SOIL ASSESSMENT REPORT AND REMEDIATION WORKPLAN

AKINS SWEET GATHERING CRUDE OIL RELEASE SITE
PLAINS EMS NO. 2004-00027
LATITUDE: N 32° 32′ 29″ LONGITUDE: W 103° 15′ 41″
LEA COUNTY, NEW MEXICO

Prepared For:
Plains Marketing, L.P.
3705 East Highway 158
Midland, Texas 79706

Link - 22569S
Facility - fPAC0603451302
Incident - nPAC0603451463
application - pPAC0603451655

Prepared by:
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SEPTEMBER 2005
REF. NO. 039137

PLAINS
PIPELINE, L.P.

October 4, 2005

Mr. Larry Johnson
New Mexico Oil Conservation Division
Environmental Bureau
1625 N. French Drive
Hobbs, New Mexico 88240

RE: Soil Assessment Report and Remediation Workplan
Akins Sweet Pipeline Release
S28, T20S, R37E Unit Letter L (NW/4, SW/4)
Lea County, NM
Landowner: New Mexico State Land Office

Dear Mr. Johnson:

Enclosed is a soil assessment report documenting site activities performed during the month of June 2005 for the Plains Pipeline release at the above referenced site. Included with this report is a workplan detailing additional activities proposed to obtain closure of this site per NMOCD guidelines. Also enclosed with this report is a copy of the C-141 for your reference.

Thank you for your time and consideration in this matter. If you have any questions or require further information, please contact me at (432) 686-1769.

Thank you,

Daniel Bryant
Environmental & Regulatory Compliance Specialist
Office: 432-686-1769
Cell: 432-557-5865
dmbryant@paalp.com

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1.0 INTRODUCTION

The Soil Assessment portion of this report presents soil boring data collected at the Akins Sweet Gathering Crude Oil Release Site (hereafter referred to as the "Site") by Conestoga-Rovers & Associates (CRA) on behalf of Plains Marketing, L.P. (Plains). Soil sampling activities were performed in accordance with our *Assessment Workplan* dated June 10, 2005 that was submitted to the Hobbs District office of the New Mexico Oil Conservation Division (NMOCD) office prior to performing the field activities.

The Site is located approximately 5.7 miles south of Monument, New Mexico in the NW ¼ of the SW ¼ (Unit Letter L), Section-28, Township-20-South, and Range-37-East. The Site coordinates are 32° 32' 29.264" North Latitude and 103° 15' 41.465" West Longitude (FIGURE 1).

The subject release occurred on January 28, 2004, and was a result of a crude oil release from a surface-laid, 4-inch diameter steel gathering pipeline at the Site. Subsequently, Environmental Plus, Inc. (EPI) submitted a correspondence titled *LINK Energy Atkins 4" Gathering (2004-00027) Initial C-141*, and a Release Notification and Corrective Action (Form C-141) both dated January 30, 2004 to the NMOCD Hobbs District office detailing the release and proposed remedial action plan for the site. The Form C-141 indicated a release of 50-barrels and 0-barrels recovered. Photographs (PHOTOs 1 & 2) presented in the Photographs Section of this report illustrate the surficial hydrocarbon impacts subsequent to the release event. A copy of the EPI correspondence and the Form C-141 is provided as APPENDIX A.

EPI, on behalf of Link Energy, initiated response activities and excavated visually-impacted soil to approximately 4-feet below ground surface (bgs). A total of 1,052-cubic yards of excavated material were reportedly transported to the nearby Lea Station Land Farm (#GW-351) for remediation by land farming and soil blending methods. A copy of the associated Form C-138 is provided as APPENDIX B.

In February 2004, two separate soil investigations were conducted by EPI in attempt to horizontally and vertically delineate the impacts at the Site. On February 4, 2004, soil samples were collected from periphery of the excavation in depths ranging from 2-to 5-feet in depth. On February 25, 2004, six trenches along the excavation floor were over-excavated to varying depths (2- to 10-feet) and soil samples were collected at their respective locations. Laboratory results from both investigations indicated that Total Petroleum Hydrocarbons (TPH) impacts had not been fully defined and additional assessment activities were warranted. A summary table depicting the results of the

analytical data and a figure illustrating locations and depths of data collected during these two separate soil investigations performed by EPI are provided in APPENDIX C.

CRA and Plains personnel conducted a Site visit on April 6, 2005 and noted an onsite remedial excavation and several soil stockpiles associated with the initial excavation at the Site (Photo 3). The dimensions of the excavation were approximately 140-feet in length, 10-feet in width and an average of 4-feet in depth. CRA also noted residual crude oil staining from the release along the west excavation wall as shown in Photo 4. Subsequently, CRA prepared and submitted an *Assessment Workplan, Plains All American, Akins Sweet Pipeline #2004-00027, Crude Oil Release, Lea County, New Mexico,* dated June 10, 2005 to Plains personnel and proposed further assessment of soil impacts at the Site. CRA understands that this document was provided to and approved by the Hobbs NMOCD office.

The assessment activities described within this report were performed on June 28 & 29, 2005. The soil borings were installed by Straub Corporation under the direct supervision of a CRA geologist.

Section 2.0 and Section 3.0 of this report summarize the regulatory framework and soil assessment activities, respectively. Figures, photographs, tables, and appendices are provided to support the results associated with the assessment activities. Section 4.0 presents proposed soil remediation and site restoration tasks designed to facilitate Site closure (as appropriate) in coordination with the NMOCD.

2.0 REGULATORY FRAMEWORK

The NMOCD has regulatory jurisdiction over oil and gas production operations including crude oil pipeline spills and closure activities in the State of New Mexico. This project is being conducted under the regulatory guidance of the NMCOD, which requires that hydrocarbon-affected soils be remediated in such a manner that the potential for future affects to groundwater or the environment are minimized. The NMOCD clean up levels are determined on a site-by-site basis, and are based on ranking criteria, which is outlined in the NMOCD "*Guidelines for Remediation of Spills, Leaks, and Releases*", dated August 13, 1993. These ranking criteria guidelines are based on site characteristics consisting of: depth to groundwater (from base of affected soil), wellhead protection (useable water sources), and distance to surface water.

There are currently no monitoring wells or water wells on the Site to determine a site-specific depth to groundwater. CRA reviewed the New Mexico Office of the State Engineer and the Interstate Stream Commission document "New Mexico Water Resource Atlas" dated December 2002. Plate 10 of this document shows the Site is situated between the groundwater elevation contours 3,400- and 3,500-feet above sea level. For site ranking purposes, the groundwater elevation at the Site is interpolated to be 3,475-feet above sea level. The surface elevation of the Site is approximately 3,505-feet above sea level. Therefore, the estimated depth-to-groundwater based on the above information is approximately 30-40 feet bgs.

The Site is located in an area of oil and gas production and mostly vegetated by native range grass. In general, adjacent properties are relatively flat with a low relief, hilly, sandy and dry topography. The topographic map of the area does not indicate any surface water within 1-mile of the Site. Well head protection areas appear to be greater than 1,000-feet from the release site.

The table below illustrates the ranking criteria used by the NMOCD and includes site-specific characteristics:

Ranking Criteria and Scoring

CHARACTERISTIC	SELECTION	SCORE
Depth to Groundwater	<50 feet	20
Wellhead Protection Area	>1,000 feet	0
Distance to Surface Water	>1,000 feet	0

Total Score= 20

Soil Recommended Remediation Action Levels

Contaminant of Concern	>19 Score	10-19 Score	0-9 Score
Benzene (mg/Kg)	10	10	10
Total BTEX (mg/Kg)	50	50	50
TPH (mg/Kg)	100	1,000	5,000

Based on the Site characteristics and the "*Guidelines for Remediation of Spills, Leaks, and Releases*" the Site has a ranking score of 20. Consequently, the ranking criteria Recommended Remediation Action Levels (RRALs) of 10 mg/Kg Benzene, 50 mg/Kg total Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX), and 100 mg/Kg TPH are adopted for remediation activities at the Site.

3.0 SOIL ASSESSMENT

Prior to commencement of soil assessment activities, a site-specific health and safety plan (HASP) was developed by CRA in conjunction with the implementation of the Plains work permit system. CRA and all subcontractors onsite conducted daily tailgate safety meetings that included a job safety analysis (JSA) form completion, as well as discussions of the elements of the Plains work permit system including excavation safety.

Assessment activities described within the following section include the installation of seven soil borings, and subsurface soil sampling and analysis at the Site. The locations of the seven soil borings are illustrated in the Site Details Map (FIGURE 2).

3.1 SOIL BORING INSTALLATIONS AND SAMPLING

All soil boring locations were approved by Plains personnel and marked appropriately. The utility notification service was also notified and provided 48 hours to mark their utilities if present. Site preparation work including sloping sidewalls and ramping of ingress/egress ramps for excavation safety purposes was provided by Plains.

The seven soil borings were installed by Straub Corporation using the air-rotary method on June 28 & 29, 2005. Four of the seven soil borings (BH-1, BH-2, BH-3 & BH-5) were drilled in the existing excavation floor along the path of the crude oil release. Soil borings BH-1, BH-2, and BH-3 were advanced to 15-feet below the excavation floor (19-feet bgs); BH-5 was advanced to 25-feet below the excavation floor (30-feet bgs). The remaining three borings (BH-4, BH-6 & BH-7) were drilled at 15-foot offsets from the edge of the excavation to approximately 20-feet bgs. Discrete soil samples were collected on 5-foot intervals with a split spoon. Half of each sample was containerized in a Zip-Loc® bag; the other half was containerized in a labeled, laboratory-supplied sample jar. After the bagged samples were allowed sufficient time to volatilize, headspace readings were recorded with a photo-ionization (PID) to measure the relative concentration of volatile organic compounds (VOCs) in the samples. A CRA geologist continuously recorded the soil sample lithologic data and drill cuttings on boring logs for each location. The jarred soil samples were immediately placed on ice in insulated coolers, chilled to a temperature of approximately 4°C (40° F). Soil samples collected for laboratory analyses were based on physical observations, field VOC measurements and as directed by Plains personnel in the field. The samples were analyzed for TPH concentrations by EPA Method 8015B modified for diesel range organics (DRO) and gasoline range organics (GRO) as well as, BTEX by EPA Method 8021B. The coolers

were sealed for shipment and proper chain-of-custody documentation accompanied the samples to TraceAnalysis, Inc. (Trace) in Lubbock, Texas for laboratory analysis.

After drilling and sampling activities were completed, the borings were permanently plugged with a bentonite/grout mixture to prevent subsurface impact from surface runoff. Boring Log Legend and Notes, Logs and Details for Soil Borings BH-1 through BH-4, Logs and Details for Soil Borings BH-5 through BH-7 (including PID measurements), and Soil Boring Analytical Results- June 2005 are presented on FIGURES 3-6, respectfully. In addition, New Mexico Office of the State Engineer Well Records for each boring is provided in APPENDIX D.

3.2 SUBSURFACE LITHOLOGY

Soil samples were logged by a CRA field geologist and the general subsurface lithologies observed in the samples are presented below. The interval thicknesses, depths, and occurrences for the following soil types are presented within the boring logs and details for each soil boring (FIGURES 3-5). The subsurface soil types encountered during the assessment include the following descriptions:

- Soil Type #1 is a Sand, pale reddish brown, dry, soft, weakly cemented, fine grained, some interbedded thin caliche layers, some clayey sand layers;
- Soil Type #2 is a Silty Sand with Clay, very pale orange, moist, medium stiff, moderately cemented, some interbedded thin caliche layers.
- Soil Type #3 is a Sand, pale reddish brown, moist, stiff, moderately cemented with indurated layers; and
- Soil Type #4 is a Sandy Limestone, moderate orange pink, moist, moderately hard, well cemented, slightly weathered.

3.3 SOIL ASSESSMENT RESULTS

Twenty soil samples were collected from varying depths within the seven soil borings and submitted to Trace for BTEX and TPH (DRO/GRO) analysis. The submitted samples were selected to evaluate the highest possible contaminant concentration(s) in each soil boring and to assess vertical and horizontal extent of hydrocarbon impacts.

TABLE I demonstrates the soil sample analytical results for BTEX and TPH (DRO/GRO) from the seven soil borings advanced at the Site during the assessment. The NMOCD

RRALs are also presented for comparison to the analytical results. All 20 soil samples collected exhibited concentrations below the NMOCD RRAL for both BTEX and TPH (DRO/GRO). Copies of the certified analytical reports and chain-of-custody documentation are attached as APPENDIX E.

Soil boring (SB-1 through SB-7) locations were determined based on approximate sample trench locations during the previous EPI soil assessment in February 2004; however, TPH analytical results from CRA's assessment did not correspond with the analytical results from EPI's previous assessment. Several contributing factors can be attributed to the discrepancies in the analytical data. Although limited historical project information was provided to CRA, the analytical discrepancies may be explained as follows:

- Based on the previous data collected by EPI and sample locations maps presented to CRA, CRA attempted to duplicate the EPI trench samples but CRA cannot warrant that these recent samples were collected in the exact same locations;
- CRA's use of decontaminated discrete soil sampling tools versus EPI's unknown sample collection methodology most likely precluded cross contamination of soil samples; and
- Natural attuentation processes over time most likely attributed to reduced concentrations.

Based on site specific clean up goals administered by the NMOCD and analytical results from the soil assessment activities, the vertical extent of the impacted soils has been fully delineated at the sampled locations; however, photos 5 & 6 in the photographs section of this report demonstrate that hydrocarbon stained soils still exist along a shallow portion of the west wall excavation. Additional remedial activities are proposed to evaluate the horizontal extent of the hydrocarbon stained soils as detailed in Section 4.0.

4.0 SOIL REMEDIATION WORKPLAN

This portion of the report describes proposed soil remediation activities to remove hydrocarbon-affected soils and perform Site restoration activities. This Soil Remediation Workplan is based upon existing Site conditions, consultation with Plains personnel and associated NMOCD guidance documents.

The primary objective of this Soil Remediation Workplan is to remove the affected soils from the Site that exhibit hydrocarbon concentrations above NMOCD regulatory guidelines and obtain written acknowledgement from the NMOCD for no further action upon completion of proposed soil remediation activities at the Site. Hydrocarbon-affected surficial soils stockpiled at various locations are also targeted for sampling and analysis to evaluate hydrocarbon concentrations. According to Plains personnel, the large stockpile (estimated at 1000 cy) on the east side of the existing excavation was clean material brought to the Site by EPI for use as backfill material. This stockpile will not be sampled. If laboratory analysis of the other stockpiles indicate significant BTEX and/or TPH concentrations, these soil will be removed from the Site. The initial excavation and associated soil stockpiles, the proposed remedial excavation area, the proposed soil-staging area (SSA), and site details are presented in FIGURE 7. Excavated soils are scheduled for transportation under manifest to the NMOCD- permitted Lea Station Land Farm (#GW-351).

The following sections outline the general tasks proposed for this Soil Remediation Workplan. The findings of the remediation activities will be presented in a Site Closure Report for the Plains Akins Sweet Site.

4.1 TASK 1- PROJECT DEVELOPMENT

Several project development activities are identified for this portion of the work scope and financial plan for the Site. The activities include: a) updating of the Site Specific Health and Safety Plan; b) client communication; c) regulatory liaison; d) field activity preparation; and e) generation of the soil remediation work scope as presented in this document.

The project specific Health and Safety Plan (HASP) will be refined by CRA prior to conducting the soil excavation, removal, and backfilling activities. Safety and health issues associated with this project include working around excavations, heavy equipment, hydrocarbon-affected soils, and the presence of exposed crude oil pipelines in the general vicinity of the excavation. A CRA representative will implement the

HASP in the field. Tailgate safety meetings will be administered each morning prior to beginning work activities in accordance with HASP objectives.

Prior to initiating excavation activities, the Site will be thoroughly inspected by a competent person for any conditions requiring precautionary safety measures. In addition, the location of underground/aboveground utilities and pipelines will be clearly identified and marked. The appropriate utility companies must be identified prior to digging.

CRA understands that Plains will have obtained all necessary authorizations for access to the Site to enable the following on-site activities. CRA will attain a signed work authorization form from Plains and will notify the NMOCD approximately 48 hours prior to conducting any activities at the Site.

4.2 TASK 2 – EXCAVATION PLAN

Subsequent to implementation of the project development task, excavation activities at the Site will commence. FIGURE 7 presents both the existing and proposed soil staging areas and location and depth of the proposed remedial excavation. Based on the results of the soil assessment activities and existing Site conditions, the proposed remedial excavation will include visible hydrocarbon-impacted material along a section of the west wall of the existing excavation that was performed on January 29, 2004. Based on analytical results presented in TABLE I, the depth of the proposed remedial excavation is not anticipated to exceed the depth of the existing excavation floor (approximately 5-feet bgs); however, if the depth of the proposed remedial excavation exceeds 20-feet, an excavation plan will be written, reviewed and approved by an engineer prior to proceeding with excavation activities. Hydrocarbon-affected material from within the excavation will be removed utilizing heavy equipment and will be placed in the designated SSA.

CRA will request that Plains provide support systems (such as shoring, bracing, underpinning or pipe cradles) to assure the stability of structures and the protection of employees if excavation operations could affect the stability of adjoining walls or other structures. The northern and southern edges of the excavation were sloped for ingress/egress areas during initial excavation activities.

Soil samples will be periodically collected from within the proposed remedial excavation at various depths and locations based on visual observations and the judgment of CRA field personnel to assess the completeness of the soil removal activities. The soil samples will be field screened utilizing a PID calibrated to a 100-ppm

isobutylene standard. Each soil sample will be placed in resealable plastic bags leaving a headspace for volatile organic compounds (VOCs) to collect. After sufficient time has passed to allow for volatilization, the headspace in each bagged sample will be measured using the PID. Areas exhibiting excessive VOC concentrations and/or visual impacts will be over-excavated and field tested until reduced VOC concentrations and/or limited visual impacts are documented. Consequently, soil confirmation samples will then be collected and analyzed to document hydrocarbon concentrations at existing sampled locations.

4.3 TASK 3 – SOIL STAGING AND HAULING ACTIVITIES

Soil stockpiles, as shown on FIGURE 7, include soil material that remains from initial excavation and previous soil assessment activities. Hydrocarbon-affected soils to be removed from the proposed remedial excavation area will be staged at the proposed SSA as shown in FIGURE 7. All soil stockpiles onsite identified for offsite transport to the Lea Station Landfarm facility will be sampled (see Task 4 Confirmation Soil Sampling Plan & Task 5 - Waste Management). The materials will be loaded into trailer and dump trucks at either the prescribed SSA or existing location. Materials deemed appropriate for backfill, whether it be overburden material generated during excavation activities or material imported in from an agreed upon location for the express purpose of backfilling, will be stockpiled adjacent to the excavation area. Appropriate documentation including manifests and/or bills-of-lading will be maintained for all soils transported offsite and backhauled onsite.

4.4 TASK 4 – CONFIRMATION SOIL SAMPLING PLAN

Sidewall areas from the proposed remedial excavation, floor areas from the existing and proposed remedial excavations, existing soil stockpile materials, and SSA locations will be identified for confirmation soil sampling activities. The sample locations as shown on FIGURE 7 will be based on the professional judgment of the CRA geologist, geometry of the existing and proposed remedial excavations, quantities of existing soil stockpile materials and quantity of SSA locations. For planning purposes, a minimum of 4 grab samples from the floor of the existing excavation (North Excavation Floor, North Middle Excavation Floor, South Middle Excavation Floor, South Excavation Floor), and 5 grab samples from the sidewalls/floor of the proposed remedial excavation (RE NE, RE NW, RE SE, RE SW, RE floor) are planned. In addition, two five-part composite samples from existing Soil Stockpiles 1 thru 4 (SS-1) and Soil Stockpiles 5 thru 6(SS-2), and one five-part composite sample from the proposed soil staging area stockpile (SSA-1) are planned. Based upon the analytical results of the existing soil stockpile samples, the material will either be transported to the Lea Station Landfarm, or utilized as backfill material (if TPH and BTEX results exhibit concentrations below NMOCD RRALS.)

Site-specific NMOCD ranking criteria cleanup levels of 10 mg/Kg benzene, 50 mg/Kg total BTEX and 100 mg/Kg TPH are adopted for remedial and closure activities at the Site. Soil samples will also be collected from any materials deemed appropriate for backfill including but not limited to overburden material generated during excavation activities. Soils exhibiting concentrations below NMOCD RRALs will be utilized for backfilling purposes. Soils exhibited concentrations above NMOCD RRALS will be treated onsite by blending or aeration techniques if feasible or transported to Lea Station Landfarm for management activities.

The soil samples will be delivered to Trace Analysis for TPH (GRO/DRO) analysis by EPA Method 8015 (modified) and BTEX analyses by EPA Method 8021B. Each container will be labeled, placed on ice in an insulated cooler, and chilled to a temperature of approximately 40°F (4°C). The cooler will be sealed for shipment to the laboratory. Proper chain-of-custody documentation will accompany the samples to the laboratory.

4.5 TASK 5 – WASTE MANAGEMENT

Waste characterization analytical data and the submittal and approval of NMOCD Form C-138 and Certificate of Waste Status (APPENDIX F) will be obtained prior to the offsite removal of the affected soils. Hydrocarbon-affected soils removed from the Site are identified for offsite disposal/treatment at the Lea Station Landfarm facility located approximately 5-miles south of Monument, New Mexico. The estimated volume of soils targeted for transport to the Lea Station Landfarm facility is anticipated to be approximately 500-cubic yards. Manifests and bills-of-lading documentation will be maintained to track the actual amount of soil removed from the Site.

