Duke Energy
Field Services

DUKE ENERGY FIELD SERVICES
370 17th Street
Suite 2500
Denver, CO 80202

303 595 3331

December 22, 2004

Mr. Jack Ford, CPG
New Mexico Oil Conservation Division
1220 S. St. Francis Dr.
Santa Fe, NM 87505

RE: Closure Report for the NMG-148C Pipeline Release (CASE #1R334)
Monument, New Mexico
Unit N Section 16, T19S R37E

Dear Mr. Ford:

Duke Energy Field Services, LP (DEFS) is pleased to submit for your review one copy of the Closure Report for the NMG-148C Pipeline Release remediation site located on New Mexico State Land in Lea County, New Mexico (Unit N Section 16, T19S R37E).

Based on the request in the New Mexico Oil Conservation Division (OCD) letter dated October 7, 2004, the closure report is a comprehensive report containing the results to date of all remediation and investigation activities associated with the NMG-148C Pipeline Release. The enclosed comprehensive closure report has actually been broken down into two stand alone reports with one report addressing the hydrocarbon-impacted soils and the remaining report addressing the hydrocarbon-impacted groundwater.

All activates associated with the remediation of NMG-148C pipeline release were completed following the requirements set forth in the OCD approvals. Based on the final analytical results all OCD soil remedial goals have been met, therefore, DEFS would like to request closure of the NMG-148C soil remediation activities. DEFS postpones the request for groundwater closure pending receipt and validation of the results from recently-installed well NMG-MW5.

If you have any questions regarding this report, please call me at 303-605-1718.

Sincerely

Duke Energy Field Services, LP

Stephen Weathers, P.G.
Sr. Environmental Specialist

Enclosure

cc: Larry Johnson – OCD District Office Hobbs
Lynn Ward – DEFS Midland
Environmental Files

AEC AMERICAN ENVIRONMENTAL CONSULTING, LLC

December 22, 2004

1RP-91
10.19.05

Mr. Stephen Weathers
Duke Energy Field Services, LP
370 17th Street, Suite 2500
Denver, CO 80202

Re: Summary of Groundwater Characterization and Monitoring Activities Completed at the NMG-148C Release Site (CASE #1R334) in Lea County New Mexico Unit N, Section 16, Township 19 South Range 37 East,

Dear Mr. Weathers:

This letter summarizes the groundwater characterization and monitoring activity information for the Duke Energy Field Services (DEFS) NMG-148C release location (site). This information was requested by the New Mexico Oil Conservation Division (OCD) in an October 8, 2004 letter. Specifically, OCD required the following items in their letter (note that the paragraph numbers correspond to their original letter):

3. Upon completion of the excavation activities, Duke shall install a ground water monitoring well directly adjacent to and downgradient of the excavated area to demonstrate that ground water in the source area has been remediated to New Mexico Water Quality Control Commission (WQCC) ground water standards.

4. The monitor well shall be installed and developed in accordance with OCD's prior investigation work plan approval.

5. No less than 24 hours after well development, ground water from the newly installed monitor well shall be purged, sampled and analyzed for concentrations of BTEX and polynuclear aromatic hydrocarbons using EPA approved methods and QA/QC procedures.

6. In order to provide a point in time snapshot of overall ground water conditions throughout the site, water quality sampling of the newly installed wells shall be coordinated to coincide with a sampling event of all previously installed monitoring wells.

8. A comprehensive report containing the results of all remediation and investigation activities shall be submitted to the OCD Santa Fe Office by December 31, 2004 with a copy provided to the OCD Hobbs District Office. The report shall contain:

   a. A comprehensive description and summary of the results of all past and present soil and ground water investigation, remediation and monitoring activities.

b. A site map showing the location of pipelines, excavations, spills, monitoring wells, recovery wells, and any other pertinent site features.

c. Summary tables of all past and present soil and ground water quality sampling results including copies of all recent laboratory analytical data sheets and associated QA/QC data.

d. The disposition of all wastes generated.

This letter provides the above information.

SUMMARY OF ACTIVITES COMPLETED

This section summarizes the investigative activities completed. It partially fulfills the requirements of paragraph 8a.

A barren area resulting from a release in the NMG-148C pipeline was first discovered the week of December 9, 2002. Hand excavation revealed stained and odorous soils within the barren area. DEFS commissioned the installation of a monitor well near the center of the release on December 13, 2002. Continuous samples were logged for lithology and screened with a photoionization detector (PID) until saturated materials were encountered at approximately 28 to 29 feet below ground surface (bgs). The sample with the highest PID reading and the sample immediately above the saturated materials were submitted for testing by an analytical laboratory. The results are summarized below:

Summary of Soil Sampling Results From Boring MW-1

Depth Interval (feet)	FIELD PID Reading (PPM)	Benzene (mg/kg)	Toluene (mg/kg)	Ethyl-Benzene (mg/kg)	Xylenes (mg/kg)	GRO (mg/kg)	DRO (mg/kg)
5-7	452	---	---	---	---	---	---
10-12	526	---	---	---	---	---	---
15-17	577	14.3	60.1	10.2	41.2	657	14.9
20-22	534	---	---	---	---	---	---
23-25	355	---	---	---	---	---	---
25-27	252	48.4	84.4	11.4	37.7	1,320	21.8

The well, identified as NMG MW-1 on Figure 1, had a measured product thickness of approximately 1.33 feet. The depth to the top of the product was measured at 30.33 feet below top of casing (btoc) on December 31, 2002.

Well NMG MW-2 was installed on December 16, 2002 at the location shown on Figure 1. This location was selected because it is in the same swale as the release. This well was developed on December 17, 2002, and it was purged and sampled on December 18,

2002. The sample did not contain detectable concentrations of the benzene, ethylbenzene, toluene and xylene (BTEX) constituents or total petroleum hydrocarbons (TPH) in the gasoline or diesel ranges.

Two additional wells were installed on February 5, 2003 at the locations shown on Figure 1. Well NMG MW-3 was installed as a background well northwest of the NMG-148C site. Well NMG MW-4 was installed at a location where pressure testing indicated that a leak in the NMG-148 pipeline (subsequently removed) might be present.

Samples were collected at 5-foot intervals from 5 to 25 feet in both new wells. Each sample was screened for the presence of volatiles using a photoionization detector (PID). The readings for all 10 samples from both wells were all zero (no ionizable constituents present). The samples from NMG MW-3 were not submitted for laboratory analysis because the boring was advanced in an upgradient location per prior approval by the OCD.

The five soil samples from well NMG-MW-4 were submitted to Environmental Labs of Texas for analyses for TPH as gasoline and diesel range organics. None of the soil samples contained detectable concentrations of TPH as gasoline or diesel range organics at a detection limit of 10 mg/kg (ppm).

Well NMG MW-1 was removed by Environmental Plus Incorporated (EPI) in January 2003 during their excavation activities. Their activities included the excavation of materials inside the footprint shown in Figure 1 to a depth of approximately 24 feet. Another DEFS contractor removed the NMG-148 pipeline within the entire study area. These activities are discussed in a separate document.

Wells NMG-MW2, NMG-MW3, NMG-MW4 and the excavation were subsequently sampled on the following dates:

- February 2, 2003
- June 2, 2003
- September 23, 2003
- December 15, 2003
- January 23, 2004
- March 22, 2004
- June 21, 2004
- September 9, 2004
- December 10, 2004

Well NMG-MW5 was installed on December 15, 2004 at the location shown on Figure 1. This location was selected to minimize interference with future reseeding activities. Cuttings samples were screened with a PID at 5 foot intervals, and none of the measurements were above background. There were no visual or olfactory indications of hydrocarbon impacts. The well completion information for all wells excluding

NMG-MW1 is summarized in Table 1.

NMG-MW5 was developed on December 16, 2004 and sampled on December 17, 2004 during the same week as the other site wells to fulfill the OCD requirements in paragraphs 3, 4, 5 and 6. The results from this well were unavailable as of the date of this report. They will be provided upon receipt and validation.

DISPOSITION OF WASTES

This section summarizes the disposition of wastes as required above in OCD paragraph 8d. The soils cuttings were drummed and disposed of at an OCD approved landfarm. All affected groundwater was disposed at the DEFS Linan Ranch facility.

SUMMARY OF DATA COLLECTED

This section summarizes the water level and chemistry data collected during the project to comply with the requirements in OCD paragraphs 8a, 8b and 8c above. The depths to groundwater were measured during each sampling episode. The resulting water-table elevations that were calculated based upon these measurements are tabulated in Table 2.

The December 2004 depths in feet for the four monitoring wells were measured as follows:

- NMG-MW2: 25.16 feet
- NMG-MW3: 26.10 feet
- NMG-MW4: 27.30 feet
- NMG-MW5: 27.07 feet

The elevation of well MW-5 was not established; however the information indicates that the depth to water in it is similar to that measured in the other three wells.

Hydrographs for wells NMG-MW2, NMG-MW3 and NMG-MW4 are shown on Figure 2. The hydrographs show that the water table at each location responds to seasonal climatic changes in a similar fashion. Figure 2 shows that the rains that begin in March 2004 and continued periodically through the rest of the year resulted in substantial increases in the water table elevations beneath the site.

