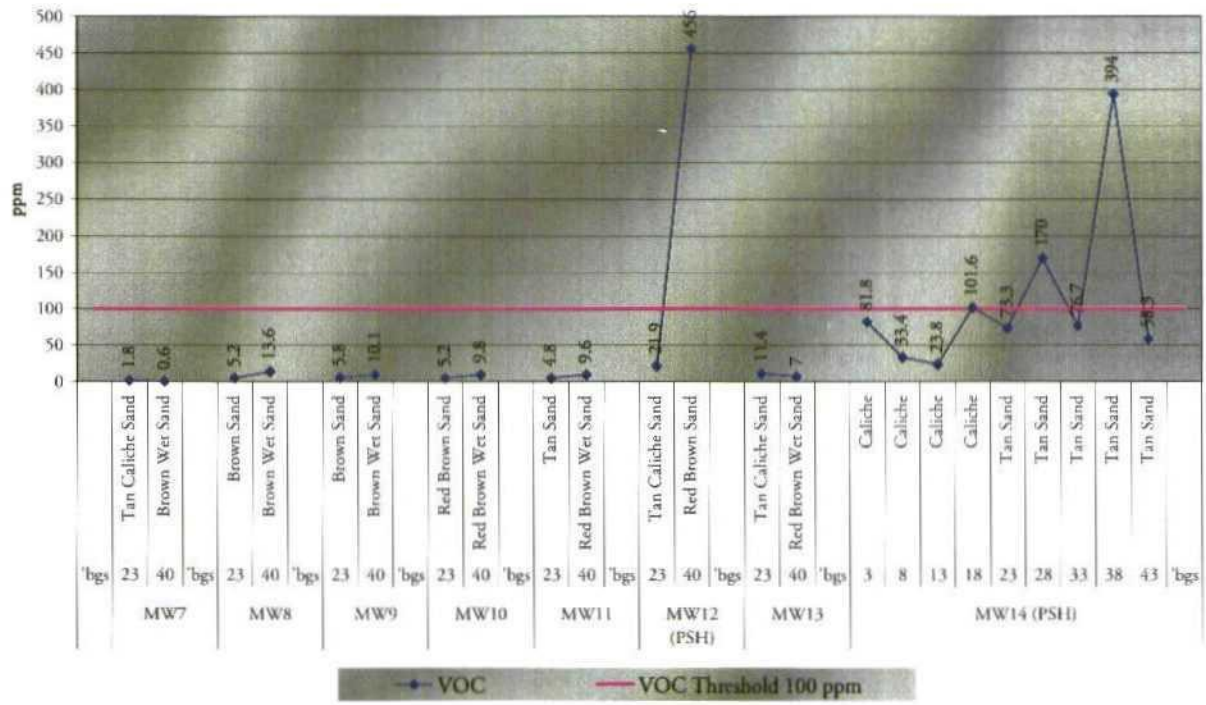
3.3.5.2 Unsaturated Contaminated Soils

It is estimated that in-situ soils between the 20 and 40 foot radii of the leak origin are considered to be unsaturated contaminated soils. The volume of unsaturated contaminated soil is estimated to be approximately 5,583 yd^3.

Plains All American Pipeline
Hobbs Junction Mainline #2003-00017
Volatile Organic Constituents (VOC) Headspace Delineation



Plains All American Pipeline
Hobbs Junction Mainline #2003-00017
Volatile Organic Constituents (VOC) Headspace Delineation



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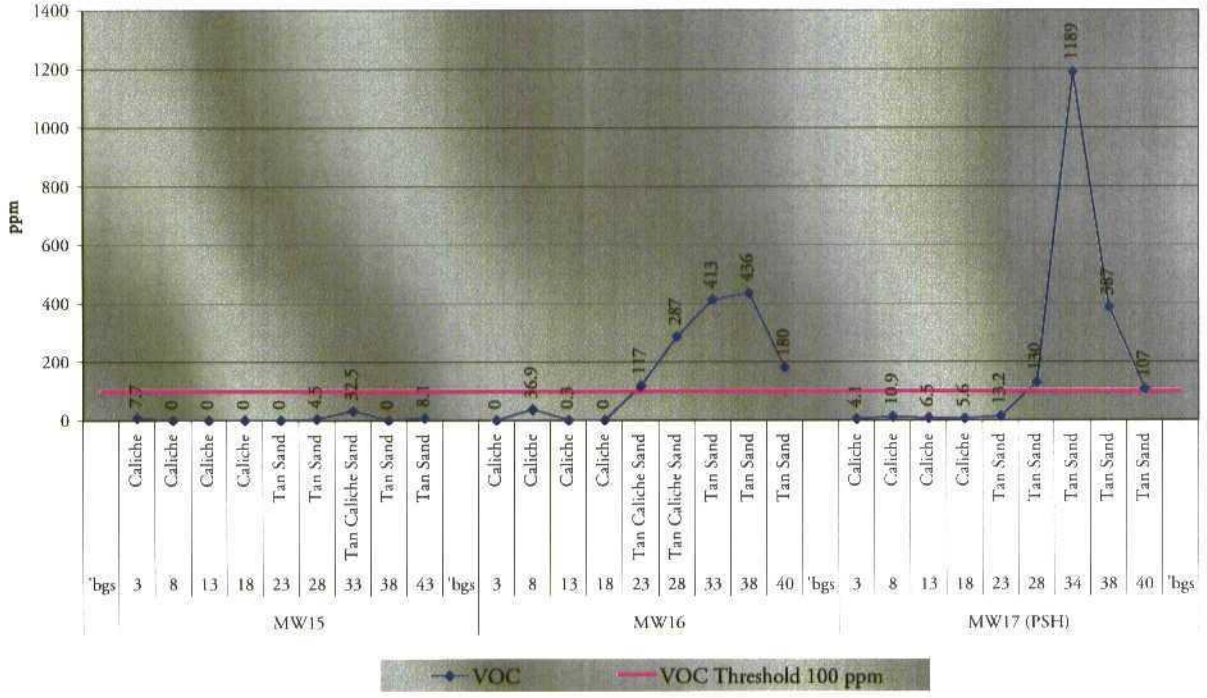
Hobbs Junction Mainline #2003-00017
Volatile Organic Constituents (VOC) Headspace Delineation



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Hobbs Junction Mainline #2003-00017
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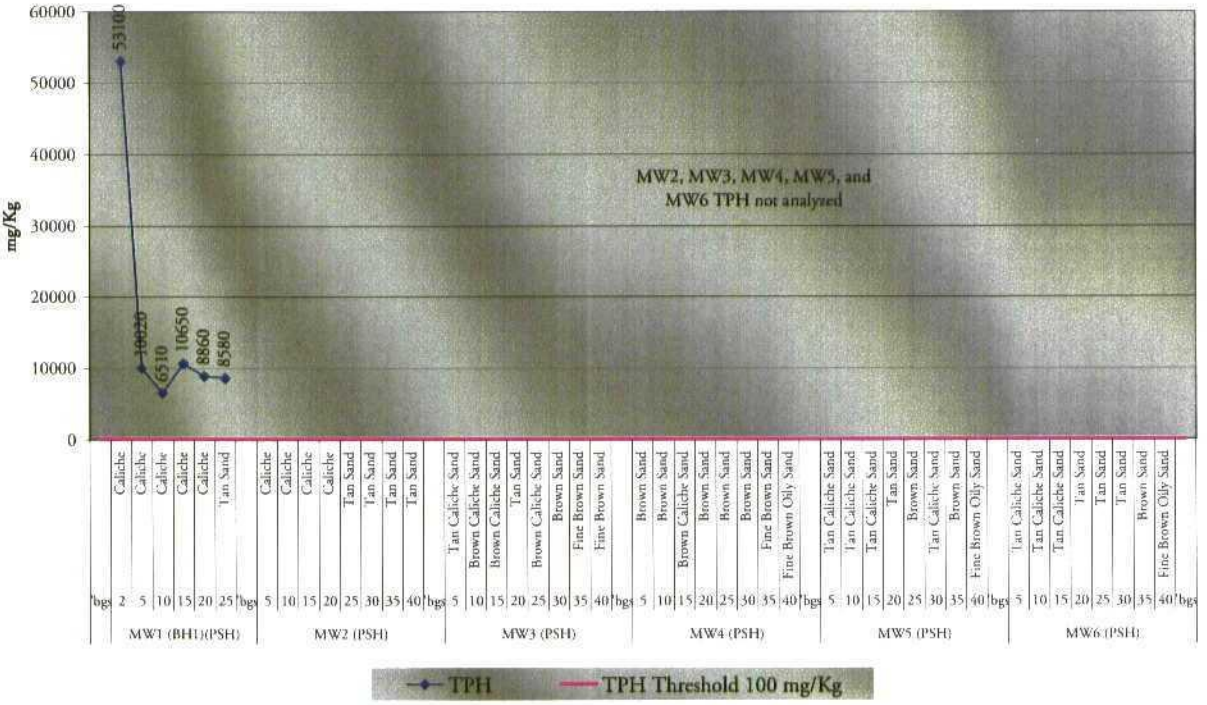

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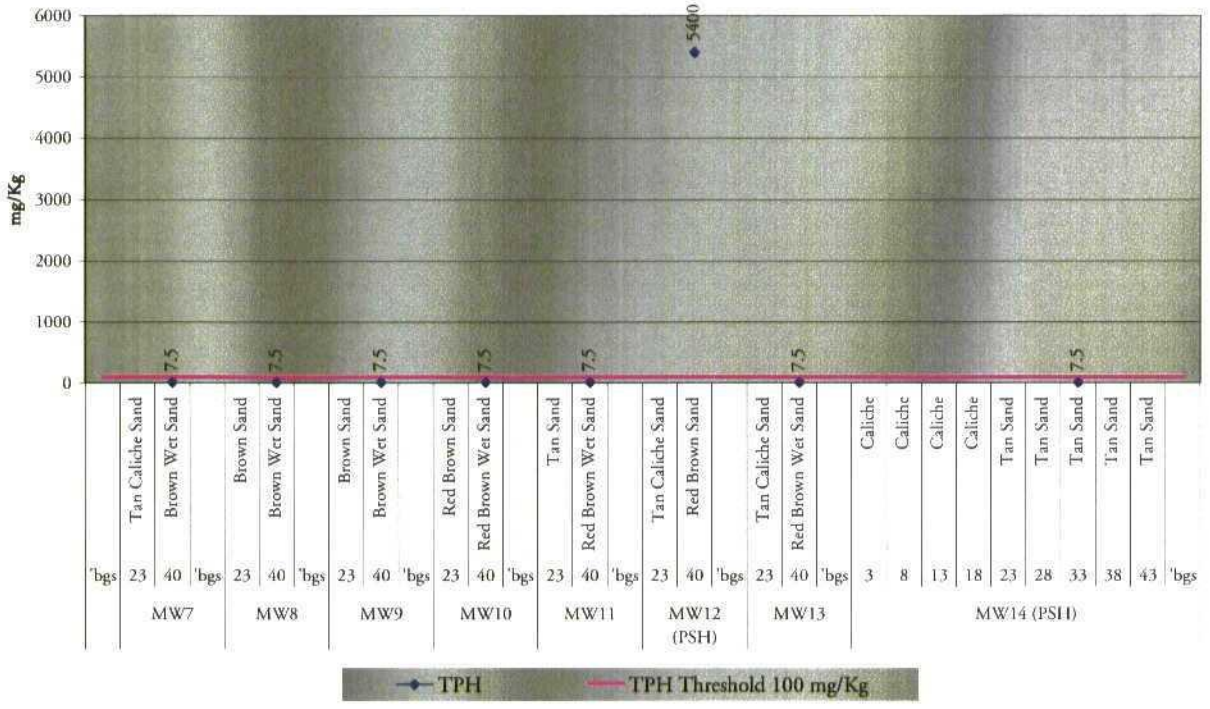

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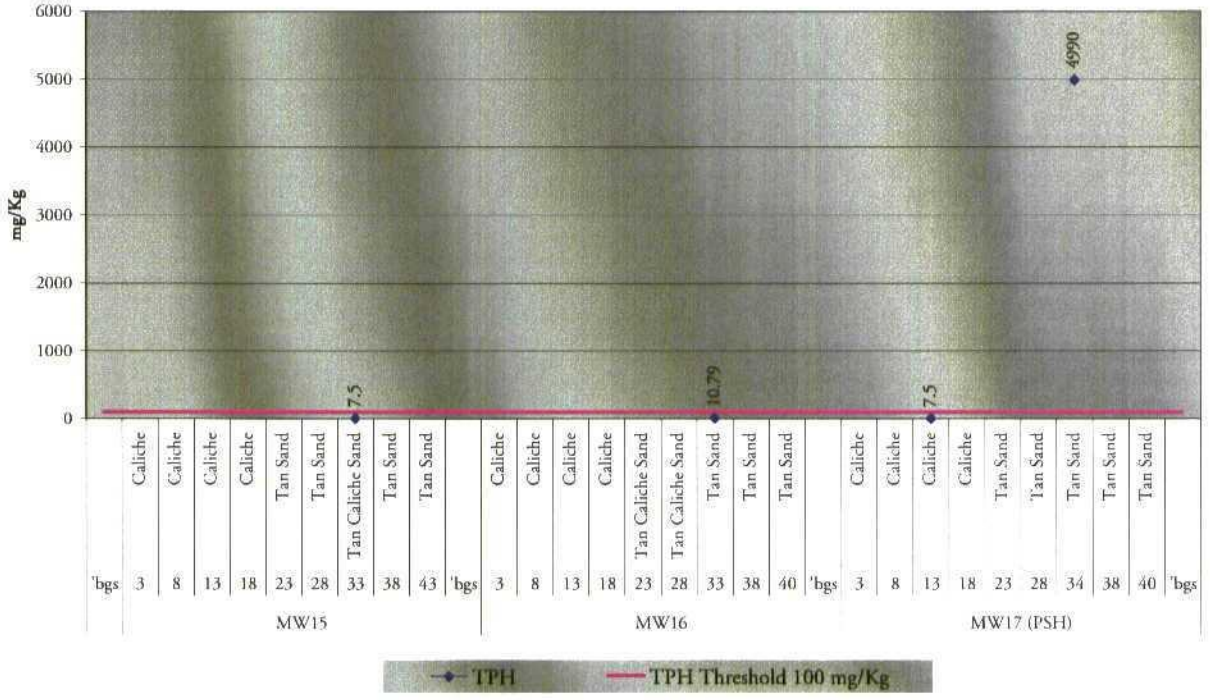

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Hobbs Junction Mainline #2003-00017
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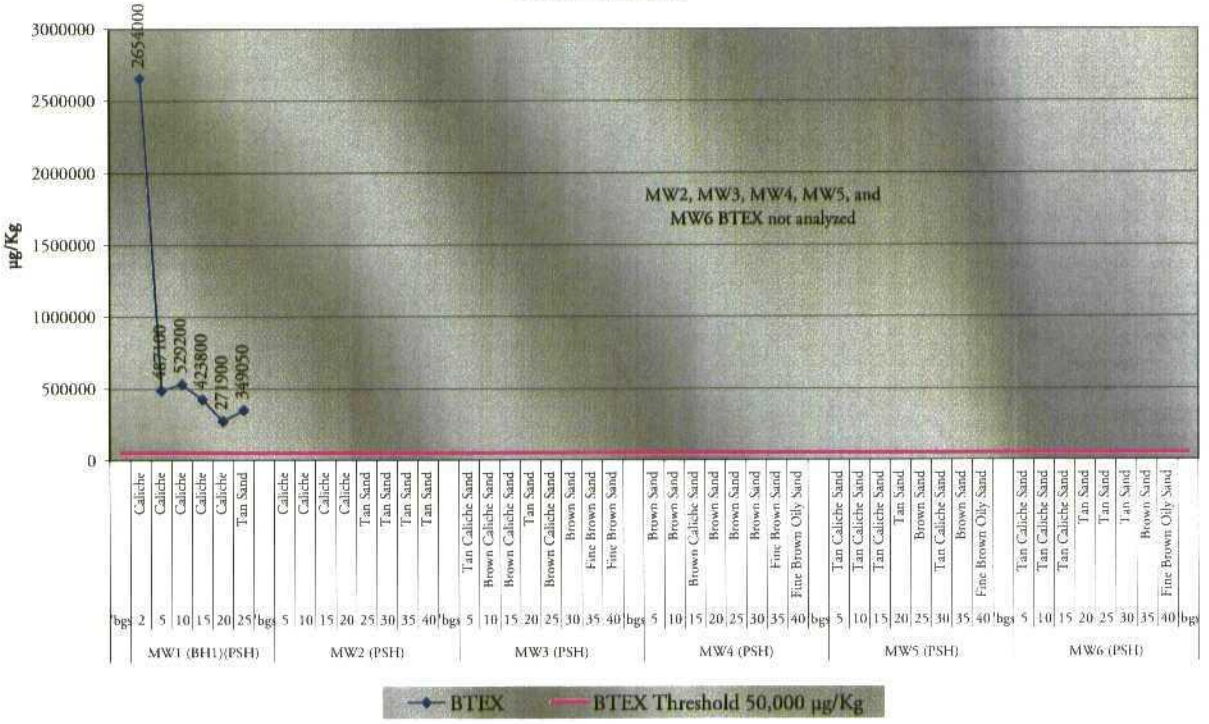

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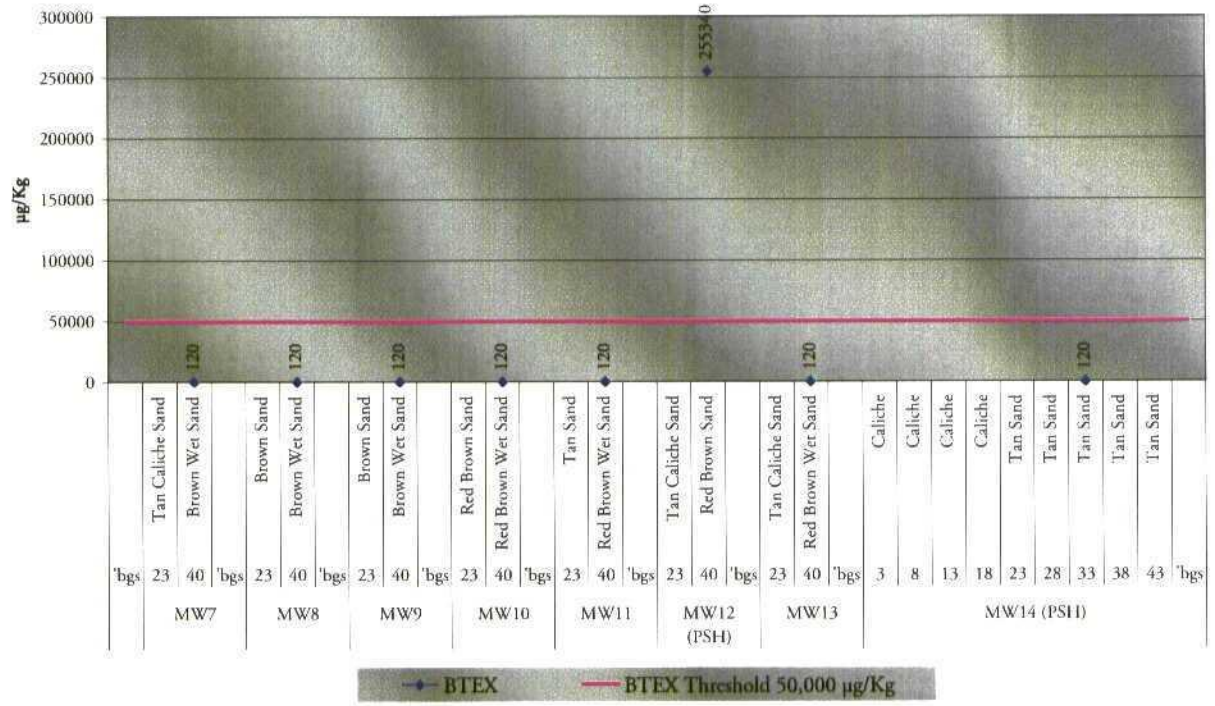

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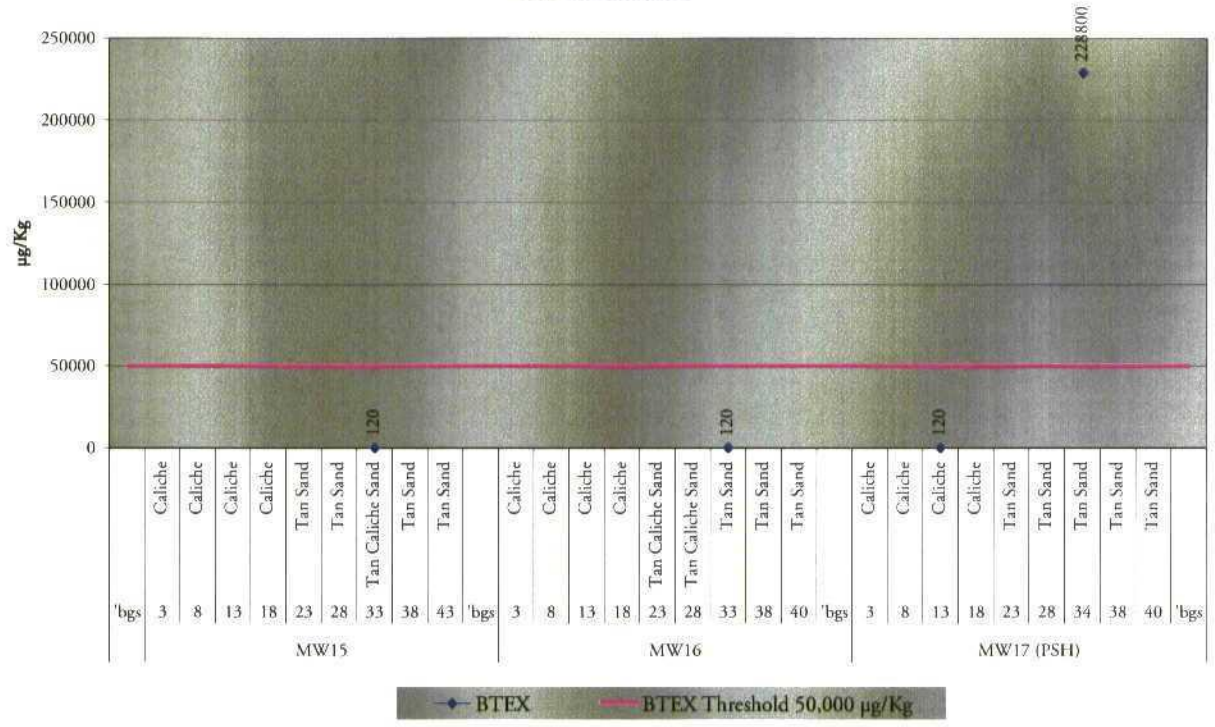
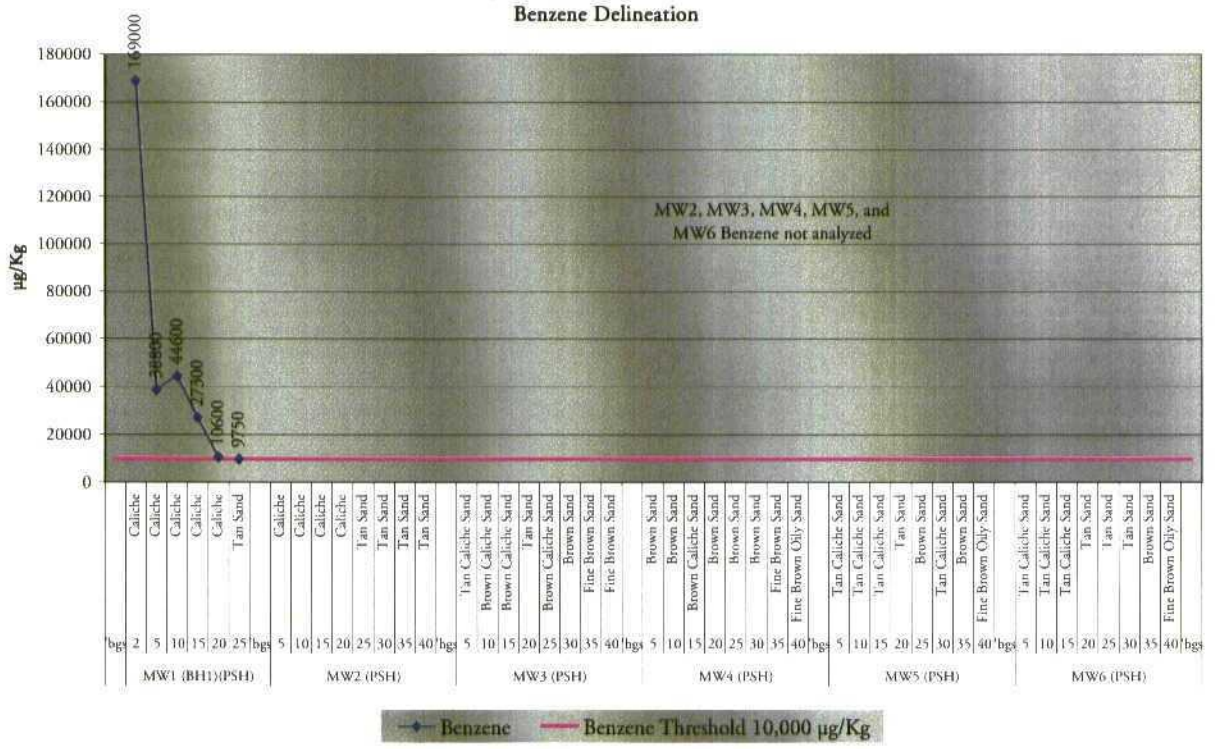
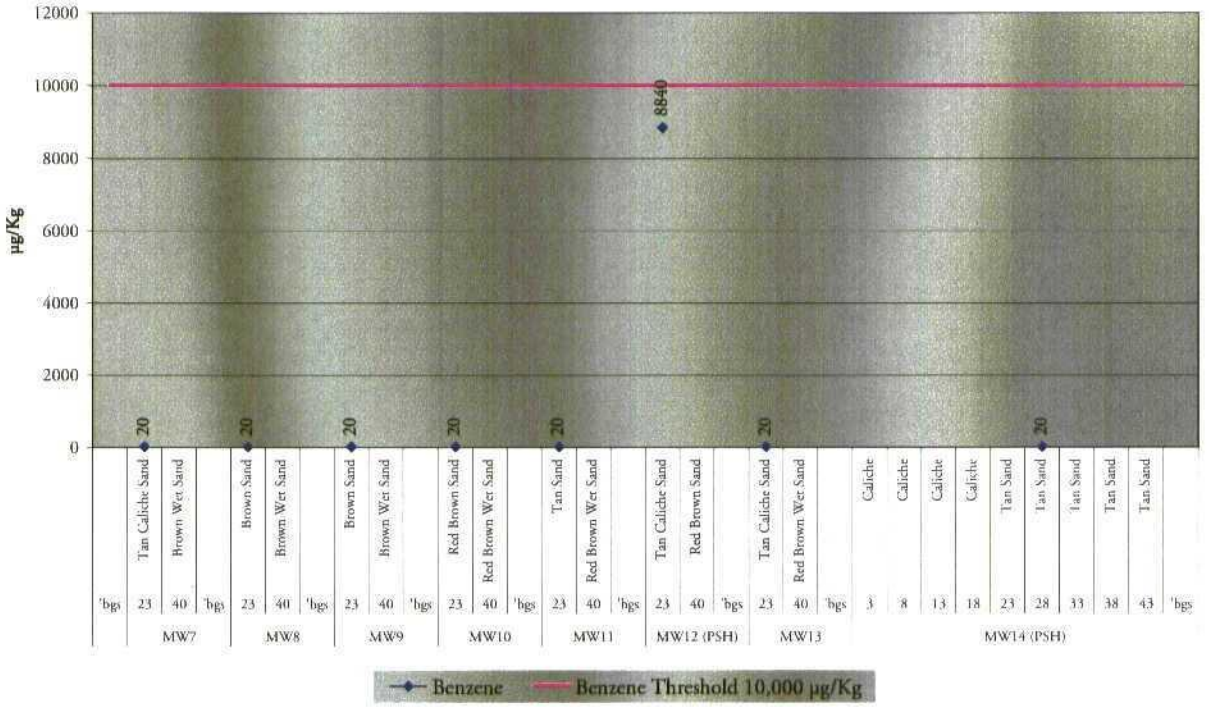