4.6 TASK 6 – SITE RESTORATION

Stockpiled overburden material onsite that exhibits TPH (GRO/DRO) and BTEX concentrations below NMOCD regulatory levels will initially be utilized to backfill the lower portions of the remedial excavation. Subsequently, soils imported from an agreed

upon location will be used to fill and raise both the existing and proposed remedial excavations to existing surface grade. All backfill material will be compacted using the tracks of a bulldozer or similar heavy equipment. Final grading of construction related surface areas will be performed to mitigate wind erosion and facilitate re-vegetation. The Site will be reseeded with a grass seed mixture acceptable to the landowner.

4.7 TASK 7 – SITE CLOSURE REPORT

A document summarizing the findings of the Soil Remedial Workplan activities (Section 4.0) is proposed for submittal to the NMOCD Hobbs District 1 office in the form of a Site Remediation/Closure Report. The report will summarize soil excavation/staging activities, confirmation sampling results, as well as providing documentation of waste management and site restoration activities. Site figures, certified laboratory reports, manifests, bills-of-lading, and other relevant project information will be provided in the report. If the findings of the report indicate that the Site is eligible for closure, a site closure request is proposed for submittal to the NMOCD Hobbs District 1 office for consideration of the approved soil remediation activities implemented at the Site. As appropriate, the proposed document will request written acknowledgement from the NMOCD for no further action regarding remedial activities at the Site.

CRA is prepared to begin work on this project subsequent to NMOCD approval (with any modifications) of this Soil Remediation Workplan and Plains notification to proceed. If you have any questions, comments, or require additional information, please contact us at (432) 686-0086.

All of Which is Respectfully Submitted,
Conestoga-Rovers & Associates

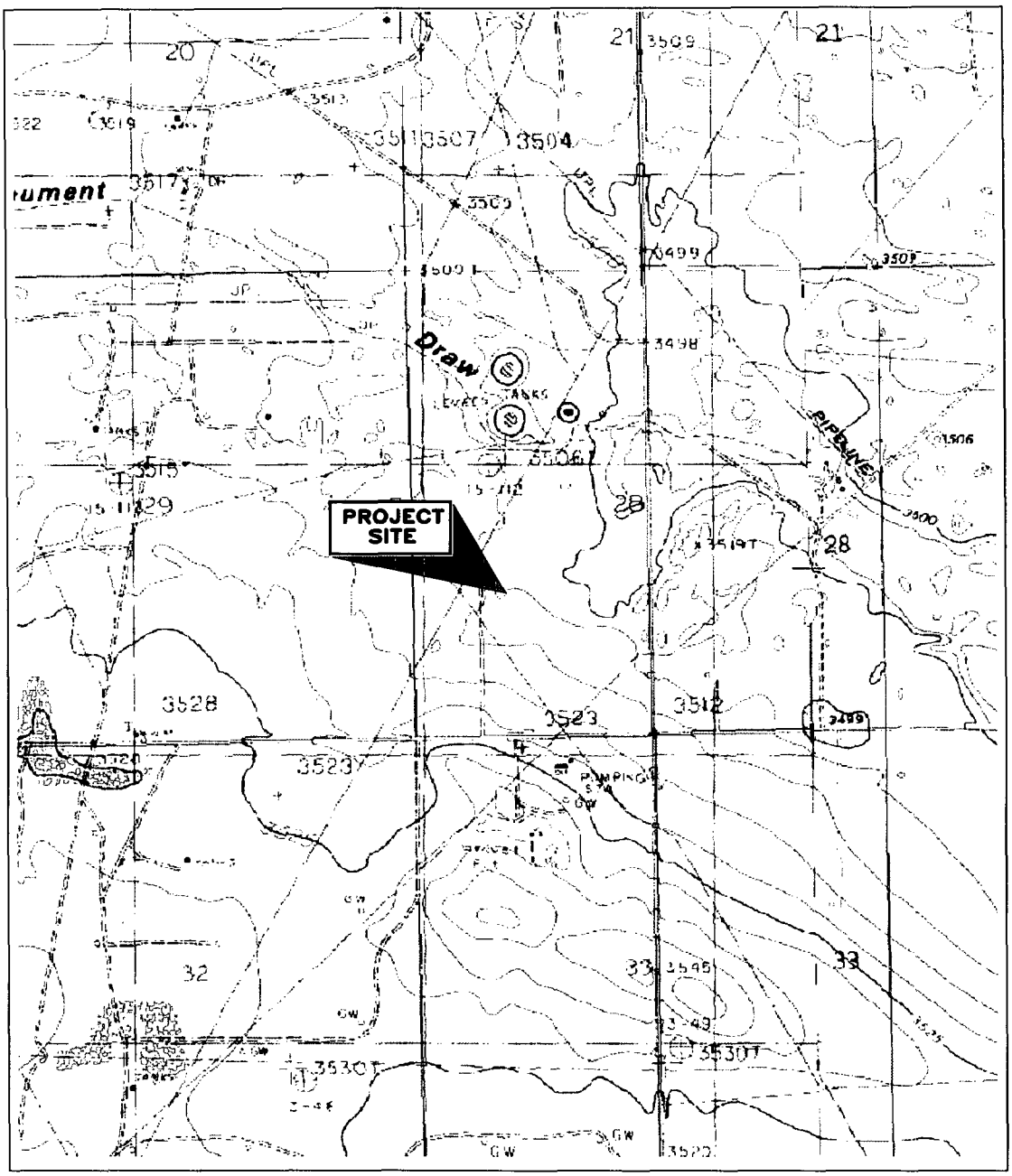
James Ornelas
Project Manager

Thomas C. Larson
Operations Manager

MONUMENT SOUTH QUADRANGLE
TEXAS

LAT= 32° 32' 29.26" N
LONG= 103° 15' 41.47" W

PHOTOREVISED 1985



USGS MAP SERIES 1:24,000

0 1/2 1 2
(Miles)

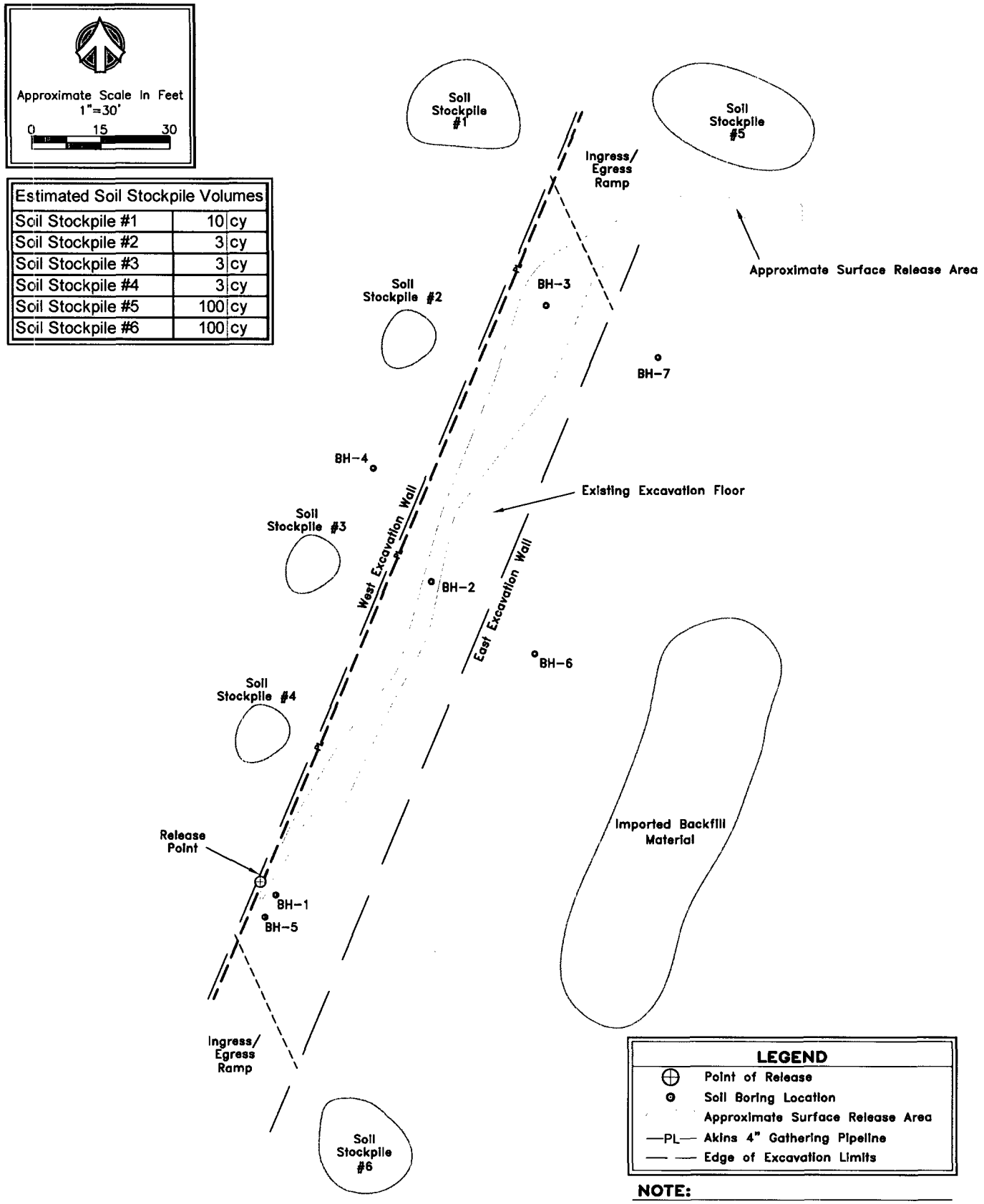
0 2000 4000 6000 8000
(Feet)

CONTOUR INTERVAL 5 FEET

NORTH

039137 SLR 092005

SITE LOCATION MAP	**JOB No. 039137**
PLAINS MARKETING, L.P. **AKINS SWEET GATHERING #2004-00027 LEA COUNTY, NEW MEXICO**	**FIGURE 1**



Estimated Soil Stockpile Volumes	
Soil Stockpile #1	10 cy
Soil Stockpile #2	3 cy
Soil Stockpile #3	3 cy
Soil Stockpile #4	3 cy
Soil Stockpile #5	100 cy
Soil Stockpile #6	100 cy

NOTE:

1. Existing soil stockpile locations shown are approximate.

039137 SLR 092005

CRA

SITE DETAILS

PLAINS MARKETING, L.P.
AKINS SWEET GATHERING #2004-00027 LEA COUNTY, NEW MEXICO

JOB No. 039137

FIGURE 2

SOIL TYPE

Sand (S): Pale Reddish Brown (10R 5/4), dry, soft, weakly cemented, fine grained, some interbedded thin caliche layers, some clayey sand (SC) layers.

Silty Sand with Clay (SM): Very Pale Orange (10R 8/2), moist, medium stiff, moderately cemented, come interbedded thin caliche layers.

Sand (S): Pale Reddish Brown (10R 5/4), moist, sitff, moderately cemented with thin indurated layers.

Sandy Limestone (LS): Moderate Orange Pink (5YR 8/4), moist, moderately hard, well cemented, slightly weathered.

Indicates sample interval. Sample was obtained by hand.

Indicates sample interval. Sample was obtained by push tube.

Indicates sample interval. Sample was obtained by drill cuttings.

Indicates sample selected for laboratory analysis.

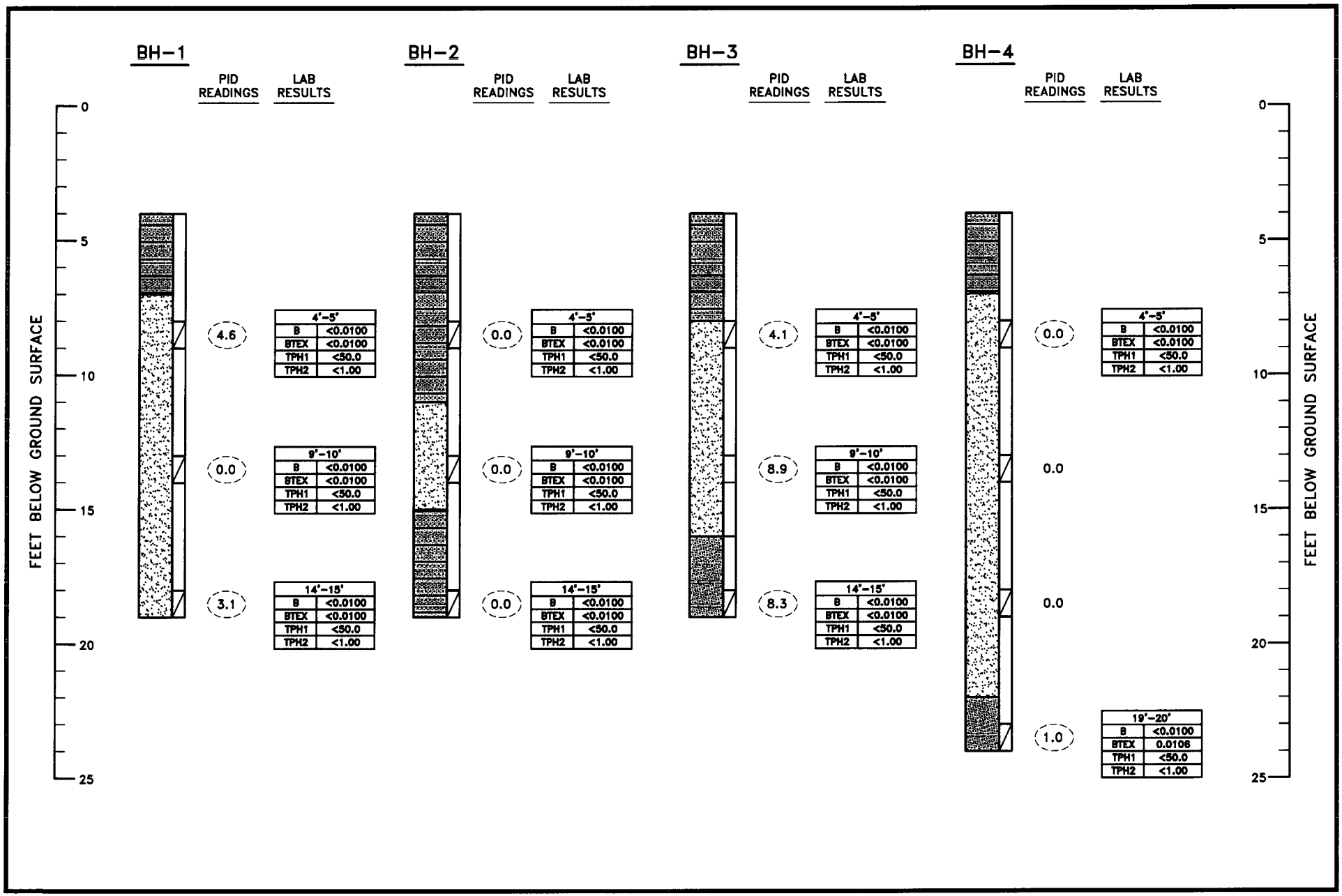
B	Benzene Concentration (mg/Kg)
BTEX	Benzene, Toluene, Ethylbenzene and Xylenes Concentration (mg/Kg) (DRO)
TPH1	Total Petroleum Hydrocarbons Concentration (mg/Kg) (DRO)
TPH1	Total Petroleum Hydrocarbons Concentration (mg/Kg) (DRO)
PID	Head-space readings in ppm obtained with a photo-ionization detector.

NOTES

1. The soil borings were drilled on June 28 and 29, 2005 using an air rotary drill rig.
2. The lines between soil types indicated on the logs represent approximate boundaries. Actual transitions may be gradual.
3. The depths indicated are referenced from the ground surface.
4. Soil borings were grouted with a cement and bentonite mixture.

039137 boring SLR 092705

SOIL BORINGS LEGEND AND NOTES	JOB No. 039137
PLAINS MARKETING, L.P. AKINS SWEET #2004-00027 LEA COUNTY, NEW MEXICO	FIGURE 3



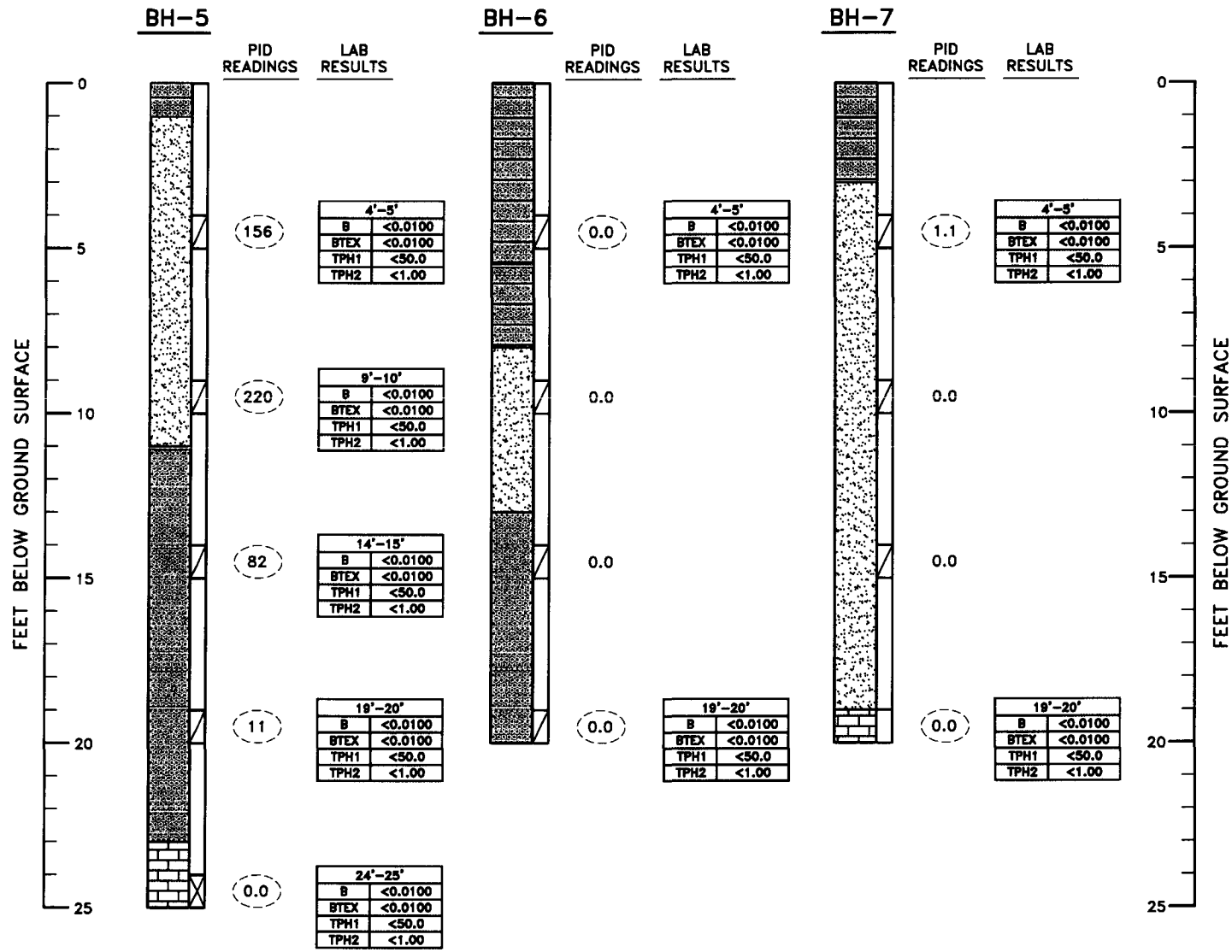
039137 BH1-BH4 SLR 092005

LOGS AND DETAILS FOR SOIL BORINGS BH-1 THROUGH BH-4

PLAINS MARKETING, L.P.
AKINS SWEET GATHERING #2004-00027 LEA COUNTY, NEW MEXICO

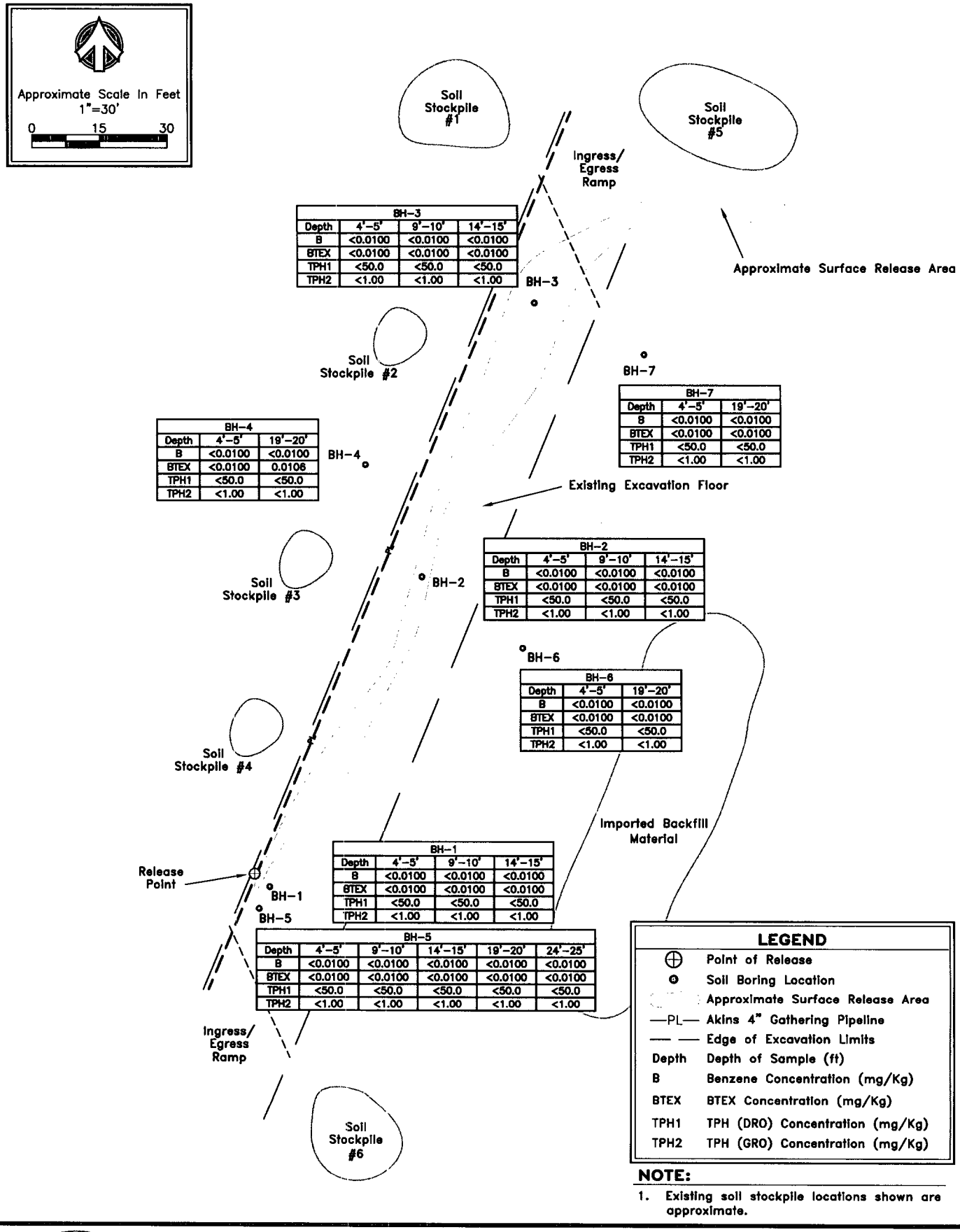
JOB No. 039137

FIGURE 4



039137 BH5-BH7 SLR 092005

LOGS AND DETAILS FOR SOIL BORINGS BH-5 THROUGH BH-7	JOB No. 039137
PLAINS MARKETING, L.P. AKINS SWEET GATHERING #2004-00027 LEA COUNTY, NEW MEXICO	FIGURE 5