The organic data for the wells is summarized in Table 3. The laboratory reports for the September 2004 and the December 2004 sampling efforts are attached to this report because they have not been previously provided to the OCD. Examination of Table 3 shows that the BTEX constituents have not been detected in any of the nine sampling episodes with the exception of the December 2003 episode where either laboratory of field contamination produced anomalous results. TPH as gasoline and diesel range

organics were also not detected in wells MW-2, MW-3 and MW-4 during each well's initial sampling episode.

The inorganic data collected from the NMG wells is summarized in Table 4. There were no anomalous concentrations noted. The was a substantial difference between the total (unfiltered) and dissolved (filtered) metals barium, iron and manganese. This result was expected given the relatively turbid nature of the samples when they were acidified to preserve them.

The BTEX concentrations measured in the excavation are summarized in Table 5 and graphed over time in Figure 4. Examination Figure 4 indicates that the concentrations rapidly attenuated to a concentration that was near or below the 0.010 mg/l groundwater standard from the New Mexico Water Quality Control Commission. It is also important to note that no visible sheen was noted on the water within the excavation since a wind-driven aeration unit was installed in August 2003.

CONCLUSIONS

The data collected to date indicate that the remediation activities completed by EPI successfully removed the vast majority of the hydrocarbon mass from the release area. The wind-driven aeration unit subsequently enhanced removal of the dissolved-phase hydrocarbons from the excavation until only trace concentrations remain. Hydrocarbons have never been detected in the down-gradient wells, establishing the very-limited extent of any dissolved-phase hydrocarbon migration.

I conclude that no further actions related to groundwater monitoring are necessary at this site. I recommend that the wells associated with this site be plugged and abandoned in a appropriate fashions.

Do not hesitate to contact me if you have any questions or comments on this report.

Respectfully Submitted,
AMERICAN ENVIRONMENTAL CONSULTING, LLC

Michael H. Stewart, P.E., C.P.G.
Principal Engineer

Attachments

TABLES

Table 1 – NMG-148C Well Completion Information

Well	Date Installed	Total Depth	Screened Interval	Sand Interval	Bentonite Interval
NMG MW-2	12/16/02	35	20-35	18-35	3-18
NMG MW-3	2/5/03	37	17-37	15-37	3-15
NMG MW-4	2/5/03	37	17-37	15-37	3-15
NMG MW-5	12/15/04	35	20-35	11-20	3-11

All units are feet
MW-1 destroyed during remediation in Jan/Feb 2003

Table 2 – Measured Groundwater Elevations for The NMG-148C Wells

Well	2/7/03	6/2/03	9/23/03	12/15/03	3/22/04	6/21/04	9/19/2004	12/10/2004
NMG MW-2	3,617.05	3,617.00	3,616.93	3,616.89	3,616.84	3,618.06	3,617.25	3,621.74
NMG MW-3	3,620.02	3,619.99	3,619.94	3,619.94	3,619.89	3,620.43	3,620.09	3,623.70
NMG MW-4	3,615.77	3,615.71	3,615.64	3,615.57	3,615.52	3,616.34	3,615.86	3,618.78

All units are feet

Table 3 – Summary of Organic Data from The NMG-148C Study Area Wells

Well	Sampling Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH GRO	TPH DRO
NMG MW-2	12/17/02	<0.001	<0.001	<0.001	<0.001	<1.0	<1.0
NMG MW-2	6/2/03	<0.001	<0.001	<0.001	<0.001		
NMG MW-2	9/23/03	<0.001	<0.001	<0.001	<0.001		
NMG MW-2	12/15/03	0.034	<0.001	<0.001	<0.001		
NMG MW-2 (dup)	12/15/03	<0.001	<0.001	<0.001	<0.001		
NMG MW-2	1/23/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-2	3/22/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-2 (dup)	3/22/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-2	6/21/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-2 (dup)	6/21/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-2	9/19/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-2 (dup)	9/19/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-2	12/10/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-2 (dup)	12/10/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-3	2/7/03	<0.001	<0.001	<0.001	<0.001	<3.0	<3.0
NMG MW-3	6/2/03	<0.001	<0.001	<0.001	<0.001		
NMG MW-3	9/23/03	<0.001	<0.001	<0.001	<0.001		
NMG MW-3	12/15/03	0.002	<0.001	<0.001	<0.001		
NMG MW-3	1/23/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-3	3/22/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-3	6/21/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-3	9/19/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-3	12/10/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-4	2/7/03	<0.001	<0.001	<0.001	<0.001	<3.0	<3.0
NMG MW-4	6/2/03	<0.001	<0.001	<0.001	0.001		
NMG MW-4	9/23/03	<0.001	<0.001	<0.001	<0.001		
NMG MW-4	12/15/03	0.038	<0.001	<0.001	<0.001		
NMG MW-4	1/23/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-4	3/22/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-4	6/21/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-4	9/19/04	<0.001	<0.001	<0.001	<0.001		
NMG MW-4	12/10/04	<0.001	<0.001	<0.001	<0.001		

Notes: 1) All units mg/l
2) Blank cell indicates sample not analyzed for that parameter

Table 4 – Summary of Inorganic Data from The NMG-148C Study Area Wells

Well	Calcium	Magnesium	Potassium	Sodium	Bicarbonate
NMG MW-2	138	21.1	6.78	68.5	195
NMG MW-3	49.8	7.02	3.64	39.4	141
NMG MW-4	57.5	8.4	4.36	52.5	152

Well	Chloride	Sulfate	Total Dissolved Solids	Barium (total)	Barium (dissolved)
NMG MW-2	62	93.8		7.45	0.496
NMG MW-3	31.9	55.1	64	726	0.591
NMG MW-4	40.8	90.7	295	1.18	0.079

Well	Iron (total)	Iron (dissolved)	Manganese (total)	Manganese (dissolved)	
NMG MW-2	88.8	0.148	0.787	0.018	
NMG MW-3	12.6	0.015	0.214	0.009	
NMG MW-4	26.5	0.036	0.452	0.046	

Notes: 1) all units are mg/l
2) carbonate and hydroxyl alkalinity were not detected at 0.10 mg/l in the above samples

Table 5 – Summary of Data from The NMG-148C Excavation

Well	Sampling Date	Benzene	Toluene	Ethylbenzene	Total Xylenes
Excavation	2/14/03	4.25/4.46	3.15/3.01	1.63/1.54	0.463/0.436
Excavation (north)	4/17/03	0.055	0.043	<0.002	0.003
Excavation (south)	4/17/03	0.048	0.038	<0.002	0.003
Excavation (sw corner)	6/2/03	0.154	0.260	0.039	1.25
Excavation (sw corner)	9/23/03	0.013	0.014	0.001	0.003
Excavation (sw corner)	10/31/03	0.025	0.026	0.002	0.007
Excavation (sw corner)	12/15/03	0.041	0.032	0.002	0.008
Excavation (sw corner)	1/13/04	0.0395	0.0393	0.00146	0.00809
Excavation (sw corner)	1/23/04	0.0531	0.0487	0.00184	0.00854
Excavation (sw corner)	3/22/04	0.011	0.00875	<0.001	0.0015
Excavation (ne corner)	1/13/04	0.0347	0.0361	0.00140	0.00766
Excavation (ne corner)	1/23/04	0.0301	0.0291	0.00121	0.00627
Excavation (ne corner)	3/22/04	0.00781	0.00640	<0.001	0.00111
Excavation (se corner)	6/21/04	0.000457	<0.001	<0.001	0.000659
Excavation (se corner)	9/19/04	0.0175	0.0384	0.00112	0.0043