Plains All American Pipeline
Hobbs Junction Mainline #2003-00017
Benzene Delineation



Plains All American Pipeline
Hobbs Junction Mainline #2003-00017
Benzene Delineation



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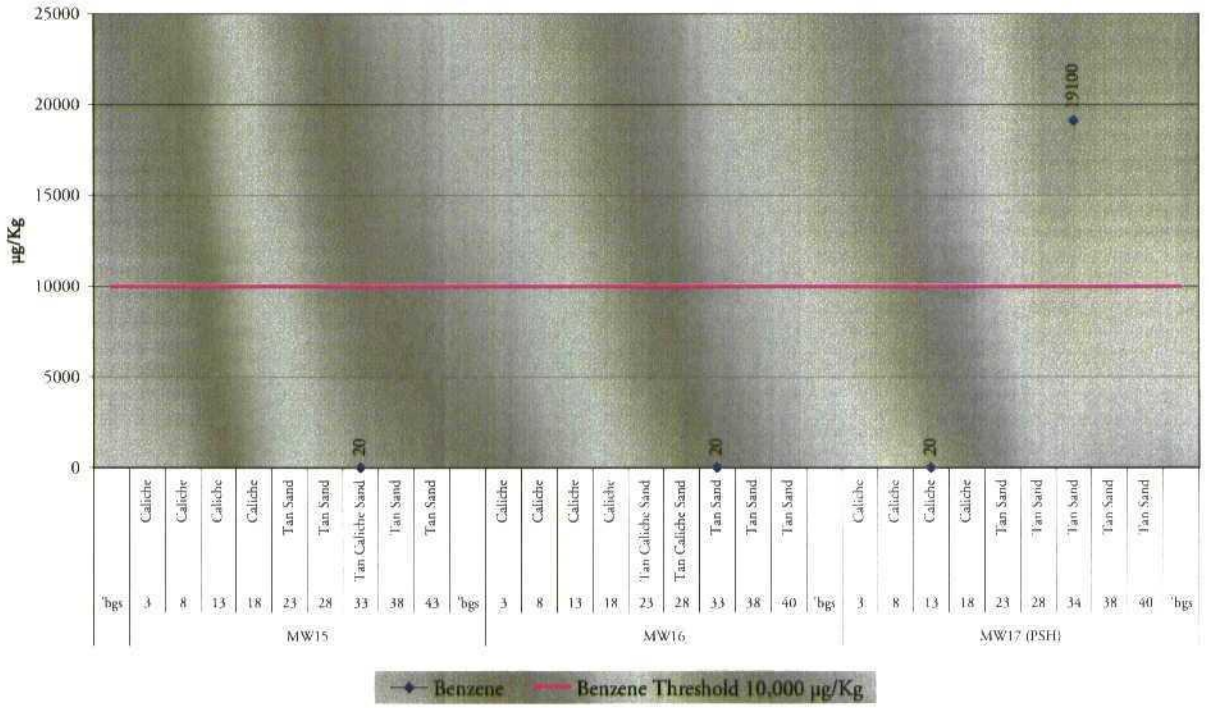
Hobbs Junction Mainline #2003-00017
Benzene Delineation



3.3.5.3 Ground Water Contamination

The areal extents of the dissolved phase CoC impact and PSH have been delineated at the site. A product gradient elevation map overlaid with the area groundwater elevation map is included in Attachment I. The groundwater monitor well water/product levels and analytical results summary table is included in Attachment V.

3.3.5.3.1 CoC Dissolved Phase Extent

The dissolved phase extent of CoC impact occurs between the unimpacted perimeter monitor wells and the outermost PSH impacted monitor wells. PSH impacted wells have not been sampled due to the PSH compromising the water samples. Wells MW1, MW2, MW3, MW4, MW5, MW6, MW12, MW14, and MW17 contain measurable PSH.

3.3.5.3.2 Extent of PSH Impact

The product gradient elevation map overlaid with the area groundwater elevation map included in Attachment I, indicates that the PSH pool depresses the groundwater near the leak origin and has an outer perimeter that lies between the PSH impacted monitor wells and the non-impacted perimeter monitor wells.

3.3.5.4 Other Relevant Media Contamination

No other environmentally sensitive media is known to have been impacted.

3.3.5.5 Background (Up-gradient) Sample Results

Background soil samples have not been collected. It is reasonably assumed that TPH^{8015m} and the BTEX compounds do not occur naturally at detectable levels in the area, moreover, there are no known hydrocarbon release sites within 1,000 horizontal feet upgradient of the site.

3.3.6 Identification of Remedial Action Levels

Remedial goals for soil in this area are the most stringent due to the proximity of the irrigation water well and the shallow occurrence of ground water.

3.3.6.1 Site Ranking

The area has the following score and site ranking;

Depth to Groundwater / <50' = 20
Wellhead Protection Area / <200' = 20
Distance to Surface Water Body / >200' = 0
Site Ranking = 40

3.3.6.2 Soil Remedial Goals

The typical remedial action objectives for soil at this site without the installation of a isolating barrier according to the NMOCD guidelines would be as follows.

- TPH – 100 mg/Kg
- BTEX – 50 mg/Kg
- Benzene – 10 mg/Kg

3.3.6.3 Groundwater Remedial Goals

The New Mexico Water Quality Control Commission (WQCC) ground water Maximum Contaminant Levels for the CoCs will apply to site ground water.

- Benzene - 0.01 mg/L (10 micrograms per liter (µg/L))
- Toluene - 0.75 mg/L (750 µg/L)
- Ethylbenzene - 0.75 mg/L (750 µg/L)
- Xylenes - 0.62 mg/L (620 µg/L)

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

The Monitoring Program will be a part of the Stage 2 Abatement Plan. The monitor wells installed at the site are and will continue to be sampled and gauged quarterly for the BTEX compounds and monitored for PSH. Product and water volumes extracted/recovered are and will continue to be routinely logged and reported along with disposition information as will routine inspection and maintenance of the PSH recovery system. Data will be summarized into an annual report documenting progress and status and submitted to the NMOCD Environmental Bureau Santa Fe and Hobbs offices.

3.3.8 Schedule for Stage 1 Abatement Plan Implementation

Information collected thus far satisfies the Rule 19 Stage 1 Abatement Plan objectives and have been included in this document. If further delineation of the soil and groundwater is required, a Stage 1 Abatement Plan Addendum will be developed and submitted to the NMOCD for concurrence and approval.

4.0 Stage 2 Abatement Plan

The objective of the Stage 2 Abatement Plan will be to abate soil and ground water contamination to acceptable levels as delineated and identified during the Stage 1 Abatement Plan. The information collected to date provides information sufficient to select an abatement strategy and develop a plan for the site.

4.1 Soil Remediation Alternatives

Currently, removal of impacted soils at the site is complicated by the network of large diameter pipelines and associated infrastructure. Removal of soils with the piping in place represents untenable environmental and occupational safety issues. When the groundwater has been remediated and the monitor wells can be plugged and abandoned and the line has been decommissioned or the lines and junction are moved to another location, soil remediation alternatives will include;

- Disposal of all soils impacted above the NMOCD remedial goals and backfilling with similar structured clean soils or,
- Disposal of soils impacted above the NMOCD remedial goals down to 8'bgs and permanently isolating the remaining hydrocarbon source term with an engineered and tested clay barrier supported by a conservative risk assessment.

4.2 Product Recovery and Ground Water Remediation

The current system of 17 monitor wells includes 8 monitor wells impacted with measurable PSH thicknesses.

4.2.1 Product Recovery

Currently, two to three barrels per day of crude oil are being recovered from monitor wells MW1, MW2, MW3, MW4, MW5, MW6, MW12, MW14, and MW17. Recovered crude oil is transported off-site and reintroduced into the Plains pipeline system. From August 26, 2003 to August 25, 2004, 564.9 bbls of crude oil have been recovered. The stabilized PSH thickness is declining as the table below indicates.

Plains All American Pipeline Hobbs Junction Mainline #2003-00017
Stabilized PSH Declination Summary

Well	Date	Product 'btoc	Water 'btoc	PSH Thickness feet	PSH Thickness Decline feet
MW1	7/22/2003	37.32	48.05	10.73	-3.41
	7/12/2004	38.34	45.66	7.32	
MW2	7/22/2003	38.63	45.63	7.00	-1.75
	7/12/2004	39.42	44.67	5.25	
MW3	12/15/2003	39.08	50.91	11.83	-4.70
	7/12/2004	39.68	46.81	7.13	
MW4	10/13/2003	39.01	48.75	9.74	-2.99
	7/12/2004	39.49	46.24	6.75	
MW5	2/18/2004	38.61	47.44	8.83	-0.35
	7/12/2004	39.24	47.72	8.48	
MW6	10/13/2003	40.04	50.12	10.08	-2.92
	7/12/2004	40.52	47.68	7.16	
MW12	4/29/2004	38.86	48.57	9.71	-1.76
	7/12/2004	39.58	47.53	7.95	
MW14	7/12/2004	39.29	46.46	7.17	-0.15
	8/26/2004	38.92	45.94	7.02	
MW17	7/12/2004	39.39	46.94	7.55	0.00
	8/26/2004	39.04	46.59	7.55	

4.2.2 Ground Water Remediation

Groundwater sparging is one alternative for treating the impacted groundwater. After all recoverable product has been removed from the groundwater surface, the extraction/recovery wells may be converted to air injection wells. Being screened in 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. At the appropriate time, Plains will evaluate several alternatives to address the dissolved phase constituents in the groundwater.

4.2.3 Site Surface Restoration

Following the completion of remediation activities and closure of the site by the NMOCD, Plains will plug and abandon the monitor wells, contour to grade, and reseed the surface, preferably during the spring of the year with grasses native to the area, i.e., blue gramma and black gramma or a seed mix agreeable with the landowners.

4.2.4 Abatement and Monitoring Schedule

Monitor well groundwater and PSH levels will be measured monthly and monitor wells not impacted with PSH will be sampled quarterly including the west irrigation well, when in operation. Annual monitoring reports will submitted to the NMOCD Environmental Bureau offices in Hobbs and Santa Fe, New Mexico by April 1st following the year end.

4.2.5 Public Notification

Once the NMOCD has indicated the Stage 1 and Stage 2 Abatement Plans are administratively complete, the following individuals and entities will be notified in writing of the Stage 1 and Stage 2 Abatement Plans.

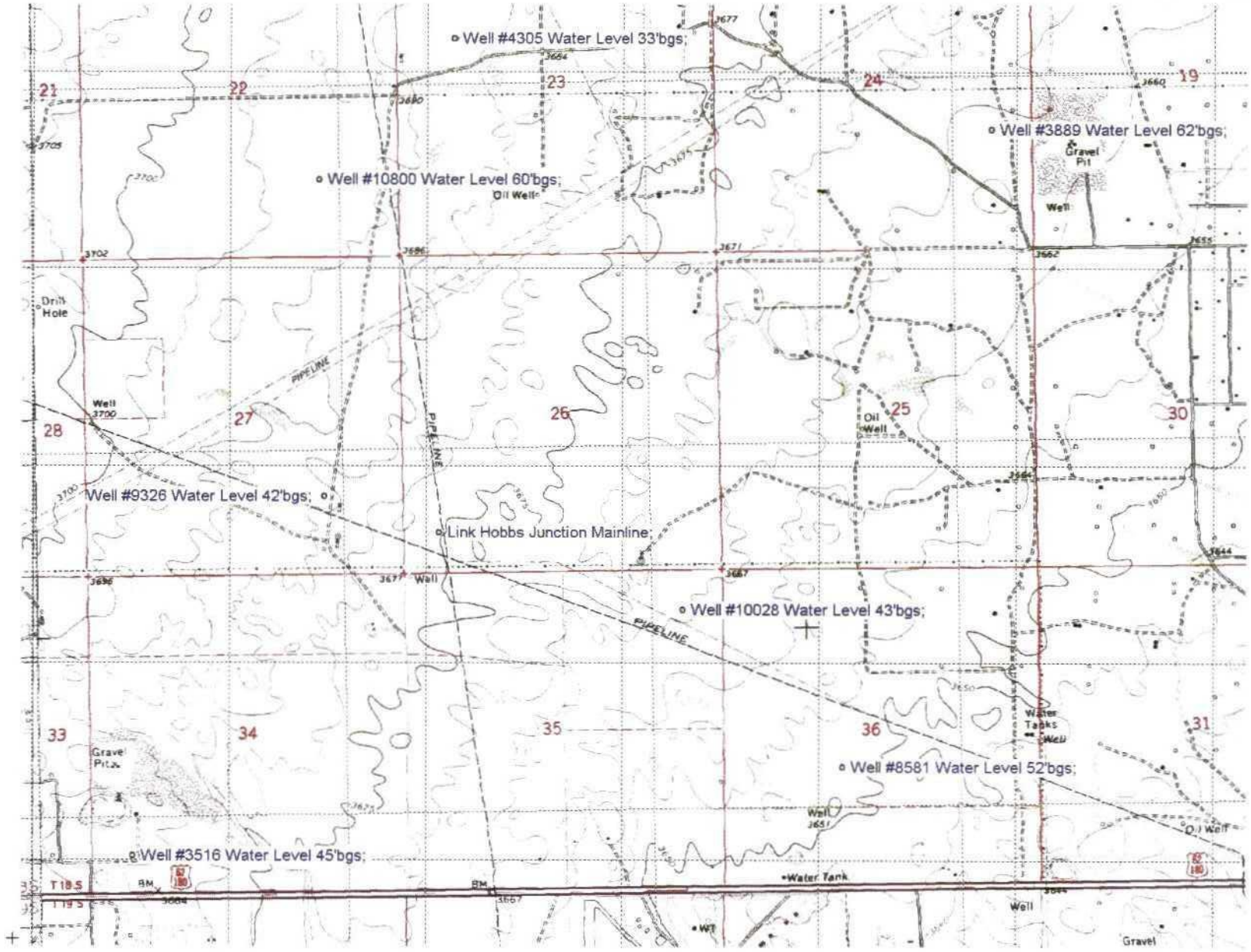
- Surface owners of record with one (1) mile of the perimeter of the affected area.
- The Lea County Commission
- Individuals or organizations requesting notification.
- The New Mexico Trustee for Natural Resources and other affected agencies.
- All others as directed by the Director of the New Mexico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

Within fifteen days after receiving notice from the NMOCD that the Stage 1 Abatement Plan and the Stage 2 Abatement Plan are administratively complete, Plains will issue a 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.

Attachment I: Maps and Figures


Well #4305 Water Level 33'bgs;
Well #3889 Water Level 62'bgs;
Well #10800 Water Level 60'bgs;
Well #9326 Water Level 42'bgs;
Link Hobbs Junction Mainline;
Well #10028 Water Level 43'bgs;
Well #8581 Water Level 52'bgs;
Well #3516 Water Level 45'bgs;
PIPELINE
Gravel Pit
Oil Well
Water Tank
Drill Hole
T18S
T19S

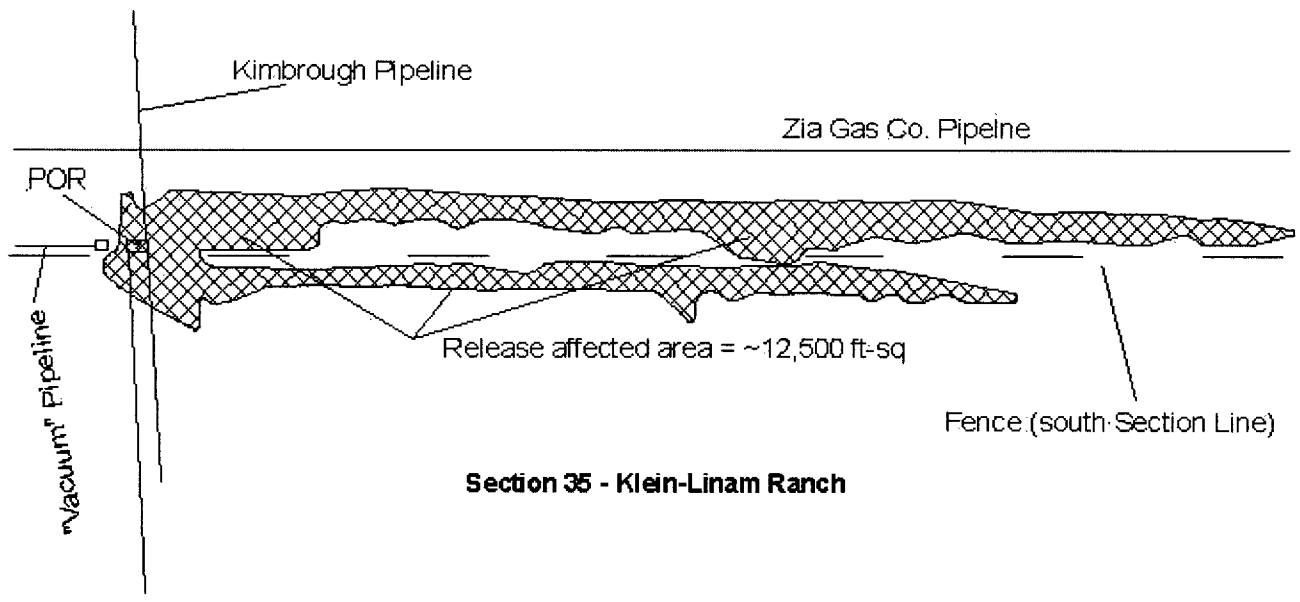
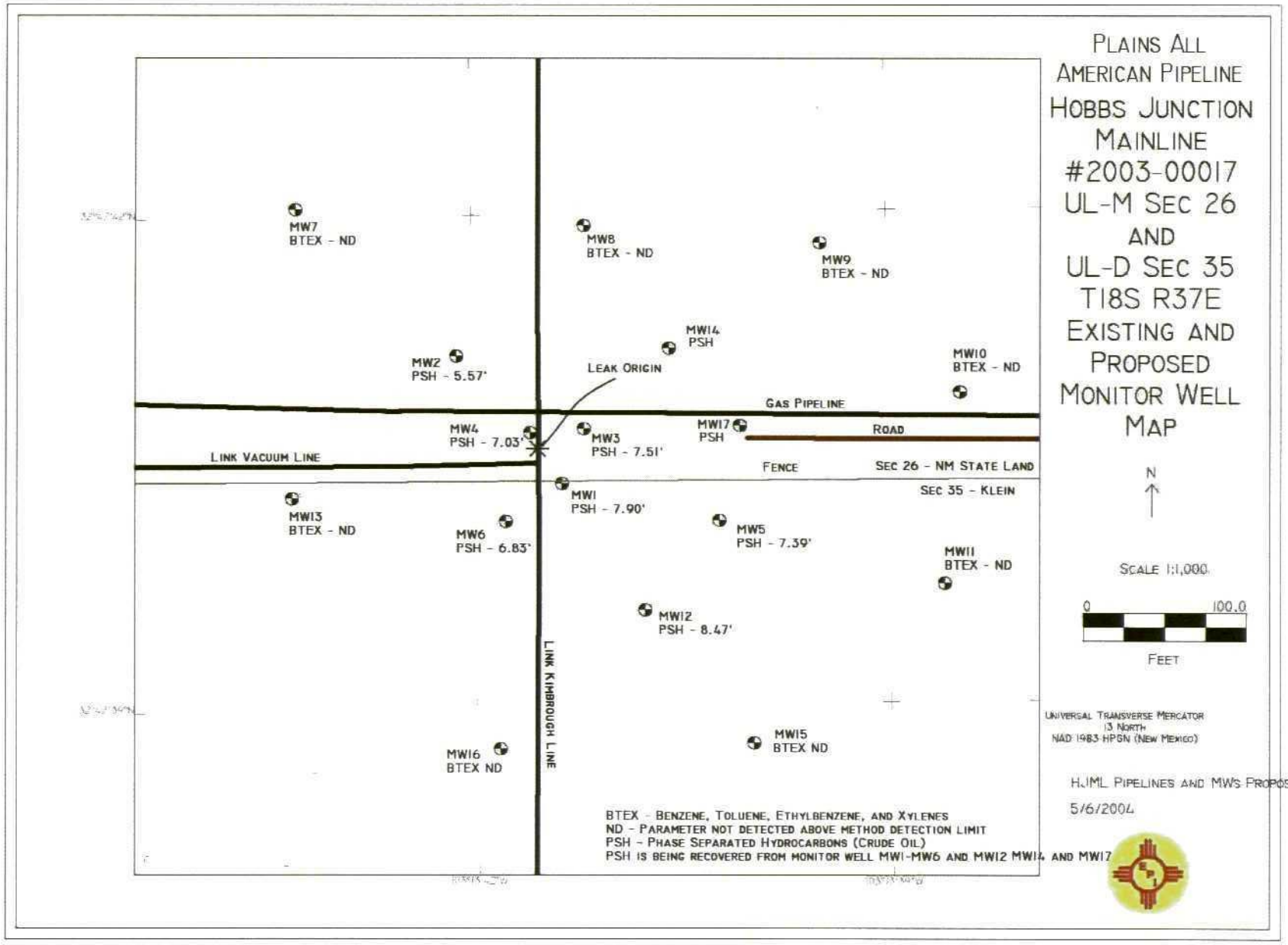
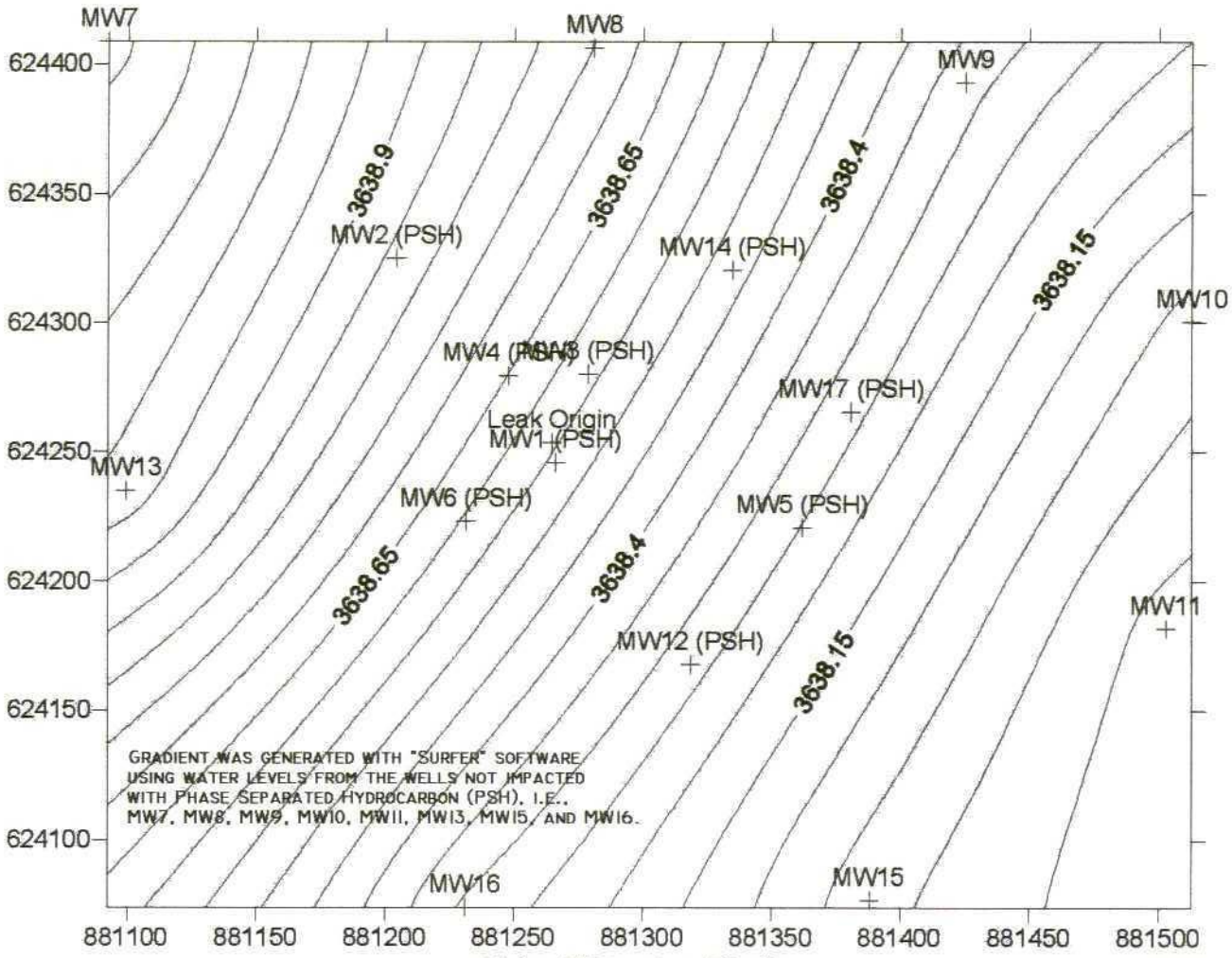
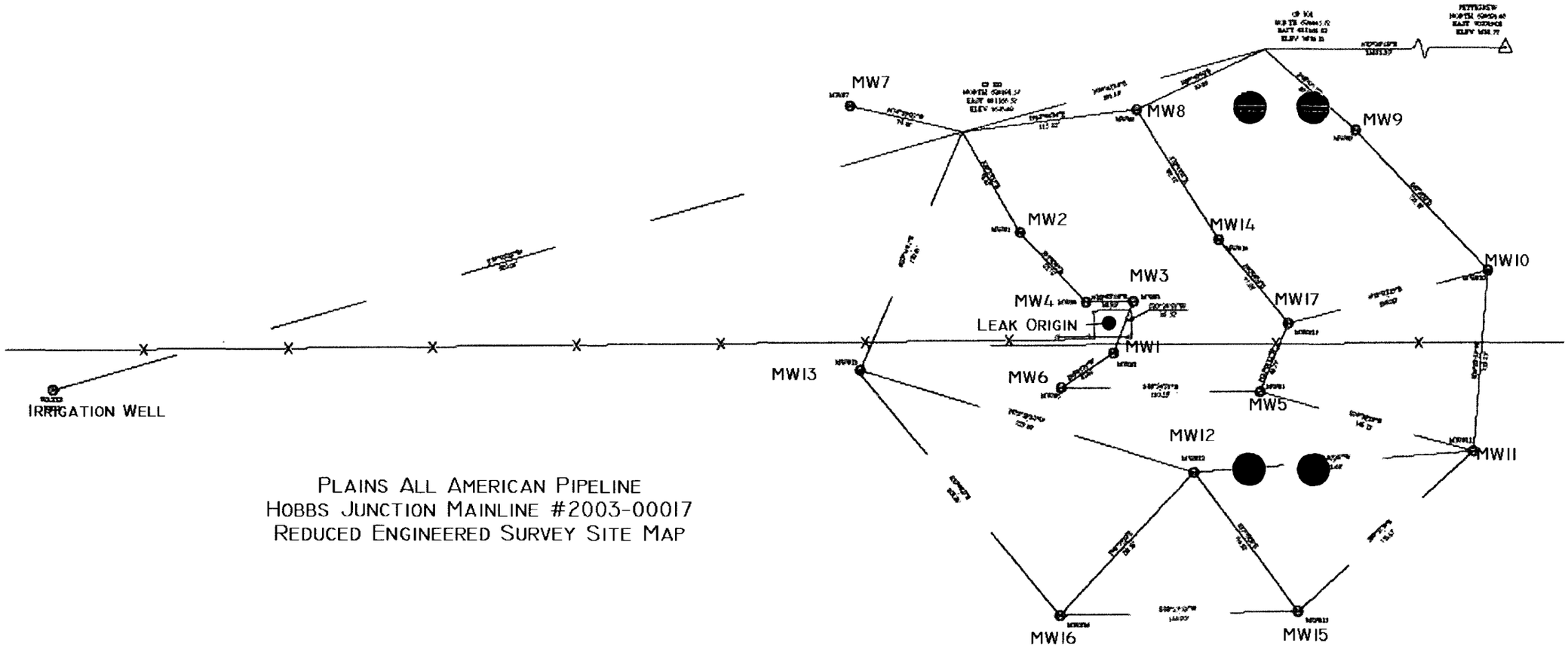