BH-3			
Depth	4'-5'	9'-10'	14'-15'
B	<0.0100	<0.0100	<0.0100
BTEX	<0.0100	<0.0100	<0.0100
TPH1	<50.0	<50.0	<50.0
TPH2	<1.00	<1.00	<1.00

BH-7		
Depth	4'-5'	19'-20'
B	<0.0100	<0.0100
BTEX	<0.0100	<0.0100
TPH1	<50.0	<50.0
TPH2	<1.00	<1.00

BH-4		
Depth	4'-5'	19'-20'
B	<0.0100	<0.0100
BTEX	<0.0100	0.0108
TPH1	<50.0	<50.0
TPH2	<1.00	<1.00

BH-2			
Depth	4'-5'	9'-10'	14'-15'
B	<0.0100	<0.0100	<0.0100
BTEX	<0.0100	<0.0100	<0.0100
TPH1	<50.0	<50.0	<50.0
TPH2	<1.00	<1.00	<1.00

BH-6		
Depth	4'-5'	19'-20'
B	<0.0100	<0.0100
BTEX	<0.0100	<0.0100
TPH1	<50.0	<50.0
TPH2	<1.00	<1.00

BH-1			
Depth	4'-5'	9'-10'	14'-15'
B	<0.0100	<0.0100	<0.0100
BTEX	<0.0100	<0.0100	<0.0100
TPH1	<50.0	<50.0	<50.0
TPH2	<1.00	<1.00	<1.00

BH-5					
Depth	4'-5'	9'-10'	14'-15'	19'-20'	24'-25'
B	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
BTEX	<0.0100	<0.0100	<0.0100	<0.0100	<0.0100
TPH1	<50.0	<50.0	<50.0	<50.0	<50.0
TPH2	<1.00	<1.00	<1.00	<1.00	<1.00

NOTE:

1. Existing soil stockpile locations shown are approximate.

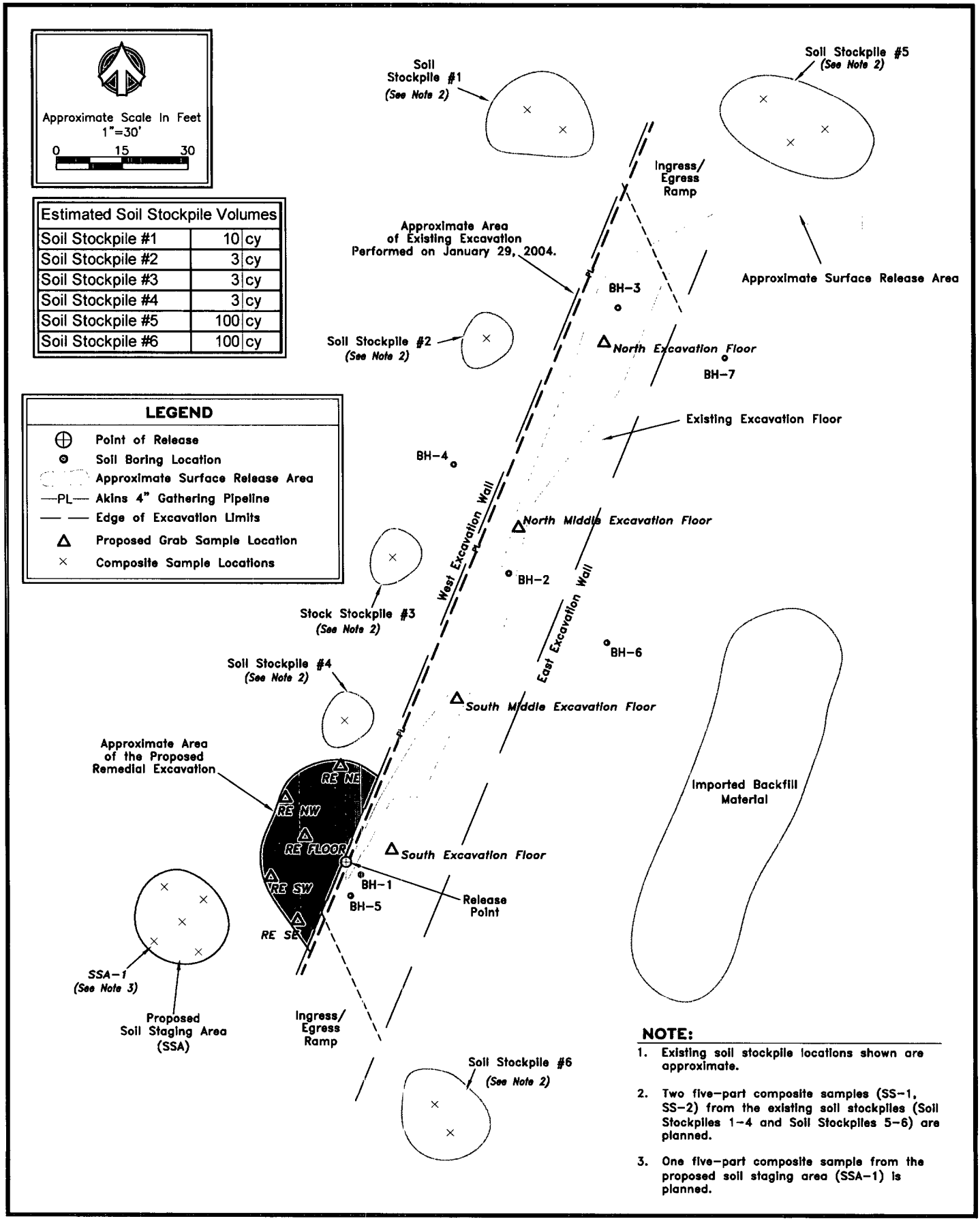
039137 SLR 092005

SOIL BORING ANALYTICAL RESULTS – JUNE 2005

PLAINS MARKETING, L.P.
AKINS SWEET GATHERING #2004-00027 LEA COUNTY, NEW MEXICO

JOB No. 039137

FIGURE 6



Estimated Soil Stockpile Volumes		
Soil Stockpile #1	10	cy
Soil Stockpile #2	3	cy
Soil Stockpile #3	3	cy
Soil Stockpile #4	3	cy
Soil Stockpile #5	100	cy
Soil Stockpile #6	100	cy

NOTE:

1. Existing soil stockpile locations shown are approximate.
2. Two five-part composite samples (SS-1, SS-2) from the existing soil stockpiles (Soil Stockpiles 1-4 and Soil Stockpiles 5-6) are planned.
3. One five-part composite sample from the proposed soil staging area (SSA-1) is planned.

039137 SLR 092705

PROPOSED EXCAVATION AND EXCAVATED SOIL CONFIRMATION SAMPLE LOCATION MAP

PLAINS MARKETING, L.P.
AKINS SWEET GATHERING #2004-00027 LEA COUNTY, NEW MEXICO

JOB No. 039137

FIGURE 7

PLAINS ALL AMERICAN
AKINS SWEET GATHERING EMS No. 2004-00027
Unit Letter L, Section 28, T 20 S, R 37 E
Lea County, New Mexico

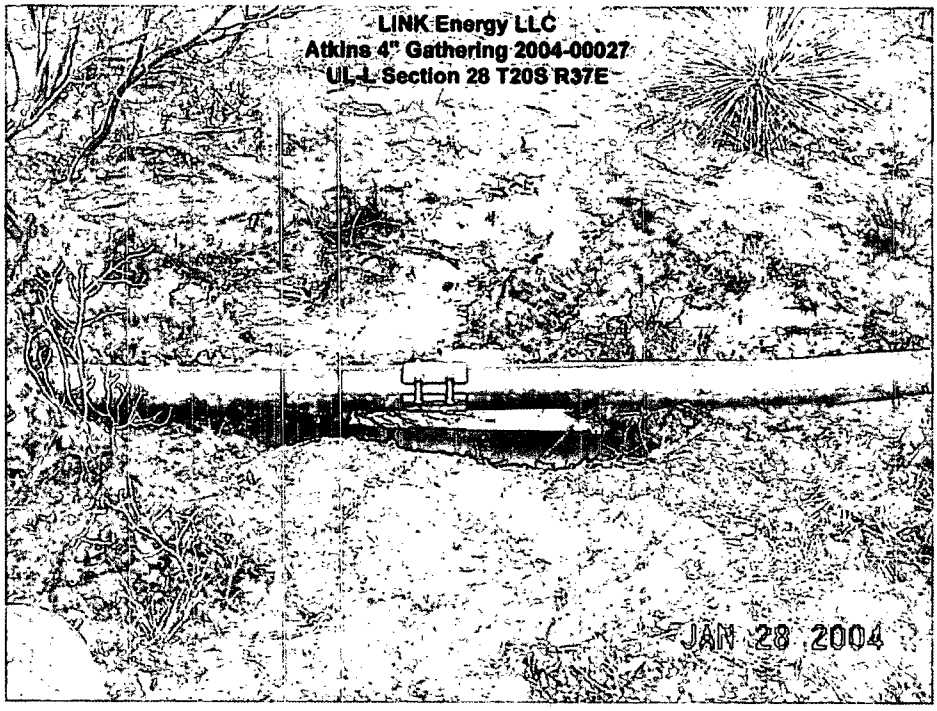


Photo 1. 4" Gathering Release Point dated January 28, 2004.

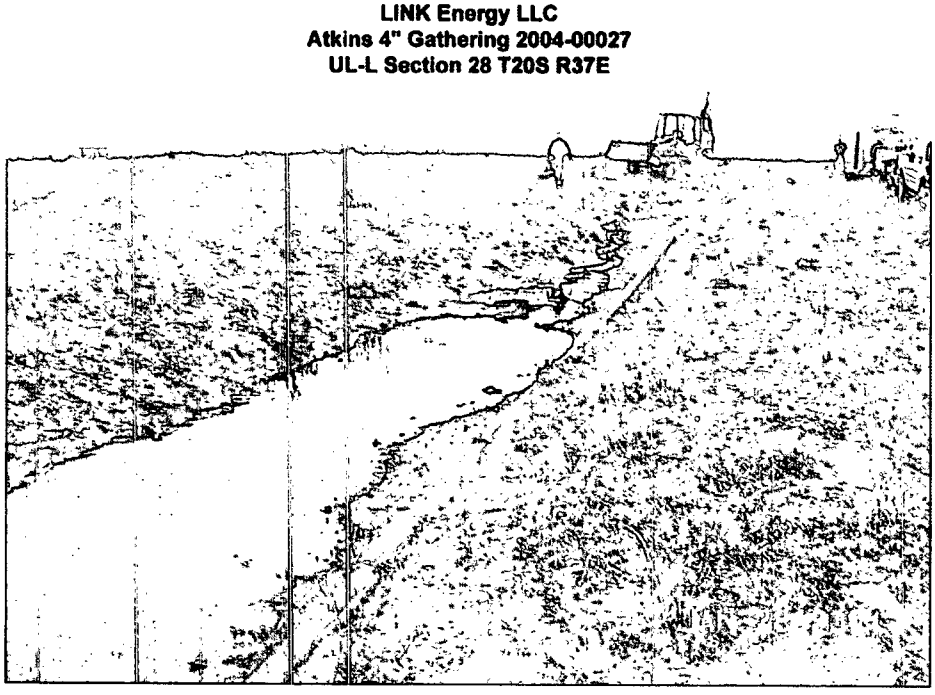


Photo 2. South View Showing Crude Oil Release dated January 28, 2004.

CONESTOGA-ROVERS & ASSOCIATES

PLAINS ALL AMERICAN
AKINS SWEET GATHERING EMS No. 2004-00027
Unit Letter L, Section 28, T 20 S, R 37 E
Lea County, New Mexico

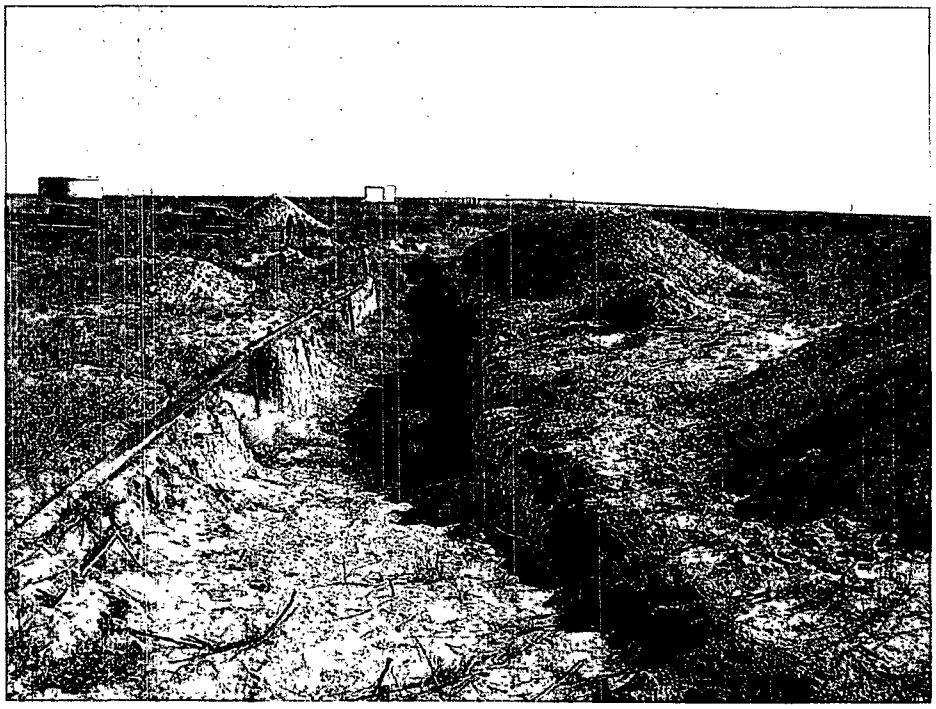


Photo 3. North View of Existing Excavation and Soil Stockpiles dated April 6, 2005.

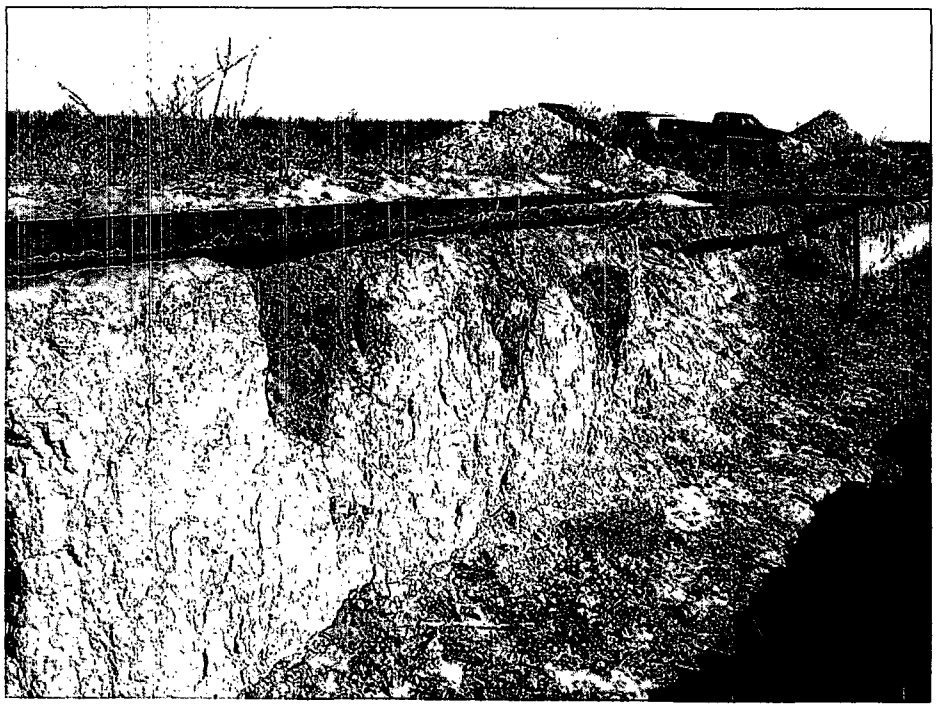


Photo 4. Visual Staining on West Excavation Wall dated April 6, 2005.

CONESTOGA-ROVERS & ASSOCIATES

PLAINS ALL AMERICAN
AKINS SWEET GATHERING EMS No. 2004-00027
Unit Letter L, Section 28, T 20 S, R 37 E
Lea County, New Mexico

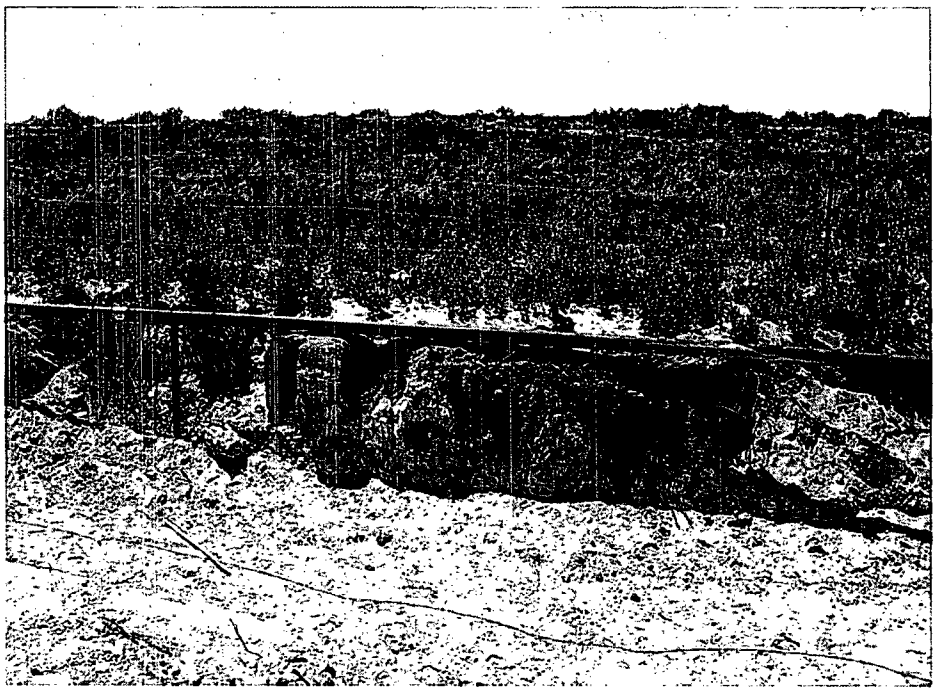


Photo 5. West View of Visual Staining on West Excavation Wall dated July 19, 2005.