All units mg/l

FIGURES

Figure 1 – NMG-148C Release Site Layout and Well Locations

NMG-148C RELEASE SITE

Duke Energy Field Services

DRAWN BY: MHS

DATE: 10/03

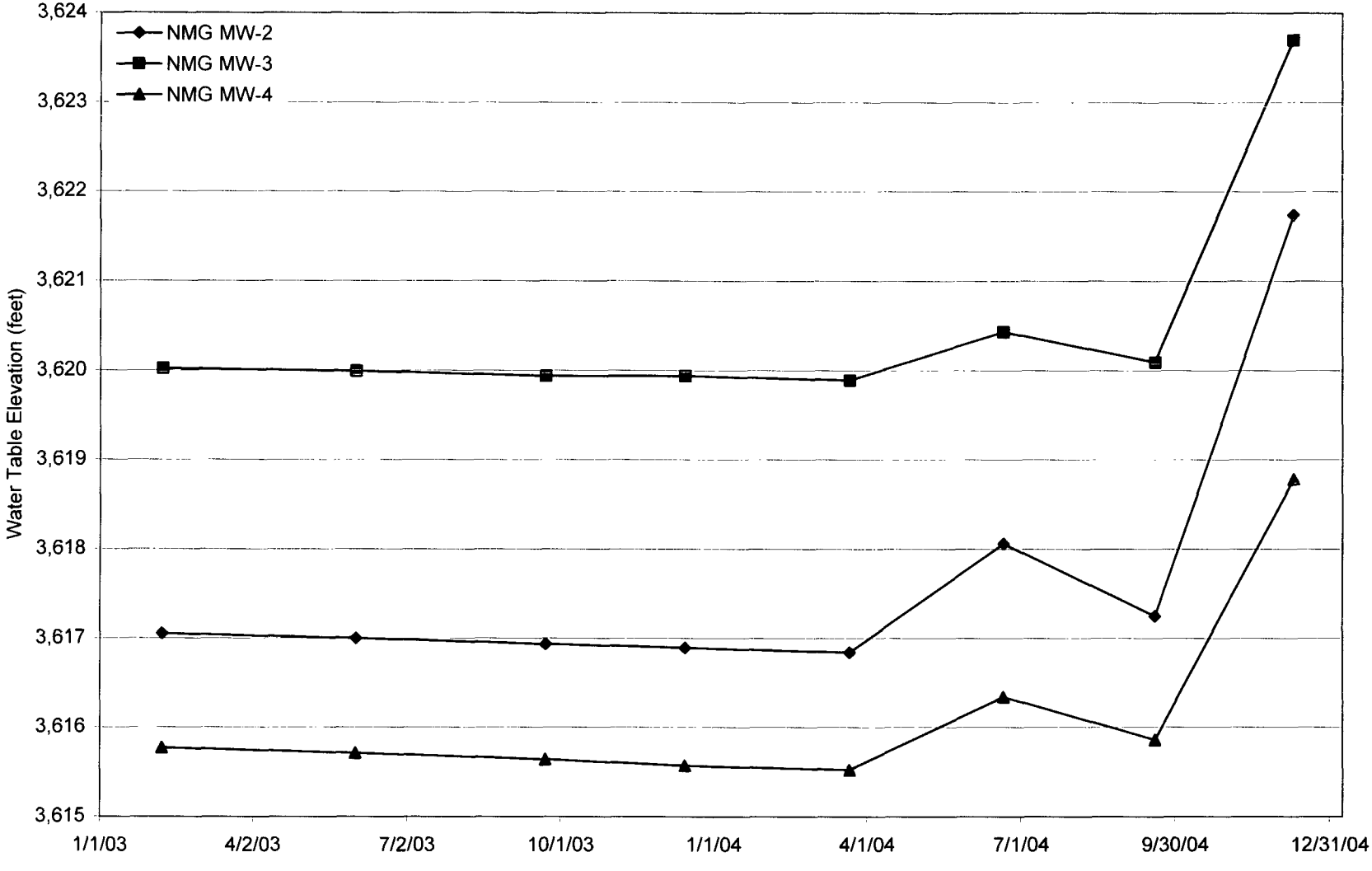


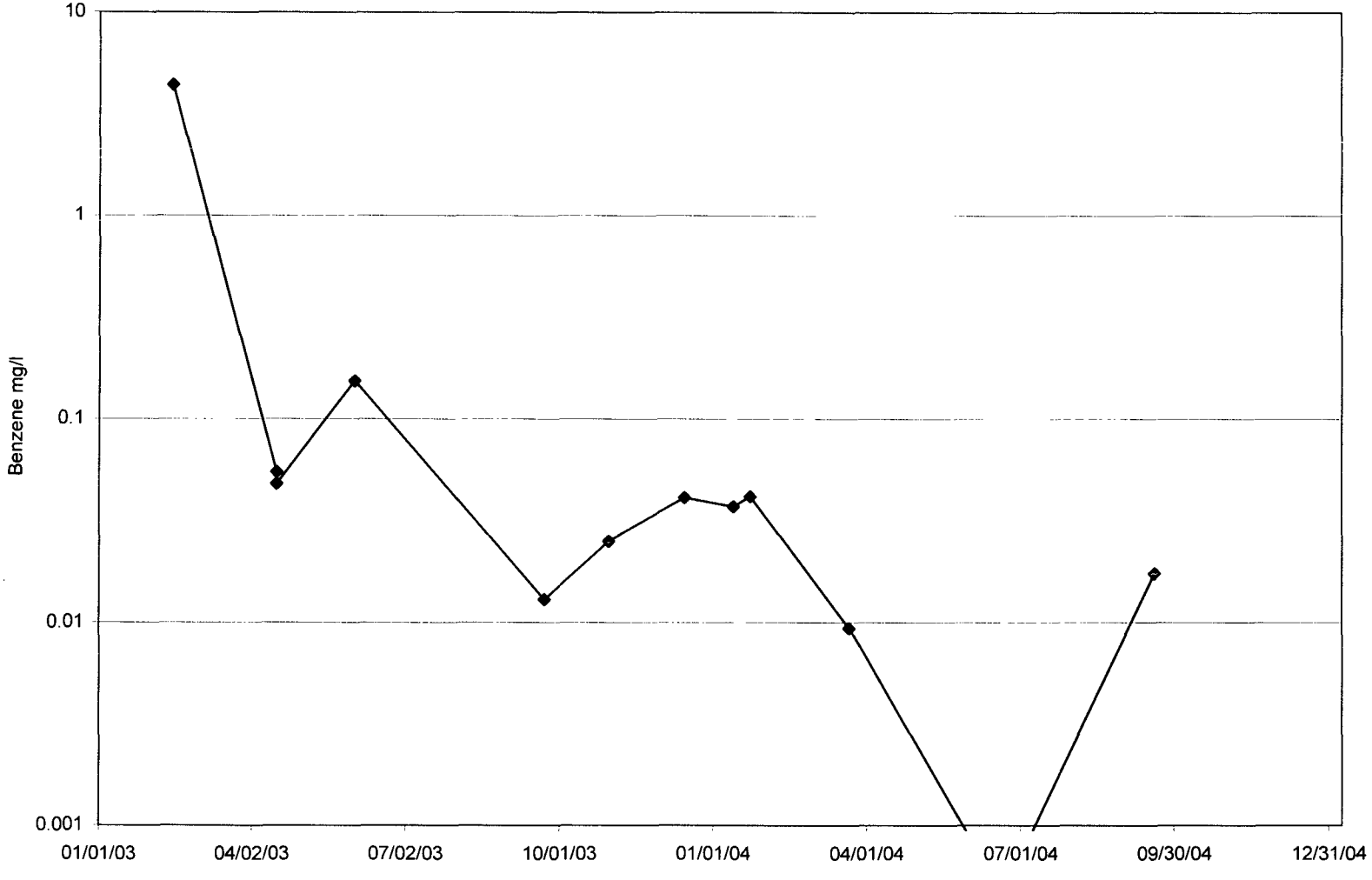
Figure 2 – NMG-148C Monitoring Well Hydrographs

NMG-148C RELEASE SITE

Duke Energy Field Services

DRAWN BY: MHS

DATE: 10/03



Notes: 1) Sample from June 2004 was <0.001
2) Samples taken from multiple locations within the excavation were averaged

Figure 3 – Benzene Concentrations from the Excavation

NMG-148C RELEASE SITE

Duke Energy Field Services

DRAWN BY: MHS

DATE: 10/03

LABORATORY REPORTS FOR

SEPTEMBER 2004 AND DECEMBER 2004

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Michael Stewart

REMEDIACON

P.O. Box 302

Evergreen, CO 80437

Project: DEFS-NMG-148C (4 in. Line)

Project Number: None Given

Location: Lea County, New Mexico

Lab Order Number: 4I22007

Report Date: 09/28/04

REMEDIACON	Project: DEFS-NMG-148C (4 in. Line)	Fax: 720-528-8132
P.O. Box 302	Project Number: None Given	**Reported:**
Evergreen CO, 80437	Project Manager: Michael Stewart	09/28/04 09:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
NMG MW-3	4I22007-01	Water	09/20/04 14:00	09/22/04 11:30
NMG Excavation	4I22007-02	Water	09/20/04 14:15	09/22/04 11:30
NMG MW-2	4I22007-03	Water	09/20/04 14:45	09/22/04 11:30
NMG MW-4	4I22007-04	Water	09/20/04 14:45	09/22/04 11:30
NMG Trip Blank	4I22007-05	Water	09/20/04 00:00	09/22/04 11:30

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REMEDIACON	Project: DEFS-NMG-148C (4 in. Line)	Fax: 720-528-8132
P.O. Box 302	Project Number: None Given	**Reported:**
Evergreen CO, 80437	Project Manager: Michael Stewart	09/28/04 09:43

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NMG MW-3 (4I22007-01) Water									
Benzene	ND	0.00100	mg/L	1	EI42708	09/24/04	09/24/04	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*118 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*85.0 %*	*80-120*		"	"	"	"	
NMG Excavation (4I22007-02) Water									
Benzene	**0.0175**	0.00100	mg/L	1	EI42708	09/24/04	09/24/04	EPA 8021B	
Toluene	**0.0384**	0.00100	"	"	"	"	"	"	
Ethylbenzene	**0.00112**	0.00100	"	"	"	"	"	"	
Xylene (p/m)	**0.00313**	0.00100	"	"	"	"	"	"	
Xylene (o)	**0.00117**	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*130 %*	*80-120*		"	"	"	"	*S-04*
Surrogate: 4-Bromofluorobenzene		*89.0 %*	*80-120*		"	"	"	"	
NMG MW-2 (4I22007-03) Water									
Benzene	ND	0.00100	mg/L	1	EI42708	09/24/04	09/24/04	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*120 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*91.0 %*	*80-120*		"	"	"	"	
NMG MW-4 (4I22007-04) Water									
Benzene	ND	0.00100	mg/L	1	EI42708	09/24/04	09/24/04	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*120 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*82.0 %*	*80-120*		"	"	"	"	