Plate 3: **Initial Site GPS Demarcation (23-Jan)** **EOTT Hobbs Junction Mainline 012303** **REF: 2003-00017**	Lea County, New Mexico UL-M Section 26 T18S R37E N32° 42' 40.85" W103° 13' 42.01" Elevation: 3681-ft amsl	**DWG BY:** John Good **January - 2003**	**REVISED:** **March - 2003**	N
		SIZE: ANSI A	**SCALE:** 0 Feet 100	**SHEET** 1 of 1


PLAINS ALL AMERICAN PIPELINE
HOBBS JUNCTION MAINLINE
#2003-00017
UL-M SEC 26
AND
UL-D SEC 35
T18S R37E
EXISTING AND PROPOSED
MONITOR WELL MAP
MW7
BTEX - ND
MW8
BTEX - ND
MW9
BTEX - ND
MW14
PSH
MW2
PSH - 5.57'
LEAK ORIGIN
MW10
BTEX - ND
GAS PIPELINE
MW4
PSH - 7.03'
MW3
PSH - 7.51'
MW17
PSH
ROAD
LINK VACUUM LINE
FENCE
SEC 26 - NM STATE LAND
SEC 35 - KLEIN
MW1
PSH - 7.90'
MW13
BTEX - ND
MW6
PSH - 6.83'
MW5
PSH - 7.39'
MW11
BTEX - ND
MW12
PSH - 8.47'
LINK KIMBROUGH LINE
MW16
BTEX ND
MW15
BTEX ND
N
SCALE 1:1,000
0
100.0
FEET
UNIVERSAL TRANSVERSE MERCATOR
13 NORTH
NAD 1983 HPGN (NEW MEXICO)
H:\ML PIPELINES AND MW's PROPOSED ANN.SSF
5/6/2004
BTEX - BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES
ND - PARAMETER NOT DETECTED ABOVE METHOD DETECTION LIMIT
PSH - PHASE SEPARATED HYDROCARBONS (CRUDE OIL)
PSH IS BEING RECOVERED FROM MONITOR WELL MW1-MW6 AND MW12 MW14 AND MW17

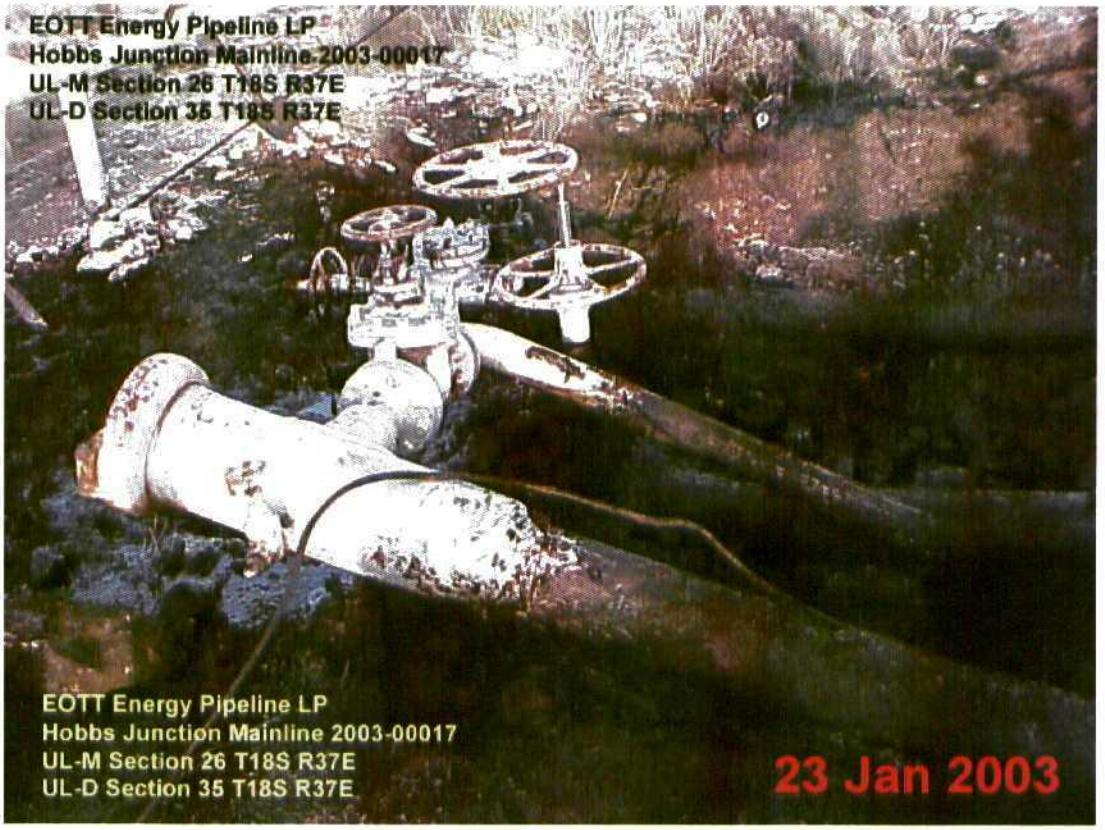


Plains All American Pipeline
Hobbs Junction Mainline #2003-00017
Groundwater Gradient Map



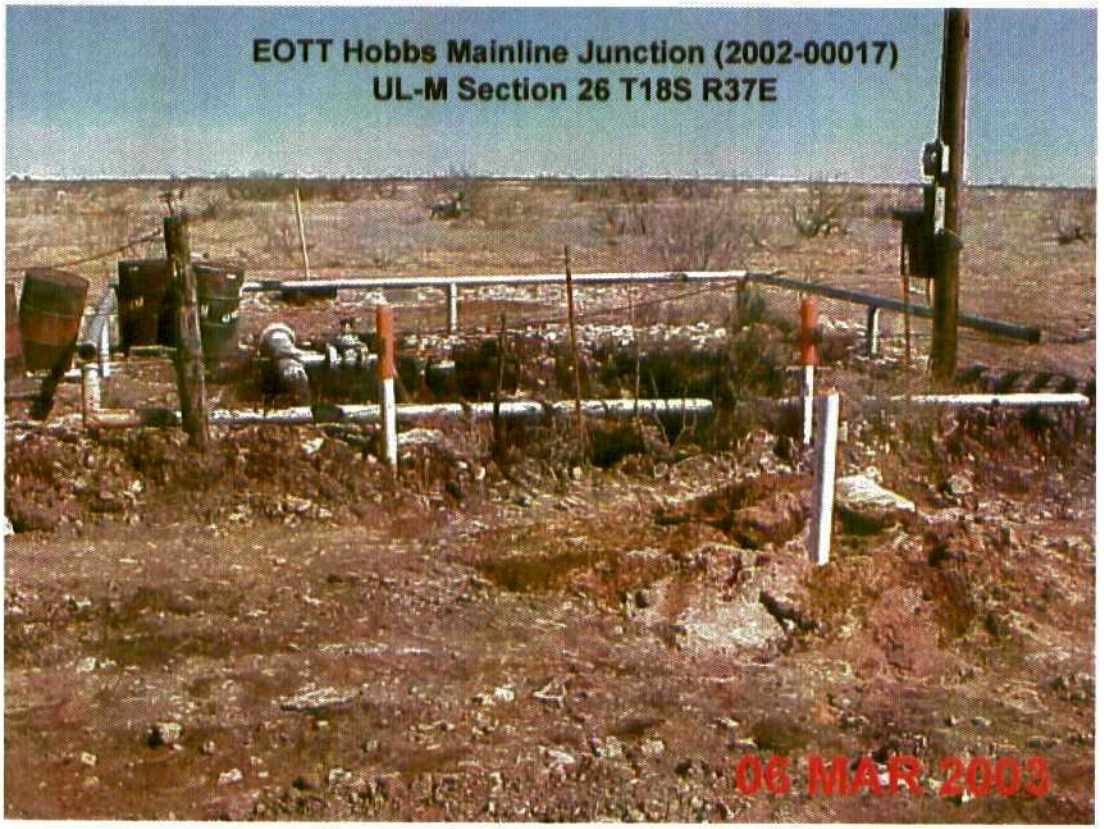
PLAINS ALL AMERICAN PIPELINE
HOBBS JUNCTION MAINLINE #2003-00017
REDUCED ENGINEERED SURVEY SITE MAP

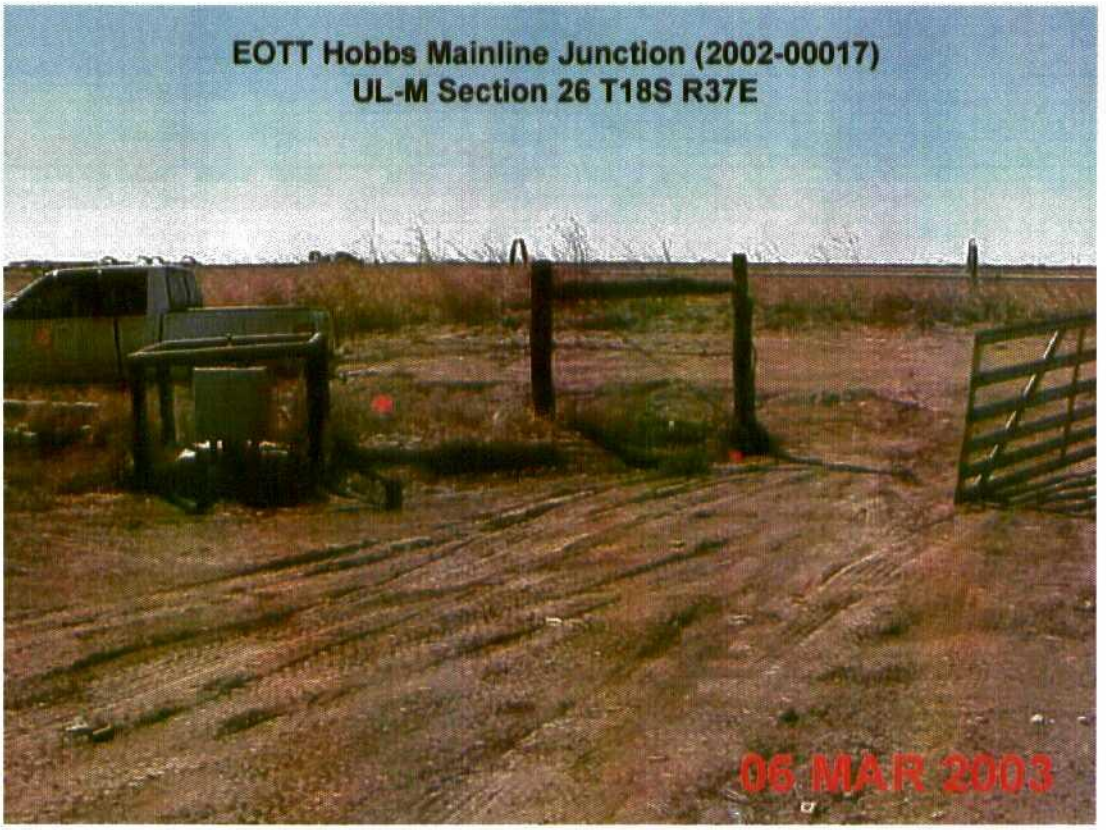
Attachment II: Site Photographs


EOTT Energy Pipeline LP
Hobbs Junction Mainline 2003-00017
UL-M Section 26 T18S R37E
UL-D Section 35 T18S R37E
EOTT Energy Pipeline LP
Hobbs Junction Mainline 2003-00017
UL-M Section 26 T18S R37E
UL-D Section 35 T18S R37E
23 Jan 2003


EOTT Energy Pipeline LP
Hobbs Junction Mainline 2003-00017
UL-M Section 26 T18S R37E
UL-D Section 35 T18S R37E
23 Jan 2003


EOTT Energy Pipeline LP
Hobbs Junction Mainline 2003-00017
UL-M Section 26 T18S R37E
UL-D Section 35 T18S R37E
23 Jan 2003


EOTT Hobbs Mainline Junction (2002-00017)
UL-M Section 26 T18S R37E
06 MAR 2003


EOTT Hobbs Mainline Junction (2002-00017)
UL-M Section 26 T18S R37E
06 MAR 2003


EOTT Energy Pipeline LP
Hobbs Junction Mainline 2003-00017
UL-M Section 26 T18S R37E
UL-D Section 35 T18S R37E
12 FEB 2003

Attachment III: Soil Analytical results and Summary

Plains All American Pipeline
Hobbs Junction Mainline #2003-00017
Soil Delineation Data

Location	Sampling Interval (FT. BGS[1])	SAMPLE ID#	Date	Lithology	VOC Headspace ppm	GRO[3] mg/Kg	DRO[4] mg/Kg	TPH[5] mg/Kg	BTEX[9] µg/Kg	Benzene µg/Kg	Ethylbenzene µg/Kg	Toluene µg/Kg	o-Xylene µg/Kg	m,p -Xylene µg/Kg	Sulfate mg/Kg	Chloride mg/Kg
MW1 (BH1) (PSH[10])	2	SEHM21303BH1-2	2/13/2003	Caliche	na	21400	31700	**53100**	**2654000**	**169000**	562000	981000	264000	678000	21.8	52.3
	5	SEHM21303BH1-5	2/13/2003	Caliche	na	3950	6070	**10020**	**487100**	**38800**	107000	177000	47300	117000	na	na
	10	SEHM21303BH1-10	2/13/2003	Caliche	na	2650	3860	***6510***	**529200**	**44600**	113000	196000	48600	127000	na	na
	15	SEHM21303BH1-15	2/13/2003	Caliche	na	3940	6710	**10650**	**423800**	**27300**	98400	142000	44100	112000	na	na
	20	SEHM21303BH1-20	2/13/2003	Caliche	na	2990	5870	**8860**	**271900**	**10600**	66300	84500	32900	77600	na	na
	25	SEHM21303BH1-25	2/13/2003	Tan Sand	na	2820	5760	**8580**	**349050**	9750	94200	95[redacted]	43600[redacted]	106000	na	na
MW2 (PSH)	5	SEHM8503MW2-5	8/5/2003	Caliche	na	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	10	SEHM8503MW2-10	8/5/2003	Caliche	na	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	15	SEHM8503MW2-15	8/5/2003	Caliche	na	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	20	SEHM8503MW2-20	8/5/2003	Caliche	na	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	25	SEHM8503MW2-25	8/5/2003	Tan Sand	na	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	30	SEHM8503MW2-30	8/5/2003	Tan Sand	na	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	35	SEHM8503MW2-35	8/5/2003	Tan Sand	na	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	40	SEHM8503MW2-40	8/5/2003	Tan Sand	na	na	na	**na**	**na**	**na**	na	na	na	na	na	na
MW3 (PSH)	5	SEHM8503MW3-5	8/5/2003	Tan Caliche Sand	978	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	10	SEHM8503MW3-10	8/5/2003	Brown Caliche Sand	990	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	15	SEHM8503MW3-15	8/5/2003	Brown Caliche Sand	1040	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	20	SEHM8503MW3-20	8/5/2003	Tan Sand	1247	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	25	SEHM8503MW3-25	8/5/2003	Brown Caliche Sand	1800	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	30	SEHM8503MW3-30	8/5/2003	Brown Sand	1450	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	35	SEHM8503MW3-35	8/5/2003	Fine Brown Sand	1576	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	40	SEHM8503MW3-40	8/5/2003	Fine Brown Sand	1860	na	na	**na**	**na**	**na**	na	na	na	na	na	na
MW4 (PSH)	5	SEHM8503MW4-5	8/5/2003	Brown Sand	850	na	na	**na**	**na**	**na**	na	[redacted]	na	na	na	na
	10	SEHM8503MW4-10	8/5/2003	Brown Sand	506	na	na	**na**	**na**	**na**	na	[redacted]	na	na	na	na
	15	SEHM8503MW4-15	8/5/2003	Brown Caliche Sand	710	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	20	SEHM8503MW4-20	8/5/2003	Brown Sand	770	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	25	SEHM8503MW4-25	8/5/2003	Brown Sand	690	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	30	SEHM8503MW4-30	8/5/2003	Brown Sand	750	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	35	SEHM8503MW4-35	8/5/2003	Fine Brown Sand	900	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	40	SEHM8503MW4-40	8/5/2003	Fine Brown Oily Sand	1350	na	na	**na**	**na**	**na**	na	na	na	na	na	na

100 ppm Isobutylene calibration gas = 101 ppm

[1]bgs – 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_{33}

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

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

[6]Bolded values are in excess of the NMOCD guideline threshold for the parameter

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

[8]*na - not analyzed*

[9]BTEX - Mass sum of benzene, toluene, ethylbenzene, and xylenes

[10]PSH - Phase Separated Hydrocarbon

Plains All American Pipeline
Hobbs Junction Mainline #2003-00017
Soil Delineation Data

Location	Sampling Interval (FT. BGS[1])	SAMPLE ID#	Date	Lithology	VOC Headspace ppm	GRO[3] mg/Kg	DRO[4] mg/Kg	TPH[5] mg/Kg	BTEX[9] µg/Kg	Benzene µg/Kg	Ethylbenzene µg/Kg	Toluene µg/Kg	o-Xylene µg/Kg	m,p -Xylene µg/Kg	Sulfate mg/Kg	Chloride mg/Kg
MW5 (PSH)	5	SEHM8603MW5-5	8/6/2003	Tan Caliche Sand	6.7	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	10	SEHM8603MW5-10	8/6/2003	Tan Caliche Sand	13.4	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	15	SEHM8603MW5-15	8/6/2003	Tan Caliche Sand	30.7	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	20	SEHM8603MW5-20	8/6/2003	Tan Sand	37.4	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	25	SEHM8603MW5-25	8/6/2003	Brown Sand	18.6	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	30	SEHM8603MW5-30	8/6/2003	Tan Caliche Sand	15	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	35	SEHM8603MW5-35	8/6/2003	Brown Sand	1880	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	40	SEHM8603MW5-40	8/6/2003	Fine Brown Oily Sand	1900	na	na	**na**	**na**	**na**	na	na	na	na	na	na
MW6 (PSH)	5	SEHM8603MW6-5	8/6/2003	Tan Caliche Sand	14.5	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	10	SEHM8603MW6-10	8/6/2003	Tan Caliche Sand	62.7	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	15	SEHM8603MW6-15	8/6/2003	Tan Caliche Sand	70.4	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	20	SEHM8603MW6-20	8/6/2003	Tan Sand	36.9	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	25	SEHM8603MW6-25	8/6/2003	Tan Sand	39.4	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	30	SEHM8603MW6-30	8/6/2003	Tan Sand	27.5	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	35	SEHM8603MW6-35	8/6/2003	Brown Sand	1150	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	40	SEHM8603MW6-40	8/6/2003	Fine Brown Oily Sand	2400	na	na	**na**	**na**	**na**	na	na	na	na	na	na
MW7	23	SSL11904MW7	1/19/2004	Tan Caliche Sand	1.8	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	40	SSL11904MW7	1/19/2004	Brown Wet Sand	0.6	5	2.5	7.5	*120*	*20*	*20*	*20*	*20*	*40*	na	na
MW8	23	SSL11904MW8	1/19/2004	Brown Sand	5.2	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	40	SSL11904MW8	1/19/2004	Brown Wet Sand	13.6	5	2.5	7.5	*120*	*20*	*20*	*20*	*20*	*40*	na	na
MW9	23	SSL11904MW9	1/19/2004	Brown Sand	5.8	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	40	SSL11904MW9	1/19/2004	Brown Wet Sand	10.1	5	2.5	7.5	*120*	*20*	*20*	*20*	*20*	*40*	na	na
MW10	23	SSL12004MW10	1/20/2004	Red Brown Sand	5.2	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	40	SSL12004MW10	1/20/2004	Red Brown Wet Sand	9.8	5	2.5	7.5	*120*	*20*	*20*	*20*	*20*	*40*	na	na
MW11	23	SSL012004MW11	1/20/2004	Tan Sand	4.8	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	40	SSL012004MW11	1/20/2004	Red Brown Wet Sand	9.6	5	2.5	7.5	*120*	*20*	*20*	*20*	*20*	*40*	na	na
MW12 (PSH)	23	SSL012004MW12	1/20/2004	Tan Caliche Sand	21.9	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	40	SSL012004MW12	1/20/2004	Red Brown Sand	456	1910	3490	**5400**	**255340**	8840	54200	98000	25500	68800	na	na