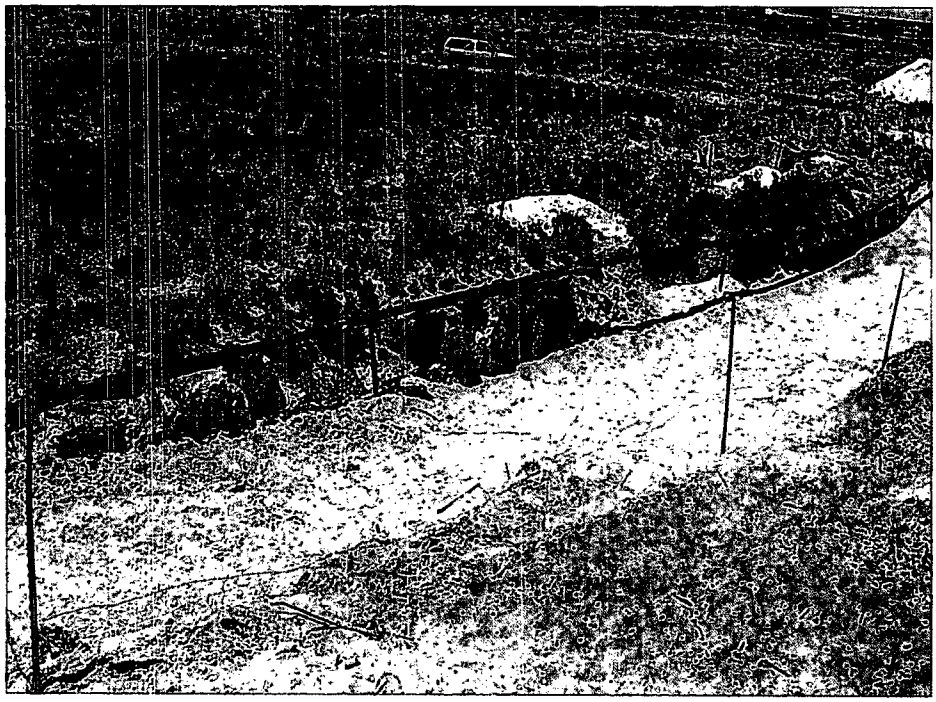


Photo 6. Northwest View Visual Staining on West Excavation Wall dated July 19, 2005.

CONESTOGA-ROVERS
& ASSOCIATES

TABLE I
SOIL ANALYTICAL SUMMARY
PLAINS MARKETING, L.P.
AKINS SWEET GATHERING #2004-00027
LEA COUNTY, NEW MEXICO

Sample ID	Depth (feet)	Sample Date	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Total Xylenes (mg/kg)	TOTAL BTEX (mg/kg)	TPH (8015B Modified) DRO (mg/kg)	GRO (mg/kg)	(GRO/DRO) (mg/kg)
New Mexico Oil Conservation Division Recommended Remediation Action Levels (Total Ranking Score > 19)			10 mg/kg	— mg/kg	— mg/kg	— mg/kg	50 mg/kg	— mg/kg	— mg/kg	100 mg/kg
BH-1	(4-5)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
	(9-10)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
	(14-15)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
BH-2	(4-5)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
	(9-10)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
	(14-15)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
BH-3	(4-5)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
	(9-10)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
	(14-15)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
BH-4	(4-5)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
	(19-20)	6/28/05	<0.0100	<0.0100	<0.0100	**0.0106**	**0.0106**	<50.0	<1.00	BDL
BH-5	(4-5)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
	(9-10)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
	(14-15)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
	(19-20)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
	(24-25)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
BH-6	(4-5)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
	(19-20)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
BH-7	(4-5)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL
	(19-20)	6/28/05	<0.0100	<0.0100	<0.0100	<0.0100	BDL	<50.0	<1.00	BDL

Notes:

1. BTEX analyses by EPA Method 8021B.
2. TPH analyzed by EPA Method 8015B Mod.
3. Bold concentrations above lab reporting limits.
4. BDL- Below Detection Limits.

ENVIRONMENTAL PLUS, INC. Micro-Blaze Micro-Blaze Out
STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

ENVIRONMENTAL PLUS, INC.

January 30, 2004

Mr. Larry Johnson
New Mexico Oil Conservation Division
1625 North French
Hobbs, New Mexico 88240

Subject: LINK Energy Atkins 4" Gathering (2004-00027) Initial C-141

Dear Mr. Johnson:

Environmental Plus, Inc. (EPI), on behalf of Mr. Frank Hernandez, LINK Energy LLC, submits the attached New Mexico Oil Conservation Division Form C-141 for the above referenced leak site located on lands owned by the State of NM. The release volume is estimated to be 50-bbl of crude petroleum with 0-bbl recovered. The release site is located in the NW¼ of the SW¼ (Unit Letter L), Section 28, Township 20 South, and Range 37 East. The geographic location is N32°32'29.264"; W103°15'41.465". The site is ~5.7 miles south (bearing 177.9°) from Monument, Lea County, New Mexico. According to information obtained from the New Mexico Office of the State Engineer (NMOSE) database, ground water level beneath this site is ~40-ft bgs. The site matrix ranking for this site is 20 due to the depth to ground water from the lower contaminant level being <50-ft.

The remedial action plan for this site is to delineate and characterize the soil contamination within the surface extents of the release, excavate, dispose of and/or blend and attenuate on-site the RCRA non-exempt contaminated soils, and backfill the excavation with clean soil obtained on-site and/or off-site from private or public sources. Any contaminated soils removed from the site will be disposed of in an NMOCD approved surface waste treatment facility.

The Constituents of Concern (CoC's) and associated NMOCD acceptable remedial levels are as follows:

- BTEX^{8620} (Benzene, Toluene, Ethyl Benzene, and Xylenes): 50 mg/kg
- TPH^{8015m} (Total Petroleum Hydrocarbon): 100 mg/kg
- Benzene^{8620}: 10 mg/kg

It is EPI's policy to evaluate crude oil release sites for the presence of elevated levels of $SO_4^{=}$ and Cl^{-} ions. These inorganic constituents are often present in subsurface soils associated with sour crude releases and/or releases containing a

P.O. BOX 1558 ••• 2100 AVENUE O ••• EUNICE, NEW MEXICO 88231
TELEPHONE 505•394•3481 ••• FAX 505•394•2601

brine component. Chloride and sulfate contamination of the soil will be evaluated relative to NMWQCC Ground Water Standards, 250 mg/ml and 600 mg/ml respectively.

If there are any questions please call Mr. Ben Miller, or myself, at our office or at (505) 390-0288 and (505) 390-9804, respectively or Mr. Frank Hernandez at (505) 631-3095. All official written communications should be addressed to:

Mr. Frank Hernandez
EOTT Energy Pipeline, L.P.
PO Box 1660
Midland, TX 79701

Sincerely,

John Good
EPI Environmental Consultant

cc: Frank Hernandez, LINK Energy – Dist Environmental Supv., w/enclosure
Jeff Dann – LINK Energy - Environmental Specialist, w/enclosure
Ben Miller, EPI Vice President and General Manager
Pat McCasland, EPI Technical Manager
Sherry Miller, EPI President
file

ENVIRONMENTAL PLUS, INC.

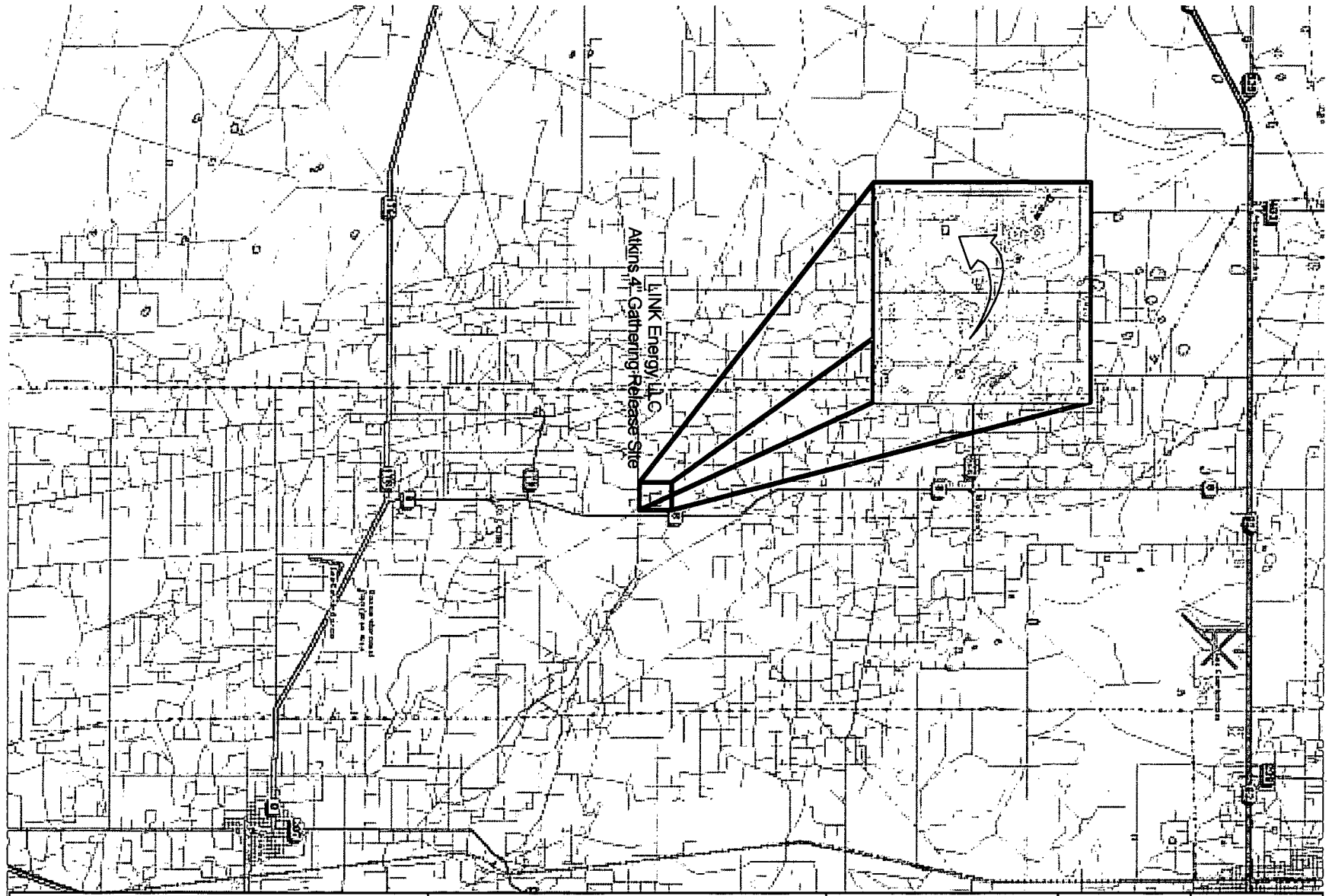


Plate 1: Site Location LINK Energy LLC - Atkins 4" Gathering 2004-00027	Lea County, New Mexico UL-L Section 28 T20S R37E N32° 32' 29.26" W103° 15' 41.47" Elevation: 3510-ft amsl	DWG BY: John Good Jan - 2004	REVISED:
		SCALE: 0 Miles 5	SHEET 1 of 1

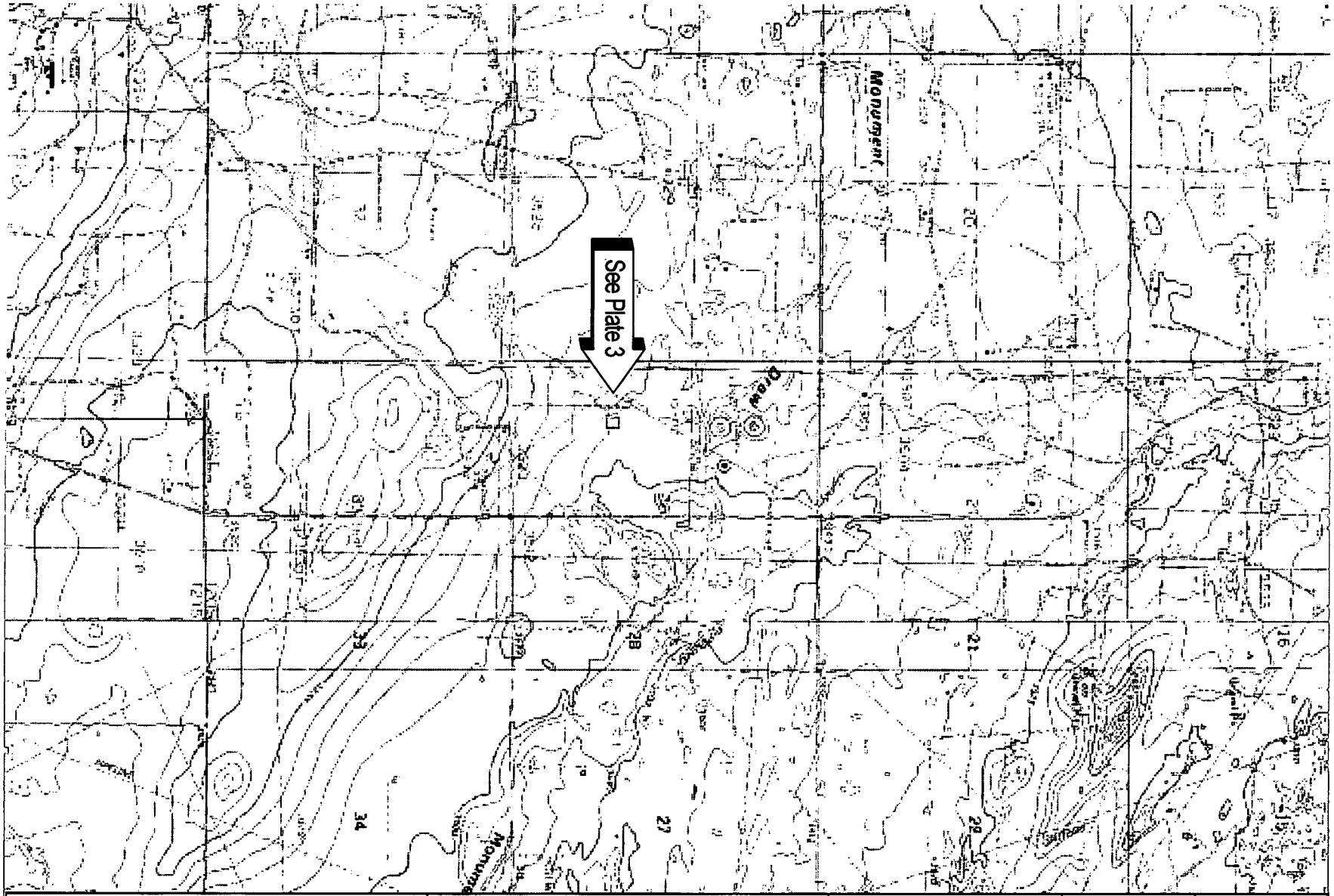


Plate 2: Site Topography LINK Energy LLC - Atkins 4" Gathering 2004-00027	Lea County, New Mexico UL-L Section 28 T20S R37E N32° 32' 29.26" W103° 15' 41.47" Elevation: 3510-ft amsl	DWG BY: John Good Jan - 2004 SCALE: 0 Mile 1	REVISED:

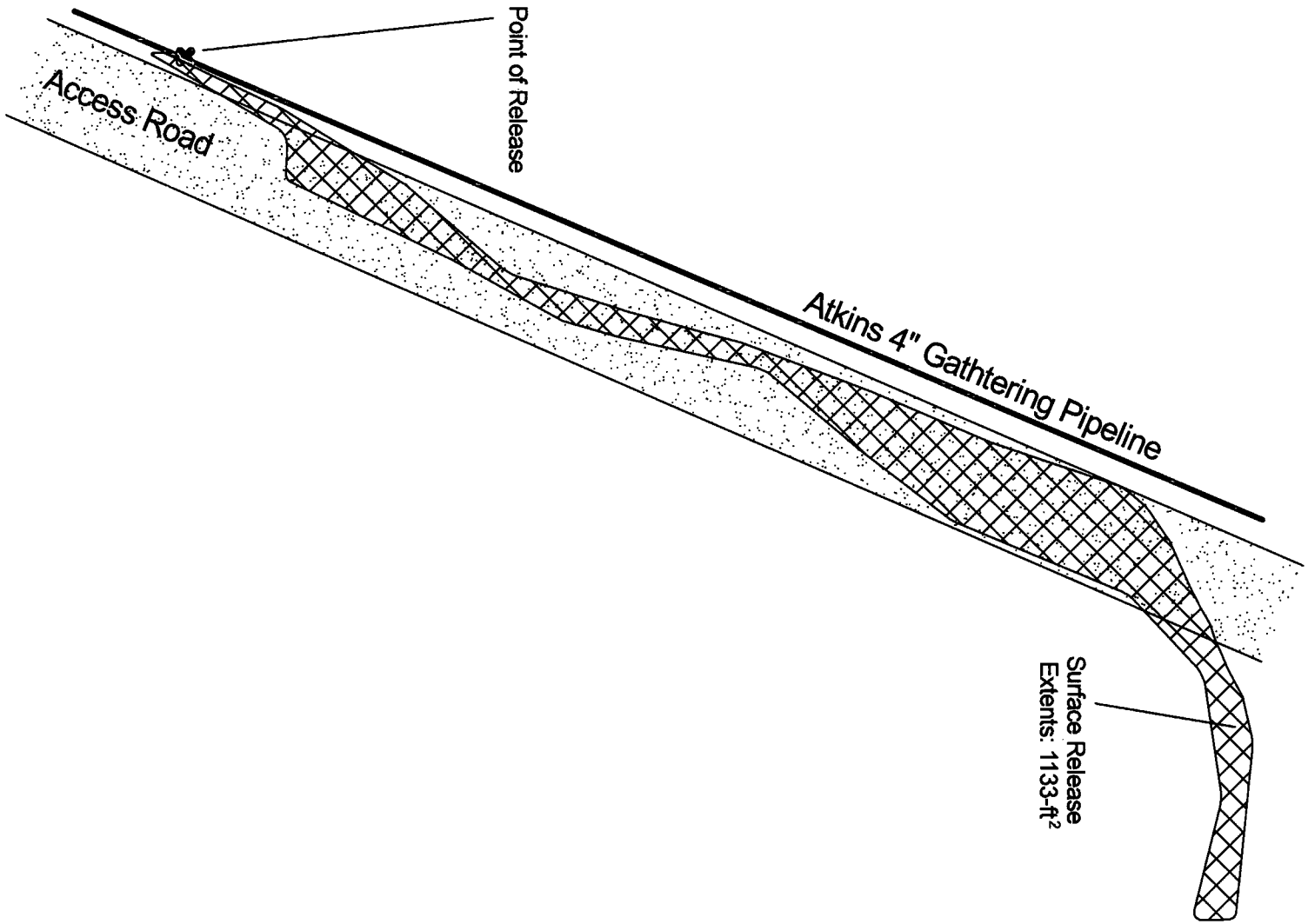


Plate 3 - Initial GPS Demarcation LINK Energy LLC - Atkins 4" Gathering 2004-00027	Lea County, New Mexico UL-L Section 28 T20S R37E N32° 32' 29.26" W103° 15' 41.47" Elevation: 3510-ft amsl	DWG BY: John Good Jan - 2004 SCALE: 0 Feet 50	REVISED:

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 March 17, 1999

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

Release Notification and Corrective Action

OPERATOR

☑ Initial Report ☐ Final Report

Name of Company	Contact
Link Energy LLC	**Frank Hernandez**
Address	Telephone No.
P.O. Box 1660 Midland, TX 79702	**(505) 631-3095**
Facility Name	Facility Type
Atkins 4" Gathering Pipeline	**Crude Oil Gathering Pipeline**

Surface Owner	Mineral Owner	Lease No.
State of New Mexico	**NA**	**NA**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from South Line	Feet from West Line	Longitude	Latitude	County:
L	**28**	**20S**	**37E**	**1700**	**1057**	**W103° 15' 41.465"**	**N32° 32' 29.264"**	**Lea**

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Crude Oil Release and associated components	**50 bbl**	**0 bbl**
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
4" Steel Pipeline	**1/28/04 PM**	**1/28/2004 PM**
Was Immediate Notice Given? ☑ Yes ☐ No ☐ Not Required	If YES, To Whom? **Larry Johnson, NMOCD-Hobbs**	
By Whom? **John Good - EPI**	Date and Hour **1/29/04 8:10 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.*
Internal pipeline corrosion

Describe Area Affected and Cleanup Action Taken.*
1,133-ft2 surface area affected; 50-bbl of product released, 0 recovered; RCRA Non-Exempt Non-hazardous grossly contaminated soil was excavated and transported to LINK's Lea Station land farm by EPI.