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Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
NMG Trip Blank (4I22007-05) Water									
Benzene	ND	0.00100	mg/L	1	EI42708	09/24/04	09/24/04	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*119 %*		*80-120*		"	"	"	
Surrogate: 4-Bromofluorobenzene		*87.5 %*		*80-120*		"	"	"	

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EI42708 - EPA 5030C (GC)										
Blank (EI42708-BLK1)				Prepared & Analyzed: 09/24/04						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*23.5*		*ug/l*	*20.0*		*118*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*17.1*		*"*	*20.0*		*85.5*	*80-120*			
LCS (EI42708-BS1)				Prepared & Analyzed: 09/24/04						
Benzene	80.3		ug/l	100		80.3	80-120			
Toluene	88.5		"	100		88.5	80-120			
Ethylbenzene	81.6		"	100		81.6	80-120			
Xylene (p/m)	176		"	200		88.0	80-120			
Xylene (o)	82.2		"	100		82.2	80-120			
Surrogate: a,a,a-Trifluorotoluene	*21.9*		*"*	*20.0*		*110*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*16.5*		*"*	*20.0*		*82.5*	*80-120*			
Calibration Check (EI42708-CCV1)				Prepared & Analyzed: 09/24/04						
Benzene	97.3		ug/l	100		97.3	80-120			
Toluene	94.1		"	100		94.1	80-120			
Ethylbenzene	94.4		"	100		94.4	80-120			
Xylene (p/m)	190		"	200		95.0	80-120			
Xylene (o)	90.0		"	100		90.0	80-120			
Surrogate: a,a,a-Trifluorotoluene	*21.3*		*"*	*20.0*		*106*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*19.7*		*"*	*20.0*		*98.5*	*80-120*			
Duplicate (EI42708-DUP1)		**Source: 4I22007-02**		Prepared & Analyzed: 09/24/04						
Benzene	0.0210	0.00100	mg/L		0.0175			18.2	20	
Toluene	0.0407	0.00100	"		0.0384			5.82	20	
Ethylbenzene	0.00128	0.00100	"		0.00112			13.3	20	
Xylene (p/m)	0.00322	0.00100	"		0.00313			2.83	20	
Xylene (o)	0.00125	0.00100	"		0.00117			6.61	20	
Surrogate: a,a,a-Trifluorotoluene	*22.9*		*ug/l*	*20.0*		*114*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*16.2*		*"*	*20.0*		*81.0*	*80-120*			

Notes and Definitions

S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: _____ Date: _____

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Biezugbe, Lab Tech.

Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In

Client: Remediacon

Date/Time: 12-15-04 @ 1000

Order #: 4L15008

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	(Yes)	No	0.5 C
Shipping container/cooler in good condition?	(Yes)	No	
Custody Seals intact on shipping container/cooler?	Yes	No	(Not present)
Custody Seals intact on sample bottles?	(Yes)	No	Not present
Chain of custody present?	(Yes)	No	
Sample Instructions complete on Chain of Custody?	(Yes)	No	
Chain of Custody signed when relinquished and received?	(Yes)	No	
Chain of custody agrees with sample label(s)	(Yes)	No	
Container labels legible and intact?	(Yes)	No	
Sample Matrix and properties same as on chain of custody?	(Yes)	No	
Samples in proper container/bottle?	(Yes)	No	
Samples properly preserved?	(Yes)	No	
Sample bottles intact?	(Yes)	No	
Preservations documented on Chain of Custody?	(Yes)	No	
Containers documented on Chain of Custody?	(Yes)	No	
Sufficient sample amount for indicated test?	(Yes)	No	
All samples received within sufficient hold time?	(Yes)	No	
VOC samples have zero headspace?	(Yes)	No	Not Applicable

Other observations:

_____

_____

_____

Variance Documentation:

Contact Person: - _____ Date/Time: _____ Contacted by: _____

Regarding:

_____

_____

_____

Corrective Action Taken:

_____

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_____

ENVIRONMENTAL LAB OF

12600 West I-20 East - Odessa, Texas 79765

Analytical Report

Prepared for:

Michael Stewart

REMEDIACON

P.O. Box 302

Evergreen, CO 80437

Project: DEFS-NMG-148C (4 in. Line)

Project Number: None Given

Location: Lea County, NM

Lab Order Number: 4L15008

Report Date: 12/20/04

REMEDIACON	Project: DEFS-NMG-148C (4 in. Line)	Fax: 720-528-8132
P.O. Box 302	Project Number: None Given	**Reported:**
Evergreen CO, 80437	Project Manager: Michael Stewart	12/20/04 18:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-2	4L15008-01	Water	12/13/04 14:05	12/15/04 10:00
MW-3	4L15008-02	Water	12/13/04 13:40	12/15/04 10:00
MW-4	4L15008-03	Water	12/13/04 14:20	12/15/04 10:00
MW-103	4L15008-04	Water	12/13/04 14:40	12/15/04 10:00
Trip Blank	4L15008-05	Water	12/13/04 00:00	12/15/04 10:00

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

REMEDIACON	Project: DEFS-NMG-148C (4 in. Line)	Fax: 720-528-8132
P.O. Box 302	Project Number: None Given	**Reported:**
Evergreen CO, 80437	Project Manager: Michael Stewart	12/20/04 18:03

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (4L15008-01) Water									
Benzene	ND	0.00100	mg/L	1	EL41705	12/16/04	12/16/04	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*88.1 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*93.6 %*	*80-120*		"	"	"	"	
MW-3 (4L15008-02) Water									
Benzene	ND	0.00100	mg/L	1	EL41705	12/16/04	12/16/04	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*85.6 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*99.8 %*	*80-120*		"	"	"	"	
MW-4 (4L15008-03) Water									
Benzene	ND	0.00100	mg/L	1	EL41705	12/16/04	12/16/04	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*85.9 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*98.0 %*	*80-120*		"	"	"	"	
MW-103 (4L15008-04) Water									
Benzene	ND	0.00100	mg/L	1	EL41705	12/16/04	12/16/04	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*91.3 %*	*80-120*		"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*100 %*	*80-120*		"	"	"	"	

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REMEDIACON	Project: DEFS-NMG-148C (4 in. Line)	Fax: 720-528-8132
P.O. Box 302	Project Number: None Given	**Reported:**
Evergreen CO, 80437	Project Manager: Michael Stewart	12/20/04 18:03

Organics by GC

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Trip Blank (4L15008-05) Water									
Benzene	ND	0.00100	mg/L	1	EL41705	12/16/04	12/16/04	EPA 8021B	
Toluene	ND	0.00100	"	"	"	"	"	"	
Ethylbenzene	ND	0.00100	"	"	"	"	"	"	
Xylene (p/m)	ND	0.00100	"	"	"	"	"	"	
Xylene (o)	ND	0.00100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		*90.1 %*		*80-120*	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		*92.9 %*		*80-120*	"	"	"	"	

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REMEDIACON	Project: DEFS-NMG-148C (4 in. Line)	Fax: 720-528-8132
P.O. Box 302	Project Number: None Given	**Reported:**
Evergreen CO, 80437	Project Manager: Michael Stewart	12/20/04 18:03

Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL41705 - EPA 5030C (GC)										
Blank (EL41705-BLK1)				Prepared & Analyzed: 12/16/04						
Benzene	ND	0.00100	mg/L							
Toluene	ND	0.00100	"							
Ethylbenzene	ND	0.00100	"							
Xylene (p/m)	ND	0.00100	"							
Xylene (o)	ND	0.00100	"							
Surrogate: a,a,a-Trifluorotoluene	*94.4*		*ug/l*	*100*		*94.4*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*96.8*		*"*	*100*		*96.8*	*80-120*			
LCS (EL41705-BS1)				Prepared & Analyzed: 12/16/04						
Benzene	99.0		ug/l	100		99.0	80-120			
Toluene	99.5		"	100		99.5	80-120			
Ethylbenzene	99.6		"	100		99.6	80-120			
Xylene (p/m)	219		"	200		110	80-120			
Xylene (o)	107		"	100		107	80-120			
Surrogate: a,a,a-Trifluorotoluene	*108*		*"*	*100*		*108*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*116*		*"*	*100*		*116*	*80-120*			
Calibration Check (EL41705-CCV1)				Prepared & Analyzed: 12/16/04						
Benzene	93.3		ug/l	100		93.3	80-120			
Toluene	94.9		"	100		94.9	80-120			
Ethylbenzene	93.1		"	100		93.1	80-120			
Xylene (p/m)	199		"	200		99.5	80-120			
Xylene (o)	96.4		"	100		96.4	80-120			
Surrogate: a,a,a-Trifluorotoluene	*103*		*"*	*100*		*103*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*116*		*"*	*100*		*116*	*80-120*			
Matrix Spike (EL41705-MS1)	**Source: 4L12004-06**			Prepared & Analyzed: 12/16/04						
Benzene	101		ug/l	100	ND	101	80-120			
Toluene	101		"	100	ND	101	80-120			
Ethylbenzene	101		"	100	ND	101	80-120			
Xylene (p/m)	208		"	200	ND	104	80-120			
Xylene (o)	100		"	100	ND	100	80-120			
Surrogate: a,a,a-Trifluorotoluene	*113*		*"*	*100*		*113*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*113*		*"*	*100*		*113*	*80-120*			