100 ppm Isobutylene calibration gas = 101 ppm

[1]bgs – below ground surface

[2]VOC–Volatile Organic Contaminants/Constituents

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

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[10]PSH - Phase Separated Hydrocarbon

Plains All American Pipeline
Hobbs Junction Mainline #2003-00017
Soil Delineation Data

Location	Sampling Interval (FT. BGS[1])	SAMPLE ID#	Date	Lithology	VOC Headspace ppm	GRO[3] mg/Kg	DRO[4] mg/Kg	TPH[5] mg/Kg	BTEX[9] µg/Kg	Benzene µg/Kg	Ethylbenzene µg/Kg	Toluene µg/Kg	o-Xylene µg/Kg	m,p -Xylene µg/Kg	Sulfate mg/Kg	Chloride mg/Kg
MW13	23	SSL012004MW13	1/20/2004	Tan Caliche Sand	11.4	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	40	SSL012004MW13	1/20/2004	Red Brown Wet Sand	7	5	2.5	7.5	*120*	*20*	*20*	*20*	*20*	*40*	**na**	**na**
MW14 (PSH)	3	LSHJM5-24-04MW14 (3'-5')	5/24/2004	Caliche	81.8	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	8	LSHJM5-24-04MW14 (8'-10')	5/24/2004	Caliche	33.4	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	13	LSHJM5-24-04MW14 (13'-15')	5/24/2004	Caliche	23.8	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	18	LSHJM5-24-04MW14 (18'-20')	5/24/2004	Caliche	101.6	na	na	**na**	**na**	**na**	na	na	na	na	**na**	**na**
	23	LSHJM5-24-04MW14 (23'-25')	5/24/2004	Tan Sand	73.3	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	28	LSHJM5-24-04MW14 (28'-30')	5/24/2004	Tan Sand	170	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	33	LSHJM5-24-04MW14 (33'-35')	5/24/2004	Tan Sand	76.7	5	2.5	7.5	*120*	*20*	*20*	*20*	*20*	*40*	na	na
	38	LSHJM5-24-04MW14 (38'-40')	5/24/2004	Tan Sand	394	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	43	LSHJM5-24-04MW14 (43'-45')	5/24/2004	Tan Sand	58.3	na	na	**na**	**na**	**na**	na	na	na	na	na	na
MW15	3	LSHJM5-26-04MW15 (3'-5')	5/26/2004	Caliche	7.7	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	8	LSHJM5-26-04MW15 (8'-10')	5/26/2004	Caliche	0	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	13	LSHJM5-26-04MW15 (13'-15')	5/26/2004	Caliche	0	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	18	LSHJM5-26-04MW15 (18'-20')	5/26/2004	Caliche	0	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	23	LSHJM5-26-04MW15 (23'-25')	5/26/2004	Tan Sand	0	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	28	LSHJM5-26-04MW15 (28'-30')	5/26/2004	Tan Sand	4.5	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	33	LSHJM5-26-04MW15 (33'-35')	5/26/2004	Tan Caliche Sand	32.5	5	2.5	7.5	*120*	*20*	*20*	*20*	*20*	*40*	na	na
	38	LSHJM5-26-04MW15 (38'-40')	5/26/2004	Tan Sand	0	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	43	LSHJM5-26-04MW15 (43'-45')	5/26/2004	Tan Sand	8.1	na	na	**na**	**na**	**na**	na	na	na	na	na	na

100 ppm Isobutylene calibration gas = 101 ppm

[1]*bgs – 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_{33}

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

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

[6]Bolded values are in excess of the NMOCD guideline threshold for the parameter

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

[8]na - not analyzed

[9]BTEX - Mass sum of benzene, toluene, ethylbenzene, and xylenes

[10]PSH - Phase Separated Hydrocarbon

Plains All American Pipeline
Hobbs Junction Mainline #2003-00017
Soil Delineation Data

Location	Sampling Interval (FT. BGS[1])	SAMPLE ID#	Date	Lithology	VOC Headspace ppm	GRO[3] mg/Kg	DRO[4] mg/Kg	TPH[5] mg/Kg	BTEX[9] µg/Kg	Benzene µg/Kg	Ethylbenzene µg/Kg	Toluene µg/Kg	o-Xylene µg/Kg	m,p -Xylene µg/Kg	Sulfate mg/Kg	Chloride mg/Kg
MW16	3	LSHJM5-26-04MW16 (3'-5')	5/26/2004	Caliche	0	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	8	LSHJM5-26-04MW16 (8'-10')	5/26/2004	Caliche	36.9	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	13	LSHJM5-26-04MW16 (13'-15')	5/26/2004	Caliche	0.3	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	18	LSHJM5-26-04MW16 (18'-20')	5/26/2004	Caliche	0	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	23	LSHJM5-26-04MW16 (23'-25')	5/26/2004	Tan Caliche Sand	117	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	28	LSHJM5-26-04MW16 (28'-30')	5/26/2004	Tan Caliche Sand	287	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	33	LSHJM5-26-04MW16 (33'-35')	5/26/2004	Tan Sand	413	5	5.79	10.79	*120*	*20*	*20*	*20*	*20*	*40*	na	na
	38	LSHJM5-26-04MW16 (38'-40')	5/26/2004	Tan Sand	436	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	40	LSHJM5-26-04MW16 (43'-45')	5/26/2004	Tan Sand	180	na	na	**na**	**na**	**na**	na	na	na	na	na	na
MW17 (PSH)	3	LSHJM5-24-04MW17 (3'-5')	5/24/2004	Caliche	4.1	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	8	LSHJM5-24-04MW17 (8'-10')	5/24/2004	Caliche	10.9	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	13	LSHJM5-24-04MW17 (13'-15')	5/24/2004	Caliche	6.5	5	2.5	7.5	*120*	*20*	*20*	*20*	*20*	*40*	na	na
	18	LSHJM5-24-04MW17 (18'-20')	5/24/2004	Caliche	5.6	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	23	LSHJM5-24-04MW17 (23'-25')	5/24/2004	Tan Sand	13.2	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	28	LSHJM5-26-04MW17 (28'-30')	5/26/2004	Tan Sand	130	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	34	LSHJM5-26-04MW17 (34'-36')	5/26/2004	Tan Sand	1189	1880	3110	**4990**	**228800**	**19100**	49800	86800	19600	53500	na	na
	38	LSHJM5-26-04MW17 (38'-40')	5/26/2004	Tan Sand	387	na	na	**na**	**na**	**na**	na	na	na	na	na	na
	40	LSHJM5-26-04MW17 (43'-45')	5/26/2004	Tan Sand	107	na	na	**na**	**na**	**na**	na	na	na	na	na	na

100 ppm Isobutylene calibration gas = 101 ppm

[1]bgs – 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_{33}

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

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[8]na - not analyzed

[9]BTEX - Mass sum of benzene, toluene, ethylbenzene, and xylenes

[10]PSH - Phase Separated Hydrocarbon

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

Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

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

Report#/Lab ID#: 157759 **Report Date:** 08/06/04
Project ID: 2003-00017
Sample Name: LEHJM071904MW7
Sample Matrix: water
Date Received: 07/21/2004 **Time:** 09:40
Date Sampled: 07/19/2004 **Time:** 09:04

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]
A/BN Extraction-PAH	---	---	---	---	07/22/04	3520	---	---	---	---	---
Extractable organics-PAH	---	---	---	---	08/04/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/22/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	07/22/04	8260b	---	0.3	106.7	112.1	99.1
Ethylbenzene	<1	µg/L	1	<1	07/22/04	8260b	---	4	108.1	110.8	104.8
m,p-Xylenes	<2	µg/L	2	<2	07/22/04	8260b	---	4.7	109.5	111.6	108
o-Xylene	<1	µg/L	1	<1	07/22/04	8260b	---	2.6	115.2	114.7	110.3
Toluene	<1	µg/L	1	<1	07/22/04	8260b	---	1.5	114.8	118.8	107.4
Acenaphthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	12.2	55.8	95.4	57.3
Acenaphthylene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	15.7	50	89.7	50.4
Anthracene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	2.8	61.9	98.5	62.9
Benzo[a]anthracene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	5.9	79.3	114.3	83.3
Benzo[a]pyrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	12.4	70.4	98.4	72.3
Benzo[b]fluoranthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	3.4	94.4	118.7	103.1
Benzo[g,h,i]perylene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	4.8	95.2	118.6	100.4
Benzo[j,k]fluoranthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	8	72.3	102.3	72.9
Chrysene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	1.4	64.1	97.9	68.5
Dibenz[a,h]anthracene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	4.9	81	110.9	84.5
Fluoranthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	6.6	69.4	97.3	66.9
Fluorene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	6.1	56.6	95.9	57.9
Indeno[1,2,3-cd]pyrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	11.9	95.7	118.4	99.7

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 Elton

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). 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.

QUALILYSYS 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:** 2003-00017	**Report#/Lab ID#:** 157759
Attn: Iain Olness	**Sample Name:** LEHJM071904MW7	**Sample Matrix:** water

REPORT OF ANALYSIS-cont.

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
Naphthalene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	17.5	46	92	47.3
Phenanthrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	2.1	62	97.7	63.4
Pyrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	3.8	61.2	94.7	63.8

ANALYSYS INC.
[redacted] Montopolis Drive, Austin, TX 78744 &
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Client: Environmental Plus, Inc.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 157759
Attn: Iain Olness	**Sample Name:** LEHJM071904MW7	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	49	39-110	---
Nitrobenzene-d5	610 & 8270c	52.2	12-110	---
Terphenyl-d14	610 & 8270c	49.5	25-110	---
1,2-Dichloroethane-d4	8260b	112	74-124	---
Toluene-d8	8260b	101	89-115	---

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: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

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

Report#/Lab ID#: 157760 **Report Date:** 08/06/04
Project ID: 2003-00017
Sample Name: LEHJM071904MW8
Sample Matrix: water
Date Received: 07/21/2004 **Time:** 09:40
Date Sampled: 07/19/2004 **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]
Volatile organics-8260b/BTEX	---		---		07/22/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	07/22/04	8260b	---	0.3	106.7	112.1	99.1
Ethylbenzene	<1	µg/L	1	<1	07/22/04	8260b	---	4	108.1	110.8	104.8
m,p-Xylenes	<2	µg/L	2	<2	07/22/04	8260b	---	4.7	109.5	111.6	108
o-Xylene	<1	µg/L	1	<1	07/22/04	8260b	---	2.6	115.2	114.7	110.3
Toluene	<1	µg/L	1	<1	07/22/04	8260b	---	1.5	114.8	118.8	107.4

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 Elton

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). 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.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 157760
Attn: Iain Olness	**Sample Name:** LEHJM071904MW8	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	98	74-124	---
Toluene-d8	8260b	106	89-115	---

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: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

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

Report#/Lab ID#: 157761 **Report Date:** 08/06/04
Project ID: 2003-00017
Sample Name: LEHJM071904MW9
Sample Matrix: water
Date Received: 07/21/2004 **Time:** 09:40
Date Sampled: 07/19/2004 **Time:** 11:32

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]
A/BN Extraction-PAH	---	---	---	---	07/22/04	3520	---	---	---	---	---
Extractable organics-PAH	---	---	---	---	07/30/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/22/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	07/22/04	8260b	---	0.3	106.7	112.1	99.1
Ethylbenzene	<1	µg/L	1	<1	07/22/04	8260b	---	4	108.1	110.8	104.8
m,p-Xylenes	<2	µg/L	2	<2	07/22/04	8260b	---	4.7	109.5	111.6	108
o-Xylene	<1	µg/L	1	<1	07/22/04	8260b	---	2.6	115.2	114.7	110.3
Toluene	<1	µg/L	1	<1	07/22/04	8260b	---	1.5	114.8	118.8	107.4
Acenaphthene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	51.7	59.2	100.1	51.5
Acenaphthylene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	53.1	59.1	109.8	51.7
Anthracene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	28.8	66.7	103.2	54.3
Benzo[a]anthracene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	21.6	84.4	87.9	71.9
Benzo[a]pyrene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	---	18.2	71.9	89.1	64
Benzo[b]fluoranthene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	---	14.5	85.4	88	73.3
Benzo[g,h,i]perylene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	---	15.1	85.1	103.8	72.8
Benzo[j,k]fluoranthene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	---	17.6	78.4	100.5	67.8
Chrysene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	---	10.9	71.4	96.7	62.9
Dibenz[a,h]anthracene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	15.9	80.1	93.1	67.7
Fluoranthene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	---	24.3	76.8	104	59.9
Fluorene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	39.5	58.7	102.4	50.7
Indeno[1,2,3-cd]pyrene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	16.4	80	95.3	67.6

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 Elton

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

Client: Environmental Plus, Inc.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 157761
Attn: Iain Olness	**Sample Name:** LEHJM071904MW9	**Sample Matrix:** water

REPORT OF ANALYSIS-cont.

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
Naphthalene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	57.3	45	117.7	39.6
Phenanthrene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	28	69.4	99.3	54.7
Pyrene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	---	24.2	77.1	99.7	61.2

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:** 2003-00017	**Report#/Lab ID#:** 157761
Attn: Iain Olness	**Sample Name:** LEHJM071904MW9	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	41.1	39-110	---
Nitrobenzene-d5	610 & 8270c	36.3	12-110	---
Terphenyl-d14	610 & 8270c	66.7	25-110	---
1,2-Dichloroethane-d4	8260b	100	74-124	---
Toluene-d8	8260b	102	89-115	---

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

Report #/Lab ID#: 157761 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2003-00017
Sample Name: LEHJM071904MW9

Sample Temperature/Condition:

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
Acenaphthene Acenaphthene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Acenaphthylene Acenaphthylene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Anthracene Anthracene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Benzo[a]anthracene Benzo[a]anthracene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Dibenz[a,h]anthracene Dibenz[a,h]anthracene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Fluorene Fluorene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Indeno[1,2,3-cd]pyrene Indeno[1,2,3-cd]pyrene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Naphthalene Naphthalene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Phenanthrene Phenanthrene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.

Notes:

ANALYSYS INC.

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

Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

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

Report#/Lab ID#: 157762 **Report Date:** 08/06/04
Project ID: 2003-00017
Sample Name: LEHJM071904MW10
Sample Matrix: water
Date Received: 07/21/2004 **Time:** 09:40
Date Sampled: 07/19/2004 **Time:** 10:43

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]
A/BN Extraction-PAH	---	---	---	---	07/22/04	3520	---	---	---	---	---
Extractable organics-PAH	---	---	---	---	08/04/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/22/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	07/22/04	8260b	---	0.3	106.7	112.1	99.1
Ethylbenzene	<1	µg/L	1	<1	07/22/04	8260b	---	4	108.1	110.8	104.8
m,p-Xylenes	<2	µg/L	2	<2	07/22/04	8260b	---	4.7	109.5	111.6	108
o-Xylene	<1	µg/L	1	<1	07/22/04	8260b	---	2.6	115.2	114.7	110.3
Toluene	<1	µg/L	1	<1	07/22/04	8260b	---	1.5	114.8	118.8	107.4
Acenaphthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	12.2	55.8	95.4	57.3
Acenaphthylene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	15.7	50	89.7	50.4
Anthracene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	2.8	61.9	98.5	62.9
Benzo[a]anthracene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	5.9	79.3	114.3	83.3
Benzo[a]pyrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	12.4	70.4	98.4	72.3
Benzo[b]fluoranthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	3.4	94.4	118.7	103.1
Benzo[g,h,i]perylene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	4.8	95.2	118.6	100.4
Benzo[j,k]fluoranthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	8	72.3	102.3	72.9
Chrysene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	1.4	64.1	97.9	68.5
Dibenz[a,h]anthracene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	4.9	81	110.9	84.5
Fluoranthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	6.6	69.4	97.3	66.9
Fluorene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	6.1	56.6	95.9	57.9
Indeno[1,2,3-cd]pyrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	11.9	95.7	118.4	99.7

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 Elton

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). 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.

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

Client: Environmental Plus, Inc.
Attn: Iain Olness

Project ID: 2003-00017
Sample Name: LEHJM071904MW10

Report#/Lab ID#: 157762
Sample Matrix: water

REPORT OF ANALYSIS-cont.

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS [4]
Naphthalene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	17.5	46	92	47.3
Phenanthrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	2.1	62	97.7	63.4
Pyrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	3.8	61.2	94.7	63.8

QUALITY SYS INC.

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 157762
Attn: Iain Olness	**Sample Name:** LEHJM071904MW10	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	52.5	39-110	---
Nitrobenzene-d5	610 & 8270c	57.5	12-110	---
Terphenyl-d14	610 & 8270c	69.4	25-110	---
1,2-Dichloroethane-d4	8260b	108	74-124	---
Toluene-d8	8260b	103	89-115	---

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

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

Report#/Lab ID#: 157763 **Report Date:** 08/06/04
Project ID: 2003-00017
Sample Name: LEHJM071904MW11
Sample Matrix: water
Date Received: 07/21/2004 **Time:** 09:40
Date Sampled: 07/19/2004 **Time:** 12:30

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]
A/BN Extraction-PAH	---	---	---	---	07/22/04	3520	---	---	---	---	---
Extractable organics-PAH	---	---	---	---	08/04/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/22/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	07/22/04	8260b	---	0.3	106.7	112.1	99.1
Ethylbenzene	<1	µg/L	1	<1	07/22/04	8260b	---	4	108.1	110.8	104.8
m,p-Xylenes	<2	µg/L	2	<2	07/22/04	8260b	---	4.7	109.5	111.6	108
o-Xylene	<1	µg/L	1	<1	07/22/04	8260b	---	2.6	115.2	114.7	110.3
Toluene	<1	µg/L	1	<1	07/22/04	8260b	---	1.5	114.8	118.8	107.4
Acenaphthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	12.2	55.8	95.4	57.3
Acenaphthylene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	15.7	50	89.7	50.4
Anthracene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	2.8	61.9	98.5	62.9
Benzo[a]anthracene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	5.9	79.3	114.3	83.3
Benzo[a]pyrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	12.4	70.4	98.4	72.3
Benzo[b]fluoranthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	3.4	94.4	118.7	103.1
Benzo[g,h,i]perylene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	4.8	95.2	118.6	100.4
Benzo[j,k]fluoranthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	8	72.3	102.3	72.9
Chrysene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	1.4	64.1	97.9	68.5
Dibenz[a,h]anthracene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	4.9	81	110.9	84.5
Fluoranthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	6.6	69.4	97.3	66.9
Fluorene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	6.1	56.6	95.9	57.9
Indeno[1,2,3-cd]pyrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	11.9	95.7	118.4	99.7

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 Elton

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). 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.

QUALITY SYS INC.
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Client: Environmental Plus, Inc.
Attn: Iain Olness

Project ID: 2003-00017
Sample Name: LEHJM071904MW11

Report#/Lab ID#: 157763
Sample Matrix: water

REPORT OF ANALYSIS-cont.

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
Naphthalene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	J	17.5	46	92	47.3
Phenanthrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	J	2.1	62	97.7	63.4
Pyrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	3.8	61.2	94.7	63.8

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Client: Environmental Plus, Inc.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 157763
Attn: Iain Olness	**Sample Name:** LEHJM071904MW11	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	100	39-110	---
Nitrobenzene-d5	610 & 8270c	108	12-110	---
Terphenyl-d14	610 & 8270c	105	25-110	---
1,2-Dichloroethane-d4	8260b	101	74-124	---
Toluene-d8	8260b	104	89-115	---

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

Report #/Lab ID#: 157763 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2003-00017
Sample Name: LEHJM071904MW11

Sample Temperature/Condition:

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
Naphthalene	J	See J-flag discussion above.
Phenanthrene	J	See J-flag discussion above.

Notes:

AnalySys, Inc.
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Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
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Phone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 157764 **Report Date:** 08/06/04
Project ID: 2003-00017
Sample Name: LEHJM071904MW13
Sample Matrix: water
Date Received: 07/21/2004 **Time:** 09:40
Date Sampled: 07/19/2004 **Time:** 13:15

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]
Volatile organics-8260b/BTEX	---		---		07/22/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	07/22/04	8260b	---	0.3	106.7	112.1	99.1
Ethylbenzene	<1	µg/L	1	<1	07/22/04	8260b	---	4	108.1	110.8	104.8
m,p-Xylenes	<2	µg/L	2	<2	07/22/04	8260b	---	4.7	109.5	111.6	108
o-Xylene	<1	µg/L	1	<1	07/22/04	8260b	---	2.6	115.2	114.7	110.3
Toluene	<1	µg/L	1	<1	07/22/04	8260b	---	1.5	114.8	118.8	107.4

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 Elton

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). 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: Iain Olness

Project ID: 2003-00017
Sample Name: LEHJM071904MW13

Report#/Lab ID#: 157764
Sample Matrix: water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
1,2-Dichloroethane-d4	8260b	100	74-124	---
Toluene-d8	8260b	104	89-115	---

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: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

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

Report#/Lab ID#: 157765 **Report Date:** 08/06/04
Project ID: 2003-00017
Sample Name: LEHJM071904MW15
Sample Matrix: water
Date Received: 07/21/2004 **Time:** 09:40
Date Sampled: 07/19/2004 **Time:** 14:01

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]
A/BN Extraction-PAH	---	---	---	---	07/22/04	3520	---	---	---	---	---
Extractable organics-PAH	---	---	---	---	08/04/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/22/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	07/22/04	8260b	J	0.3	106.7	112.1	99.1
Ethylbenzene	<1	µg/L	1	<1	07/22/04	8260b	---	4	108.1	110.8	104.8
m,p-Xylenes	<2	µg/L	2	<2	07/22/04	8260b	---	4.7	109.5	111.6	108
o-Xylene	<1	µg/L	1	<1	07/22/04	8260b	---	2.6	115.2	114.7	110.3
Toluene	1.01	µg/L	1	<1	07/22/04	8260b	---	1.5	114.8	118.8	107.4
Acenaphthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	12.2	55.8	95.4	57.3
Acenaphthylene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	15.7	50	89.7	50.4
Anthracene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	2.8	61.9	98.5	62.9
Benzo[a]anthracene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	5.9	79.3	114.3	83.3
Benzo[a]pyrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	12.4	70.4	98.4	72.3
Benzo[b]fluoranthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	3.4	94.4	118.7	103.1
Benzo[g,h,i]perylene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	4.8	95.2	118.6	100.4
Benzo[j,k]fluoranthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	8	72.3	102.3	72.9
Chrysene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	1.4	64.1	97.9	68.5
Dibenz[a,h]anthracene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	4.9	81	110.9	84.5
Fluoranthene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	6.6	69.4	97.3	66.9
Fluorene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	6.1	56.6	95.9	57.9
Indeno[1,2,3-cd]pyrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	11.9	95.7	118.4	99.7

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 Elton

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). 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.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 157765
Attn: Iain Olness	**Sample Name:** LEHJM071904MW15	**Sample Matrix:** water

REPORT OF ANALYSIS-cont.

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
Naphthalene	0.051	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	17.5	46	92	47.3
Phenanthrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	2.1	62	97.7	63.4
Pyrene	<0.05	µg/L	0.05	<0.05	08/04/04	610 & 8270c	---	3.8	61.2	94.7	63.8

2209 N. Padre Island Dr., Corpus Christi, TX 78408
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Client: Environmental Plus, Inc.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 157765
Attn: Iain Olness	**Sample Name:** LEHJM071904MW15	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	72.7	39-110	---
Nitrobenzene-d5	610 & 8270c	73.5	12-110	---
Terphenyl-d14	610 & 8270c	87.6	25-110	---
1,2-Dichloroethane-d4	8260b	108	74-124	---
Toluene-d8	8260b	101	89-115	---

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

Exceptions Report:

Report #/Lab ID#: 157765 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2003-00017
Sample Name: LEHJM071904MW15

Sample Temperature/Condition:

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.