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: Frank Hernandez	**OIL CONSERVATION DIVISION**	
Printed Name: **Frank Hernandez**	Approved by District Supervisor:	
Title: **District Environmental Supv.**	Approval Date:	Expiration Date:
E-Mail **frank.hernandez@eott.com**	Conditions of Approval:	☐ Attached
Date: **1/30/04** Phone: **(505) 631-3095**		

LinkEnergy

Incident Date and NMOCD Notified?	
1/28/2004 PM	1/29/04 8:10 AM

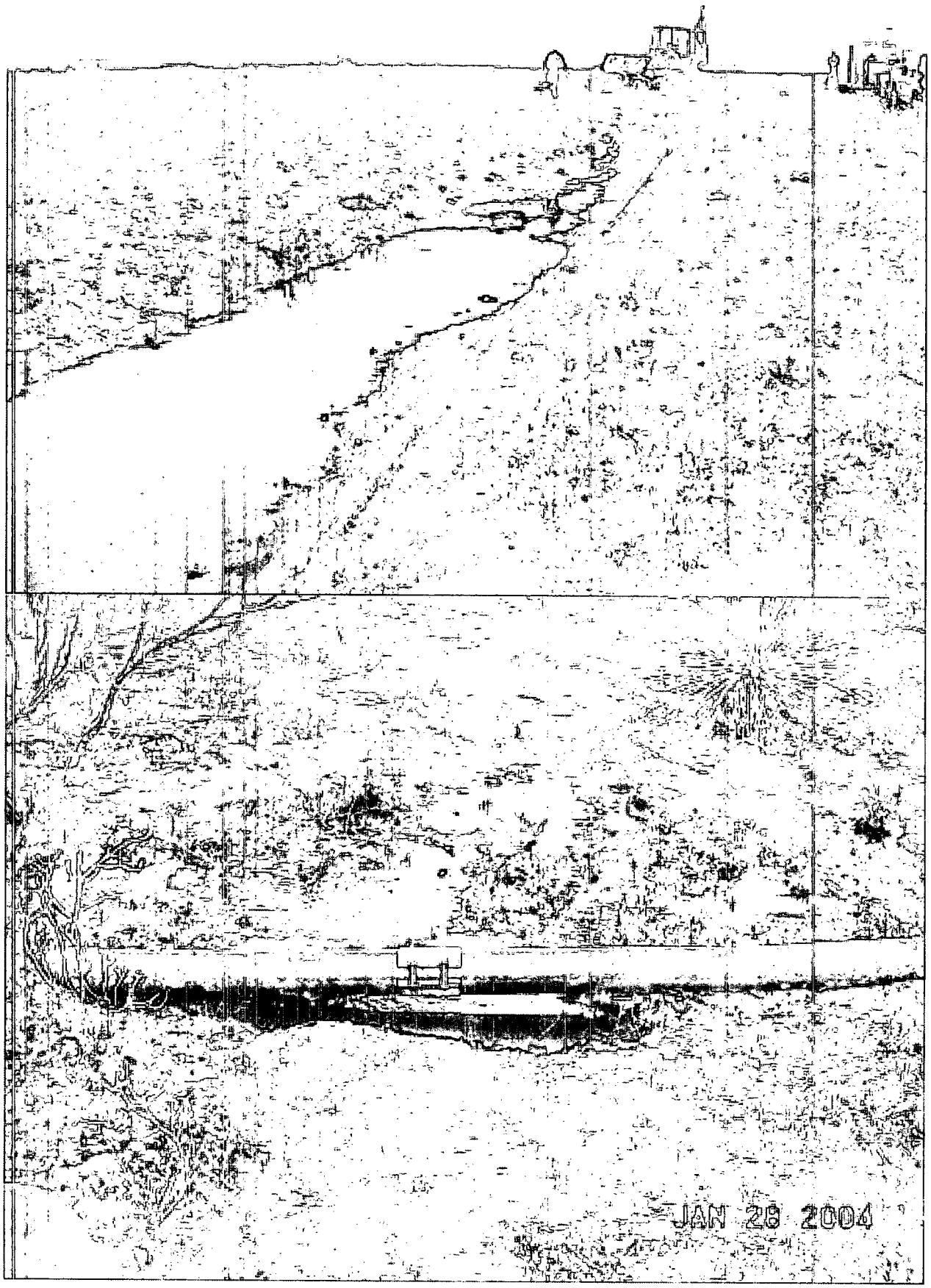
SITE:	Atkins 4" Gathering Pipeline	Assigned Site Reference	2004-00027
Company:	Link Energy LLC		
Street Address:	5805 East Highway 80		
Mailing Address:	P.O. Box 1660		
City, State, Zip:	Midland, TX 79702		
Representative:	Frank Hernandez		
Representative Telephone:	(505) 631-3095		
Telephone:			
Fluid volume released (bbls):	50	Recovered (bbls):	0
>25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days.			
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:	2004-00027		
Source of contamination:	4" Steel Pipeline		
Land Owner, i.e., BLM, ST, Fee, Other:	State of New Mexico State Land Office - Santa Fe, NM		
LSP Dimensions:	140 x 10 (see Plate 3, Attachments)		
LSP Area:	1,133 -ft^2		
Location of Reference Point (RP):			
Location distance and direction from RP:			
Latitude:	N32° 32' 29.264"		
Longitude:	W103° 15' 41.465"		
Elevation above mean sea level:	3510 -ft amsl		
Feet from South Section Line:	1700		
Feet from West Section Line:	1057		
Location - Unit and 1/4 1/4:	UL- L NW 1/4 of SW 1/4		
Location - Section:	28		
Location - Township:	20S		
Location - Range:	37E		
Surface water body within 1000' radius of Site:	0		
Surface water body within 1000' radius of Site:	0		
Domestic water wells within 1000' radius of Site:	0		
Domestic water wells within 1000' radius of Site:	0		
Agricultural water wells within 1000' radius of Site:	0		
Agricultural water wells within 1000' radius of Site:	0		
Public water supply wells within 1000' radius of Site:	0		
Public water supply wells within 1000' radius of Site:	0		
Depth (ft) from land surface to ground water (DG):	40		
Depth (ft) of contamination (DC):	8		
Depth (ft) to ground water (DG - DC = DtGW):	32		

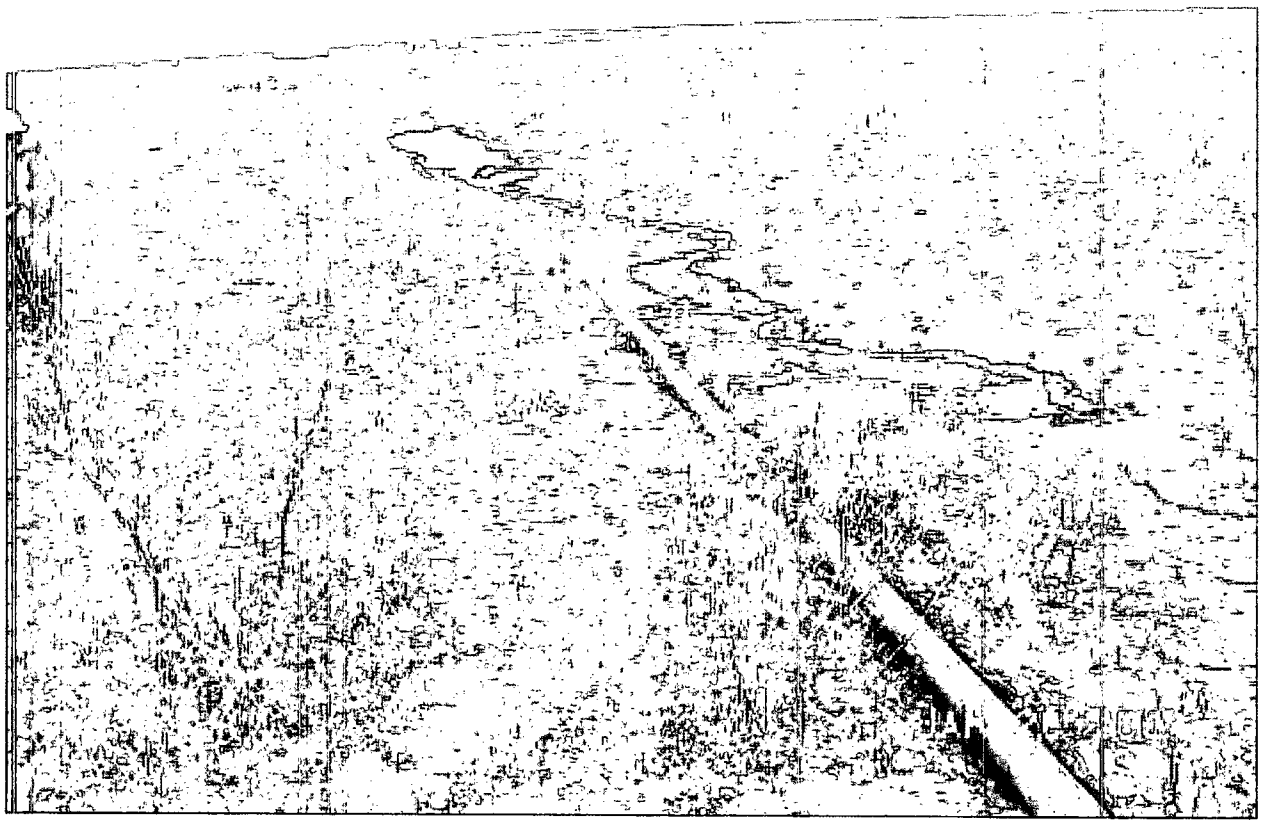
1. Ground Water	2. Wellhead Protection Area	3. Distance to Surface Water Body
If Depth to GW <50 feet: *20 points*	If <1000' from water source, or, <200' from private domestic water source: *20 points*	<200 horizontal feet: 20 points
If Depth to GW 50 to 99 feet: *10 points*		200-100 horizontal feet: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

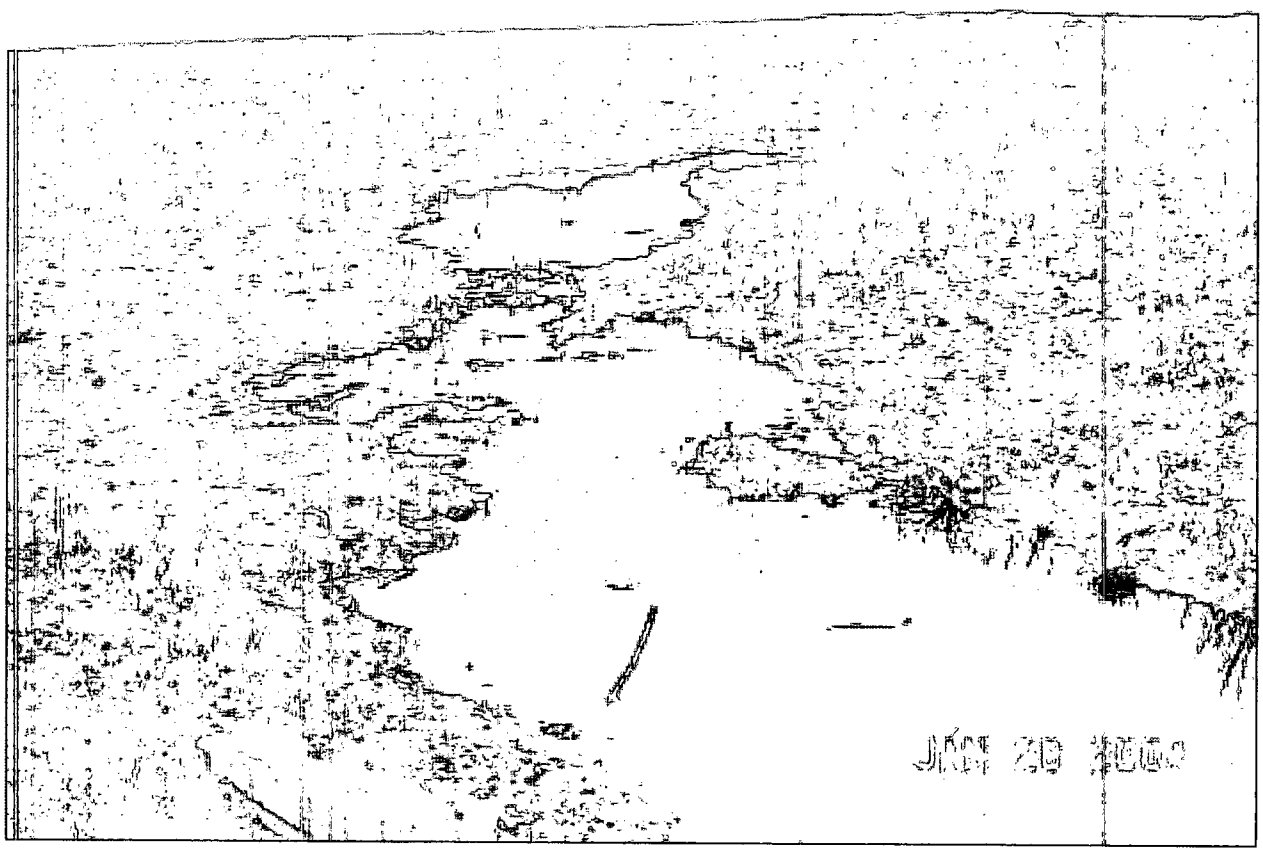
Total Site Ranking Score and Acceptable Concentrations

Parameter	**20 or >**	10	0
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


JAN 28 2004





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State of New Mexico
Energy Minerals and Natural Resources
Department
Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-138
Revised March 17, 1999

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☒ Verbal Approval Received: Yes ☐ No ☐	4. Generator **Link Energy** 5. Originating Site **Atkins 4" Gathering ref#2004-00027**
2. Management Facility Destination: Link Energy Lea Station Land Farm #GW-351	6. Transporter Environmental Plus, Inc.
3. Address of Facility Operator: Environmental Plus, Inc.	8. State New Mexico
7. Location of Material (Street Address or ULSTR)	**UL- L, NW¼ of the SW¼ of Section 28 20S R37E**

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

Crude Oil Contaminated Soil

Estimated Volume 50 cy Known Volume (to be entered by the operator at the end of the haul) 1,052 cy

SIGNATURE Frank Hernandez TITLE: Environmental Coordinator DATE: 4-23-04

Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: Frank Hernandez TELEPHONE NO. 505-390-3095

030604-2

(This space for State Use)

APPROVED BY: _____ TITLE: _____ DATE: _____

APPROVED BY: Martyn J. Kitty TITLE: Environmental Geologist DATE: 5/6/04

Link Energy LLC - Atkins 4" Gathering 2004-00027

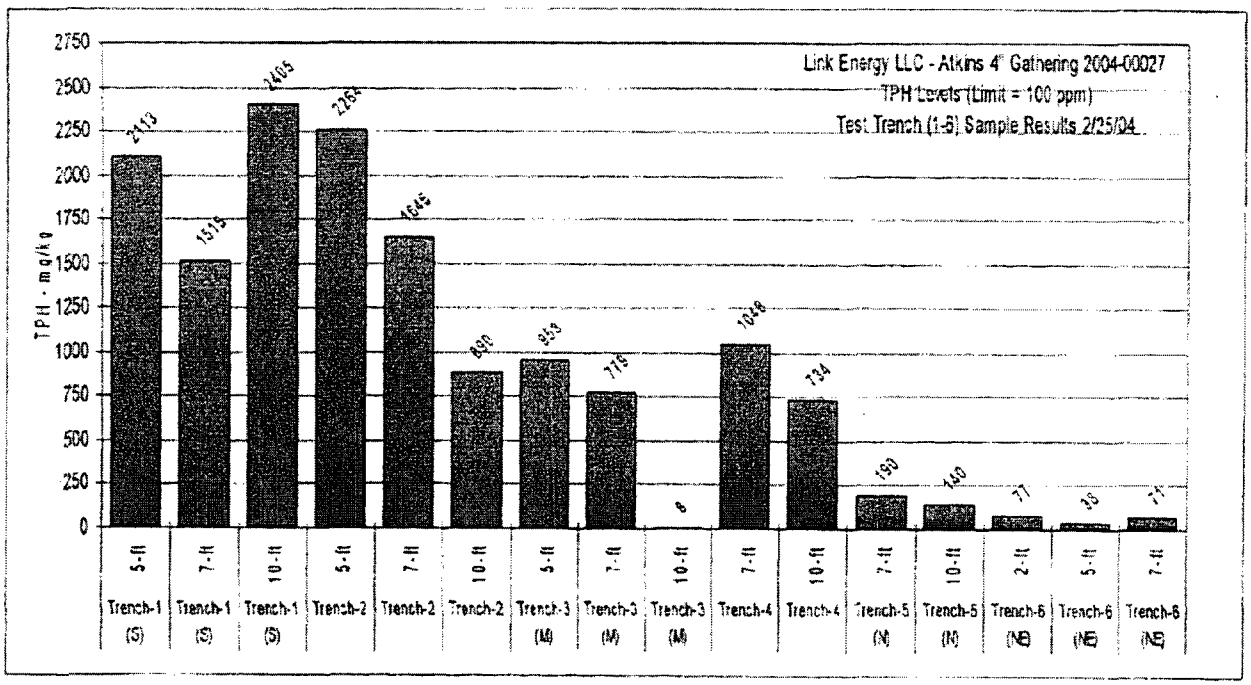
Bold highlighted cells indicate values in excess of the NMOCD remedial action guideline thresholds: TPH = 100 mg/Kg; Benzene = 10 mg/Kg; BTEX = 50 mg/Kg; Cl = 250 mg/Kg; SO4 = 600 mg/Kg

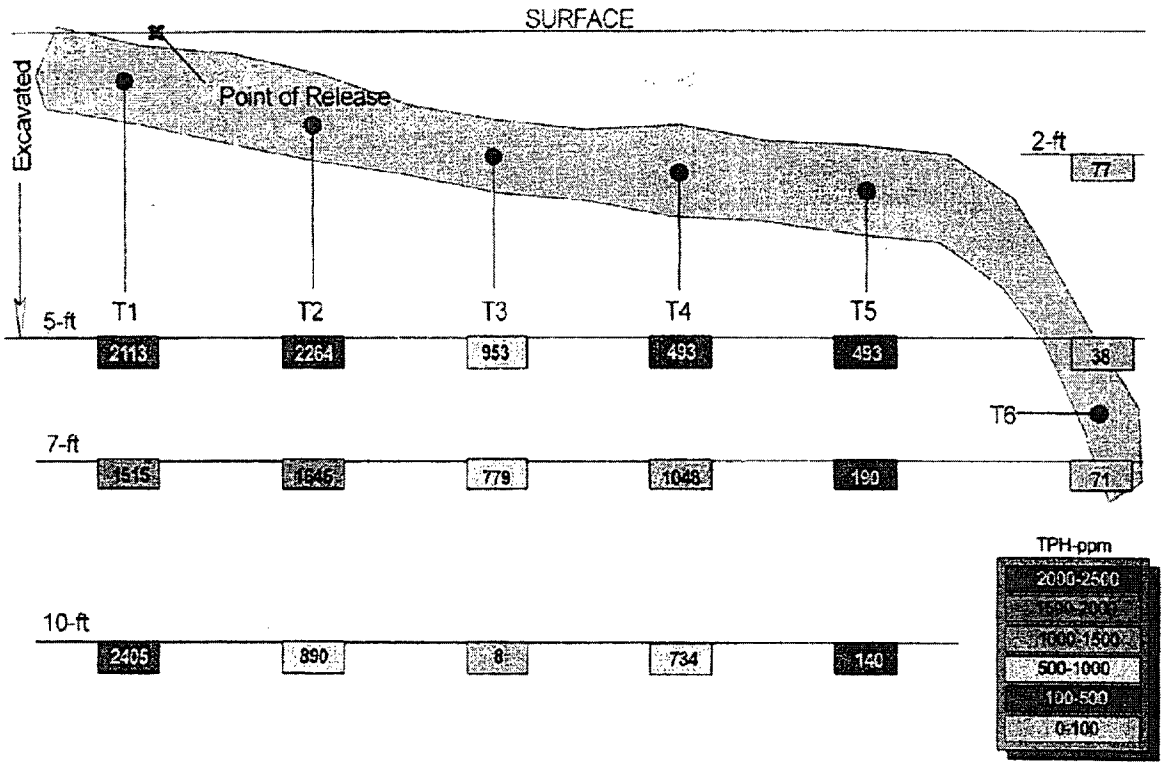
Sample Date	Excavation Sampling Area	Depth (ft - bgs[1])	SAMPLE IDs	VOC[2] ppm	GRO[3] mg/Kg	DRO[4] mg/Kg	TPH[5] mg/Kg	BTEX[6] mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ethyl Benzene mg/Kg	Total Xylenes mg/Kg	Cl^- mg/Kg	$SO_4^{=}$ mg/Kg
4-Feb	SideWall-NW	4	SLA4020404NWSWC		5.0	3.0	8.0	0.100	0.020	0.020	0.020	0.040		
4-Feb	SideWall-SW	2	SLA4020404SWSWC		5.0	8.0	13.0	0.466	0.028	0.057	0.111	0.269		
4-Feb	SideWall-NE	4	SLA4020404NESWC		5.0	19.2	24.2	0.142	0.020	0.020	0.027	0.075		
4-Feb	SideWall-SE	2	SLA4020404SESWC		5.7	4.8	13.4	0.464	0.029	0.032	0.108	0.304		
4-Feb	BottomHole-N	5	SLA4020404NBHC-5		9.7	483.0	492.7	1.048	0.020	0.083	0.274	0.671	34.7	30.6
4-Feb	BottomHole-S	3	SLA4020404SBHC-3		131.0	1260.0	1391.0	0.484	0.029	0.057	0.118	0.288	28.0	111.0
25-Feb	BottomHole-S	5	SLA4022504T1-5		13.3	2100.0	2113.3							
25-Feb	BottomHole-S	7	SLA4022504T1-7		5.0	1510.0	1515.0							
25-Feb	BottomHole-S	10	SLA4022504T1-10		5.0	2400.0	2405.0							
25-Feb	BottomHole-SM	5	SLA4022504T2-5		13.9	2250.0	2263.9							
25-Feb	BottomHole-SM	7	SLA4022504T2-7		5.0	1640.0	1645.0							
25-Feb	BottomHole-SM	10	SLA4022504T2-10		5.0	885.0	890.0							
25-Feb	BottomHole-M	5	SLA4022504T3-5		5.0	948.0	953.0							
25-Feb	BottomHole-M	7	SLA4022504T3-7		5.0	774.0	779.0							
25-Feb	BottomHole-M	10	SLA4022504T3-10		5.0	2.5	7.5							
25-Feb	BottomHole-NM	7	SLA4022504T4-7		98.1	952.0	1048.1							
25-Feb	BottomHole-NM	10	SLA4022504T4-10		5.0	729.0	734.0							
25-Feb	BottomHole-N	7	SLA4022504T5-7		5.0	185.0	190.0							
25-Feb	BottomHole-N	10	SLA4022504T5-10		5.0	135.0	140.0							
25-Feb	BottomHole-NE	2	SLA4022504T6-2		5.0	72.0	77.0							
25-Feb	BottomHole-NE	5	SLA4022504T6-5		5.0	33.1	38.1							
25-Feb	BottomHole-NE	7	SLA4022504T6-7		5.0	65.9	70.9							