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Organics by GC - Quality Control

Environmental Lab of Texas

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch EL41705 - EPA 5030C (GC)										
Matrix Spike Dup (EL41705-MSD1)	**Source: 4L12004-06**			Prepared & Analyzed: 12/16/04						
Benzene	94.2		ug/l	100	ND	94.2	80-120	6.97	20	
Toluene	96.0		"	100	ND	96.0	80-120	5.08	20	
Ethylbenzene	94.8		"	100	ND	94.8	80-120	6.33	20	
Xylene (p/m)	200		"	200	ND	100	80-120	3.92	20	
Xylene (o)	97.3		"	100	ND	97.3	80-120	2.74	20	
Surrogate: a,a,a-Trifluorotoluene	*102*		"	*100*		*102*	*80-120*			
Surrogate: 4-Bromofluorobenzene	*117*		"	*100*		*117*	*80-120*			

REMEDIACON	Project: DEFS-NMG-148C (4 in. Line)	Fax: 720-528-8132
P.O. Box 302	Project Number: None Given	**Reported:**
Evergreen CO, 80437	Project Manager: Michael Stewart	12/20/04 18:03

Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
LCS	Laboratory Control Spike
MS	Matrix Spike
Dup	Duplicate

Report Approved By: Raland K. Tuttle Date: 12/20/2004

Raland K. Tuttle, Lab Manager
Celey D. Keene, Lab Director, Org. Tech Director
Peggy Allen, QA Officer
Jeanne Mc Murrey, Inorg. Tech Director
James L. Hawkins, Chemist/Geologist
Sandra Sanchez, Lab Tech.

12600 West I-20 East - Odessa, Texas 79705 - (432) 563-1800 - Fax (432) 563-1713

Environmental Lab of Texas

12600 West I-20 East
Odessa, Texas 79765

Phone: 432-563-1800
Fax: 432-563-1713

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

Project Manager: Michael H. Stewart
Company Name Remediacon, Inc.
Company Address: P. O. Box 302
City/State/Zip: Evergreen, Colorado 80437
Telephone No: (303) 674-4370
Fax No: (720) 528-8132
Sampler Signature: [signature]

Project Name: DEFS - NMG-148C (4" Line)
Project #:
Project Loc: Lea County, New Mexico
PO #:

4L15008

Analyze For: BTEX 8021B/5030 (TOTAL: X)

LAB # (lab use only)	FIELD CODE	Date Sampled	Time Sampled	No. of Containers (40ml glass)	Preservative: Ice	HNO$_3$	HCl	NaOH	H_2SO_4	None	Other (Specify)	Matrix: Water	Sludge	Soil	Other (specify):	TPH: 418.1 8015M 1005 1006	Cations (Ca, Mg, Na, K)	Anions (Cl, SO4, CO3, HCO3)	SAR / ESP / CEC	Metals: As Ag Ba Cd Cr Pb Hg Se	Volatiles	Semivolatiles	BTEX 8021B/5030 or BTEX 8260	RCI	N.O.R.M.					RUSH TAT (Pre-Schedule)	Standard TAT
-01	MW-2	12/13/04	1405	2	✓		✓					✓											✓								✓
-02	MW-3	12/13/04	1340	2	✓		✓					✓											✓								✓
-03	MW-4	12/13/04	1420	2	✓		✓					✓											✓								✓
-04	MW-103	12/13/04	1440	2	✓		✓					✓											✓								✓
-05	Trip Blank	—	—	2	✓		✓					✓											✓								✓

Special Instructions: Send fax copy of lab report to Michael Stewart, sent original lab report and invoce to Stephen Weathers, Duke Energy Field Services, 303 17th Street, Suite 2500, Denver, CO 80202

Sample Containers Intact? (Y) N
Temperature Upon Receipt:
Laboratory Comments: Rec 0.5 C

Relinquished by:	Date	Time	Received by:	Date	Time
[signature]	12/15/04	1000			
Relinquished by:	Date	Time	Received by ELOT: [signature]	12-15-04	1000

Environmental Lab of Texas
Variance / Corrective Action Report – Sample Log-In

Client: Remediacon

Date/Time: 12-15-04 @ 1000

Order #: 4L15008

Initials: JMM

Sample Receipt Checklist

Temperature of container/cooler?	Yes	No	0.5 C
Shipping container/cooler in good condition?	Yes	No	
Custody Seals intact on shipping container/cooler?	Yes	No	Not present
Custody Seals intact on sample bottles?	Yes	No	Not present
Chain of custody present?	Yes	No	
Sample Instructions complete on Chain of Custody?	Yes	No	
Chain of Custody signed when relinquished and received?	Yes	No	
Chain of custody agrees with sample label(s)	Yes	No	
Container labels legible and intact?	Yes	No	
Sample Matrix and properties same as on chain of custody?	Yes	No	
Samples in proper container/bottle?	Yes	No	
Samples properly preserved?	Yes	No	
Sample bottles intact?	Yes	No	
Preservations documented on Chain of Custody?	Yes	No	
Containers documented on Chain of Custody?	Yes	No	
Sufficient sample amount for indicated test?	Yes	No	
All samples received within sufficient hold time?	Yes	No	
VOC samples have zero headspace?	Yes	No	Not Applicable

Other observations:

_____

_____

_____

Variance Documentation:

Contact Person: _____ Date/Time: _____ Contacted by: _____

Regarding:

_____

_____

_____

Corrective Action Taken:

_____

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Duke Energy Field Services

NMG-148C Release Site

Soil Remediation Closure Documentation

UL-N-SE¼ of the SW¼, Section 16, T19S, R37E
Latitude 32°39'21.32"N - Longitude 103°15'32.90"W
~2.25 miles north northeast of Monument
Lea County, New Mexico

December 2004

PREPARED BY

Environmental Plus, Inc.
2100 Avenue O
P.O. Box 1558
Eunice, New Mexico

Environmental Assessment and Remediation Report

Duke Energy Field Services NMG-148 C-Line

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

This report was prepared by:		
		
Patrick W. McCasland		Date
This report was reviewed by:		
Iain Olness, PG		Date

Table of Contents

1.0 SUMMARY

In December 2002, Duke Energy Field Services (Duke) retained Environmental Plus, Inc. (EPI) of Eunice, New Mexico to delineate the extent of pipeline fluid contamination and remediate the historical NMG-148 C-Line release site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993). The land is owned by the State of New Mexico. The initial form C-141 submitted to the NMOCD by Duke reported an assumed natural gas pipeline fluid release of >25 barrels (bbls) with 0 bbls recovered. The NMG-148 C-Line is part of the Duke gas gathering system and as such is exempt from the EPA Resource Conservation and Recovery Act 40 CFR (RCRA) Subtitle C hazardous waste characterization requirements. The ground water depth at the site is ~28 feet below ground surface ('bgs) and is based on water level measurements of a temporary monitor well (MW) installed adjacent to what was believed to be the leak origin. The NMOCD site ranking thresholds for the "Constituents of Concern" (CoCs) in soil are as follows:

Soil from the surface to 28'bgs:

- 100 mg/Kg = Total Petroleum Hydrocarbon EPA method 8015m (TPH^{8015m})
- 10 mg/Kg = Benzene
- 50 mg/Kg = BTEX (mass sum of benzene, toluene, ethylbenzene, and m, o, & p xylenes)

The historical release occurred in the 4" steel NMG-148 C-Line apparently due to corrosion as was evidenced by the line repair clamp. Initially, delineation occurred during excavation of a barren area in the right of way that exposed a previously installed line repair clamp. Subsequent excavation to 10'bgs indicated hydrocarbon contamination. Given the shallow ground water in the area, a temporary monitor/observation well was installed 10 feet west of the clamp, sampling the soil discretely at 5 foot intervals. The bore was found to be contaminated with volatile hydrocarbon, characteristic of raw natural gas pipeline condensate, down to the ground water interface with a measurable thickness of liquid phase hydrocarbon observed atop the ground water. The NMOCD was immediately notified of the impact. The ground water issues are being addressed separately. To delineate the horizontal extent of contamination, sample trenches were excavated to 3'bgs and sampled from the leak origin clamp to various points laterally along the cardinal radians. Volatile Organic Constituent (VOC) headspace surveys of the samples indicated an affected area at 3'bgs of 2,081 ft^2 and extended 40' north, 30' east, 18' west, and 20' south. The trenches were deepened to 16'bgs sampled and surveyed. At 16'bgs an affected area of 9,082 ft^2 was identified to be affected, i.e., 76' north, 50' east, 60' west, and 30' south. A site delineation map is included in Attachment I. Selected samples analyzed for TPH^{8015m} and BTEX by Cardinal Laboratories in Hobbs, New Mexico were below instrument detection limits and attest to the volatility of the source term. It also suggests that the VOC headspace readings collected well away from the leak origin clamp during the subsurface delineation were actually due to vapor phase hydrocarbon in the pore space that is dissipating from the liquid phase atop the ground water rather than having been inundated by the condensate liquid similar to the soil beneath the leak origin where the contaminants were adsorbed to the soil. The vapor pressure of the condensate has not been determined. Analyses of hydrocarbon contaminated soil samples from the leak origin did not indicate that sulfate or chloride will be issues at this site.