Notes:

[redacted]

AnalySys INC.
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(512) 385-5886 • FAX (512) 385-7411

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

Report#/Lab ID#: 157766 **Report Date:** 08/06/04
Project ID: 2003-00017
Sample Name: LEHJM071904MW16
Sample Matrix: water
Date Received: 07/21/2004 **Time:** 09:40
Date Sampled: 07/19/2004 **Time:** 15:38

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]
A/BN Extraction-PAH	---	---	---	---	07/22/04	3520	---	---	---	---	---
Extractable organics-PAH	---	---	---	---	07/30/04	610 & 8270c	---	---	---	---	---
Volatile organics-8260b/BTEX	---		---		07/22/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	07/22/04	8260b	---	0.3	106.7	112.1	99.1
Ethylbenzene	<1	µg/L	1	<1	07/22/04	8260b	---	4	108.1	110.8	104.8
m,p-Xylenes	<2	µg/L	2	<2	07/22/04	8260b	---	4.7	109.5	111.6	108
o-Xylene	<1	µg/L	1	<1	07/22/04	8260b	---	2.6	115.2	114.7	110.3
Toluene	<1	µg/L	1	<1	07/22/04	8260b	---	1.5	114.8	118.8	107.4
Acenaphthene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	51.7	59.2	100.1	51.5
Acenaphthylene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	53.1	59.1	109.8	51.7
Anthracene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	28.8	66.7	103.2	54.3
Benzo[a]anthracene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	21.6	84.4	87.9	71.9
Benzo[a]pyrene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	---	18.2	71.9	89.1	64
Benzo[b]fluoranthene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	---	14.5	85.4	88	73.3
Benzo[g,h,i]perylene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	---	15.1	85.1	103.8	72.8
Benzo[j,k]fluoranthene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	---	17.6	78.4	100.5	67.8
Chrysene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	---	10.9	71.4	96.7	62.9
Dibenz[a,h]anthracene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	15.9	80.1	93.1	67.7
Fluoranthene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	---	24.3	76.8	104	59.9
Fluorene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	J,P	39.5	58.7	102.4	50.7
Indeno[1,2,3-cd]pyrene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	16.4	80	95.3	67.6

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 Elton

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). 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: Iain Olness

Project ID: *2003-00017*
Sample Name: LEHJM071904MW16

Report#/Lab ID#: *157766*
Sample Matrix: water

REPORT OF ANALYSIS-cont.

QUALITY ASSURANCE DATA [1]

Parameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
Naphthalene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	57.3	45	117.7	39.6
Phenanthrene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	P	28	69.4	99.3	54.7
Pyrene	<0.05	µg/L	0.05	<0.05	07/30/04	610 & 8270c	---	24.2	77.1	99.7	61.2

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Client: Environmental Plus, Inc.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 157766
Attn: Iain Olness	**Sample Name:** LEHJM071904MW16	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limits	Data Qualifiers
2-Fluorobiphenyl	610 & 8270c	42.4	39-110	---
Nitrobenzene-d5	610 & 8270c	31.5	12-110	---
Terphenyl-d14	610 & 8270c	60.4	25-110	---
1,2-Dichloroethane-d4	8260b	99.6	74-124	---
Toluene-d8	8260b	101	89-115	---

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

Exceptions Report:

Report #/Lab ID#: 157766 **Matrix:** water
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2003-00017
Sample Name: LEHJM071904MW16

Sample Temperature/Condition:

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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☐ 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
Acenaphthene Acenaphthene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Acenaphthylene Acenaphthylene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Anthracene Anthracene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Benzo[a]anthracene Benzo[a]anthracene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Dibenz[a,h]anthracene Dibenz[a,h]anthracene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Fluorene Fluorene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Fluorene	J	See J-flag discussion above.
Indeno[1,2,3-cd]pyrene Indeno[1,2,3-cd]pyrene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Naphthalene Naphthalene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.
Phenanthrene Phenanthrene	P P	The precision of the MS & MSD (or sample and sample duplicate for those analyseswhere MS/MSD are not run) is outside advisory/acceptance limits.

Notes:

_____

_____

_____

AnalySys Inc.

Chain of Custody Form

4221 Freidrich Lane, Suite 190, Austin, TX 78744 *2209 N. Padre Island Dr., Corpus Christi, TX 78408*
512-444-5896 FAX: 512-447-4766

Company Name	Environmental Plus, Inc.
EPI Project Manager	Iain Olness
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	505-394-3481 / 505-394-2601
Client Company	Plains All American
Facility Name	Hobbs Junction Mainline
Project Reference	2003-00017
EPI Sampler Name	Manuel Gonzales

Bill To

LinkEnergy

Attn: Jimmy Bryant
PO Box 1660,
Midland, TX 79701

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH
157759	1 LEHJM071904MW7	G	4	X						X	X		19-Jul	9:04	X							X
157760	2 LEHJM071904MW8	G	4	X						X	X		19-Jul	10:00	X							X
157761	3 LEHJM071904MW9	G	4	X						X	X		19-Jul	11:32	X							X
157762	4 LEHJM071904MW10	G	4	X						X	X		19-Jul	10:43	X							X
157763	5 LEHJM071904MW11	G	4	X						X	X		19-Jul	12:30	X							X
157764	6 LEHJM071904MW13	G	4	X						X	X		19-Jul	13:15	X							X
157765	7 LEHJM071904MW15	G	4	X						X	X		19-Jul	14:01	X							X
157766	8 LEHJM071904MW16	G	4	X						X	X		19-Jul	15:38	X							X
	9																					
	10																					

Sampler Relinquished: Manuel Gonzales Date: 7-20-04 Time: 16:50 Received By:

Relinquished by: Date: Time: Received By: (lab staff) ATL - 7/21/04 @0940

Delivered by: Sample Cool & Intact Yes No Checked By:

E-mail results to: iolness@hotmail.com and enviplus1@aol.com

REMARKS:

T:5.2C

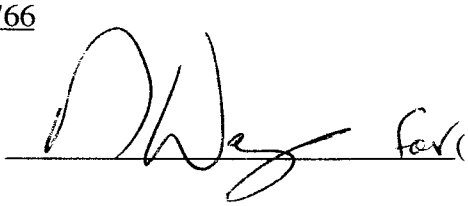
Sample Analysis Case Narrative

Client: Environmental Plus, Inc. **Project ID:** 2003-00017

Attn: Iain Olness

for Sample #'s: 157759 **thru** 157766

Analyzed by AnalySys, Inc.

Final Review Date: 8/10/2204 **By:**  for (R. Elton)

Case Narrative:

The precisions of several Semi Volatile organic compounds in the analytical batch associated with sample #'s 157761 and 157766 were higher than normal laboratory acceptance criteria. However, in each case, the Matrix Spikes (MS & MSD), and the Laboratory Control Sample (LCS) were within analyte recovery limits indicating that the analytical process was working appropriately and in control. This deviation in the precision between the MS and MSD when viewed in conjunction with the acceptable analyte recovery seen in the MS, MSD, and LCS should have minimal impact on data usability.

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ent: Environmental Plus, Inc.
tn: Iain Olness
dress: 2100 Ave. O
Eunice, NM 88231
one: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 155754 **Report Date:** 05/21/04
Project ID: 2003-00017 Hobbs Juc. Mainline
Sample Name: LEHJM051204MW7
Sample Matrix: water
Date Received: 05/14/2004 **Time:** 12:35
Date Sampled: 05/12/2004 **Time:** 08:09

PORT OF ANALYSIS **QUALITY ASSURANCE DATA** [1]

rameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS [4]
latile organics-8260b/BTEX	---		---		05/20/04	8260b(5030/5035)	---	---	---	---	---
nzene	<1	µg/L	1	<1	05/20/04	8260b	---	3.3	97.6	99.9	98.7
ylbenzene	<1	µg/L	1	<1	05/20/04	8260b	---	4.9	108.1	117	111.3
o-Xylenes	<2	µg/L	2	<2	05/20/04	8260b	---	7	109.3	118.4	114.9
Xylene	<1	µg/L	1	<1	05/20/04	8260b	---	7.1	111.7	118.8	117.2
luene	<1	µg/L	1	<1	05/20/04	8260b	---	10.2	100.1	116.9	107

is analytical report is respectfully submitted by AnalySys, Inc. The enclosed results ve been carefully reviewed and, to the best of my knowledge, the analytical results consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program.

Respectfully Submitted,

Richard Elton

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). 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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lient: Environmental Plus, Inc.	**Project ID:** 2003-00017 Hobbs Juc. Mainline	**Report#/Lab ID#:** 155754
ttn: Iain Olness	**Sample Name:** LEHJM051204MW7	**Sample Matrix:** water

EPORT OF SURROGATE RECOVERY

ırrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
2-Dichloroethane-d4	8260b	99.8	74-124	---
)luene-d8	8260b	108	89-115	---

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

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

ent: Environmental Plus, Inc.
n: Iain Olness
dress: 2100 Ave. O
Eunice, NM 88231
one: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 155755 **Report Date:** 05/21/04
Project ID: 2003-00017 Hobbs Juc. Mainline
Sample Name: LEHJM051204MW8
Sample Matrix: water
Date Received: 05/14/2004 **Time:** 12:35
Date Sampled: 05/12/2004 **Time:** 08:59

PORT OF ANALYSIS **QUALITY ASSURANCE DATA** [1]

rameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
latile organics-8260b/BTEX	---		---		05/21/04	8260b(5030/5035)	---	---	---	---	---
nzene	1.1	µg/L	1	<1	05/21/04	8260b	---	1.1	100.1	100.7	103.5
ıylbenzene	<1	µg/L	1	<1	05/21/04	8260b	---	1.4	110.3	112.8	118.7
o-Xylenes	<2	µg/L	2	<2	05/21/04	8260b	---	2.6	111.5	111.2	119.8
Xylene	<1	µg/L	1	<1	05/21/04	8260b	---	2.8	112.9	111.8	123.8
luene	<1	µg/L	1	<1	05/21/04	8260b	---	6.7	110.6	109.7	111.1

is analytical report is respectfully submitted by AnalySys, Inc. The enclosed results ve been carefully reviewed and, to the best of my knowledge, the analytical results consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program.

Respectfully Submitted,

Richard Elton

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

ient: Environmental Plus, Inc.	**Project ID:** 2003-00017 Hobbs Juc. Mainline	**Report#/Lab ID#:** 155755
:tn: Iain Olness	**Sample Name:** LEHJM051204MW8	**Sample Matrix:** water

EPORT OF SURROGATE RECOVERY

ırrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
2-Dichloroethane-d4	8260b	102	74-124	---
)luene-d8	8260b	109	89-115	---

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

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(512) 385-5886 • FAX (512) 385-7411

ent: Environmental Plus, Inc.
:n: Iain Olness
dress: 2100 Ave. O
Eunice, NM 88231

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

Report#/Lab ID#: 155756 **Report Date:** 05/21/04
Project ID: 2003-00017 Hobbs Juc. Mainline
Sample Name: LEHJM051204MW9
Sample Matrix: water
Date Received: 05/14/2004 **Time:** 12:35
Date Sampled: 05/12/2004 **Time:** 09:45

PORT OF ANALYSIS **QUALITY ASSURANCE DATA** [1]

rameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
latile organics-8260b/BTEX	---		---		05/20/04	8260b(5030/5035)	---	---	---	---	---
nzene	<1	µg/L	1	<1	05/20/04	8260b	---	2	103.2	96.1	101.4
ıylbenzene	<1	µg/L	1	<1	05/20/04	8260b	---	1.5	114.9	111.2	107.9
p-Xylenes	<2	µg/L	2	<2	05/20/04	8260b	---	3	117.5	110.9	109.2
Xylene	<1	µg/L	1	<1	05/20/04	8260b	---	3.1	119.6	112.8	111.1
luene	<1	µg/L	1	<1	05/20/04	8260b	---	0	106.7	111.7	112.7

is analytical report is respectfully submitted by AnalySys, Inc. The enclosed results ve been carefully reviewed and, to the best of my knowledge, the analytical results e consistent with AnalySys, Inc.'s Quality Assurance/Quality Control Program.

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Richard Elton

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lient: Environmental Plus, Inc.	**Project ID:** 2003-00017 Hobbs Juc. Mainline	**Report#/Lab ID#:** 155756
ttn: Iain Olness	**Sample Name:** LEHJM051204MW9	**Sample Matrix:** water

EPORT OF SURROGATE RECOVERY

urrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
,2-Dichloroethane-d4	8260b	96.7	74-124	---
oluene-d8	8260b	104	89-115	---

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

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ttn: Iain Olness
ddress: 2100 Ave. O
Eunice, NM 88231

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

Report#/Lab ID#: 155757 **Report Date:** 05/21/04
Project ID: 2003-00017 Hobbs Juc. Mainline
Sample Name: LEHJM051204MW10
Sample Matrix: water
Date Received: 05/14/2004 **Time:** 12:35
Date Sampled: 05/12/2004 **Time:** 10:53

EPORT OF ANALYSIS **QUALITY ASSURANCE DATA** [1]

arameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
olatile organics-8260b/BTEX	---		---		05/20/04	8260b(5030/5035)	---	---	---	---	---
enzene	<1	µg/L	1	<1	05/20/04	8260b	---	2	103.2	96.1	101.4
thylbenzene	<1	µg/L	1	<1	05/20/04	8260b	---	1.5	114.9	111.2	107.9
ı,p-Xylenes	<2	µg/L	2	<2	05/20/04	8260b	---	3	117.5	110.9	109.2
-Xylene	<1	µg/L	1	<1	05/20/04	8260b	---	3.1	119.6	112.8	111.1
oluene	<1	µg/L	1	<1	05/20/04	8260b	---	0	106.7	111.7	112.7

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Client: Environmental Plus, Inc.	**Project ID:** 2003-00017 Hobbs Juc. Mainline	**Report#/Lab ID#:** 155757
Attn: Iain Olness	**Sample Name:** LEHJM051204MW10	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1,2-Dichloroethane-d4	8260b	103	74-124	---
Toluene-d8	8260b	105	89-115	---

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

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lient: Environmental Plus, Inc.
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ddress: 2100 Ave. O
Eunice, NM 88231
hone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 155758 **Report Date:** 05/21/04
Project ID: 2003-00017 Hobbs Juc. Mainline
Sample Name: LEHJM051204MW11
Sample Matrix: water
Date Received: 05/14/2004 **Time:** 12:35
Date Sampled: 05/12/2004 **Time:** 12:45

EPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

arameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
olatile organics-8260b/BTEX	---		---		05/20/04	8260b(5030/5035)	---	---	---	---	---
enzene	<1	µg/L	1	<1	05/20/04	8260b	J	2	103.2	96.1	101.4
thylbenzene	<1	µg/L	1	<1	05/20/04	8260b	---	1.5	114.9	111.2	107.9
,p-Xylenes	<2	µg/L	2	<2	05/20/04	8260b	---	3	117.5	110.9	109.2
-Xylene	<1	µg/L	1	<1	05/20/04	8260b	---	3.1	119.6	112.8	111.1
oluene	<1	µg/L	1	<1	05/20/04	8260b	---	0	106.7	111.7	112.7

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Client: Environmental Plus, Inc.	**Project ID:** 2003-00017 Hobbs Juc. Mainline	**Report#/Lab ID#:** 155758
Attn: Iain Olness	**Sample Name:** LEHJM051204MW11	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1,2-Dichloroethane-d4	8260b	107	74-124	---
Toluene-d8	8260b	106	89-115	---

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

:port #/Lab ID#: 155758 **Matrix:** water
ient: Environmental Plus, Inc. **Attn:** Iain Olness
oject ID: 2003-00017 Hobbs Juc. Mainline
mple Name: LEHJM051204MW11

mple 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).

mple 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.

lag Discussion:

' flag data qualifier indicates (as required under TCEQ-TRRP reporting requirements) that the raw calculated analyte concentration in the sample (uncorrected for background els/blanks and other potential sources of sampling and analytical contamination), though less than the Reported Quantitation Limit (RQL) is greater than the Detection Limit. :ause 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 sence 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.)

mments pertaining to Data Qualifiers and QC data:

rameter	Qualif	Comment
ızene	J	See J-flag discussion above.

tes:

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Eunice, NM 88231
hone: (505) 394-3481 **FAX:** (505) 394-2601

Report#/Lab ID#: 155759 **Report Date:** 05/21/04
Project ID: 2003-00017 Hobbs Juc. Mainline
Sample Name: LEHJM051204MW13
Sample Matrix: water
Date Received: 05/14/2004 **Time:** 12:35
Date Sampled: 05/12/2004 **Time:** 14:10

EPORT OF ANALYSIS

QUALITY ASSURANCE DATA [1]

arameter	Result	Units	RQL [5]	Blank	Date	Method [6]	Data Qual.[7]	Prec. [2]	Recov. [3]	CCV[4]	LCS[4]
olatile organics-8260b/BTEX	---		---		05/20/04	8260b(5030/5035)	---	---	---	---	---
enzene	<1	µg/L	1	<1	05/20/04	8260b	---	2	103.2	96.1	101.4
thylbenzene	<1	µg/L	1	<1	05/20/04	8260b	---	1.5	114.9	111.2	107.9
,p-Xylenes	<2	µg/L	2	<2	05/20/04	8260b	---	3	117.5	110.9	109.2
-Xylene	<1	µg/L	1	<1	05/20/04	8260b	---	3.1	119.6	112.8	111.1
oluene	<1	µg/L	1	<1	05/20/04	8260b	---	0	106.7	111.7	112.7

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Client: Environmental Plus, Inc.	**Project ID:** 2003-00017 Hobbs Juc. Mainline	**Report#/Lab ID#:** 155759
Attn: Iain Olness	**Sample Name:** LEHJM051204MW13	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1,2-Dichloroethane-d4	8260b	103	74-124	---
Toluene-d8	8260b	106	89-115	---

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

AnalySys Inc.

Chain of Custody Form

4221 Freidrich Lane, Suite 190, Austin, TX 78744 *2209 N. Padre Island Dr., Corpus Christi, TX 78408*
512-444-5896 FAX: 512-447-4766

Company Name	Environmental Plus, Inc.
EPI Project Manager	Iain Olness
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	505-394-3481 / 505-394-2601
Client Company	Plains All American
Facility Name	Hobbs Junction Mainline
Project Reference	2003-00017
EPI Sampler Name	Manuel Gonzales

BILL TO

LinkEnergy
Attn: Jimmy Bryant
PO Box 1660,
Midland, TX 79701

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	ANALYSIS REQUEST: BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES ($SO_4^{=}$)	pH	TCLP	OTHER >>>	PAH
155754 1	LEHJM051204MW7	G	2	X						X	X		12-May	8:09	X							
155755 2	LEHJM051204MW8	G	2	X						X	X		12-May	8:59	X							
155756 3	LEHJM051204MW9	G	2	X						X	X		12-May	9:45	X							
155757 4	LEHJM051204MW10	G	2	X						X	X		12-May	10:53	X							
155758 5	LEHJM051204MW11	G	2	X						X	X		12-May	12:45	X							
155759 6	LEHJM051204MW13	G	2	X						X	X		12-May	14:10	X							
7																						
8																						
9																						
10																						

Sampler Relinquished: Manuel Gonzales	Date 5/14 Time	Received By: E. Zuniga ASI. 5-14-04 12:35	E-mail results to: iolness@hotmail.com and enviplus1@aol.com
Relinquished by:	Date Time	Received By: (lab staff)	REMARKS:
Delivered by:	Sample Cool & Intact Yes No	Checked By:	T: 4.2°C

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#: 152322 **Report Date:** 02/03/04
Project ID: 2003-00017
Sample Name: WLEHM12304PMW7
Sample Matrix: water
Date Received: 01/30/2004 **Time:** 09:50
Date Sampled: 01/23/2004 **Time:** 08:00

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]
Volatile organics-8260b/BTEX	---		---		02/02/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	02/02/04	8260b	---	2.8	113.4	110.5	103.7
Ethylbenzene	<1	µg/L	1	<1	02/02/04	8260b	---	3.1	108	110	103.1
m,p-Xylenes	<2	µg/L	2	<2	02/02/04	8260b	---	2.9	110.5	110.6	105.2
o-Xylene	<1	µg/L	1	<1	02/02/04	8260b	---	2	110.6	110.8	105
Toluene	<1	µg/L	1	<1	02/02/04	8260b	---	1.7	118.2	114.9	110.9

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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.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 152322
Attn: Pat McCasland	**Sample Name:** WLEHM12304PMW7	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1,2-Dichloroethane-d4	8260b	103	74-124	---
Toluene-d8	8260b	99.8	89-115	---

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#: 152323 **Report Date:** 02/03/04
Project ID: 2003-00017
Sample Name: WLEHM12304PMW8
Sample Matrix: water
Date Received: 01/30/2004 **Time:** 09:50
Date Sampled: 01/23/2004 **Time:** 08:55

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]
Volatile organics-8260b/BTEX	---		---		02/02/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	02/02/04	8260b	---	11.1	94	87.1	88
Ethylbenzene	<1	µg/L	1	<1	02/02/04	8260b	---	4.2	124.6	120	118.2
m,p-Xylenes	<2	µg/L	2	<2	02/02/04	8260b	---	3.2	124.5	117.8	120.4
o-Xylene	<1	µg/L	1	<1	02/02/04	8260b	---	4.2	126.4	119.7	120.8
Toluene	<1	µg/L	1	<1	02/02/04	8260b	---	11.6	96.1	86.1	90.7

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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	**Project ID:** 2003-00017 **Sample Name:** WLEHM12304PMW8	**Report#/Lab ID#:** 152323 **Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1,2-Dichloroethane-d4	8260b	99	74-124	---
Toluene-d8	8260b	109	89-115	---

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#: 152324 **Report Date:** 02/03/04
Project ID: 2003-00017
Sample Name: WLEHM12304PMW9
Sample Matrix: water
Date Received: 01/30/2004 **Time:** 09:50
Date Sampled: 01/23/2004 **Time:** 09:25

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]
Volatile organics-8260b/BTEX	---		---		02/02/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	02/02/04	8260b	---	11.1	94	87.1	88
Ethylbenzene	<1	µg/L	1	<1	02/02/04	8260b	---	4.2	124.6	120	118.2
m,p-Xylenes	<2	µg/L	2	<2	02/02/04	8260b	---	3.2	124.5	117.8	120.4
o-Xylene	<1	µg/L	1	<1	02/02/04	8260b	---	4.2	126.4	119.7	120.8
Toluene	<1	µg/L	1	<1	02/02/04	8260b	---	11.6	96.1	86.1	90.7

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 Elton

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. **Attn:** Pat McCasland	**Project ID:** 2003-00017 **Sample Name:** WLEHM12304PMW9	**Report#/Lab ID#:** 152324 **Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1,2-Dichloroethane-d4	8260b	98.4	74-124	---
Toluene-d8	8260b	107	89-115	---

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#: 152325 **Report Date:** 02/03/04
Project ID: 2003-00017
Sample Name: WLEHM12304PMW10
Sample Matrix: water
Date Received: 01/30/2004 **Time:** 09:50
Date Sampled: 01/23/2004 **Time:** 09:55

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]
Volatile organics-8260b/BTEX	---		---		02/02/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	02/02/04	8260b	---	11.1	94	87.1	88
Ethylbenzene	<1	µg/L	1	<1	02/02/04	8260b	---	4.2	124.6	120	118.2
m,p-Xylenes	<2	µg/L	2	<2	02/02/04	8260b	---	3.2	124.5	117.8	120.4
o-Xylene	<1	µg/L	1	<1	02/02/04	8260b	---	4.2	126.4	119.7	120.8
Toluene	<1	µg/L	1	<1	02/02/04	8260b	---	11.6	96.1	86.1	90.7

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 Elton

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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.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 152325
Attn: Pat McCasland	**Sample Name:** WLEHM12304PMW10	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1,2-Dichloroethane-d4	8260b	95.2	74-124	---
Toluene-d8	8260b	109	89-115	---

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#: 152326 **Report Date:** 02/03/04
Project ID: 2003-00017
Sample Name: WLEHM12304PMW11
Sample Matrix: water
Date Received: 01/30/2004 **Time:** 09:50
Date Sampled: 01/23/2004 **Time:** 10:25

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]
Volatile organics-8260b/BTEX	---		---		02/02/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	02/02/04	8260b	---	11.1	94	87.1	88
Ethylbenzene	<1	µg/L	1	<1	02/02/04	8260b	---	4.2	124.6	120	118.2
m,p-Xylenes	<2	µg/L	2	<2	02/02/04	8260b	---	3.2	124.5	117.8	120.4
o-Xylene	<1	µg/L	1	<1	02/02/04	8260b	---	4.2	126.4	119.7	120.8
Toluene	<1	µg/L	1	<1	02/02/04	8260b	---	11.6	96.1	86.1	90.7

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 Elton

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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:** 2003-00017 **Sample Name:** WLEHM12304PMW11	**Report#/Lab ID#:** 152326 **Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1,2-Dichloroethane-d4	8260b	97	74-124	---
Toluene-d8	8260b	108	89-115	---

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#: 152327 **Report Date:** 02/03/04
Project ID: 2003-00017
Sample Name: WLEHM12304PW12
Sample Matrix: water
Date Received: 01/30/2004 **Time:** 09:50
Date Sampled: 01/23/2004 **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]
Volatile organics-8260b/BTEX	---		---		02/02/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	02/02/04	8260b	---	11.1	94	87.1	88
Ethylbenzene	<1	µg/L	1	<1	02/02/04	8260b	---	4.2	124.6	120	118.2
m,p-Xylenes	<2	µg/L	2	<2	02/02/04	8260b	---	3.2	124.5	117.8	120.4
o-Xylene	<1	µg/L	1	<1	02/02/04	8260b	---	4.2	126.4	119.7	120.8
Toluene	<1	µg/L	1	<1	02/02/04	8260b	---	11.6	96.1	86.1	90.7

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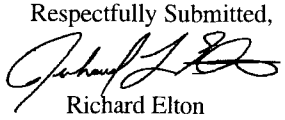
Respectfully Submitted,



Richard Elton

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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.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 152327
Attn: Pat McCasland	**Sample Name:** WLEHM12304PW12	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1,2-Dichloroethane-d4	8260b	98.1	74-124	---
Toluene-d8	8260b	108	89-115	---

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

AnalySys
4221 Freidrich Lane, Suite 190, Austin, TX 78744
(512) 444-5896

002 002/002

Send Report's To:
Company Name Environmental Plus
Address 2100 Ave O
City Eunice State N.M Zip 88231
ATTN: Pat McCasland
Phone 505-394-2601 Fax 505-394-2601

Bill to (if different)
Company Name Link Energy
Address 2100 Ave O
City Eunice State N.M Zip 88231
ATTN: Frank Hernandez
Phone 505-631-3095 Fax 505-396-2754

Rush Status (must be confirmed with lab mgr.):
Project Name/PO#: 2003-00017 Sampler: Bradley Blevins

Analyses Requested (1)
Please attach explanatory information as required

Client Sample No. Description/Identification	Date Sampled	Time Sampled	No. of Containers	Soil	Water	Waste	Lab I.D. # (Lab only)	BTEX 8021	Comments
LWEHM12304PMW7	1-23-04	8:00	2		X		152322	X	
LWEHM12304PMW8	1-23-04	8:55	2		X		152323	X	
LWEHM12304PMW9	1-23-4	9:25	2		X		152324	X	
LWEHM12304PMW10	1-23-04	9:55	2		X		152325	X	
LWEHM12304PMW11	1-23-04	10:25	2		X		152326	X	
LWEHM12304 BW 12	1-23-04	11:30	2		2		152327	2	

Unless specifically requested otherwise on this Chain-of-custody and/or attached documentation, all analyses will be conducted using ASI's method of choice and all data will be reported to ASI's normal reporting 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 Pollutants or I's HSL list at ASI's option. Specific compound lists must be supplied for all GC procedures.