[1] bgs = below ground surface [2] VOC = Volatile Organic Constituents (note: 100 ppm isobutylene calibration gas = 101 ppm)

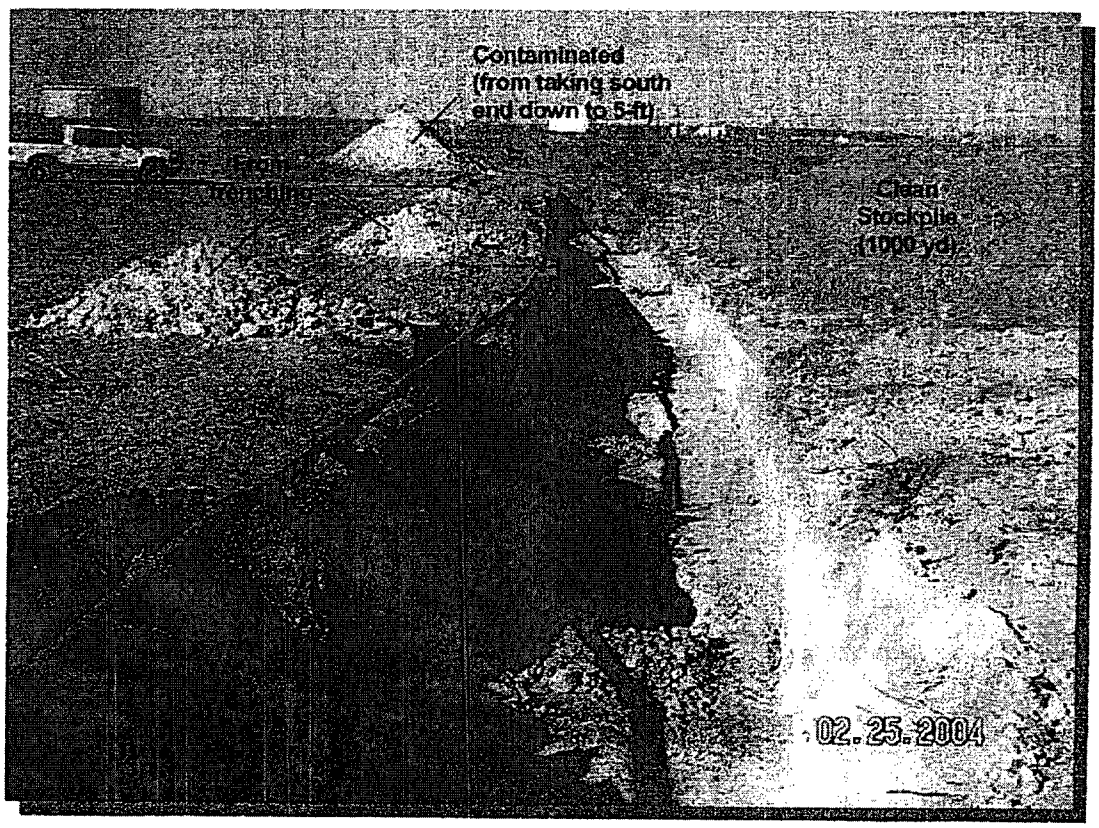
[3] GRO - Gasoline Range Organics (Detection Limit = 5 mg/Kg) [4] DRO - Diesel Range Organics (Detection Limit = 2.5 mg/Kg) [5] TPH - Total Petroleum Hydrocarbon (GRO+DRO)

[6] BTEX = Sum of CoC's (Detection Limits = 0.02 mg/Kg; 0.04 mg/Kg for total Xylenes). Note: Reported detection limits are considered "de minimus" values and are included in the TPH and BTEX summations.





Test Trench Sampling Results (TPH) February 25, 2004 LINK Energy LLC - Atkins 4" Gathering 2004-00027	Lea County, New Mexico UL-L Section 28 T20S R37E N32° 32' 29.26" W103° 15' 41.47" Elevation: 3510-ft amsl	DWG BY: John Good March - 2004 SCALE:	REVISED:	N



Atkins Gathering # 4, SB-1

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Plains Work Phone: _____
Contact: _____ Home Phone: _____
Address: 333 Clay Street Suite 1600

City Houston, State: Texas Zip 77002

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. ____1/4 ____1/4 ____1/4 Section:____ Township:____ Range:____ N.M.P.M.
in _____. Monument N.M. Lea County.
B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____
C. Latitude: 32d 32m 31N Longitude: 103 d 15 m 41w
D. East _____ (m), North _____ (m), UTM Zone 13, NAD __ (27 or 83)
E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey
F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.
G. Other: _____
H. Give State Engineer File Number if existing well: _____
I. On land owned by (required): _____

3. DRILLING CONTRACTOR

License Number: WD1478
Name: Straub Corporation Work Phone: 432-756-3489
Agent: Edward Bryan Home Phone: _____

Mailing Address: P.O. Box 192

City: Stanton State: TX Zip: 79782

4. DRILLING RECORD

Drilling began unknown Completed: unknown ; Type tools: Air Rotary Drilling Rig;
Size of hole unknown in.; Total depth of well unknown
Completed well is: _____ (shallow, artesian);
Depth to water upon completion of well: _____ ft.
File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-1

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet	Method of Placement

8. PLUGGING RECORD

Plugging Contractor: Straub Corporation
Address: P.O. Box 192, Stanton, Texas 79782
Plugging Method: Pouring Bentonite Holeplug/Cement Grout
Date Well Plugged : 6-28-05
Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feet of Cement
	0	2	.25 Cement
	2	15	3 bags of hole plug

File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-1

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE

Depth in Feet From	To in feet	Thickness	Color and Type of Material Encountered
0	3		Tan fine sand- caliche – clay layer.
3	8		Tan silty sand – clay
8	9		Tan fine sand – sand stone
9	10		Red fine sand
10	14		Tan fine sand - clay
14	15		Red fine sand
TD	15		

File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-1

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Edward Bryan 6-28-05
Driller (mm/dd/year)

FOR STATE ENGINEER USE ONLY
Quad _____; FWL _____; FSL _____; Use _____; Location No. _____
File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-2

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Plains Work Phone: _____
Contact: _____ Home Phone: _____
Address: 333 Clay Street Suite 1600

City Houston, State: Texas Zip 77002

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. ____1/4 ____1/4 ____1/4 Section:____ Township:____ Range:____ N.M.P.M.
in _____. Monument N.M. Lea County.
B. X =_____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____
C. Latitude: 32d 32m 31N Longitude: 103 d 15 m 41w
D. East _____ (m), North _____ (m), UTM Zone 13, NAD __ (27 or 83)
E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey
F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.
G. Other: _____
H. Give State Engineer File Number if existing well: _____
I. On land owned by (required): _____

3. DRILLING CONTRACTOR

License Number: WD1478
Name: Straub Corporation Work Phone: 432-756-3489
Agent: Edward Bryan Home Phone: _____

Mailing Address: P.O. Box 192

City: Stanton State: TX Zip: 79782

4. DRILLING RECORD

Drilling began unknown Completed: unknown ; Type tools: Air Rotary Drilling Rig;
Size of hole unknown in.; Total depth of well unknown
Completed well is: _____ (shallow, artesian);
Depth to water upon completion of well: _____ ft.
File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-2

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	Thickness in feet To	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Depth in Feet Bottom	Length (feet)	Type of Shoe	Perforations From	Perforations To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	Depth in Feet To	Hole Diameter	Sacks of mud	Cubic Feet	Method of Placement

8. PLUGGING RECORD

Plugging Contractor: Straub Corporation
Address: P.O. Box 192, Stanton, Texas 79782
Plugging Method: Pouring Bentonite Holeplug/Cement Grout
Date Well Plugged : 6-28-05
Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet Top	Depth in Feet Bottom	Cubic Feet of Cement
	0	2	.25 Cement
	2	15	3 bags of hole plug

File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-2

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE

Depth in Feet From	To in feet	Thickness	Color and Type of Material Encountered
0	7		Tan fine sand – caliche- clay layers
7	11		Tan silty sand – sandstone loose
11	12		Red fine sand
12	15		Tan fine sand – sandstone layers

File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-2

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Edward Bryan 6-28-05
Driller (mm/dd/year)

FOR STATE ENGINEER USE ONLY
Quad _____; FWL _____; FSL _____; Use _____; Location No. _____
File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-3

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Plains Work Phone: _____
Contact: _____ Home Phone: _____
Address: 333 Clay Street Suite 1600

City Houston, State: Texas Zip 77002

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. ____1/4 ____1/4 ____1/4 Section:____ Township:____ Range:____ N.M.P.M.
in _____. Monument N.M. Lea County.
B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____
C. Latitude: 32d 32m 31N Longitude: 103 d 15 m 41w
D. East _____ (m), North _____ (m), UTM Zone 13, NAD __ (27 or 83)
E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey
F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.
G. Other: _____
H. Give State Engineer File Number if existing well: _____
I. On land owned by (required): _____

3. DRILLING CONTRACTOR

License Number: WD1478
Name: Straub Corporation Work Phone: 432-756-3489
Agent: Edward Bryan Home Phone: _____

Mailing Address: P.O. Box 192

City: Stanton State: TX Zip: 79782

4. DRILLING RECORD

Drilling began unknown Completed: unknown ; Type tools: Air Rotary Drilling Rig;
Size of hole unknown in.; Total depth of well unknown
Completed well is: _____ (shallow, artesian);
Depth to water upon completion of well: _____ ft.
File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-3

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet	Method of Placement

8. PLUGGING RECORD

Plugging Contractor: Straub Corporation
Address: P.O. Box 192, Stanton, Texas 79782
Plugging Method: Pouring Bentonite Holeplug/Cement Grout
Date Well Plugged : 6-28-05
Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feet of Cement
	0	2	.25 Cement
	2	15	3 bags of hole plug

File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-3

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE

Depth in Feet From	Thickness To in feet	Color and Type of Material Encountered
0	3	Red fine sand
3	12	Tan fine sand – caliche- clay layers
12	15	Tan fine sand
TD	15	

File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-3

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Edward Bryan 6-28-05
Driller (mm/dd/year)

FOR STATE ENGINEER USE ONLY
Quad _____; FWL _____; FSL _____; Use _____; Location No. _____
File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-4

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Plains Work Phone: _____
Contact: _____ Home Phone: _____
Address: 333 Clay Street Suite 1600

City Houston, State: Texas Zip 77002

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. ____1/4 ____1/4 ____1/4 Section:____ Township:____ Range:____ N.M.P.M.
in _____. Monument N.M. Lea County.
B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____
C. Latitude: 32d 32m 31N Longitude: 103 d 15 m 41w
D. East _____ (m), North _____ (m), UTM Zone 13, NAD __ (27 or 83)
E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey
F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.
G. Other: _____
H. Give State Engineer File Number if existing well: _____
I. On land owned by (required): _____

3. DRILLING CONTRACTOR

License Number: WD1478
Name: Straub Corporation Work Phone: 432-756-3489
Agent: Edward Bryan Home Phone: _____

Mailing Address: P.O. Box 192

City: Stanton State: TX Zip: 79782

4. DRILLING RECORD

Drilling began unknown Completed: unknown; Type tools: Air Rotary Drilling Rig;
Size of hole unknown in.; Total depth of well unknown
Completed well is: _____ (shallow, artesian);
Depth to water upon completion of well: _____ ft.
File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-4

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet	Method of Placement

8. PLUGGING RECORD

Plugging Contractor: Straub Corporation
Address: P.O. Box 192, Stanton, Texas 79782
Plugging Method: Pouring Bentonite Holeplug/Cement Grout
Date Well Plugged : 6-29-05
Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feet of Cement
	0	2	.25 Cement
	2	20	4 bags of hole plug

File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-4

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE

Depth in Feet From	Thickness To in feet	Color and Type of Material Encountered
0	3	Red fine sand
3	18	Tan silty sand – caliche – clay layers
18	19	Red fine sand with clay
19	20	Red fine sand with clay
TD	20	

File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-4

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Edward Bryan 6-29-05
Driller (mm/dd/year)

FOR STATE ENGINEER USE ONLY

Quad _____; FWL _____; FSL _____; Use _____; Location No. _____

File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-5

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Plains Work Phone: _____
Contact: ____ Home Phone: _____
Address: 333 Clay Street Suite 1600

City Houston, State: Texas Zip 77002

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. ____1/4 ____1/4 ____1/4 Section:____ Township:____ Range:____ N.M.P.M.
in _____. Monument N.M. Lea County.
B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____
C. Latitude: 32d 32m 31N Longitude: 103 d 15 m 41w
D. East _____ (m), North _____ (m), UTM Zone 13, NAD __ (27 or 83)
E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey
F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.
G. Other: _____
H. Give State Engineer File Number if existing well: _____
I. On land owned by (required): _____

3. DRILLING CONTRACTOR

License Number: WD1478
Name: Straub Corporation Work Phone: 432-756-3489
Agent: Edward Bryan Home Phone: _____

Mailing Address: P.O. Box 192

City: Stanton State: TX Zip: 79782

4. DRILLING RECORD

Drilling began unknown Completed: unknown; Type tools: Air Rotary Drilling Rig;
Size of hole unknown in.; Total depth of well unknown
Completed well is: _____ (shallow, artesian);
Depth to water upon completion of well: _____ ft.
File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-5

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet	Method of Placement

8. PLUGGING RECORD

Plugging Contractor: Straub Corporation
Address: P.O. Box 192, Stanton, Texas 79782
Plugging Method: Pouring Bentonite Holeplug/Cement Grout
Date Well Plugged : 6-29-05
Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feet of Cement
	0	2	.25 Cement
	2	24	5 bags of hole plug

File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-5

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE

Depth in Feet From	To	Thickness in feet	Color and Type of Material Encountered
0	4		Tan fine sand – claiche – clay layers
4	9		Tan silty sand – clay
9	11		Tan fine sand – red sand – clay layers
11	21		Red fine sand
21	23		Tan silty sand – sandstone
23	24		Pink limestone
TD	24		

File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-5

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Edward Bryan _____ 6-29-05
Driller (mm/dd/year)

FOR STATE ENGINEER USE ONLY
Quad _____; FWL _____; FSL _____; Use _____; Location No. _____
File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-6

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Plains Work Phone: _____
Contact: _____ Home Phone: _____
Address: 333 Clay Street Suite 1600

City Houston, State: Texas Zip 77002

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. ____1/4 ____1/4 ____1/4 Section:____ Township:____ Range:____ N.M.P.M.
in _____. Monument N.M. Lea County.
B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____
C. Latitude: 32d 32m 31N Longitude: 103 d 15 m 41w
D. East _____ (m), North _____ (m), UTM Zone 13, NAD __ (27 or 83)
E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey
F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.
G. Other: _____
H. Give State Engineer File Number if existing well: _____
I. On land owned by (required): _____

3. DRILLING CONTRACTOR

License Number: WD1478
Name: Straub Corporation Work Phone: 432-756-3489
Agent: Edward Bryan Home Phone: _____

Mailing Address: P.O. Box 192

City: Stanton State: TX Zip: 79782

4. DRILLING RECORD

Drilling began unknown Completed: unknown; Type tools: Air Rotary Drilling Rig;
Size of hole unknown in.; Total depth of well unknown
Completed well is: _____ (shallow, artesian);
Depth to water upon completion of well: _____ ft.
File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-6

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

Depth in Feet From	To	Thickness in feet	Description of water-bearing formation	Estimated Yield (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth in Feet Top	Bottom	Length (feet)	Type of Shoe	Perforations From	To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet	Method of Placement

8. PLUGGING RECORD

Plugging Contractor: Straub Corporation
Address: P.O. Box 192, Stanton, Texas 79782
Plugging Method: Pouring Bentonite Holeplug/Cement Grout
Date Well Plugged : 6-28-05
Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feet of Cement
	0	2	.25 Cement
	2	20	4 bags of hole plug

File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-6

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

9. LOG OF HOLE

Depth in Feet From	To in feet	Thickness	Color and Type of Material Encountered
0	3		Red fine sand
3	6		Tan fine sand – caliche- clay layers
6	11		Tan fine sand- caliche
11	20		Tan fine sand – caliche
TD	20		

File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-6

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Edward Bryan 6-28-05
Driller (mm/dd/year)

FOR STATE ENGINEER USE ONLY
Quad _____; FWL _____; FSL _____; Use _____; Location No. _____
File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-7

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

1. OWNER OF WELL

Name: Plains Work Phone: _____
Contact: _____ Home Phone: _____
Address: 333 Clay Street Suite 1600

City Houston, State: Texas Zip 77002

2. LOCATION OF WELL (A, B, C, or D required, E or F if known)

A. ____1/4 ____1/4 ____1/4 Section:____ Township:____ Range:____ N.M.P.M.
in _____. Monument N.M. Lea County.
B. X = _____ feet, Y = _____ feet, N.M. Coordinate System
_____ Zone in the _____ Grant.
U.S.G.S. Quad Map _____
C. Latitude: 32d 32m 31N Longitude: 103 d 15 m 41w
D. East _____ (m), North _____ (m), UTM Zone 13, NAD __ (27 or 83)
E. Tract No. _____, Map No. _____ of the _____ Hydrographic Survey
F. Lot No. _____, Block No. _____ of Unit/Tract _____ of the
_____ Subdivision recorded in _____ County.
G. Other: _____
H. Give State Engineer File Number if existing well: _____
I. On land owned by (required): _____

3. DRILLING CONTRACTOR

License Number: WD1478
Name: Straub Corporation Work Phone: 432-756-3489
Agent: Edward Bryan Home Phone: _____

Mailing Address: P.O. Box 192

City: Stanton State: TX Zip: 79782

4. DRILLING RECORD

Drilling began unknown Completed: unknown; Type tools: Air Rotary Drilling Rig;
Size of hole unknown in.; Total depth of well unknown
Completed well is: _____ (shallow, artesian);
Depth to water upon completion of well: _____ ft.
File Number: _____ Trn Number: _____

Atkins Gathering # 4, SB-7

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

5. PRINCIPAL WATER-BEARING STRATA

Depth in Feet Thickness Description of Estimated Yield
From To in feet water-bearing formation (GPM)

6. RECORD OF CASING

Diameter (inches)	Pounds per ft.	Threads per in.	Depth Top	in Feet Bottom	Length (feet)	Type of Shoe	Perforations From To

7. RECORD OF MUDDING AND CEMENTING

Depth in Feet From	To	Hole Diameter	Sacks of mud	Cubic Feet	Method of Placement

8. PLUGGING RECORD

Plugging Contractor: Straub Corporation
Address: P.O. Box 192, Stanton, Texas 79782
Plugging Method: Pouring Bentonite Holeplug/Cement Grout
Date Well Plugged : 6-28-05
Plugging approved by: _____
State Engineer Representative

No.	Depth in Feet Top	Bottom	Cubic Feet of Cement
	0	2	.25 Cement
	2	20	4 bags of hole plug

File Number: _____ Trn Number: _____

NEW MEXICO OFFICE OF THE STATE ENGINEER
WELL RECORD

10. ADDITIONAL STATEMENTS OR EXPLANATIONS:

The undersigned hereby certifies that, to the best of his knowledge and belief, the foregoing is a true and correct record of the above described hole.