In February 2003, Environmental Plus, Inc. (EPI), with direction and supervision from Duke Energy Field Services, implemented the Duke NMG-148 C-Line Site Characterization and Soil Remediation Proposal, January 2003. The site characterization information and soil remediation strategies presented in the document should be referenced as a part of this closure proposal. The January 2003 remediation proposal

was approved on February 4, 2003 by Mr. William C. Olson, New Mexico Oil Conservation Division (NMOCD) Environmental Bureau Hydrologist with the following stipulations;

1. Duke shall take final soil confirmation samples from the bottom and sidewalls of the excavated area for laboratory analysis upon completion of the excavation activities. The samples will be obtained and analyzed for concentrations of benzene, toluene, ethylbenzene and xylene (BTEX) and total petroleum hydrocarbons (TPH) using EPA approved methods and quality assurance/quality control (QA/QC) procedures.

2. Duke shall take final soil confirmation samples for laboratory analysis from every 200 yards of landfarmed soils returned to the excavated area to verify that the soils meet the proposed remediation levels. The samples will be obtained and analyzed for concentrations of BTEX and TPH using EPA approved methods and QA/QC procedures. A field soil vapor headspace measurement of less than 100 ppm may be substituted for a laboratory analysis of BTEX for the purposes of compliance with the proposed BTEX soil remediation limits.

3. Duke shall submit a soil remediation report upon completion of the remedial activities. The report shall be submitted to the OCD Santa Fe Office with a copy provided to the OCD Hobbs District Office and shall include:

    a. A description of the investigation and remediation activities which occurred including conclusions and recommendations.

    b. Maps showing the locations of all pipelines, excavated areas, landfarmed areas, sample locations and release areas as well as any other pertinent features.

    c. Summary tables of all soil sampling results and copies of all laboratory analytical data sheets and associated QA/QC data.

    d. Photographs of the various phases of the remedial activities.

    e. The disposition of all wastes generated.

    f. Any other relevant information generated during implementation of the work plans.

4. Duke shall notify the OCD at least 48 hours in advance of all scheduled activities such that the OCD has the opportunity to witness the events and split samples.

From February to March 2003, soil contaminated above the NMOCD CoC remedial goals was excavated and shredded to aerate and separate the landfarmable soil from the rock. Volatile Organic Constituent (VOC) headspace survey monitoring was conducted with a calibrated Photoionization Detector (PID) and confirmed with laboratory analyses. The soil and rock were stockpiled on site. The more contaminated soil was spread into a 6" thick lift east of the excavation, tilled weekly, and monitored. Duke received "Right of Entry" permit #707 from the New Mexico State Land Commissioner and allowed for landspreading of contaminated soil for remediation purposes.

In a letter dated October 7, 2004, the NMOCD approved the Duke NMG-148C Line Soil Remediation Status and Closure Proposal, January 2004, with similar soil stipulations and is included in Attachment VI. In October 2004, the closure proposal was implemented consistent with the NMOCD stipulations. The

field surveys and laboratory results for all samples from the excavation sidewalls and every 200 yd^3 batch of backfill material surveyed in the field and analyzed in the laboratory were less than the CoC remedial goals and were deemed acceptable. This report documents the implementation of the approved plans consistent with the NMOCD stipulations and provides specific soil analytical information supporting closure of the soil issues at this site justifying a "no further action required" declaration by the NMOCD.

2.0 SOIL REMEDIATION

Beginning in February 2003, approximately 18,156 cubic yards (yd^3) of soil was excavated, shredded, i.e., rock and soil separated, and aerated. Because the excavation exceeded 20'bgs, a site specific excavation safety plan was developed and approved by a Professional Engineer registered in New Mexico. The volatility of the hydrocarbon source term, breezy days, and the warm daytime temperatures during the project contributed to the attenuation of the soil to acceptable levels. With approval from the NMOCD and the New Mexico State Land Office, soil was landspread in an area east of excavation with the segregated soil and rock stockpiled to the north. A 4-wire barbed wire fence with lockable entrance gate secured(s) the site. Photographs are attached.

With approval from the NMOCD, a landspread area, i.e., 350' x 100', for the more contaminated soil, was established east of the excavation inside of the secured area boundary fence. Approximately 1,500 yd^3 of soil was spread and disked at 2 week intervals until attenuated to below the NMOCD remedial goals.

The remaining shredded soil and rock were stored in segregated stockpiles north of the excavation. Testing before and after the shredding process indicated the soil had been adequately remediated and did not require landspreading.

3.0 CLOSURE PLAN IMPLEMENTATION DOCUMENTATION

Consistent with the conditions set forth by the NMOCD in February 2003, Duke obtained laboratory samples of the sides of the excavation to confirm achievement of the NMOCD remedial goals for the CoCs, i.e., TPH^{8015m}, benzene, and BTEX. Groundwater precluded a bottom sample. All sampling was conducted in accordance with the EPI Standard Operating Procedures and Quality Assurance/Quality Control Plan. The backfilling process monitored soil Volatile Organic Constituents Headspace (VOCH) of every 200 yd^3 of soil as it was being emplaced. The VOCH survey data is being submitted "in lieu" of laboratory benzene and BTEX analyses. Prior to surveying the excavation sidewall and backfill samples for organic vapors, the laboratory samples were jarred and refrigerated. The laboratory reports are provided and summarized in Attachment IV.

A photographic chronolog of the project is provided in Attachment II.

Five-point composite samples were collected from each sidewall in the 28 foot deep excavation on October 22, 2004 from the following vertical locations;

- Center of the sidewall at approximately 14 feet below ground surface ('bgs)
- Lower left quadrant at approximately 20'bgs
- Lower right quadrant at approximately 20'bgs

- Upper left quadrant at approximately 8'bgs
- Upper right quadrant at approximately 8'bgs

The 5-point samples were collected into a clean Ziplock® bag, gently blended and the laboratory sample jarred and refrigerated. The remaining bagged sample was allowed to equilibrate to approximately 70°F and the VOCH measured and recorded.

All samples collected were less than 100 ppm VOCH and deemed acceptable.

Laboratory results from all samples were less than the 100 mg/Kg TPH^{8015m} remedial goal and deemed acceptable.

Discrete samples of each 200 yd^3 batch of soil were collected, allowed to equilibrate to approximately 70°F, and the VOCH measured and recorded. The VOCH will be submitted to the NMOCD "in-lieu" of laboratory benzene and BTEX analyses. The laboratory analytical reports are included and summarized in Attachment IV.

All samples collected were less than 100 ppm VOCH and deemed acceptable

Laboratory results from all samples were less than the 100 mg/Kg TPH^{8015m} remedial goal and deemed acceptable.

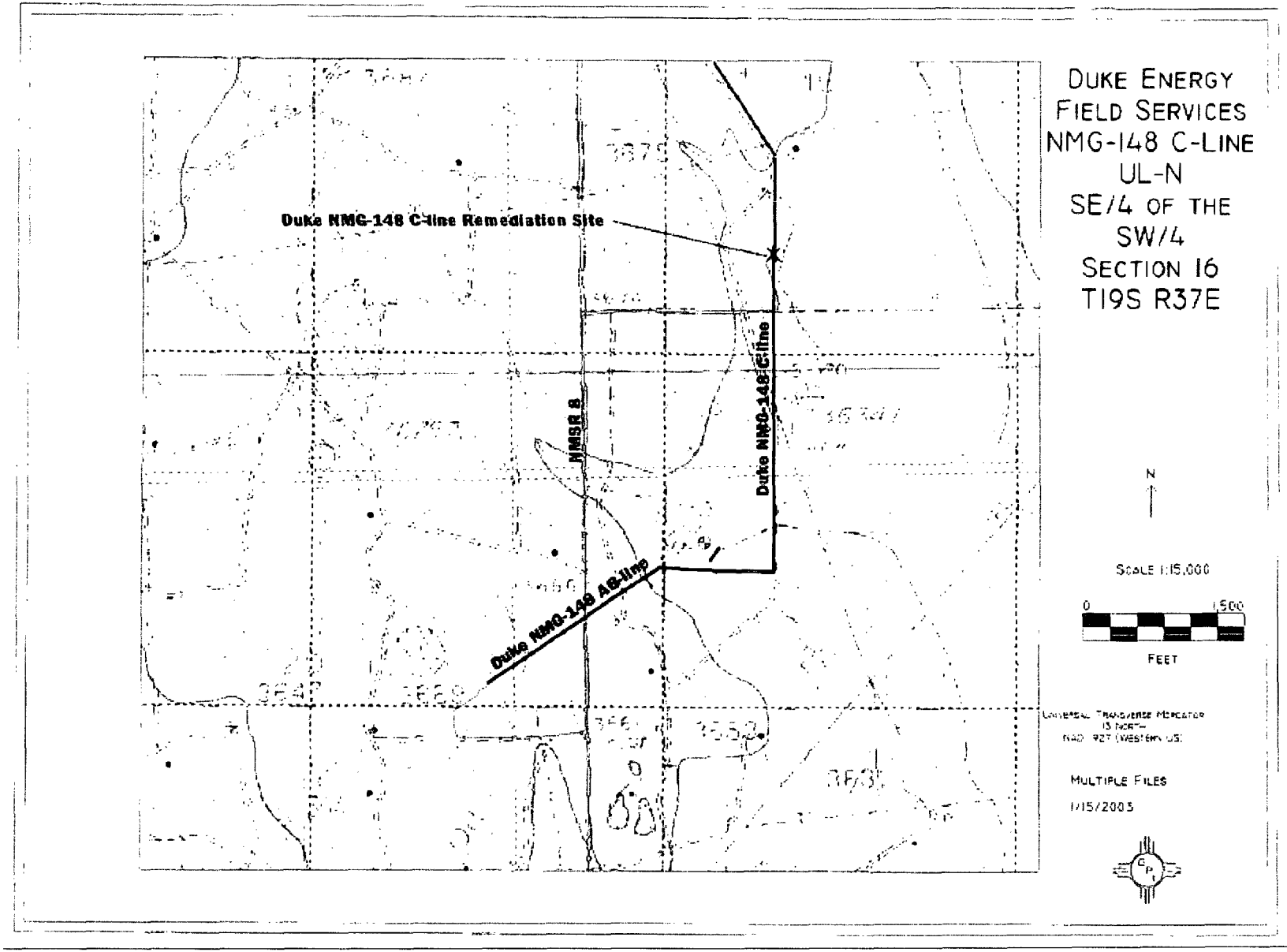
Backfilling begin with emplacement of the rock in the bottom of the excavation and overlayed with the soil. The front-end loaders spread and compacted the matrix in approximately 1-foot thick lifts. After the excavation was backfilled, the clean topsoil stockpiled on site was spread over the area and contoured to grade.