Sample Relinquished By				Sample Received By			
Name	Affiliation	Date	Time	Name	Affiliation	Date	Time
Bradley Blevins	EPI	1-29-04	3:00pm	[illegible] Flynn	ASI	1/30/04	0950

endering 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: John Good
Address: P.O. Box 1558
Eunice, NM 88231

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

Report#/Lab ID#: 149161 **Report Date:** 11/07/03
Project ID: 2003-00017
Sample Name: WLHJM103103FK-WELL
Sample Matrix: water
Date Received: 11/05/2003 **Time:** 11:00
Date Sampled: 10/31/2003 **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]
Volatile organics-8260b/BTEX	---		---		11/06/03	8260b(5030/5035)	---	---	---	---	---
Benzene	<1	µg/L	1	<1	11/06/03	8260b	---	2.6	89	81	89.3
Ethylbenzene	<1	µg/L	1	<1	11/06/03	8260b	---	4.7	109.5	101.2	109.4
m,p-Xylenes	<2	µg/L	2	<2	11/06/03	8260b	---	4.5	110.5	103.8	112.1
o-Xylene	<1	µg/L	1	<1	11/06/03	8260b	---	2.2	116.5	109.6	118.6
Toluene	<1	µg/L	1	<1	11/06/03	8260b	---	2.8	94.8	88.5	92.4

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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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:** 2003-00017	**Report#/Lab ID#:** 149161
Attn: John Good	**Sample Name:** WLHJM103103FK-WELL	**Sample Matrix:** water

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1,2-Dichloroethane-d4	8260b	98.6	80-120	---
Toluene-d8	8260b	101	88-110	---

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

AnalySys Inc.

Chain of Custody Form

4221 Freidrich Lane, Suite 190, Austin, TX 78744 *2209 N. Padre Island Dr., Corpus Christi, TX 78408*
512-444-5896 FAX: 512-447-4766

Company Name	Environmental Plus, Inc.
EPI Project Manager	John Good
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	505-394-3481 / 505-394-2601
Client Company	LINK Energy
Facility Name	Hobbs Junction Mainline
Project Reference	2003-00017
EPI Sampler Name	John Good

Bill To

LinkEnergy

PO Box 1660, Midland, TX 79701

ANALYSIS REQUEST

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES (SO_4^{-2})	pH	TCLP	OTHER >>>
149161	WLHJM103103FK-WELL	G	2	X						X	X		31-Oct	10:00	X						
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					

Sampler Relinquished: John Good — Date 10-31-03 Time 4:30 PM — Received By: Melanie Humphrey 11/5/03

Relinquished by: — Date 11/5/03 Time 11:00 — Received By: (lab staff) Melanie Humphrey

Delivered by:

Sample Cool & Intact: Yes No

Checked By:

Fax Results To John Good 505-394-2601

REMARKS: Sample from Faye Klein's irrigation well -- 600-ft west of release site

T = 4.9°c

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: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

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

Report#/Lab ID#: 156254 **Report Date:** 06/04/04
Project ID: 2003-00017
Sample Name: LSHJM5-24-04MW14 (13'-15')
Sample Matrix: soil
Date Received: 05/28/2004 **Time:** 10:15
Date Sampled: 05/24/2004 **Time:** 09:45

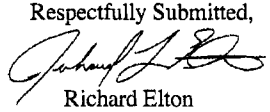
REPORT OF ANALYSIS

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)	<2.5	mg/Kg	2.5	<2.5	06/03/04	8015 mod.	---	3.7	74.7	93.1	109.6
TPH by GC (as diesel-ext)	---	---	---	---	06/02/04	3570m	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/03/04	8015 mod.	---	0.7	73.3	107.4	102.4
Volatile organics-8260b/BTEX	---		---		06/03/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/03/04	8260b	---	13.5	94.4	93.2	86.8
Ethylbenzene	<20	µg/Kg	20	<20	06/03/04	8260b	---	0.9	101.7	105.1	103.6
m,p-Xylenes	<40	µg/Kg	40	<40	06/03/04	8260b	---	6.3	109.4	100.6	101.8
o-Xylene	<20	µg/Kg	20	<20	06/03/04	8260b	---	3.6	115.1	109.5	109.9
Toluene	<20	µg/Kg	20	<20	06/03/04	8260b	---	6	101.7	102.5	91.7

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 Elton

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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:** 2003-00017	**Report#/Lab ID#:** 156254
Attn: Iain Olness	**Sample Name:** LSHJM5-24-04MW14 (13'-15')	**Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	52.2	36-140	---
p-Terphenyl	8015 mod.	83.1	40-121	---
1,2-Dichloroethane-d4	8260b	83.4	56-120	---
Toluene-d8	8260b	103	71-116	---

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: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

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

Report#/Lab ID#: 156255 **Report Date:** 06/04/04
Project ID: 2003-00017
Sample Name: LSHJM5-24-04MW14 (33'-35')
Sample Matrix: soil
Date Received: 05/28/2004 **Time:** 10:15
Date Sampled: 05/24/2004 **Time:** 10:22

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)	<2.5	mg/Kg	2.5	<2.5	06/03/04	8015 mod.	---	3.7	74.7	93.1	109.6
TPH by GC (as diesel-ext)	---	---	---	---	06/02/04	3570m	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/03/04	8015 mod.	---	0.7	73.3	107.4	102.4
Volatile organics-8260b/BTEX	---		---		06/03/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/03/04	8260b	---	13.5	94.4	93.2	86.8
Ethylbenzene	<20	µg/Kg	20	<20	06/03/04	8260b	---	0.9	101.7	105.1	103.6
m,p-Xylenes	<40	µg/Kg	40	<40	06/03/04	8260b	---	6.3	109.4	100.6	101.8
o-Xylene	<20	µg/Kg	20	<20	06/03/04	8260b	---	3.6	115.1	109.5	109.9
Toluene	<20	µg/Kg	20	<20	06/03/04	8260b	---	6	101.7	102.5	91.7

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 Elton

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). 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.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 156255
Attn: Iain Olness	**Sample Name:** LSHIM5-24-04MW14 (33'-35')	**Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	49.5	36-140	---
p-Terphenyl	8015 mod.	85.5	40-121	---
1,2-Dichloroethane-d4	8260b	83.4	56-120	---
Toluene-d8	8260b	99.4	71-116	---

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: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

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

Report#/Lab ID#: 156256 **Report Date:** 06/04/04
Project ID: 2003-00017
Sample Name: LSHJM5-24-04MW17 (13'-15')
Sample Matrix: soil
Date Received: 05/28/2004 **Time:** 10:15
Date Sampled: 05/24/2004 **Time:** 15:05

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)	<2.5	mg/Kg	2.5	<2.5	06/03/04	8015 mod.	---	3.7	74.7	93.1	109.6
TPH by GC (as diesel-ext)	---	---	---	---	06/02/04	3570m	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/03/04	8015 mod.	---	0.7	73.3	107.4	102.4
Volatile organics-8260b/BTEX	---		---		06/03/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/03/04	8260b	---	13.5	94.4	93.2	86.8
Ethylbenzene	<20	µg/Kg	20	<20	06/03/04	8260b	---	0.9	101.7	105.1	103.6
m,p-Xylenes	<40	µg/Kg	40	<40	06/03/04	8260b	---	6.3	109.4	100.6	101.8
o-Xylene	<20	µg/Kg	20	<20	06/03/04	8260b	---	3.6	115.1	109.5	109.9
Toluene	<20	µg/Kg	20	<20	06/03/04	8260b	---	6	101.7	102.5	91.7

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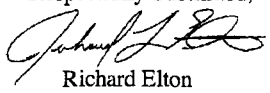
Respectfully Submitted,



Richard Elton

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

Client: Environmental Plus, Inc.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 156256
Attn: Iain Olness	**Sample Name:** LSHJM5-24-04MW17 (13'-15')	**Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	59.3	36-140	---
p-Terphenyl	8015 mod.	87.8	40-121	---
1,2-Dichloroethane-d4	8260b	78.7	56-120	---
Toluene-d8	8260b	94.8	71-116	---

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

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Client: Environmental Plus, Inc.
Attn: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

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

Report#/Lab ID#: 156257 **Report Date:** 06/04/04
Project ID: 2003-00017
Sample Name: LSHJM5-26-04MW17 (34'-36')
Sample Matrix: soil
Date Received: 05/28/2004 **Time:** 10:15
Date Sampled: 05/26/2004 **Time:** 09:04

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)	3110	mg/Kg	25	<25	06/03/04	8015 mod.	---	3.7	74.7	93.1	109.6
TPH by GC (as diesel-ext)	---	---	---	---	06/02/04	3570m	---	---	---	---	---
TPH by GC (as gasoline)	1880	mg/Kg	50	<50	06/03/04	8015 mod.	---	0.7	73.3	107.4	102.4
Volatile organics-8260b/BTEX	---		---		06/03/04	8260b(5030/5035)	---	---	---	---	---
Benzene	19100	µg/Kg	1000	<1000	06/03/04	8260b	---	13.5	94.4	93.2	86.8
Ethylbenzene	49800	µg/Kg	1000	<1000	06/03/04	8260b	---	0.9	101.7	105.1	103.6
m,p-Xylenes	53500	µg/Kg	2000	<2000	06/03/04	8260b	---	6.3	109.4	100.6	101.8
o-Xylene	19600	µg/Kg	1000	<1000	06/03/04	8260b	---	3.6	115.1	109.5	109.9
Toluene	86800	µg/Kg	1000	<1000	06/03/04	8260b	---	6	101.7	102.5	91.7

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 Elton

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 156257
Attn: Iain Olness	**Sample Name:** LSHJM5-26-04MW17 (34'-36')	**Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	none/diluted	diluted @ 5X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 5X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 50X	D
Toluene-d8	8260b	none/diluted	diluted @ 50X	D

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

Exceptions Report:

Report #/Lab ID#: 156257 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Iain Olness
Project ID: 2003-00017
Sample Name: LSHJM5-26-04MW17 (34'-36')

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.
1-Chlorooctane 1-Chlorooctane	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: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

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

Report#/Lab ID#: 156258 **Report Date:** 06/04/04
Project ID: 2003-00017
Sample Name: LSHJM5-26-04MW16 (33'-35')
Sample Matrix: soil
Date Received: 05/28/2004 **Time:** 10:15
Date Sampled: 05/26/2004 **Time:** 14:11

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)	5.79	mg/Kg	2.5	<2.5	06/03/04	8015 mod.	---	3.7	74.7	93.1	109.6
TPH by GC (as diesel-ext)	---	---	---	---	06/02/04	3570m	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/03/04	8015 mod.	---	0.7	73.3	107.4	102.4
Volatile organics-8260b/BTEX	---		---		06/03/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/03/04	8260b	---	13.5	94.4	93.2	86.8
Ethylbenzene	<20	µg/Kg	20	<20	06/03/04	8260b	---	0.9	101.7	105.1	103.6
m,p-Xylenes	<40	µg/Kg	40	<40	06/03/04	8260b	---	6.3	109.4	100.6	101.8
o-Xylene	<20	µg/Kg	20	<20	06/03/04	8260b	---	3.6	115.1	109.5	109.9
Toluene	<20	µg/Kg	20	<20	06/03/04	8260b	---	6	101.7	102.5	91.7

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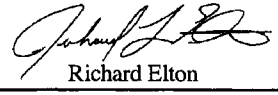
Respectfully Submitted,



Richard Elton

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 156258
Attn: Iain Olness	**Sample Name:** LSHJM5-26-04MW16 (33'-35')	**Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	47.5	36-140	---
p-Terphenyl	8015 mod.	74	40-121	---
1,2-Dichloroethane-d4	8260b	77.5	56-120	---
Toluene-d8	8260b	94.9	71-116	---

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: Iain Olness
Address: 2100 Ave. O
Eunice, NM 88231

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

Report#/Lab ID#: 156259 **Report Date:** 06/04/04
Project ID: 2003-00017
Sample Name: LSHJM5-26-04MW15 (33'-35')
Sample Matrix: soil
Date Received: 05/28/2004 **Time:** 10:15
Date Sampled: 05/26/2004 **Time:** 16:18

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)	<2.5	mg/Kg	2.5	<2.5	06/03/04	8015 mod.	---	3.7	74.7	93.1	109.6
TPH by GC (as diesel-ext)	---	---	---	---	06/02/04	3570m	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	06/03/04	8015 mod.	---	0.7	73.3	107.4	102.4
Volatile organics-8260b/BTEX	---		---		06/03/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	06/03/04	8260b	---	13.5	94.4	93.2	86.8
Ethylbenzene	<20	µg/Kg	20	<20	06/03/04	8260b	---	0.9	101.7	105.1	103.6
m,p-Xylenes	<40	µg/Kg	40	<40	06/03/04	8260b	---	6.3	109.4	100.6	101.8
o-Xylene	<20	µg/Kg	20	<20	06/03/04	8260b	---	3.6	115.1	109.5	109.9
Toluene	<20	µg/Kg	20	<20	06/03/04	8260b	---	6	101.7	102.5	91.7

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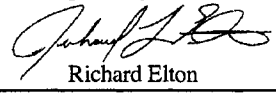
Respectfully Submitted,



Richard Elton

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 156259
Attn: Iain Olness	**Sample Name:** LSHJM5-26-04MW15 (33'-35')	**Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limitse	Data Qualifiers
1-Chlorooctane	8015 mod.	66	36-140	---
p-Terphenyl	8015 mod.	88.4	40-121	---
1,2-Dichloroethane-d4	8260b	79.3	56-120	---
Toluene-d8	8260b	96.9	71-116	---

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

AnalySys Inc.

Chain of Custody Form

4221 Freidrich Lane, Suite 190, Austin, TX 78744 *2209 N. Padre Island Dr., Corpus Christi, TX 78408*
512-444-5896 FAX: 512-447-4766

Company Name	Environmental Plus, Inc.
EPI Project Manager	Iain Olness
Mailing Address	P.O. BOX 1558
City, State, Zip	Eunice New Mexico 88231
EPI Phone#/Fax#	505-394-3481 / 505-394-2601
Client Company	Plains All American
Facility Name	Hobbs Junction Mainline
Project Reference	2003-00017
EPI Sampler Name	Morris Burkett

PLAINS ALL AMERICAN PIPELINE, L.P.

Attn: Jimmy Bryant
PO Box 1660,
Midland, TX 79701

LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX: GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	PRESERV.: ACID/BASE	ICE/COOL	OTHER	SAMPLING: DATE	TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl)	SULFATES (SO_4^{-2})	pH	TCLP	OTHER >>>	PAH
156254	1 LSHJM5-24-04MW14 (13'-15')	G	1			X					X		24-May	9:45	X	X						
156255	2 LSHJM5-24-04MW14 (33'-35')	G	1			X					X		24-May	10:22	X	X						
156256	3 LSHJM5-24-04MW17 (13'-15')	G	1			X					X		24-May	15:05	X	X						
156257	4 LSHJM5-26-04MW17 (34'-36')	G	1			X					X		26-May	9:04	X	X						
156258	5 LSHJM5-26-04MW16 (33'-35')	G	1			X					X		26-May	14:11	X	X						
156259	6 LSHJM5-26-04MW15 (33'-35')	G	1			X					X		26-May	16:18	X	X						
	7																					
	8																					
	9																					
	10																					

Sampler Relinquished: Ron Elrod	Date 5/27/04 Time 1530	Received By:	E-mail results to: iolness@hotmail.com and enviplus1@aol.com
Relinquished by:	Date 5/28/04 Time 1015	Received By: (lab staff) L. Hymm	REMARKS:
Delivered by:	Sample Cool & Intact Yes No	Checked By:	

EPI Form "Analysis Analysis Inc Chain of Custody.xls"

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: 2100 Ave. O
Eunice NM 88231

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

Report#/Lab ID#: 152059 **Report Date:** 01/29/04
Project ID: 2003-00017
Sample Name: SSL11904MW7
Sample Matrix: soil
Date Received: 01/22/2004 **Time:** 09:50
Date Sampled: 01/19/2004 **Time:** 11:00

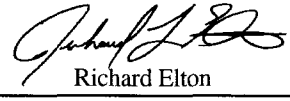
REPORT OF ANALYSIS

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)	<2.5	mg/Kg	2.5	<2.5	01/26/04	8015 mod.	---	10.8	67.6	96.6	89.5
TPH by GC (as diesel-ext)	---	---	---	---	01/26/04	3570m	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/26/04	8015 mod.	---	12.3	92.2	87.4	82.4
Volatile organics-8260b/BTEX	---		---		01/27/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/27/04	8260b	---	0.7	93.9	104	101.6
Ethylbenzene	<20	µg/Kg	20	<20	01/27/04	8260b	---	1.4	96.7	102.4	107.6
m,p-Xylenes	<40	µg/Kg	40	<40	01/27/04	8260b	---	1.5	97.9	102.1	108.7
o-Xylene	<20	µg/Kg	20	<20	01/27/04	8260b	---	1.4	96.2	103.6	109.1
Toluene	<20	µg/Kg	20	<20	01/27/04	8260b	---	1.4	95.3	104.7	106.2

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 Elton

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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	**Project ID:** 2003-00017 **Sample Name:** SSL11904MW7	**Report#/Lab ID#:** 152059 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	73.8	36-140	---
p-Terphenyl	8015 mod.	60.9	40-121	---
1,2-Dichloroethane-d4	8260b	84.8	56-120	---
Toluene-d8	8260b	87.5	71-116	---

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

AnalySys Inc.

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: 2100 Ave. O
Eunice NM 88231

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

Report#/Lab ID#: 152060 **Report Date:** 01/29/04
Project ID: 2003-00017
Sample Name: SSL11904MW8
Sample Matrix: soil
Date Received: 01/22/2004 **Time:** 09:50
Date Sampled: 01/19/2004 **Time:** 14:30

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)	<2.5	mg/Kg	2.5	<2.5	01/26/04	8015 mod.	---	10.8	67.6	96.6	89.5
TPH by GC (as diesel-ext)	---	---	---	---	01/26/04	3570m	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/26/04	8015 mod.	---	12.3	92.2	87.4	82.4
Volatile organics-8260b/BTEX	---		---		01/27/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/27/04	8260b	---	0.7	93.9	104	101.6
Ethylbenzene	<20	µg/Kg	20	<20	01/27/04	8260b	---	1.4	96.7	102.4	107.6
m,p-Xylenes	<40	µg/Kg	40	<40	01/27/04	8260b	---	1.5	97.9	102.1	108.7
o-Xylene	<20	µg/Kg	20	<20	01/27/04	8260b	---	1.4	96.2	103.6	109.1
Toluene	<20	µg/Kg	20	<20	01/27/04	8260b	---	1.4	95.3	104.7	106.2

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 Elton

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:** 2003-00017 **Sample Name:** SSL11904MW8	**Report#/Lab ID#:** 152060 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	66	36-140	---
p-Terphenyl	8015 mod.	57.7	40-121	---
1,2-Dichloroethane-d4	8260b	86.9	56-120	---
Toluene-d8	8260b	86.7	71-116	---

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#: 152061 **Report Date:** 01/29/04
Project ID: 2003-00017
Sample Name: SSL11904MW9
Sample Matrix: soil
Date Received: 01/22/2004 **Time:** 09:50
Date Sampled: 01/19/2004 **Time:** 16:35

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)	<2.5	mg/Kg	2.5	<2.5	01/26/04	8015 mod.	---	10.8	67.6	96.6	89.5
TPH by GC (as diesel-ext)	---	---	---	---	01/26/04	3570m	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/26/04	8015 mod.	---	12.3	92.2	87.4	82.4
Volatile organics-8260b/BTEX	---		---		01/27/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/27/04	8260b	---	0.7	93.9	104	101.6
Ethylbenzene	<20	µg/Kg	20	<20	01/27/04	8260b	---	1.4	96.7	102.4	107.6
m,p-Xylenes	<40	µg/Kg	40	<40	01/27/04	8260b	---	1.5	97.9	102.1	108.7
o-Xylene	<20	µg/Kg	20	<20	01/27/04	8260b	---	1.4	96.2	103.6	109.1
Toluene	<20	µg/Kg	20	<20	01/27/04	8260b	---	1.4	95.3	104.7	106.2

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Respectfully Submitted,

Richard Elton

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Client: Environmental Plus, Inc. **Attn:** Pat McCasland	**Project ID:** 2003-00017 **Sample Name:** SSL11904MW9	**Report#/Lab ID#:** 152061 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	80.2	36-140	---
p-Terphenyl	8015 mod.	69.5	40-121	---
1,2-Dichloroethane-d4	8260b	83.7	56-120	---
Toluene-d8	8260b	89.9	71-116	---

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

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#: 152062 **Report Date:** 01/29/04
Project ID: 2003-00017
Sample Name: SSL12004MW10
Sample Matrix: soil
Date Received: 01/22/2004 **Time:** 09:50
Date Sampled: 01/20/2004 **Time:** 08:50

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)	<2.5	mg/Kg	2.5	<2.5	01/26/04	8015 mod.	---	10.8	67.6	96.6	89.5
TPH by GC (as diesel-ext)	---	---	---	---	01/26/04	3570m	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/26/04	8015 mod.	---	12.3	92.2	87.4	82.4
Volatile organics-8260b/BTEX	---		---		01/27/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/27/04	8260b	---	0.7	93.9	104	101.6
Ethylbenzene	<20	µg/Kg	20	<20	01/27/04	8260b	---	1.4	96.7	102.4	107.6
m,p-Xylenes	<40	µg/Kg	40	<40	01/27/04	8260b	---	1.5	97.9	102.1	108.7
o-Xylene	<20	µg/Kg	20	<20	01/27/04	8260b	---	1.4	96.2	103.6	109.1
Toluene	<20	µg/Kg	20	<20	01/27/04	8260b	---	1.4	95.3	104.7	106.2

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 Elton

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. **Attn:** Pat McCasland	**Project ID:** 2003-00017 **Sample Name:** SSL12004MW10	**Report#/Lab ID#:** 152062 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	80.7	36-140	---
p-Terphenyl	8015 mod.	69	40-121	---
1,2-Dichloroethane-d4	8260b	83.3	56-120	---
Toluene-d8	8260b	83.5	71-116	---

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

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#: 152063 **Report Date:** 01/29/04
Project ID: 2003-00017
Sample Name: SSL012004MW11
Sample Matrix: soil
Date Received: 01/22/2004 **Time:** 09:50
Date Sampled: 01/20/2004 **Time:** 10:48