Edward Bryan 6-28-05
Driller (mm/dd/year)

FOR STATE ENGINEER USE ONLY
Quad _____; FWL _____; FSL _____; Use _____; Location No. _____
File Number: _____ Trn Number: _____

Analytical and Quality Control Report

James Ornelas
CRA-Midland
2135 South Loop 250 West
Midland, TX 79703

Report Date: July 7, 2005

Work Order: 5070120

Project Location: 5 Mi S of Monument
Project Name: Akins Sweet
Project Number: 039137

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
67076	BH-3 4'-5'	soil	2005-06-28	10:00	2005-07-01
67077	BH-3 9'-10'	soil	2005-06-28	10:21	2005-07-01
67078	BH-3 14'-15'	soil	2005-06-28	10:31	2005-07-01
67079	BH-2 4'-5'	soil	2005-06-28	10:58	2005-07-01
67080	BH-2 9'-10'	soil	2005-06-28	11:07	2005-07-01
67081	BH-2 14'-15'	soil	2005-06-28	11:14	2005-07-01
67082	BH-1 4'-5'	soil	2005-06-28	13:50	2005-07-01
67083	BH-1 9'-10'	soil	2005-06-28	14:00	2005-07-01
67084	BH-1 14'-15'	soil	2005-06-28	14:12	2005-07-01
67085	BH-6 4'-5'	soil	2005-06-28	16:39	2005-07-01
67088	BH-6 19-20'	soil	2005-06-28	17:11	2005-07-01
67089	BH-7 4-5'	soil	2005-06-28	17:36	2005-07-01
67092	BH-7 19-20'	soil	2005-06-28	18:03	2005-07-01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Blair Leftwich

Dr. Blair Leftwich, Director

Analytical Report

Sample: 67076 - BH-3 4'-5'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19359	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.784	mg/Kg	10	0.100	78	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.790	mg/Kg	10	0.100	79	36.6 - 112

Sample: 67076 - BH-3 4'-5'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		158	mg/Kg	1	150	105	57.5 - 139

Sample: 67076 - BH-3 4'-5'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19354	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.865	mg/Kg	10	0.100	86	10 - 160
4-Bromofluorobenzene (4-BFB)		0.916	mg/Kg	10	0.100	92	10 - 174

Sample: 67077 - BH-3 9'-10'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19359	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.936	mg/Kg	10	0.100	94	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.921	mg/Kg	10	0.100	92	36.6 - 112

Sample: 67077 - BH-3 9'-10'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		147	mg/Kg	1	150	98	57.5 - 139

Sample: 67077 - BH-3 9'-10'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19354	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.05	mg/Kg	10	0.100	105	10 - 160
4-Bromofluorobenzene (4-BFB)		1.06	mg/Kg	10	0.100	106	10 - 174

Sample: 67078 - BH-3 14'-15'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19359	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.820	mg/Kg	10	0.100	82	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.835	mg/Kg	10	0.100	84	36.6 - 112

Sample: 67078 - BH-3 14'-15'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		157	mg/Kg	1	150	105	57.5 - 139

Sample: 67078 - BH-3 14'-15'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19354	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.921	mg/Kg	10	0.100	92	10 - 160
4-Bromofluorobenzene (4-BFB)		0.943	mg/Kg	10	0.100	94	10 - 174

Sample: 67079 - BH-2 4'-5'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19359	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.800	mg/Kg	10	0.100	80	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.787	mg/Kg	10	0.100	79	36.6 - 112

Sample: 67079 - BH-2 4'-5'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		130	mg/Kg	1	150	87	57.5 - 139

Sample: 67079 - BH-2 4'-5'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19354	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.09	mg/Kg	10	0.100	109	10 - 160
4-Bromofluorobenzene (4-BFB)		0.890	mg/Kg	10	0.100	89	10 - 174

Sample: 67080 - BH-2 9'-10'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19359	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.814	mg/Kg	10	0.100	81	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.798	mg/Kg	10	0.100	80	36.6 - 112

Sample: 67080 - BH-2 9'-10'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	82	57.5 - 139

Sample: 67080 - BH-2 9'-10'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19354	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.904	mg/Kg	10	0.100	90	10 - 160
4-Bromofluorobenzene (4-BFB)		0.903	mg/Kg	10	0.100	90	10 - 174

Sample: 67081 - BH-2 14'-15'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19359	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.0100		mg/Kg	10	0.00100
Toluene		<0.0100		mg/Kg	10	0.00100
Ethylbenzene		<0.0100		mg/Kg	10	0.00100
Xylene		<0.0100		mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.961	mg/Kg	10	0.100	96	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.938	mg/Kg	10	0.100	94	36.6 - 112

Sample: 67081 - BH-2 14'-15'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		<50.0		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		136	mg/Kg	1	150	91	57.5 - 139

Sample: 67081 - BH-2 14'-15'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19354	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		<1.00		mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	10	0.100	108	10 - 160
4-Bromofluorobenzene (4-BFB)		1.06	mg/Kg	10	0.100	106	10 - 174

Sample: 67082 - BH-1 4'-5'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19359	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.786	mg/Kg	10	0.100	79	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.777	mg/Kg	10	0.100	78	36.6 - 112

Sample: 67082 - BH-1 4'-5'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		116	mg/Kg	1	150	77	57.5 - 139

Sample: 67082 - BH-1 4'-5'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19354	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.885	mg/Kg	10	0.100	88	10 - 160
4-Bromofluorobenzene (4-BFB)		0.878	mg/Kg	10	0.100	88	10 - 174

Sample: 67083 - BH-1 9'-10'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19359	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.872	mg/Kg	10	0.100	87	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.853	mg/Kg	10	0.100	85	36.6 - 112

Sample: 67083 - BH-1 9'-10'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		129	mg/Kg	1	150	86	57.5 - 139

Sample: 67083 - BH-1 9'-10'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19354	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.980	mg/Kg	10	0.100	98	10 - 160
4-Bromofluorobenzene (4-BFB)		0.962	mg/Kg	10	0.100	96	10 - 174

Sample: 67084 - BH-1 14'-15'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19359	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.0100		mg/Kg	10	0.00100
Toluene		<0.0100		mg/Kg	10	0.00100
Ethylbenzene		<0.0100		mg/Kg	10	0.00100
Xylene		<0.0100		mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.963	mg/Kg	10	0.100	96	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.943	mg/Kg	10	0.100	94	36.6 - 112

Sample: 67084 - BH-1 14'-15'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		<50.0		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		121	mg/Kg	1	150	81	57.5 - 139

Sample: 67084 - BH-1 14'-15'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19354	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		<1.00		mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.07	mg/Kg	10	0.100	107	10 - 160
4-Bromofluorobenzene (4-BFB)		1.06	mg/Kg	10	0.100	106	10 - 174

Sample: 67085 - BH-6 4'-5'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19359	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.944	mg/Kg	10	0.100	94	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.962	mg/Kg	10	0.100	96	36.6 - 112

Sample: 67085 - BH-6 4'-5'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		128	mg/Kg	1	150	86	57.5 - 139

Sample: 67085 - BH-6 4'-5'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19354	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.05	mg/Kg	10	0.100	105	10 - 160
4-Bromofluorobenzene (4-BFB)		1.08	mg/Kg	10	0.100	108	10 - 174

Sample: 67088 - BH-6 19-20'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19359	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.873	mg/Kg	10	0.100	87	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.851	mg/Kg	10	0.100	85	36.6 - 112

Sample: 67088 - BH-6 19-20'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		120	mg/Kg	1	150	80	57.5 - 139

Sample: 67088 - BH-6 19-20'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19354	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.975	mg/Kg	10	0.100	98	10 - 160
4-Bromofluorobenzene (4-BFB)		0.958	mg/Kg	10	0.100	96	10 - 174

Sample: 67089 - BH-7 4-5'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19359	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.0100		mg/Kg	10	0.00100
Toluene		<0.0100		mg/Kg	10	0.00100
Ethylbenzene		<0.0100		mg/Kg	10	0.00100
Xylene		<0.0100		mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	10	0.100	108	74.5 - 114
4-Bromofluorobenzene (4-BFB)		1.06	mg/Kg	10	0.100	106	36.6 - 112

Sample: 67089 - BH-7 4-5'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		<50.0		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		121	mg/Kg	1	150	80	57.5 - 139

Sample: 67089 - BH-7 4-5'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19354	Date Analyzed:	2005-07-01	Analyzed By:	
Prep Batch:	17014	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		<1.00		mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.20	mg/Kg	10	0.100	120	10 - 160
4-Bromofluorobenzene (4-BFB)		1.19	mg/Kg	10	0.100	119	10 - 174

Sample: 67092 - BH-7 19-20'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19379	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	Result	RL	Units	Dilution	RL
Benzene		<0.0100		mg/Kg	10	0.00100
Toluene		<0.0100		mg/Kg	10	0.00100
Ethylbenzene		<0.0100		mg/Kg	10	0.00100
Xylene		<0.0100		mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.05	mg/Kg	10	0.100	105	74.5 - 114
4-Bromofluorobenzene (4-BFB)		1.10	mg/Kg	10	0.100	110	36.6 - 112

Sample: 67092 - BH-7 19-20'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	Result	RL	Units	Dilution	RL
DRO		<50.0		mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		114	mg/Kg	1	150	76	57.5 - 139

Sample: 67092 - BH-7 19-20'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19382	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	Result	RL	Units	Dilution	RL
GRO		<1.00		mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	10	0.100	101	10 - 160
4-Bromofluorobenzene (4-BFB)		1.08	mg/Kg	10	0.100	108	10 - 174

Method Blank (1) QC Batch: 19354

Parameter	Flag	MDL Result	Units	RL
GRO		2.11	mg/Kg	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.916	mg/Kg	10	0.100	92	81.8 - 109
4-Bromofluorobenzene (4-BFB)		0.902	mg/Kg	10	0.100	90	50.7 - 113

Method Blank (1) QC Batch: 19359

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00333	mg/Kg	0.001
Toluene		<0.00353	mg/Kg	0.001
Ethylbenzene		<0.00339	mg/Kg	0.001
Xylene		<0.0103	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.824	mg/Kg	10	0.100	82	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.801	mg/Kg	10	0.100	80	36.6 - 112

Method Blank (1) QC Batch: 19379

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00333	mg/Kg	0.001
Benzene		<0.00333	mg/Kg	0.001
Toluene		<0.00353	mg/Kg	0.001
Toluene		<0.00353	mg/Kg	0.001
Ethylbenzene		<0.00339	mg/Kg	0.001
Ethylbenzene		<0.00339	mg/Kg	0.001
Xylene		<0.0103	mg/Kg	0.001
Xylene		<0.0103	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.911	mg/Kg	10	0.100	91	74.5 - 114
Trifluorotoluene (TFT)		0.911	mg/Kg	10	0.100	91	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.895	mg/Kg	10	0.100	90	36.6 - 112
4-Bromofluorobenzene (4-BFB)		0.895	mg/Kg	10	0.100	90	36.6 - 112

Method Blank (1) QC Batch: 19382

Parameter	Flag	MDL Result	Units	RL
GRO		2.00	mg/Kg	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.894	mg/Kg	10	0.100	89	81.8 - 109
4-Bromofluorobenzene (4-BFB)		0.870	mg/Kg	10	0.100	87	50.7 - 113

Method Blank (1) QC Batch: 19386

Parameter	Flag	MDL Result	Units	RL
DRO		<5.35	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		137	mg/Kg	1	150	91	57.5 - 139

Laboratory Control Spike (LCS-1) QC Batch: 19354

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	9.45	11.0	mg/Kg	10	1.00	<0.381	94	15	72 - 124	21

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.897	1.01	mg/Kg	10	0.100	90	101	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.976	0.981	mg/Kg	10	0.100	98	98	72.2 - 119

Laboratory Control Spike (LCS-1) QC Batch: 19359

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.898	0.904	mg/Kg	10	0.100	<0.0333	90	1	79.8 - 114	20
Toluene	0.883	0.883	mg/Kg	10	0.100	<0.0353	88	0	79.7 - 115	20
Ethylbenzene	0.845	0.851	mg/Kg	10	0.100	<0.0339	84	1	78.7 - 116	20
Xylene	2.51	2.53	mg/Kg	10	0.300	<0.103	84	1	78.7 - 118	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.794	0.819	mg/Kg	10	0.100	79	82	76.6 - 114
4-Bromofluorobenzene (4-BFB)	0.813	0.830	mg/Kg	10	0.100	81	83	72 - 111

Laboratory Control Spike (LCS-1) QC Batch: 19379

continued ...

control spikes continued ...

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.978	0.984	mg/Kg	10	0.100	<0.0333	98	1	79.8 - 114	20
Benzene	0.978	0.984	mg/Kg	10	0.100	<0.0333	98	1	79.8 - 114	20
Toluene	0.980	0.986	mg/Kg	10	0.100	<0.0353	98	1	79.7 - 115	20
Toluene	0.980	0.986	mg/Kg	10	0.100	<0.0353	98	1	79.7 - 115	20
Ethylbenzene	0.986	0.996	mg/Kg	10	0.100	<0.0339	99	1	78.7 - 116	20
Ethylbenzene	0.986	0.996	mg/Kg	10	0.100	<0.0339	99	1	78.7 - 116	20
Xylene	2.91	2.94	mg/Kg	10	0.300	<0.103	97	1	78.7 - 118	20
Xylene	2.91	2.94	mg/Kg	10	0.300	<0.103	97	1	78.7 - 118	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.923	0.926	mg/Kg	10	0.100	92	93	76.6 - 114
Trifluorotoluene (TFT)	0.923	0.926	mg/Kg	10	0.100	92	93	76.6 - 114
4-Bromofluorobenzene (4-BFB)	0.943	0.951	mg/Kg	10	0.100	94	95	72 - 111
4-Bromofluorobenzene (4-BFB)	0.943	0.951	mg/Kg	10	0.100	94	95	72 - 111

Laboratory Control Spike (LCS-1) QC Batch: 19382

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	9.75	9.24	mg/Kg	10	1.00	<0.381	98	5	72 - 124	21

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.950	0.855	mg/Kg	10	0.100	95	86	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.958	0.944	mg/Kg	10	0.100	96	94	72.2 - 119

Laboratory Control Spike (LCS-1) QC Batch: 19386

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO [1]	227	197	mg/Kg	1	250	<5.35	91	14	84 - 118	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	127	128	mg/Kg	1	150	84	85	57.5 - 139

Matrix Spike (MS-1) QC Batch: 19359 Spiked Sample: 66963

[1] LCSD analyte out of range. LCS shows extraction occured properly.

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.773	0.684	mg/Kg	10	0.100	<0.0333	77	12	63.5 - 98.6	20
Toluene	0.775	0.686	mg/Kg	10	0.100	<0.0353	78	12	65.8 - 102	20
Ethylbenzene	0.776	0.691	mg/Kg	10	0.100	<0.0339	78	12	66.6 - 106	20
Xylene	2.31	2.05	mg/Kg	10	0.300	<0.103	77	12	67.4 - 108	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.755	0.674	mg/Kg	10	0.1	76	67	60.1 - 104
4-Bromofluorobenzene (4-BFB)	0.763	0.685	mg/Kg	10	0.1	76	68	63.1 - 105

Matrix Spike (MS-1) QC Batch: 19379 Spiked Sample: 67086

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	[2,3]	1.04	0.991	mg/Kg	10	0.100	<0.0333	104	5	63.5 - 98.6	20
Toluene	[4]	1.06	1.02	mg/Kg	10	0.100	<0.0353	106	4	65.8 - 102	20
Ethylbenzene	[5,6]	1.12	1.08	mg/Kg	10	0.100	<0.0339	112	4	66.6 - 106	20
Xylene	[7]	3.32	3.23	mg/Kg	10	0.300	<0.103	111	3	67.4 - 108	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.986	0.992	mg/Kg	10	0.1	99	99	60.1 - 104
4-Bromofluorobenzene (4-BFB)	0.987	1.00	mg/Kg	10	0.1	99	100	63.1 - 105

Matrix Spike (MS-1) QC Batch: 19382 Spiked Sample: 67086

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	9.80	10.3	mg/Kg	10	1.00	<0.381	98	5	10 - 182	19.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.856	0.889	mg/Kg	10	0.1	86	89	10 - 160
4-Bromofluorobenzene (4-BFB)	0.993	1.09	mg/Kg	10	0.1	99	109	10 - 174

Matrix Spike (MS-1) QC Batch: 19386 Spiked Sample: 67081

[2]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[3]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[4]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[5]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[6]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[7]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO	180	175	mg/Kg	1	250	<5.35	72	3	70 - 130	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
n-Triacontane	117	122	mg/Kg	1	150	78	81	57.5 - 139

Standard (ICV-1) QC Batch: 19354

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.970	97	85 - 115	2005-07-01

Standard (CCV-1) QC Batch: 19354

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.914	91	85 - 115	2005-07-01

Standard (CCV-2) QC Batch: 19354

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.903	90	85 - 115	2005-07-01

Standard (ICV-1) QC Batch: 19359

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0904	90	85 - 115	2005-07-01
Toluene		mg/Kg	0.100	0.0894	89	85 - 115	2005-07-01
Ethylbenzene		mg/Kg	0.100	0.0852	85	85 - 115	2005-07-01
Xylene	[8]	mg/Kg	0.300	0.253	84	85 - 115	2005-07-01

Standard (CCV-3) QC Batch: 19359

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0886	89	85 - 115	2005-07-01
Toluene		mg/Kg	0.100	0.0870	87	85 - 115	2005-07-01

continued ...

[8]Xylene outside of control limits on CCV(ICV). CCV(ICV) component average is 87.8 which is within acceptable range. This is acceptable by Method 8000.

standard continued . . .

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Ethylbenzene	[9]	mg/Kg	0.100	0.0839	84	85 - 115	2005-07-01
Xylene	[10]	mg/Kg	0.300	0.248	83	85 - 115	2005-07-01

Standard (CCV-2) QC Batch: 19359

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0889	89	85 - 115	2005-07-01
Toluene		mg/Kg	0.100	0.0878	88	85 - 115	2005-07-01
Ethylbenzene		mg/Kg	0.100	0.0849	85	85 - 115	2005-07-01
Xylene	[11]	mg/Kg	0.300	0.250	83	85 - 115	2005-07-01

Standard (ICV-1) QC Batch: 19379

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.103	103	85 - 115	2005-07-01
Benzene		mg/Kg	0.100	0.103	103	85 - 115	2005-07-01
Toluene		mg/Kg	0.100	0.102	102	85 - 115	2005-07-01
Toluene		mg/Kg	0.100	0.102	102	85 - 115	2005-07-01
Ethylbenzene		mg/Kg	0.100	0.102	102	85 - 115	2005-07-01
Ethylbenzene		mg/Kg	0.100	0.102	102	85 - 115	2005-07-01
Xylene		mg/Kg	0.300	0.304	101	85 - 115	2005-07-01
Xylene		mg/Kg	0.300	0.304	101	85 - 115	2005-07-01

Standard (CCV-1) QC Batch: 19379

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0983	98	85 - 115	2005-07-01
Toluene		mg/Kg	0.100	0.0986	99	85 - 115	2005-07-01
Ethylbenzene		mg/Kg	0.100	0.0988	99	85 - 115	2005-07-01
Xylene		mg/Kg	0.300	0.292	97	85 - 115	2005-07-01

Standard (ICV-1) QC Batch: 19382

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.903	90	85 - 115	2005-07-01

[9]Ethylbenzene outside of control limits on CCV(ICV). CCV(ICV) component average is 85.8 which is within acceptable range. This is acceptable by Method 8000.
[10]Xylene outside of control limits on CCV(ICV). CCV(ICV) component average is 85.8 which is within acceptable range. This is acceptable by Method 8000.
[11]Xylene outside of control limits on CCV(ICV). CCV(ICV) component average is 86 which is within acceptable range. This is acceptable by Method 8000.

Standard (CCV-1) QC Batch: 19382

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.943	94	85 - 115	2005-07-01

Standard (ICV-1) QC Batch: 19386

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	216	86	57.5 - 139	2005-07-03

Standard (CCV-1) QC Batch: 19386

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	199	79	57.5 - 139	2005-07-03

Standard (CCV-2) QC Batch: 19386

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	214	86	57.5 - 139	2005-07-03

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
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Fax (806) 794-1298
1 (800) 378-1296
email: lab@traceanalysis.com

TraceAnalysis, Inc.

155 McCutcheon,Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 5070120

Company Name: CRA
Phone #: 432-686-0086
Address: (Street, City, Zip) 2135 S Loop 250 West
Fax #:
e-mail: 432-686-0186
Contact Person: James Ornelas
Invoice to: (If different from above) Plains
Project #: 039137
Project Name: Akins Sweet
Project Location: 5 mi S of Monument
Sampler Signature:

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
67076	BH-3 4'-5'	1	4		X							X	X	6/28	10:00
77	BH-3 9'-10'	1	4		X							X	X	6/28	10:12
78	BH-3 14'-15'	1	4		X							X	X	6/28	10:31
79	BH-2 4-5	1	4		X							X		6/28	10:56
80	BH-2 9-10'	1	4		X							X		6/28	11:07
81	BH-2 14'-15	1	4		X							X		6/28	11:19
82	BH-1 4'-5'	1	4		X							X		6/28	13:50
83	BH-1 9'-10'	1	4		X							X		6/28	14:04
84	BH-1 14-15'	1	4		X							X		6/28	14:12
85	BH-6 4'-5'	1	4		X							X		6/28	16:39
86	BH-6 9'-10'	1	4		X							X		6/28	16:48

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	TPH Method 8015 modified Tx1005	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/2007	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol 8260B/624	GC/MS Semi Vol 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD TSS pH	Moisture Content				Turn Around Time if different from standard	Hold
	X		X																		✓

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
E Phillips	6-30-05	5:00	Melissa Brantley	6/30/05	1700
Melissa Brantley	6/30/05	1705			
			Received at Laboratory by:	Date:	Time:
			Jerry Lyles	7/1/05	10:10

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

ORIGINAL COPY

11 samples

LAB USE ONLY

Intact Y / N
Headspace Y / N
Temp 4 °
Log-in Review

REMARKS: Hold Samples for possible Additional Analyses

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # LS P139 4618

Page 2 of 2

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1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 5070120

Company Name: CRA
Phone #: 686-~~0086~~
Address: (Street, City, Zip) 2135 S Loop 250 W
Fax #: 432 686 ~~0085~~ 0186
e-mail: Jornelas@CRAworld.com
Contact Person: James ornelas
Invoice to: (If different from above) Plains
Project #: 039137
Project Name: Akins Sweet
Project Location: 5mi S. of Monument
Sampler Signature: [signature]

ANALYSIS REQUEST (Circle or Specify Method No.)