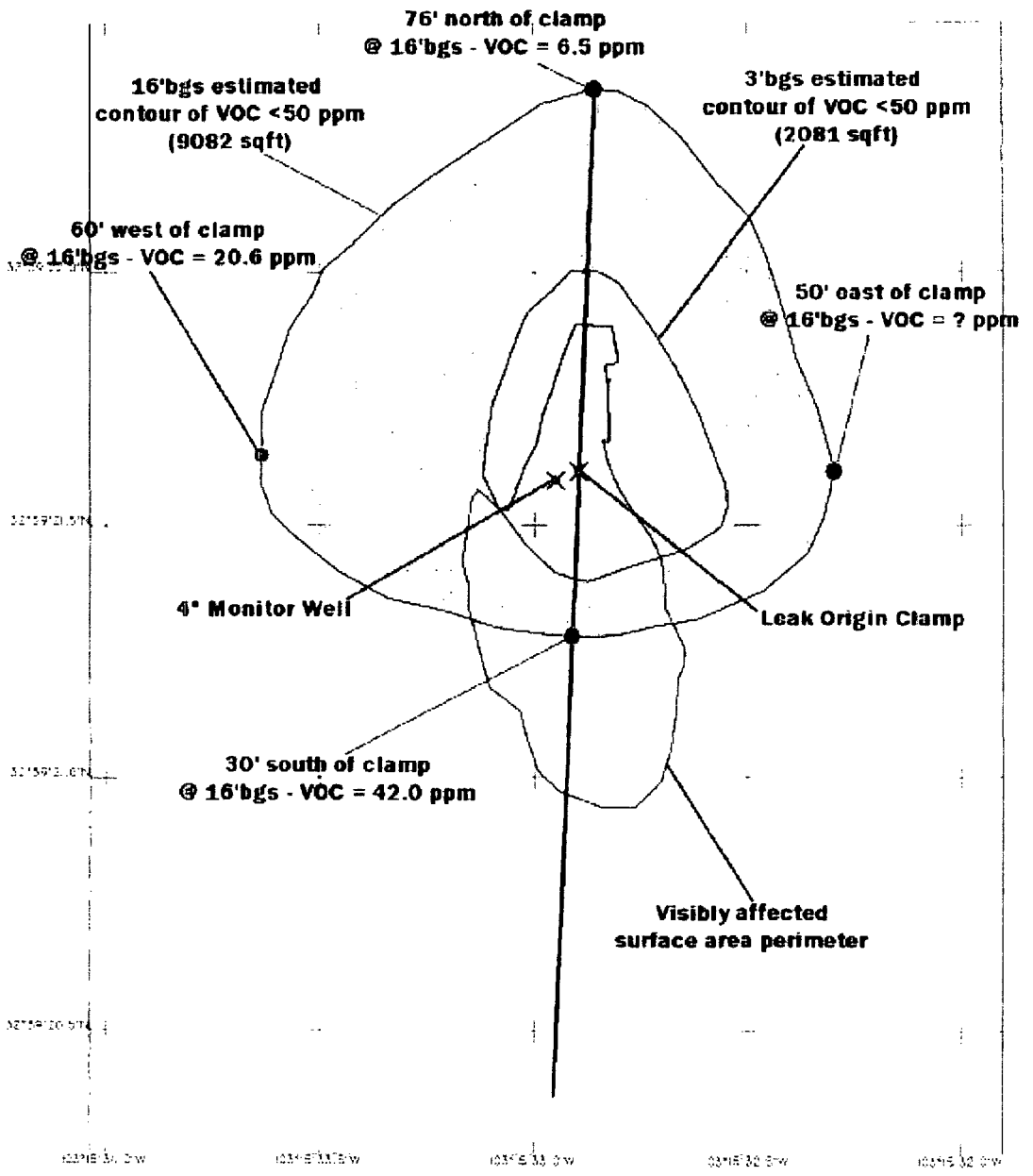
4.0 Closure Justification

This report documents the implementation of the approved plan consistent with the NMOCD stipulations and provides specific soil analytical information supporting closure of the soil issues at this site justifying a "no further action required" declaration by the NMOCD. The final form C-141 is included in Attachment VII.

5.0 Follow-up

The site will be reseeded in the spring of 2005 with a seed blend acceptable to the New Mexico State Land Office.


Duke NMG-148 C-line Remediation Site
NMSR 8
Duke NMG-148 C-line
Duke NMG-148 AB-line
DUKE ENERGY
FIELD SERVICES
NMG-148 C-LINE
UL-N
SE/4 OF THE
SW/4
SECTION 16
T19S R37E
N
SCALE 1:15,000
0
1500
FEET
UNIVERSAL TRANSVERSE MERCATOR
13 NORTH
NAD 27 (WESTERN US)
MULTIPLE FILES
1/15/2003



DUKE ENERGY FIELD SERVICES NMG-148 C-LINE (~1.2 MI NORTH OF ELDRIDGE) SW/4 OF SECTION 16 T19S R37E
DELINEATION MAP - 3' AND 16'BGS

LAT/LONG
WGS 1984

SCALE 1:400

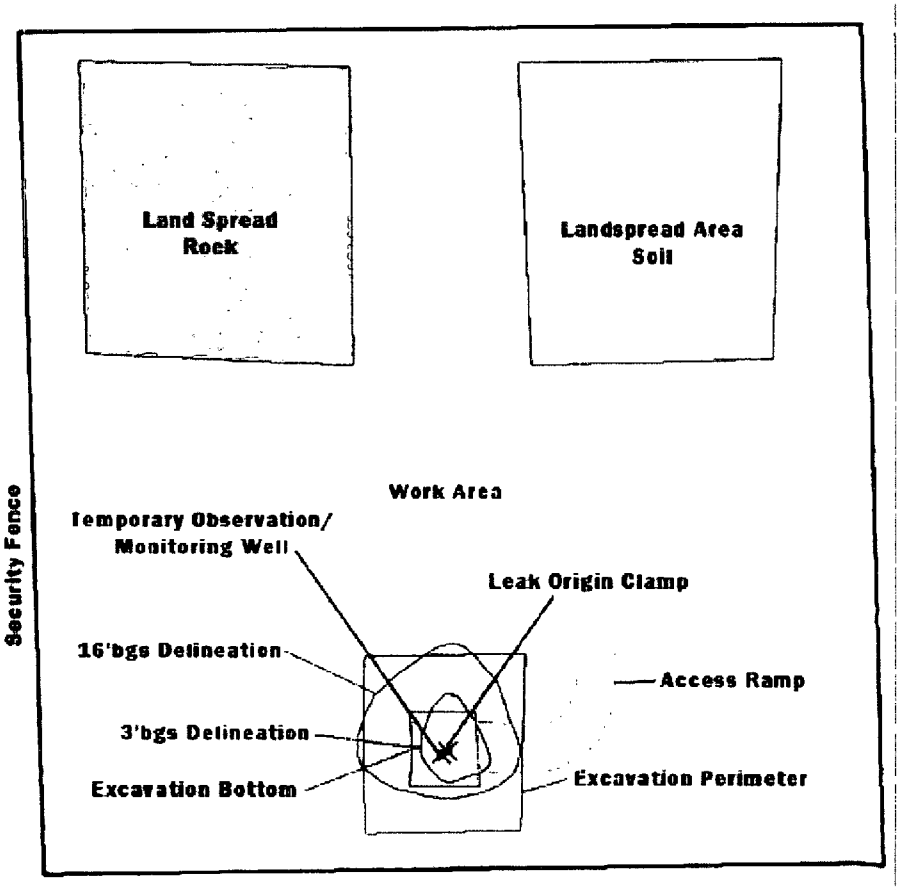
N

0 50.00

FEET

NMG148R3FC01DELINEATION.SSF

1/3/2003



DUKE ENERGY FIELD SERVICES NMG-148 C-LINE
SECTION 16 T19S R37E
SITE MAP

UNIVERSAL TRANSVERSE MERCATOR
13 NORTH
NAD 1927 (WESTERN US)