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)	<2.5	mg/Kg	2.5	<2.5	01/26/04	8015 mod.	---	10.8	67.6	96.6	89.5
TPH by GC (as diesel-ext)	---	---	---	---	01/26/04	3570m	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/26/04	8015 mod.	---	12.3	92.2	87.4	82.4
Volatile organics-8260b/BTEX	---		---		01/27/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/27/04	8260b	---	0.7	93.9	104	101.6
Ethylbenzene	<20	µg/Kg	20	<20	01/27/04	8260b	---	1.4	96.7	102.4	107.6
m,p-Xylenes	<40	µg/Kg	40	<40	01/27/04	8260b	---	1.5	97.9	102.1	108.7
o-Xylene	<20	µg/Kg	20	<20	01/27/04	8260b	---	1.4	96.2	103.6	109.1
Toluene	<20	µg/Kg	20	<20	01/27/04	8260b	---	1.4	95.3	104.7	106.2

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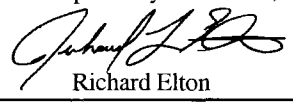
Respectfully Submitted,



Richard Elton

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Client: Environmental Plus, Inc. **Attn:** Pat McCasland	**Project ID:** 2003-00017 **Sample Name:** SSL012004MW11	**Report#/Lab ID#:** 152063 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	78.3	36-140	---
p-Terphenyl	8015 mod.	68.6	40-121	---
1,2-Dichloroethane-d4	8260b	83.7	56-120	---
Toluene-d8	8260b	87.5	71-116	---

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

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#: 152064 **Report Date:** 01/29/04
Project ID: 2003-00017
Sample Name: SSL012004MW12
Sample Matrix: soil
Date Received: 01/22/2004 **Time:** 09:50
Date Sampled: 01/20/2004 **Time:** 15:45

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)	**3490**	mg/Kg	12.5	<12.5	01/27/04	8015 mod.	---	10.8	67.6	96.6	89.5
TPH by GC (as diesel-ext)	---	---	---	---	01/26/04	3570m	---	---	---	---	---
TPH by GC (as gasoline)	**1910**	mg/Kg	25	<25	01/27/04	8015 mod.	---	12.3	92.2	87.4	82.4
Volatile organics-8260b/BTEX	---		---		01/29/04	8260b(5030/5035)	---	---	---	---	---
Benzene	**8840**	µg/Kg	1000	<1000	01/29/04	8260b	---	5.3	91	110.6	98
Ethylbenzene	**54200**	µg/Kg	1000	<1000	01/29/04	8260b	---	3.6	89.6	108.9	108.5
m,p-Xylenes	**68800**	µg/Kg	2000	<2000	01/29/04	8260b	---	3.6	90.9	109	110.7
o-Xylene	**25500**	µg/Kg	1000	<1000	01/29/04	8260b	---	5.3	88	108.7	110.1
Toluene	**98000**	µg/Kg	1000	<1000	01/29/04	8260b	---	4.3	92.1	110.9	103.6

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 Elton

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Client: Environmental Plus, Inc.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 152064
Attn: Pat McCasland	**Sample Name:** SSL012004MW12	**Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	none/diluted	diluted @ 2.5X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 2.5X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 50X	D
Toluene-d8	8260b	none/diluted	diluted @ 50X	D

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

Exceptions Report:

Report #/Lab ID#: 152064 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
Project ID: 2003-00017
Sample Name: SSL012004MW12

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.
1-Chlorooctane 1-Chlorooctane	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:

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#: 152065 **Report Date:** 01/29/04
Project ID: 2003-00017
Sample Name: SSL012004MW13
Sample Matrix: soil
Date Received: 01/22/2004 **Time:** 09:50
Date Sampled: 01/20/2004 **Time:** 14:00

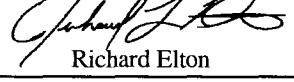
REPORT OF ANALYSIS

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)	<2.5	mg/Kg	2.5	<2.5	01/27/04	8015 mod.	---	10.8	67.6	96.6	89.5
TPH by GC (as diesel-ext)	---	---	---	---	01/26/04	3570m	---	---	---	---	---
TPH by GC (as gasoline)	<5	mg/Kg	5	<5	01/27/04	8015 mod.	---	12.3	92.2	87.4	82.4
Volatile organics-8260b/BTEX	---		---		01/28/04	8260b(5030/5035)	---	---	---	---	---
Benzene	<20	µg/Kg	20	<20	01/28/04	8260b	---	5.3	91	110.6	98
Ethylbenzene	<20	µg/Kg	20	<20	01/28/04	8260b	---	3.6	89.6	108.9	108.5
m,p-Xylenes	<40	µg/Kg	40	<40	01/28/04	8260b	---	3.6	90.9	109	110.7
o-Xylene	<20	µg/Kg	20	<20	01/28/04	8260b	---	5.3	88	108.7	110.1
Toluene	<20	µg/Kg	20	<20	01/28/04	8260b	---	4.3	92.1	110.9	103.6

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 Elton

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

Client: Environmental Plus, Inc.	**Project ID:** 2003-00017	**Report#/Lab ID#:** 152065
Attn: Pat McCasland	**Sample Name:** SSL012004MW13	**Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
1-Chlorooctane	8015 mod.	64.7	36-140	---
p-Terphenyl	8015 mod.	56.3	40-121	---
1,2-Dichloroethane-d4	8260b	85.2	56-120	---
Toluene-d8	8260b	85.9	71-116	---

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

8488

CHAIN-OF-CUSTODY

WWW.ANALYSYSINC.COM

ANALYSYS INC.
3512 Montopolis Drive, Austin, TX 78744
Phone: (512) 385-5886 Fax: (512) 385-7411
2209 N.P.I.D., Ste K, Corpus Christi, TX 7840
Phone: (361) 289-6384 Fax: (361) 289-0875

Send Reports To:
Company Name ENVIRONMENTAL PLUS
Address 2100 AVE
City EUNICE State NM Zip 88231
ATTN: PAT MCCASLAND
Phone 505 394 3481 Fax 505 394-2601

Bill to (if different):
Company Name LINK ENERGY
Address 5805 Hwy 80
City MIDLAND State TX Zip 79701
ATTN: FRANK HERNANDEZ
Phone 505 631-3095 Fax 505 396-2754

Rush Status (must be confirmed with lab mgr.): _____
Project Name/PO#: 2005 0001 Sampler: Brett Clay

Analyses Requested (1)
Please attach explanatory information as require

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
SSL11904 MW 7	1-19	11:00	1	✓			152059	X	X								
SSL11904 MW 8	1-19	2:30	1	✓			152060	X	X								
SSL11904 MW 9	1-19	4:35	1	✓			152061	X	X								
SSL11904 MW 10	1-20	8:50	1	✓			152062	X	X								
SSL012004 MW 11	1-20	10:48	1	✓			152063	X	X								
SSL012004 MW 12	1-20	15:45	1	✓			152064	X	X								
SSL012004 MW 13	1-20	14:00	1	✓			152065	X	X								

(1)Unless specifically requested otherwise on this Chain-of-custody and/or attached documentation, all analyses will be conducted using ASI's method of choice and all data will be reported to ASI's normal reporting limits (MDL/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 o ASI'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
Brett Clay	Environmental Plus	1-20	15:00	[signature]	ASI	1/22/04	0950

[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#: 139653 **Report Date:** 03/04/03
Project ID: 2003 - 00017 Hobbs Main
Sample Name: SEHM21303BH1-2
Sample Matrix: soil
Date Received: 02/20/2003 **Time:** 10:30
Date Sampled: 02/13/2003 **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)	**31700**	mg/Kg	500	<500	02/27/03	8015 mod.	---	3.9	90.4	107.8	118.4
TPH by GC (as diesel-ext)	---	---	---	---	02/27/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	**21400**	mg/Kg	500	<500	02/27/03	8015 mod.	---	14.3	74.3	116	103.6
Chloride	**52.3**	mg/Kg	2.5	<2.5	02/21/03	325.2&9251	---	5.21	111.51	104.82	96.35
Sulfate	**21.8**	mg/Kg	5	<5	02/21/03	375.4&9038	---	4.04	111.01	107.84	112.89
Volatile organics-8260b/BTEX	---		---		02/24/03	8260b	---	---	---	---	---
Benzene	**169000**	µg/Kg	5000	<5000	02/24/03	8260b	---	3.2	79.8	102.9	102.5
Ethylbenzene	**562000**	µg/Kg	5000	<5000	02/24/03	8260b	---	1.6	123.3	118	117.5
m,p-Xylenes	**678000**	µg/Kg	5000	<5000	02/24/03	8260b	---	0.2	123	110.9	114.5
o-Xylene	**264000**	µg/Kg	5000	<5000	02/24/03	8260b	---	0.8	123	110	117
Toluene	**981000**	µg/Kg	5000	<5000	02/24/03	8260b	---	2.5	101.9	106.9	111.2

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.

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:** 2003 - 00017 Hobbs Main **Sample Name:** SEHM21303BH1-2	**Report#/Lab ID#:** 139653 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	none/diluted	diluted @ 50X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 50X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 250X	D
Toluene-d8	8260b	none/diluted	diluted @ 250X	D

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

Exceptions Report:

Report #/Lab ID#: 139653 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
Project ID: 2003 - 00017 Hobbs Main
Sample Name: SEHM21303BH1-2

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: _____

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#: 139654 **Report Date:** 03/04/03
Project ID: 2003 - 00017 Hobbs Main
Sample Name: SEHM21303BH1-5
Sample Matrix: soil
Date Received: 02/20/2003 **Time:** 10:30
Date Sampled: 02/13/2003 **Time:** 09:10

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)	**6070**	mg/Kg	50	<50	02/27/03	8015 mod.	---	3.9	90.4	107.8	118.4
TPH by GC (as diesel-ext)	---	---	---	---	02/27/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	**3950**	mg/Kg	50	<50	02/27/03	8015 mod.	---	14.3	74.3	116	103.6
Volatile organics-8260b/BTEX	---		---		02/24/03	8260b	---	---	---	---	---
Benzene	**38800**	µg/Kg	1000	<1000	02/24/03	8260b	---	3.2	79.8	102.9	102.5
Ethylbenzene	**107000**	µg/Kg	1000	<1000	02/24/03	8260b	---	1.6	123.3	118	117.5
m,p-Xylenes	**117000**	µg/Kg	1000	<1000	02/24/03	8260b	---	0.2	123	110.9	114.5
o-Xylene	**47300**	µg/Kg	1000	<1000	02/24/03	8260b	---	0.8	123	110	117
Toluene	**177000**	µg/Kg	1000	<1000	02/24/03	8260b	---	2.5	101.9	106.9	111.2

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

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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	**Project ID:** 2003 - 00017 Hobbs Main **Sample Name:** SEHM21303BH1-5	**Report#/Lab ID#:** 139654 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	none/diluted	diluted @ 5X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 5X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 50X	D
Toluene-d8	8260b	none/diluted	diluted @ 50X	D

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

Exceptions Report:

Report #/Lab ID#: 139654 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
Project ID: 2003 - 00017 Hobbs Main
Sample Name: SEHM21303BH1-5

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:

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#: 139655 **Report Date:** 03/04/03
Project ID: 2003 - 00017 Hobbs Main
Sample Name: SEHM21303BH1-10
Sample Matrix: soil
Date Received: 02/20/2003 **Time:** 10:30
Date Sampled: 02/13/2003 **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)	**3860**	mg/Kg	50	<50	02/27/03	8015 mod.	---	3.9	90.4	107.8	118.4
TPH by GC (as diesel-ext)	---	---	---	---	02/27/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	**2650**	mg/Kg	50	<50	02/27/03	8015 mod.	---	14.3	74.3	116	103.6
Volatile organics-8260b/BTEX	---		---		02/24/03	8260b	---	---	---	---	---
Benzene	**44600**	µg/Kg	5000	<5000	02/24/03	8260b	---	3.2	79.8	102.9	102.5
Ethylbenzene	**113000**	µg/Kg	5000	<5000	02/24/03	8260b	---	1.6	123.3	118	117.5
m,p-Xylenes	**127000**	µg/Kg	5000	<5000	02/24/03	8260b	---	0.2	123	110.9	114.5
o-Xylene	**48600**	µg/Kg	5000	<5000	02/24/03	8260b	---	0.8	123	110	117
Toluene	**196000**	µg/Kg	5000	<5000	02/24/03	8260b	---	2.5	101.9	106.9	111.2

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

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. **Attn:** Pat McCasland	**Project ID:** 2003 - 00017 Hobbs Main **Sample Name:** SEHM21303BH1-10	**Report#/Lab ID#:** 139655 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

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

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

Exceptions Report:

Report #/Lab ID#: 139655 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
Project ID: 2003 - 00017 Hobbs Main
Sample Name: SEHM21303BH1-10

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).

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J flag Discussion

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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:

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#: 139656 **Report Date:** 03/04/03
Project ID: 2003 - 00017 Hobbs Main
Sample Name: SEHM21303BH1-15
Sample Matrix: soil
Date Received: 02/20/2003 **Time:** 10:30
Date Sampled: 02/13/2003 **Time:** 10:25

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)	**6710**	mg/Kg	50	<50	02/27/03	8015 mod.	---	3.9	90.4	107.8	118.4
TPH by GC (as diesel-ext)	---	---	---	---	02/27/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	**3940**	mg/Kg	50	<50	02/27/03	8015 mod.	---	14.3	74.3	116	103.6
Volatile organics-8260b/BTEX	---		---		02/21/03	8260b	---	---	---	---	---
Benzene	**27300**	µg/Kg	1000	<1000	02/21/03	8260b	---	3.2	79.8	102.9	102.5
Ethylbenzene	**98400**	µg/Kg	1000	<1000	02/21/03	8260b	---	1.6	123.3	118	117.5
m,p-Xylenes	**112000**	µg/Kg	1000	<1000	02/21/03	8260b	---	0.2	123	110.9	114.5
o-Xylene	**44100**	µg/Kg	1000	<1000	02/21/03	8260b	---	0.8	123	110	117
Toluene	**142000**	µg/Kg	1000	<1000	02/21/03	8260b	---	2.5	101.9	106.9	111.2

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.

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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:** 2003 - 00017 Hobbs Main **Sample Name:** SEHM21303BH1-15	**Report#/Lab ID#:** 139656 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	none/diluted	diluted @ 5X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 5X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 50X	D
Toluene-d8	8260b	none/diluted	diluted @ 50X	D

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

Exceptions Report:

Report #/Lab ID#: 139656 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
Project ID: 2003 - 00017 Hobbs Main
Sample Name: SEHM21303BH1-15

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
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: 2100 Ave. O
Eunice NM 88231

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

Report#/Lab ID#: 139657 **Report Date:** 03/04/03
Project ID: 2003 - 00017 Hobbs Main
Sample Name: SEHM21303BH1-20
Sample Matrix: soil
Date Received: 02/20/2003 **Time:** 10:30
Date Sampled: 02/13/2003 **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)	**5870**	mg/Kg	50	<50	02/27/03	8015 mod.	---	3.9	90.4	107.8	118.4
TPH by GC (as diesel-ext)	---	---	---	---	02/27/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	**2990**	mg/Kg	50	<50	02/27/03	8015 mod.	---	14.3	74.3	116	103.6
Volatile organics-8260b/BTEX	---		---		02/24/03	8260b	---	---	---	---	---
Benzene	**10600**	µg/Kg	1000	<1000	02/24/03	8260b	---	3.2	79.8	102.9	102.5
Ethylbenzene	**66300**	µg/Kg	1000	<1000	02/24/03	8260b	---	1.6	123.3	118	117.5
m,p-Xylenes	**77600**	µg/Kg	1000	<1000	02/24/03	8260b	---	0.2	123	110.9	114.5
o-Xylene	**32900**	µg/Kg	1000	<1000	02/24/03	8260b	---	0.8	123	110	117
Toluene	**84500**	µg/Kg	1000	<1000	02/24/03	8260b	---	2.5	101.9	106.9	111.2

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.

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(512) 385-5886 • FAX (512) 385-7411

Client: Environmental Plus, Inc. **Attn:** Pat McCasland	**Project ID:** 2003 - 00017 Hobbs Main **Sample Name:** SEHM21303BH1-20	**Report#/Lab ID#:** 139657 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

Surrogate Compound	Method	Recovery	Recovery Limit	Data Qualifiers
Nitrobenzene-d5	8015 mod.	none/diluted	diluted @ 5X	D
p-Terphenyl	8015 mod.	none/diluted	diluted @ 5X	D
1,2-Dichloroethane-d4	8260b	none/diluted	diluted @ 50X	D
Toluene-d8	8260b	none/diluted	diluted @ 50X	D

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

Exceptions Report:

Report #/Lab ID#: 139657 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
Project ID: 2003 - 00017 Hobbs Main
Sample Name: SEHM21303BH1-20

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

Notes:

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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#: 139658 **Report Date:** 03/04/03
Project ID: 2003 - 00017 Hobbs Main
Sample Name: SEHM21303BH1-25
Sample Matrix: soil
Date Received: 02/20/2003 **Time:** 10:30
Date Sampled: 02/13/2003 **Time:** 13:55

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)	**5760**	mg/Kg	50	<50	02/27/03	8015 mod.	---	3.9	90.4	107.8	118.4
TPH by GC (as diesel-ext)	---	---	---	---	02/27/03	3540	---	---	---	---	---
TPH by GC (as gasoline)	**2820**	mg/Kg	50	<50	02/27/03	8015 mod.	---	14.3	74.3	116	103.6
Volatile organics-8260b/BTEX	---		---		02/21/03	8260b	---	---	---	---	---
Benzene	**9750**	µg/Kg	5000	<5000	02/21/03	8260b	---	3.2	79.8	102.9	102.5
Ethylbenzene	**94200**	µg/Kg	5000	<5000	02/21/03	8260b	---	1.6	123.3	118	117.5
m,p-Xylenes	**106000**	µg/Kg	5000	<5000	02/21/03	8260b	---	0.2	123	110.9	114.5
o-Xylene	**43600**	µg/Kg	5000	<5000	02/21/03	8260b	---	0.8	123	110	117
Toluene	**95500**	µg/Kg	5000	<5000	02/21/03	8260b	---	2.5	101.9	106.9	111.2

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

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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:** 2003 - 00017 Hobbs Main **Sample Name:** SEHM21303BH1-25	**Report#/Lab ID#:** 139658 **Sample Matrix:** soil

REPORT OF SURROGATE RECOVERY

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

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

Exceptions Report:

Report #/Lab ID#: 139658 **Matrix:** soil
Client: Environmental Plus, Inc. **Attn:** Pat McCasland
Project ID: 2003 - 00017 Hobbs Main
Sample Name: SEHM21303BH1-25

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).

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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
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:

AIN-OF-CUSTODY

AnalySys 5255

4221 Freidrich Lane, Suite 190, Austin, TX 78744
(512) 444-5896

Reports To:

Company Name: Environmental Plus
Address: 2100 Ave O
City: Eun.Co State: N.M Zip: 88231
ATTN: Pat McCasland / John Good
Phone: 505-394-3481 Fax: 505-394-2601

Bill to (if different):

Company Name: Eott Energy
Address: 5805 Hwy 80
City: Midland State: Tx Zip: 79701
ATTN: Frank Hernandez
Phone: 915-638-3799 Fax:

Status (must be confirmed with lab mgr.):
Project Name/PO#: 2003.00017 Hobbs Main Sampler: Bradley Blevins

Analyses Requested (1)
Please attach explanatory information as required

Client Sample No. / Description/Identification	Date Sampled	Time Sampled	No. of Containers	Soil	Water	Waste	Lab I.D. # (Lab only)	TPH 8015m	BTEX 8021b	Chloride	Sulfate	Comments
SEHM21303BH1-2'	2-13-03	8:40	1	X			139653	X	X	X	X	
SEHM21303BH1-5'	2-13-03	9:10	1	X			139654	X	X			
SEHM21303BH1-10'	2-13-03	9:40	1	X			139655	X	X			
SEHM21303BH1-15'	2-13-03	10:25	1	X			139656	X	X			
SEHM21303BH1-20'	2-13-03	11:45	1	X			139657	X	X			
SEHM21303BH1-25'	2-13-03	1:55	1	X			139658	X	X			

s specifically requested otherwise on this Chain-of-custody and/or attached documentation, all analyses will be conducted using ASI's method of choice and all data will be reported to ASI's normal reporting IDL/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 or SL list at ASI's option. Specific compound lists must be supplied for all GC procedures.

T=5.5°C

Sample Relinquished By				Sample Received By			
Name	Affiliation	Date	Time	Name	Affiliation	Date	Time
B.B.	Environmental Plus	2/13/03		Melanie Humphrey	ASI	2/20/03	10:30

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

Attachment IV: 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 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.

1.2 METHODS

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 PLAINS ALL AMERICAN PIPELINE standard operating procedures as referenced in the NMOCD approved "General Work Plan for Remediation of PLAINS ALL AMERICAN PIPELINE Pipeline Spills, Leaks, and Releases in New Mexico." Likewise, personnel will implement standard environmental and occupational safety protocols.

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 ground water. 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.

1.2.1.1 General Drilling Procedures

The investigation will use a drill rig with hollow stem auger and "thin-wall probe" method of discrete sampling.

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 (~1 Kg) placed in a 1 gallon Ziplock bag, warmed to ambient ~ 70-80 °F and VOC Headspace concentration measured and recorded. All pertinent information will be recorded on the field borelog data sheet.

1.2.1.3 Monitor and Pollution Abatement Well Installation

Boreholes exhibiting contamination from the surface to ground water 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.

1.2.1.4 Ground Water Sampling

Ground water 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.

1.2.1.5 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.

1.2.2 Sample Handling

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

1.2.2.1 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.

1.2.2.2 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

1.2.2.3 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.

1.2.2.4 Quality Control Samples

Quality control samples will be analyzed to ensure data quality.

1.2.2.4.1 Field Blank

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

1.2.2.4.2 Equipment Blank

None will be collected.

1.2.2.4.3 Field Duplicate or Co-located Samples

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

1.2.2.4.4 Trip Blank

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

1.2.2.5 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.

1.2.2.5.1 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.

1.2.2.5.2 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.

1.2.2.5.3 Ground Water Level Measurements

Ground water levels will be taken with an accurate water level meter at each borehole where ground water 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."

1.2.2.6 Analyses

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

The analytical suite for soil samples will include;

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

1.2.2.7 Sample Identification

Sample identification numbers will be designated as follows;

Site: Plains Hobbs Junction Mainline	Date	Borehole #	Interval bgs	Qualification: Cutting/Probe Sample
PHJML	8-27-03	1	20'	C or P

Example: PHJML82704BH1-20C

1.2.2.8 Data Evaluation

All data will be reviewed based on the Data Quality Objectives in section 1.1.