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: SOIL	PRESERVATIVE METHOD: ICE	SAMPLING DATE	SAMPLING TIME	BTEX 8021B/602	~~TX 1005 Extended (C35)~~ TPH 8015 mod	Hold
67087	BH-6 14-15'	1	4	X	X	6/28	16:54	✓	✓	✓
88	BH-6 19-20'	1	4	X	X	6/28	17:11	✓	✓	
89	BH-7 4-5'	1	4	X	X	6/28	17:36	✓	✓	
90	BH-7 9-10'	1	4	X	X	6/28	17:42	✓	✓	✓
91	BH-7 14-15'	1	4	X	X	6/28	17:50	✓	✓	✓
92	BH-7 19-20	1	4	X	X	6/28	18:07	✓	✓	

Other matrix columns (WATER, AIR, SLUDGE), preservative columns (HCl, HNO_3, H_2SO_4, NaOH, NONE) and analysis columns (MTBE 8021B/602, TPH 418.1/TX1005, PAH 8270C, Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7, TCLP Metals Ag As Ba Cd Cr Pb Se Hg, TCLP Volatiles, TCLP Semi Volatiles, TCLP Pesticides, RCI, GC/MS Vol. 8260B/624, GC/MS Semi. Vol. 8270C/625, PCB's 8082/608, Pesticides 8081A/608, BOD, TSS, pH, Moisture Content, Turn Around Time if different from standard) are blank.

Relinquished by:	Date:	Time:	Received by:	Date:	Time:
Earl Phillips	6-30-05	5:00	Melina Bramley	6/30/05	1700
Melina Bramley	6/30/05	1705			
			Received at Laboratory by: Jud Lyle	7/1/05	10:10

LAB USE ONLY
Intact Y/N
Headspace Y / N
Temp 4 °
Log-in Review BP
Carrier # LS 8139 4618

REMARKS: Hold samples for possible Additional Analyses
☐ Dry Weight Basis Required
☐ TRRP Report Required
☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

6 samples

ORIGINAL COPY

Analytical and Quality Control Report

James Ornelas
CRA-Midland
2135 South Loop 250 West
Midland, TX 79703

Report Date: July 13, 2005

Work Order: 5070121

Project Location: 5 Mi S of Monument
Project Name: Akins Sweet
Project Number: 039137

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
67093	BH-5 4'-5'	soil	2005-06-29	10:25	2005-07-01
67094	BH-5 9'-10'	soil	2005-06-29	10:35	2005-07-01
67095	BH-5 14-15	soil	2005-06-29	10:43	2005-07-01
67096	BH-5 19'-20'	soil	2005-06-29	10:57	2005-07-01
67097	BH-5 24-25'	soil	2005-06-29	11:05	2005-07-01
67098	BH-4 4-5	soil	2005-06-29	12:25	2005-07-01
67101	BH-4 19-20	soil	2005-06-29	12:52	2005-07-01

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

Blair Leftwich

Dr. Blair Leftwich, Director

Analytical Report

Sample: 67093 - BH-5 4'-5'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19379	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.08	mg/Kg	10	0.100	108	74.5 - 114
4-Bromofluorobenzene (4-BFB)		1.09	mg/Kg	10	0.100	109	36.6 - 112

Sample: 67093 - BH-5 4'-5'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		122	mg/Kg	1	150	82	57.5 - 139

Sample: 67093 - BH-5 4'-5'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19382	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.06	mg/Kg	10	0.100	106	10 - 160
4-Bromofluorobenzene (4-BFB)		1.06	mg/Kg	10	0.100	106	10 - 174

Sample: 67094 - BH-5 9'-10'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19379	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.993	mg/Kg	10	0.100	99	74.5 - 114
4-Bromofluorobenzene (4-BFB)		1.00	mg/Kg	10	0.100	100	36.6 - 112

Sample: 67094 - BH-5 9'-10'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		125	mg/Kg	1	150	83	57.5 - 139

Sample: 67094 - BH-5 9'-10'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19382	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.972	mg/Kg	10	0.100	97	10 - 160
4-Bromofluorobenzene (4-BFB)		0.971	mg/Kg	10	0.100	97	10 - 174

Sample: 67095 - BH-5 14-15

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19379	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.988	mg/Kg	10	0.100	99	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.997	mg/Kg	10	0.100	100	36.6 - 112

Sample: 67095 - BH-5 14-15

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		117	mg/Kg	1	150	78	57.5 - 139

Sample: 67095 - BH-5 14-15

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19382	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.968	mg/Kg	10	0.100	97	10 - 160
4-Bromofluorobenzene (4-BFB)		0.969	mg/Kg	10	0.100	97	10 - 174

Sample: 67096 - BH-5 19'-20'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19379	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.904	mg/Kg	10	0.100	90	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.905	mg/Kg	10	0.100	90	36.6 - 112

Sample: 67096 - BH-5 19'-20'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		129	mg/Kg	1	150	86	57.5 - 139

Sample: 67096 - BH-5 19'-20'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19382	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.883	mg/Kg	10	0.100	88	10 - 160
4-Bromofluorobenzene (4-BFB)		0.882	mg/Kg	10	0.100	88	10 - 174

Sample: 67097 - BH-5 24-25'

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19379	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.988	mg/Kg	10	0.100	99	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.986	mg/Kg	10	0.100	99	36.6 - 112

Sample: 67097 - BH-5 24-25'

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		123	mg/Kg	1	150	82	57.5 - 139

Sample: 67097 - BH-5 24-25'

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19382	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.966	mg/Kg	10	0.100	97	10 - 160
4-Bromofluorobenzene (4-BFB)		0.958	mg/Kg	10	0.100	96	10 - 174

Sample: 67098 - BH-4 4-5

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19379	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		<0.0100	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.01	mg/Kg	10	0.100	101	74.5 - 114
4-Bromofluorobenzene (4-BFB)		1.02	mg/Kg	10	0.100	102	36.6 - 112

Sample: 67098 - BH-4 4-5

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		121	mg/Kg	1	150	80	57.5 - 139

Sample: 67098 - BH-4 4-5

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19382	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.994	mg/Kg	10	0.100	99	10 - 160
4-Bromofluorobenzene (4-BFB)		0.992	mg/Kg	10	0.100	99	10 - 174

Sample: 67101 - BH-4 19-20

Analysis:	BTEX	Analytical Method:	S 8021B	Prep Method:	S 5035
QC Batch:	19379	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
Benzene		<0.0100	mg/Kg	10	0.00100
Toluene		<0.0100	mg/Kg	10	0.00100
Ethylbenzene		<0.0100	mg/Kg	10	0.00100
Xylene		**0.0106**	mg/Kg	10	0.00100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		1.04	mg/Kg	10	0.100	104	74.5 - 114
4-Bromofluorobenzene (4-BFB)		1.04	mg/Kg	10	0.100	104	36.6 - 112

Sample: 67101 - BH-4 19-20

Analysis:	TPH DRO	Analytical Method:	Mod. 8015B	Prep Method:	N/A
QC Batch:	19386	Date Analyzed:	2005-07-03	Analyzed By:	DS
Prep Batch:	17017	Sample Preparation:	2005-07-01	Prepared By:	DS

Parameter	Flag	RL Result	Units	Dilution	RL
DRO		<50.0	mg/Kg	1	50.0

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		123	mg/Kg	1	150	82	57.5 - 139

Sample: 67101 - BH-4 19-20

Analysis:	TPH GRO	Analytical Method:	S 8015B	Prep Method:	S 5035
QC Batch:	19382	Date Analyzed:	2005-07-01	Analyzed By:	MT
Prep Batch:	17023	Sample Preparation:	2005-07-01	Prepared By:	

Parameter	Flag	RL Result	Units	Dilution	RL
GRO		<1.00	mg/Kg	10	0.100

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.991	mg/Kg	10	0.100	99	10 - 160
4-Bromofluorobenzene (4-BFB)		1.01	mg/Kg	10	0.100	101	10 - 174

Method Blank (1) QC Batch: 19379

Parameter	Flag	MDL Result	Units	RL
Benzene		<0.00333	mg/Kg	0.001
Benzene		<0.00333	mg/Kg	0.001
Toluene		<0.00353	mg/Kg	0.001
Toluene		<0.00353	mg/Kg	0.001
Ethylbenzene		<0.00339	mg/Kg	0.001
Ethylbenzene		<0.00339	mg/Kg	0.001
Xylene		<0.0103	mg/Kg	0.001
Xylene		<0.0103	mg/Kg	0.001

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.911	mg/Kg	10	0.100	91	74.5 - 114
Trifluorotoluene (TFT)		0.911	mg/Kg	10	0.100	91	74.5 - 114
4-Bromofluorobenzene (4-BFB)		0.895	mg/Kg	10	0.100	90	36.6 - 112
4-Bromofluorobenzene (4-BFB)		0.895	mg/Kg	10	0.100	90	36.6 - 112

Method Blank (1) QC Batch: 19382

Parameter	Flag	MDL Result	Units	RL
GRO		2.00	mg/Kg	0.1

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
Trifluorotoluene (TFT)		0.894	mg/Kg	10	0.100	89	81.8 - 109
4-Bromofluorobenzene (4-BFB)		0.870	mg/Kg	10	0.100	87	50.7 - 113

Method Blank (1) QC Batch: 19386

Parameter	Flag	MDL Result	Units	RL
DRO		<5.35	mg/Kg	50

Surrogate	Flag	Result	Units	Dilution	Spike Amount	Percent Recovery	Recovery Limits
n-Triacontane		137	mg/Kg	1	150	91	57.5 - 139

Laboratory Control Spike (LCS-1) QC Batch: 19379

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene	0.978	0.984	mg/Kg	10	0.100	<0.0333	98	1	79.8 - 114	20
Benzene	0.978	0.984	mg/Kg	10	0.100	<0.0333	98	1	79.8 - 114	20
Toluene	0.980	0.986	mg/Kg	10	0.100	<0.0353	98	1	79.7 - 115	20
Toluene	0.980	0.986	mg/Kg	10	0.100	<0.0353	98	1	79.7 - 115	20
Ethylbenzene	0.986	0.996	mg/Kg	10	0.100	<0.0339	99	1	78.7 - 116	20

continued ...

control spikes continued ...

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ethylbenzene	0.986	0.996	mg/Kg	10	0.100	<0.0339	99	1	78.7 - 116	20
Xylene	2.91	2.94	mg/Kg	10	0.300	<0.103	97	1	78.7 - 118	20
Xylene	2.91	2.94	mg/Kg	10	0.300	<0.103	97	1	78.7 - 118	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.923	0.926	mg/Kg	10	0.100	92	93	76.6 - 114
Trifluorotoluene (TFT)	0.923	0.926	mg/Kg	10	0.100	92	93	76.6 - 114
4-Bromofluorobenzene (4-BFB)	0.943	0.951	mg/Kg	10	0.100	94	95	72 - 111
4-Bromofluorobenzene (4-BFB)	0.943	0.951	mg/Kg	10	0.100	94	95	72 - 111

Laboratory Control Spike (LCS-1) QC Batch: 19382

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	9.75	9.24	mg/Kg	10	1.00	<0.381	98	5	72 - 124	21

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.950	0.855	mg/Kg	10	0.100	95	86	80.4 - 113
4-Bromofluorobenzene (4-BFB)	0.958	0.944	mg/Kg	10	0.100	96	94	72.2 - 119

Laboratory Control Spike (LCS-1) QC Batch: 19386

Param	LCS Result	LCSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
DRO [1]	227	197	mg/Kg	1	250	<5.35	91	14	84 - 118	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	LCS Result	LCSD Result	Units	Dil.	Spike Amount	LCS Rec.	LCSD Rec.	Rec. Limit
n-Triacontane	127	128	mg/Kg	1	150	84	85	57.5 - 139

Matrix Spike (MS-1) QC Batch: 19379 Spiked Sample: 67086

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Benzene [2,3]	1.04	0.991	mg/Kg	10	0.100	<0.0333	104	5	63.5 - 98.6	20
Toluene [4]	1.06	1.02	mg/Kg	10	0.100	<0.0353	106	4	65.8 - 102	20

continued ...

[1] LCSD analyte out of range. LCS shows extraction occured properly.
[2] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[3] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[4] Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

matrix spikes continued ...

Param		MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
Ethylbenzene	[6]	1.12	1.08	mg/Kg	10	0.100	<0.0339	112	4	66.6 - 106	20
Xylene	[7]	3.32	3.23	mg/Kg	10	0.300	<0.103	111	3	67.4 - 108	20

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.986	0.992	mg/Kg	10	0.1	99	99	60.1 - 104
4-Bromofluorobenzene (4-BFB)	0.987	1.00	mg/Kg	10	0.1	99	100	63.1 - 105

Matrix Spike (MS-1) QC Batch: 19382 Spiked Sample: 67086

Param	MS Result	MSD Result	Units	Dil.	Spike Amount	Matrix Result	Rec.	RPD	Rec. Limit	RPD Limit
GRO	9.80	10.3	mg/Kg	10	1.00	<0.381	98	5	10 - 182	19.6

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Surrogate	MS Result	MSD Result	Units	Dil.	Spike Amount	MS Rec.	MSD Rec.	Rec. Limit
Trifluorotoluene (TFT)	0.856	0.889	mg/Kg	10	0.1	86	89	10 - 160
4-Bromofluorobenzene (4-BFB)	0.993	1.09	mg/Kg	10	0.1	99	109	10 - 174

Standard (ICV-1) QC Batch: 19379

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.103	103	85 - 115	2005-07-01
Benzene		mg/Kg	0.100	0.103	103	85 - 115	2005-07-01
Toluene		mg/Kg	0.100	0.102	102	85 - 115	2005-07-01
Toluene		mg/Kg	0.100	0.102	102	85 - 115	2005-07-01
Ethylbenzene		mg/Kg	0.100	0.102	102	85 - 115	2005-07-01
Ethylbenzene		mg/Kg	0.100	0.102	102	85 - 115	2005-07-01
Xylene		mg/Kg	0.300	0.304	101	85 - 115	2005-07-01
Xylene		mg/Kg	0.300	0.304	101	85 - 115	2005-07-01

Standard (CCV-1) QC Batch: 19379

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0983	98	85 - 115	2005-07-01
Toluene		mg/Kg	0.100	0.0986	99	85 - 115	2005-07-01
Ethylbenzene		mg/Kg	0.100	0.0988	99	85 - 115	2005-07-01
Xylene		mg/Kg	0.300	0.292	97	85 - 115	2005-07-01

[5]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[6]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.
[7]Matrix spike recovery out of control limits due to matrix interference. Use LCS/LCSD to demonstrate analysis is under control.

Standard (CCV-2) QC Batch: 19379

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
Benzene		mg/Kg	0.100	0.0928	93	85 - 115	2005-07-01
Toluene		mg/Kg	0.100	0.0955	96	85 - 115	2005-07-01
Ethylbenzene		mg/Kg	0.100	0.0933	93	85 - 115	2005-07-01
Xylene		mg/Kg	0.300	0.280	93	85 - 115	2005-07-01

Standard (ICV-1) QC Batch: 19382

Param	Flag	Units	ICVs True Conc.	ICVs Found Conc.	ICVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.903	90	85 - 115	2005-07-01

Standard (CCV-1) QC Batch: 19382

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	0.943	94	85 - 115	2005-07-01

Standard (CCV-2) QC Batch: 19382

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
GRO		mg/L	1.00	1.09	109	85 - 115	2005-07-01

Standard (CCV-1) QC Batch: 19386

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	199	79	57.5 - 139	2005-07-03

Standard (CCV-2) QC Batch: 19386

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	214	86	57.5 - 139	2005-07-03

Standard (CCV-3) QC Batch: 19386

Param	Flag	Units	CCVs True Conc.	CCVs Found Conc.	CCVs Percent Recovery	Percent Recovery Limits	Date Analyzed
DRO		mg/Kg	250	233	93	57.5 - 139	2005-07-03

Page 1 of 1

6701 Aberdeen Avenue, Ste. 9
Lubbock, Texas 79424
Tel (806) 794-1296
Fax (806) 794-1298
1 (800) 378-1296
email: lab@traceanalysis.com

TraceAnalysis, Inc.

155 McCutcheon, Suite H
El Paso, Texas 79932
Tel (915) 585-3443
Fax (915) 585-4944
1 (888) 588-3443

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

LAB Order ID # 5070121

Company Name: CRA
Phone #: 686-0086
Address: (Street, City, Zip) 2135 S Loop 250 W
Fax #:
e-mail:
Contact Person: James Arnold
jarnolds@CRAworld.com
Invoice to: (If different from above) Plains
Project #: 039137
Project Name: Akins Sweet
Project Location: 5 mi S of Monument, NM
Sampler Signature: [signature]

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume/Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME	MTBE 8021B/602	BTEX 8021B/602	TPH 418.1/TX1005	Tx 1005 Extended (C35)	PAH 8270C	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol 8260B/624	GC/MS Semi Vol 8270C/625	PCB's 8082/608	Pesticides 8081A/608	BOD TSS pH	Moisture Content	Turn Around Time if different from standard	Hold
97093	BH-5 4'-5'	1	4		✓							✓		6-29	10:25		✓		✓														
94	BH-5 9'-10'	1	4		✓							✓		6-29	10:35		✓		✓														
95	BH-5 14-15'	1	4		✓							✓		6-29	10:43		✓		✓														
96	BH-5 19'-20'	1	4		✓							✓		6-29	10:57		✓		✓														
97	BH-5 24-25'	1	4		✓							✓		6-29	11:05		✓		✓														
98	BH-4 4-5'	1	4		✓							✓		6-29	12:25		✓		✓														
99	BH-4 9-10'	1	4		✓							✓		6-29	12:30		✓		✓														H
100	BH-4 14-15'	1	4		✓							✓		6-29	12:43		✓		✓														H
101	BH-4 19-20'	1	4		✓							✓		6-29	12:52		✓		✓														
	temp blank	1																															

ANALYSIS REQUEST
(Circle or Specify Method No.)

Relinquished by: [signature] Date: 6/30/05 Time: 5:00
Received by: [signature] Date: 6/30/05 Time: 1700

Relinquished by: [signature] Date: 6/30/05 Time: 1705
Received by: Date: Time:

Relinquished by: Date: Time:
Received at Laboratory by: [signature] Date: 7/1/05 Time: 10:10

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C.O.C.

ORIGINAL COPY

10 samples

LAB USE ONLY

Intact (Y) N
Headspace Y / N
Temp 4 °
Log-in Review BP

REMARKS: Hold samples for possible additional Analyses

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Carrier # LS 813946 18

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-138
Revised June 10, 2003

Submit Original
Plus 1 Copy
to Appropriate
District Office

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: ☐ Non-Exempt: ☐ ☐Verbal Approval Received: Yes ☐ No ☐	4. Generator
	5. Originating Site
2. Management Facility Destination	6. Transporter
3. Address of Facility Operator	8. State
7. Location of Material (Street Address or ULSTR)	

9. Circle One:

A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job.

B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved

All transporters must certify the wastes delivered are only those consigned for transport.

BRIEF DESCRIPTION OF MATERIAL:

Estimated Volume _____ cy Known Volume (to be entered by the operator at the end of the haul) _____ cy

SIGNATURE _____ TITLE: _____ DATE: _____
Waste Management Facility Authorized Agent

TYPE OR PRINT NAME: _____ TELEPHONE NO. _____

E-MAIL ADDRESS _____

(This space for State Use)

APPROVED BY: _____ TITLE: _____ DATE: _____

APPROVED BY: _____ TITLE: _____ DATE: _____

District I
1625 N. French Dr., Hobbs, NM 88240
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State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised March 17, 1999

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

Release Notification and Corrective Action

OPERATOR

☑ Initial Report ☐ Final Report

Name of Company	Contact
Link Energy LLC	**Frank Hernandez**
Address	Telephone No.
P.O. Box 1660 Midland, TX 79702	**(505) 631-3095**
Facility Name	Facility Type
Atkins 4" Gathering Pipeline	**Crude Oil Gathering Pipeline**

Surface Owner	Mineral Owner	Lease No.
State of New Mexico	**NA**	**NA**

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from South Line	Feet from West Line	Longitude	Latitude	County:
L	**28**	**20S**	**37E**	**1700**	**1057**	**W103° 15' 41.465"**	**N32° 32' 29.264"**	**Lea**

NATURE OF RELEASE

Type of Release	Volume of Release	Volume Recovered
Crude Oil Release and associated components	**50 bbl**	**0 bbl**
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
4" Steel Pipeline	**1/28/04 PM**	**1/28/2004 PM**
Was Immediate Notice Given? ☑ Yes ☐ No ☐ Not Required	If YES, To Whom? **Larry Johnson, NMOCD-Hobbs**	
By Whom? **John Good - EPI**	Date and Hour **1/29/04 8:10 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.*
Internal pipeline corrosion

Describe Area Affected and Cleanup Action Taken.*
1,133-ft2 surface area affected; 50-bbl of product released, 0 recovered; RCRA Non-Exempt Non-hazardous grossly contaminated soil was excavated and transported to LINK's Lea Station land farm by EPI.

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: Frank Hernandez	**OIL CONSERVATION DIVISION**	
Printed Name: **Frank Hernandez**	Approved by District Supervisor:	
Title: **District Environmental Supv.**	Approval Date:	Expiration Date:
E-Mail **frank.hernandez@eott.com**	Conditions of Approval:	☐ Attached
Date: **1/30/04** Phone: **(505) 631-3095**		

225695