Attachment V: Groundwater Documentation

New Mexico Office of the State Engineer
Well Reports and Downloads

Township: 18S Range: 37E Sections: 22,23,24,25,26,27,34,35,36

NAD27 X: Y: Zone: Search Radius:

County: Basin: Number: Suffix:

Owner Name: (First) (Last) ○ Non-Domestic ○ Domestic ◉ All

Well / Surface Data Report | Avg Depth to Water Report | Water Column Report

Clear Form | WATERS Menu | Help

AVERAGE DEPTH OF WATER REPORT 08/28/2004

								(Depth Water in Feet)		
Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	Min	Max	Avg
L	18S	37E	22				2	60	70	65
L	18S	37E	23				1	33	33	33
L	18S	37E	24				2	35	62	49
L	18S	37E	27				1	42	42	42
L	18S	37E	34				1	45	45	45
L	18S	37E	35				13	30	65	43
L	18S	37E	36				19	35	150	55

Record Count: 39

http://iwaters.ose.state.nm.us:7001/iWATERS/WellAndSurfaceDispatcher 8/28/2004

TABLE I
Plains All American Pipeline
Hobbs Junction Mainline #2003-00017
Groundwater Monitoring Analytical Results

Well	Date	Benzene µg/L	Toluene µg/L	Ethylbenzene µg/L	m,p-Xylenes µg/L	o-Xylene µg/L	Total Xylenes µg/L	TPH GRO mg/L	TPH DRO mg/L
MW1	1/23/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
	7/19/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
MW2	1/23/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
	7/19/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
MW3	1/23/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
	7/19/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
MW4	1/23/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
	7/19/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
MW5	1/23/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
	7/19/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
MW6	1/23/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
	7/19/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
MW7	1/23/2004	<1	<1	<1	<2	<1	<2		
	7/19/2004	<1	<1	<1	<2	<1	<2		
MW8	1/23/2004	<1	<1	<1	<2	<1	<2		
	7/19/2004	<1	<1	<1	<2	<1	<2		
MW9	1/23/2004	<1	<1	<1	<2	<1	<2		
	7/19/2004	<1	<1	<1	<2	<1	<2		
MW10	1/23/2004	<1	<1	<1	<2	<1	<2		
	7/19/2004	<1	<1	<1	<2	<1	<2		
MW11	1/23/2004	<1	<1	<1	<2	<1	<2		
	7/19/2004	<1	<1	<1	<2	<1	<2		
MW12	1/23/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
	7/19/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
MW13	1/23/2004	<1	<1	<1	<2	<1	<2		
	7/19/2004	<1	<1	<1	<2	<1	<2		
MW14	7/19/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
MW15	7/19/2004	<1	1.01	<1	<2	<1	<2		
MW16	7/19/2004	<1	<1	<1	<2	<1	<2		
MW17	7/19/2004	Not sampled Due to the Presence of Phase Separated Hydrocarbon							
Klein Irrigation Well	10/31/2003	<1	<1	<1	<2	<1	<2		
	7/19/2004								
NMWQCC Standards		10	750	750			620		

PSH - Phase Separated Hydrocarbon
µg/L - micrograms per Liter
mg/L - milligrams per liter
GRO - Gasoline Range Organics
DRO - Diesel Range Organics

< - denotes method detection limit
Blank cells indicate that analyses was not performed.
Bolded results are above the NMWQCC Standards for drinking water
NMWQCC - New Mexico Water Quality Control Commission

TABLE II
Plains All American Pipeline
Hobbs Junction Mainline #2003-00017
Groundwater and PSH Levels

Well	Date Gauged	Top of Casing Elevation 'amsl	Depth to PSH 'btoc	Depth to Water 'btoc	Corrected Groundwater Elevation 'amsl	Phase Separated Hydrocarbon Thickness feet
MW1	6/23/2003	3678.50	38.49	45.43	3626.82	6.94
	6/25/2003		38.48	45.43	3626.82	6.95
	7/1/2003		36.64	48.25	3619.80	11.61
	7/7/2003		38.73	45.55	3626.81	6.82
	7/22/2003		37.32	48.05	3620.79	10.73
	7/23/2003		37.33	48.06	3620.78	10.73
	7/24/2003		37.40	47.90	3621.15	10.50
	7/30/2003		37.41	47.90	3621.16	10.49
	10/13/2003		36.81	47.34	3621.68	10.53
	12/11/2003		37.79	46.85	3623.50	9.06
	12/15/2003		37.75	46.77	3623.61	9.02
	2/18/2004		38.42	47.64	3622.56	9.22
	3/29/2004		37.45	45.35	3626.04	7.90
	4/29/2004		38.26	42.18	3632.79	3.92
	5/3/2004		37.44	46.11	3624.59	8.67
	7/12/2004		38.34	45.66	3626.25	7.32
MW2	6/26/2003	3679.47	38.72	44.93	3628.95	6.21
	7/1/2003		38.65	45.42	3627.96	6.77
	7/22/2003		38.63	45.63	3627.54	7.00
	7/23/2003		38.64	45.63	3627.55	6.99
	7/24/2003		39.20	43.57	3631.97	4.37
	7/30/2003		39.21	43.58	3631.96	4.37
	12/11/2003		38.88	45.51	3627.99	6.63
	12/15/2003		38.84	45.41	3628.15	6.57
	3/23/2004		38.36	44.52	3629.41	6.16
	3/29/2004		38.47	44.04	3630.42	5.57
	4/29/2004		38.16	48.06	3622.50	9.90
	5/3/2004		38.39	44.27	3629.91	5.88
	7/12/2004		39.42	44.67	3630.08	5.25
MW3	10/13/2003	3679.81	39.21	48.75	3622.47	9.54
	12/11/2003		39.15	48.95	3622.04	9.80
	12/15/2003		39.08	50.91	3618.25	11.83
	2/18/2004		38.72	48.26	3622.96	9.54
	3/12/2004		39.82	48.49	3623.52	8.67
	3/29/2004		38.81	46.32	3626.73	7.51
	4/29/2004		39.49	44.11	3631.54	4.62
	5/3/2004		38.77	46.51	3626.33	7.74
	7/12/2004		39.68	46.81	3626.58	7.13

TABLE II Cont.
Plains All American Pipeline
Hobbs Junction Mainline #2003-00017
Groundwater and PSH Levels

Well	Date Gauged	Top of Casing Elevation 'amsl	Depth to PSH 'btoc	Depth to Water 'btoc	Corrected Groundwater Elevation 'amsl	Phase Separated Hydrocarbon Thickness feet
MW4	10/13/2003	3679.64	39.01	48.75	3622.12	9.74
	12/11/2003		38.92	47.32	3624.76	8.40
	12/15/2003		38.84	47.16	3624.99	8.32
	2/18/2004		38.48	46.62	3625.69	8.14
	3/12/2004		39.09	47.51	3624.55	8.42
	3/29/2004		38.59	45.62	3627.69	7.03
	4/29/2004		39.94	44.23	3631.55	4.29
	5/3/2004		38.55	46.33	3626.31	7.78
	7/12/2004		39.49	46.24	3627.33	6.75
MW5	10/13/2003	3679.26	40.35	43.02	3633.84	2.67
	12/11/2003		38.95	47.81	3623.48	8.86
	12/15/2003		38.91	47.72	3623.61	8.81
	2/18/2004		38.61	47.44	3623.87	8.83
	3/29/2004		38.76	46.15	3626.46	7.39
	4/29/2004		38.55	47.41	3623.88	8.86
	5/3/2004		38.52	47.46	3623.75	8.94
	7/12/2004		39.24	47.72	3623.91	8.48
MW6	10/13/2003	3680.63	40.04	50.12	3621.44	10.08
	12/11/2003		40.01	48.43	3624.62	8.42
	12/15/2003		39.92	48.33	3624.73	8.41
	2/18/2004		39.63	47.81	3625.46	8.18
	3/12/2004		39.68	47.51	3626.07	7.83
	3/29/2004		39.67	46.50	3627.98	6.83
	4/29/2004		40.18	44.76	3631.75	4.58
	5/3/2004		39.66	46.63	3627.73	6.97
	7/12/2004		40.52	47.68	3626.51	7.16
MW7	1/23/2004	3679.85	nd	39.64	3640.21	na
	4/29/2004		nd	39.29	3640.56	na
	5/12/2004		nd	39.29	3640.56	na
	6/3/2004		nd	39.27	3640.58	na
	7/12/2004		nd	40.42	3639.43	na
	7/19/2004		nd	40.68	3639.17	na
MW8	1/23/2004	3679.07	nd	39.56	3639.51	na
	4/29/2004		nd	39.33	3639.74	na
	5/12/2004		nd	39.34	3639.73	na
	6/3/2004		nd	39.32	3639.75	na
	7/12/2004		nd	40.13	3638.94	na
	7/19/2004		nd	40.32	3638.75	na

TABLE II Cont.
Plains All American Pipeline
Hobbs Junction Mainline #2003-00017
Groundwater and PSH Levels

Well	Date Gauged	Top of Casing Elevation 'amsl	Depth to PSH 'btoc	Depth to Water 'btoc	Corrected Groundwater Elevation 'amsl	Phase Separated Hydrocarbon Thickness feet
MW9	1/23/2004	3678.76	nd	39.91	3638.85	na
	4/29/2004		nd	39.68	3639.08	na
	5/12/2004		nd	39.69	3639.07	na
	6/3/2004		nd	39.67	3639.09	na
	7/12/2004		nd	40.34	3638.42	na
	7/19/2004		nd	40.44	3638.32	na
MW10	1/23/2004	3678.36	nd	39.89	3638.47	na
	4/29/2004		nd	39.74	3638.62	na
	5/12/2004		nd	39.74	3638.62	na
	6/3/2004		nd	39.74	3638.62	na
	7/12/2004		nd	40.24	3638.12	na
	7/19/2004		nd	40.33	3638.03	na
MW11	1/23/2004	3678.03	nd	41.40	3636.63	na
	4/29/2004		nd	41.07	3636.96	na
	5/12/2004		nd	39.57	3638.46	na
	6/3/2004		nd	39.61	3638.42	na
	7/12/2004		nd	40.04	3637.99	na
	7/19/2004		nd	40.10	3637.93	na
MW12	1/23/2004	3679.63	39.49	45.30	3629.10	5.81
	3/23/2004		38.89	47.39	3624.59	8.50
	3/29/2004		38.86	47.33	3624.68	8.47
	4/29/2004		38.86	48.57	3622.32	9.71
	5/3/2004		38.83	46.63	3625.98	7.80
	7/12/2004		39.58	47.53	3624.95	7.95
MW13	1/23/2004	3681.42	nd	39.67	3641.75	na
	4/29/2004		nd	39.58	3641.84	na
	5/12/2004		nd	41.05	3640.37	na
	6/3/2004		nd	41.05	3640.37	na
	7/12/2004		nd	42.18	3639.24	na
	7/19/2004		nd	42.44	3638.98	na

TABLE II Cont.
Plains All American Pipeline
Hobbs Junction Mainline #2003-00017
Groundwater and PSH Levels

Well	Date Gauged	Top of Casing Elevation 'amsl	Depth to PSH 'btoc	Depth to Water 'btoc	Corrected Groundwater Elevation 'amsl	Phase Separated Hydrocarbon Thickness feet
MW14	5/24/2004	3679.00	Install		3679.00	
	6/1/2004		Develop		3679.00	
	6/3/2004		39.16	42.87	3632.79	3.71
	7/12/2004		39.29	46.46	3626.09	7.17
	7/19/2004		39.45	46.59	3625.98	7.14
	8/26/2004		38.92	45.94	3626.74	7.02
MW15	5/26/2004	3674.92	Install		3674.92	
	6/2/2004		Develop		3674.92	
	6/3/2004		nd	36.22	3638.70	na
	7/12/2004		nd	36.77	3638.15	na
	7/19/2004		nd	36.90	3638.02	na
MW16	5/26/2004	3676.86	Install		3676.86	na
	6/2/2004		Develop		3676.86	na
	6/3/2004		nd	37.66	3639.20	na
	7/12/2004		nd	38.35	3638.51	na
	7/19/2004		nd	38.57	3638.29	na
MW17	5/24/2004	3679.01	Install		3679.01	
	6/1/2004		Develop		3679.01	
	6/3/2004		39.66	42.05	3634.81	2.39
	7/12/2004		39.39	46.94	3625.28	7.55
	7/19/2004		39.50	46.97	3625.32	7.47
	8/26/2004		39.04	46.59	3625.63	7.55
Klein Irrigation Well	10/31/2003	na				na
	7/19/2004	na				na

PSH - Phase Separated Hydrocarbon
ns - not sampled
'btoc - feet below top of casing
nd - not detected
na - not applicable

Attachment VI: Site Information and Metrics Form and Initial NMOCD Form C-141

Plains All American Pipeline Site Information and Metrics	Incident Date: Plains All American Pipeline	NMOCD Notified: 1-23-03 @ 11:35 AM

SITE: **Hobbs Junction Mainline**	Assigned Site Reference #: **2003-00017**
Company: Plains All American Pipeline	**NATIONAL RESPONSE CENTER - 800.424.8802**
Street Address: PO Box 1660	Notified Date/Time: NA
Mailing Address: 5805 East Highway 80	Notified by: Pat McCasland EPI
City, State, Zip: Midland, Texas 79702	Person Notified: NA
Representative: Camille Reynolds	NRC Report# : NA
Representative Telephone: 505.393.5611	
Telephone:	
Fluid volume released (bbls): 50 bbls	Recovered (bbls): 24 bbls
>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: Hobbs Junction Mainline	
Source of contamination: 10" Steel Pipeline	
Land Owner, i.e., BLM, ST, Fee, Other: State of New Mexico and Faye Klein dba Klein-Linam Ranches	
LSP Dimensions 50' x 470'	
LSP Area: 12,500 sqft ft^2	
Location of Reference Point (RP)	
Location distance and direction from RP	
Latitude: 32°42'40.85"N	
Longitude: 103°13'42.01"W	
Elevation above mean sea level: 3,372'amsl	
Feet from South Section Line UL-D Section 35 T18S R37E, property owned by Faye Klein	
Feet from West Section Line	
Location- Unit or ¼¼: SW¼ of the SW¼ and NW¼ of the NW¼	Unit Letters: M and D
Location- Sections: 26 and 35	
Location- Township: T18S	
Location- Range: R37E	
Surface water body within 1000 ' radius of site: none	
Surface water body within 1000 ' radius of site:	
Domestic water wells within 1000' radius of site: none	
Domestic water wells within 1000' radius of site:	
Agricultural water wells within 1000' radius of site: 1- approximately 600' west	
Agricultural water wells within 1000' radius of site:	
Public water supply wells within 1000' radius of site: none	
Public water supply wells within 1000' radius of site:	
Depth from land surface to ground water (DG) 40'bgs	
Depth of contamination (DC) – 40'bgs	
Depth to ground water (DG – DC = DtGW) - 0'	

1. Ground Water	2. Wellhead Protection Area	3. Distance to Surface Water Body
If Depth to GW <50 feet: *20 points*	If <1000' from water source, or;<200' from private domestic water source: *20 points*	<200 horizontal feet: *20 points*
If Depth to GW 50 to 99 feet: *10 points*		200-100 horizontal feet: *10 points*
If Depth to GW >100 feet: *0 points*	If >1000' from water source, or; >200' from private domestic water source: *0 points*	>1000 horizontal feet: *0 points*
Ground water Score = 20	*Wellhead Protection Area Score= 20*	*Surface Water Score= 0*

Site Rank (1+2+3) = 40

Total Site Ranking Score and Acceptable Concentrations

Parameter	**>19**	10-19	0-9
Benzene[1]	**10 ppm**	10 ppm	10 ppm
BTEX[1]	**50 ppm**	50 ppm	50 ppm
TPH	**100 ppm**	1000 ppm	5000 ppm

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

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 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 October 10, 2003

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company: **Plains All American Pipeline**	Contact: **Camille Reynolds**
Address **PO Box 1660 5805 East Highway 80 Midland, Texas 79702**	Telephone No. **505.393.5611**
Facility Name **Hobbs Junction Mainline #2003-00017**	Facility Type **10" Steel Pipeline**
Surface Owner: **State of New Mexico and Faye Klein**	Mineral Owner / Lease No.

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea
M	**26**	**T18S**	**R37E**					

Latitude: **32°42'40.85"N** Longitude: **103°13'42.01"W**

NATURE OF RELEASE

Type of Release **Crude Oil**	Volume of Release **50 barrels**	Volume Recovered **24 barrels**
Source of Release **10" Steel Pipeline**	Date and Hour of Occurrence **1-23-03 @ 8:00 AM**	Date and Hour of Discovery **1-23-03 @ 10:45 AM**
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom? **Larry Johnson**	
By Whom? **Pat McCasland EPI**	Date and Hour **1-23-03 @ 11:35 AM**	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse. **NA**	

If a Watercourse was Impacted, Describe Fully.*
NA

Describe Cause of Problem and Remedial Action Taken.*
10" Steel Pipeline **Steel line began leaking due to internal corrosion. Repair clamp installed, Pipe subsequently replaced and line tested.**

Describe Area Affected and Cleanup Action Taken.*
12,500 sqft 50' x 470': Soil and groundwater contaminated above the NMOCD Remedial Guidelines will be remediated to the prescribed remedial goals. Remedial Goals: TPH 8015m = 100 mg/Kg, Benzene = 10 mg/Kg, and BTEX, i.e., the mass sum of Benzene, Ethyl Benzene, Toluene, and Xylenes = 50 mg/Kg.

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 ground water, 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:	**OIL CONSERVATION DIVISION**	
Printed Name: Camille Reynolds	Approved by District Supervisor:	
E-mail Address: CJReynolds@PAALP.com	Approval Date:	Expiration Date:
Title: District Environmental Coordinator	Conditions of Approval:	Attached ☐
Date: April 14, 2004 Phone: 505.393.5611		

Attach Additional Sheets If Necessary

Attachment VII: Groundwater Impact Notification

March 5, 2003

Mr. Randy Bayliss
New Mexico Oil Conservation Division - Environmental Bureau
P.O. Box 6429
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505

Subject: Written notification of ground water impact

Dear Mr. Bayliss,
Environmental Plus, Inc. (EPI), 2100 Avenue O, Eunice, New Mexico, on behalf of EOTT Energy, Midland, Texas submits this written notification of ground water impact due to a crude oil leak on the Hobbs Junction Mainline (EOTT reference #2003-00017), located in Unit Letter M, SW¼ of SW¼ of Section 26, T18S, and R37E in excess of 20 NMAC 6.2.3103, i.e., "Non-aqueous phase liquid shall not be present floating atop or immersed within ground water, as can be reasonably measured." Verbal notification of ground water impact at this site was made to Mr. Larry Johnson, NMOCD, Hobbs District at 2:30 PM, March 5, 2003. In addition, this written submittal, via electronic mail and regular mail, is consistent with the notification requirements of 19 NMAC 15.116. A Site location map, topographical map and GPS site drawing are attached .
Distribution of the crude oil source term at the site is currently being assessed with an initial installation of two ground water monitor wells. Monitor Well #1 was placed ~6-ft south of the E-W Section Line, in line with the Point of Release (POR). An up gradient Monitor Well #2 was placed ~75-ft northwest of the POR. Preliminary results from the MW#1 installation indicate that there is approximately 6-ft of crude oil on top of the ground water at the zone 36-42-ft bgs. Completion of the up gradient monitor well will provide an accurate measurement of true ground water elevation. There are no water wells or surface water bodies within 1000-ft of the release site.
A remediation work plan addressing soil and ground water will be developed and submitted for your approval.
Please mail all official written communications to:

Mr. Frank Hernandez
EOTT Energy Pipeline, LP
P.O. Box 1660
Midland, Texas 79703

Sincerely,

John C. Good
EPI Environmental Consultant
cc: Paul Sheeley, NMOCD - Hobbs
Larry Johnson, NMOCD Hobbs

Frank Hernandez, EOTT Energy - Midland
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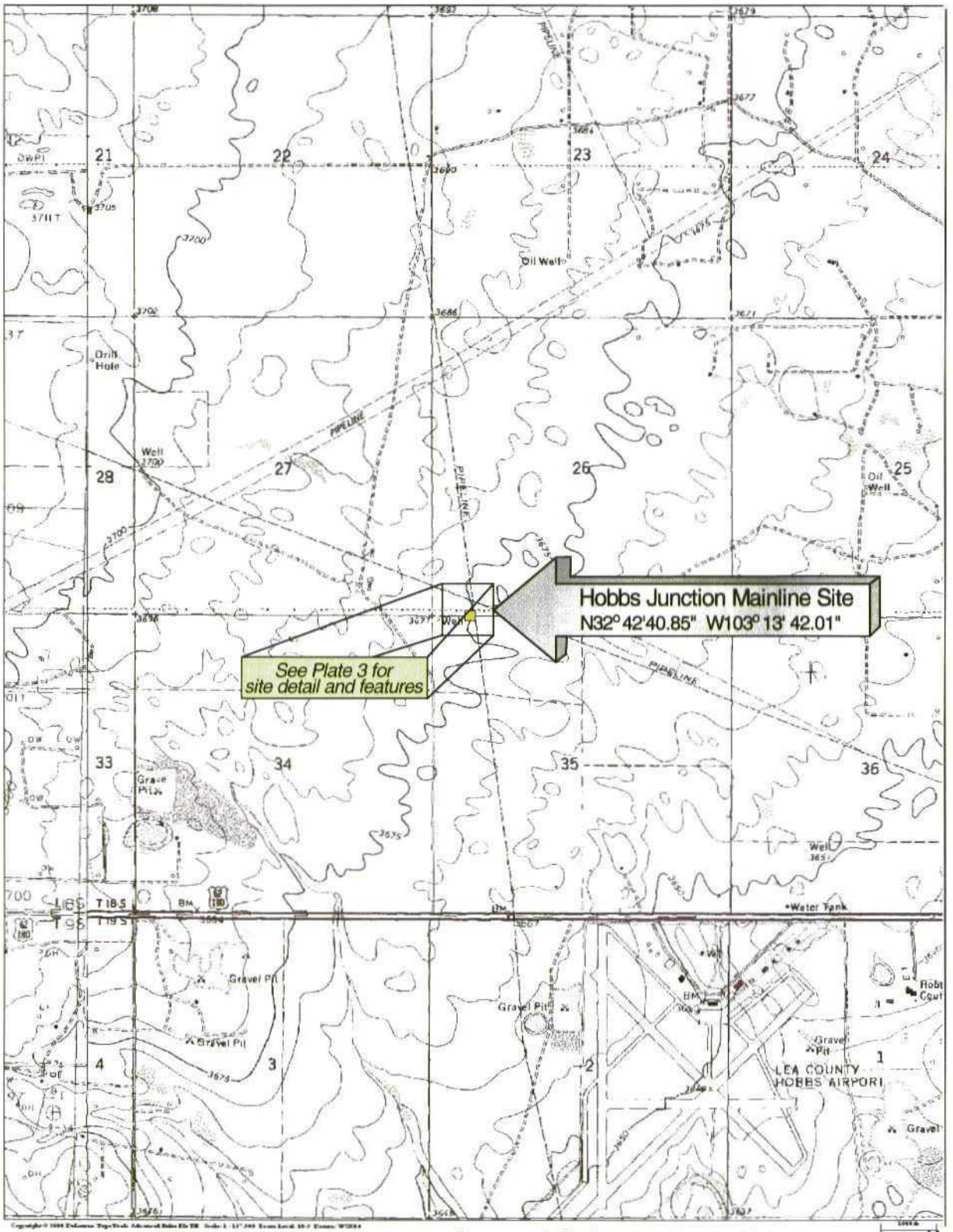

Plate 2: Site Topography and Release Location

EOTT Energy Pipeline, LP - Hobbs Junction Mainline (2003-00017)
Lea County, NM; UL-M Section 26 T18S R37E
Lea County, NM; UL-D Section 35 T18S R37E

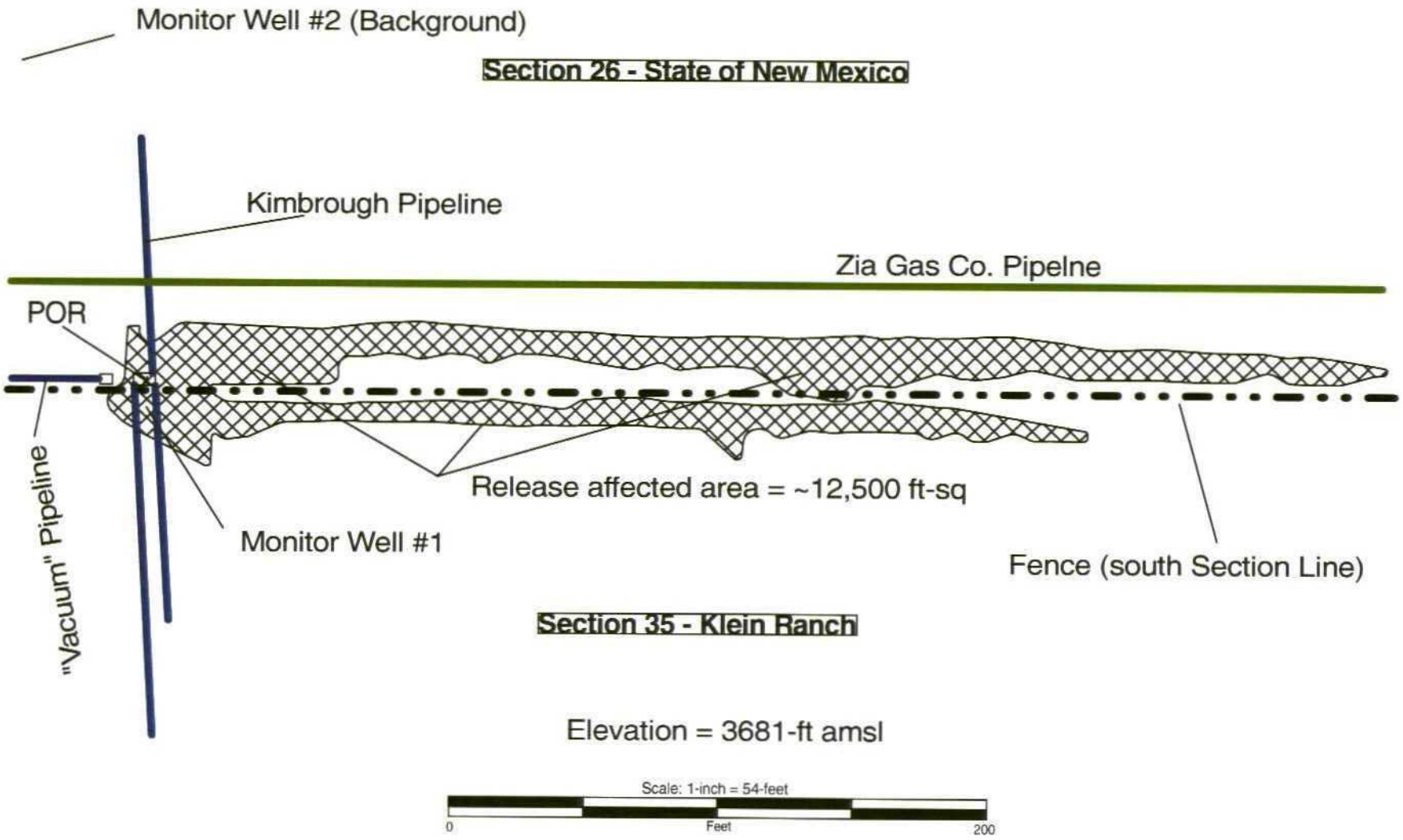

Plate 3: Initial Response GPS Demarcation

EOTT Energy Pipeline, LP - Hobbs Junction Mainline 012303; REF: 2003-00017

Lea County, NM; UL-M Section 26 T18S R37E
UL-D Section 35 T18S R37E

Drawn By: JCG Date: JAN-03 Revised