N

SCALE 1:500

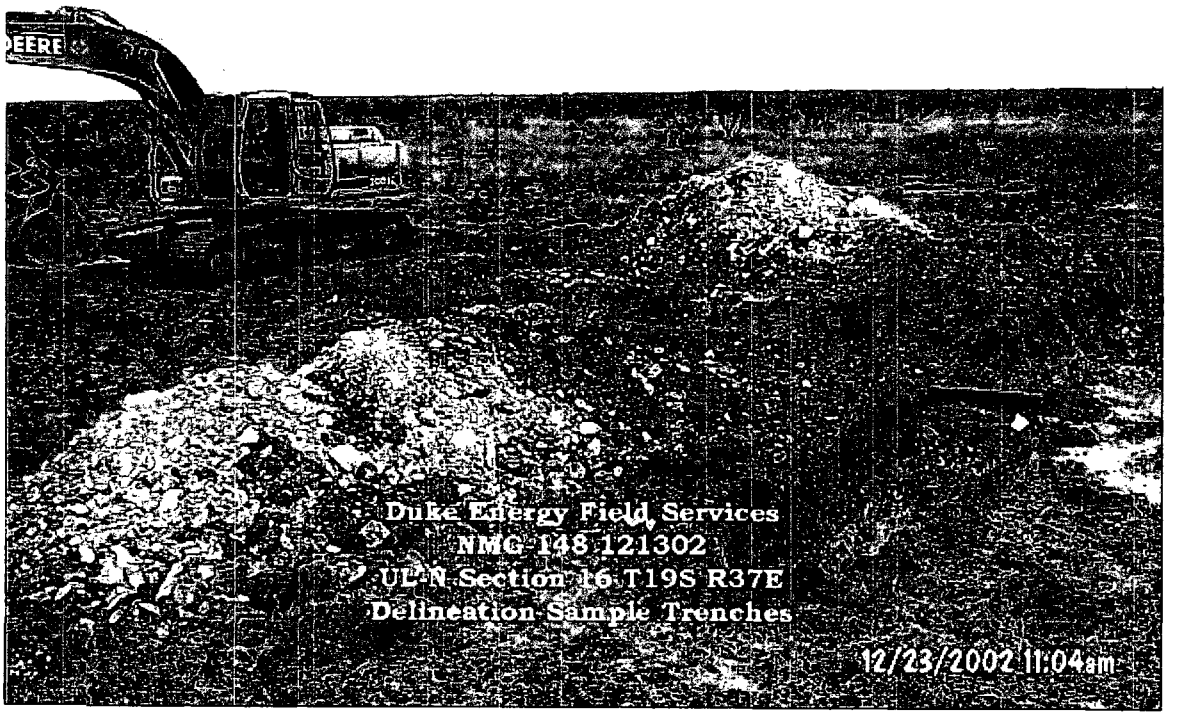
0 175.0

FEET

NMG148S-16FOOTDELINEATION.SSF

1/16/2003


Duke Energy Field Services
NMG-148C 121302
UL-N Section 16 T19S R37E
12/13/2002 9:51am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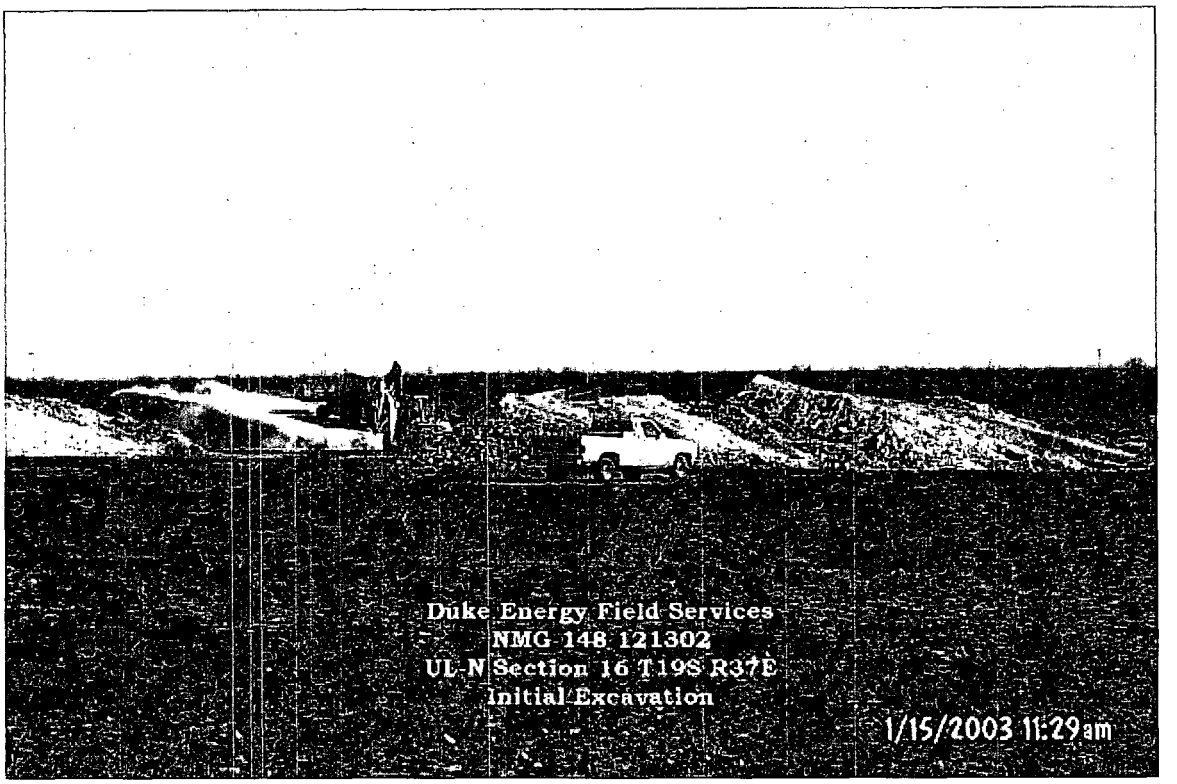
NMG-148 121302
UL-N Section 16 T19S R37E
Delineation Sample Trenches
12/23/2002 11:04am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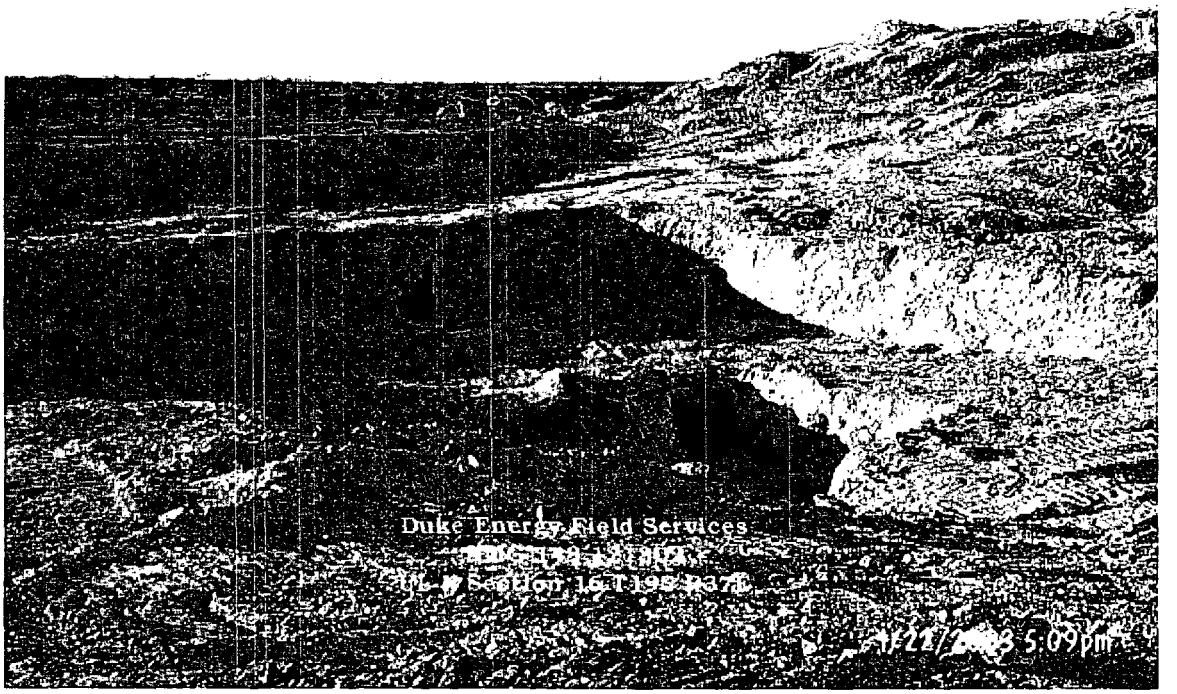
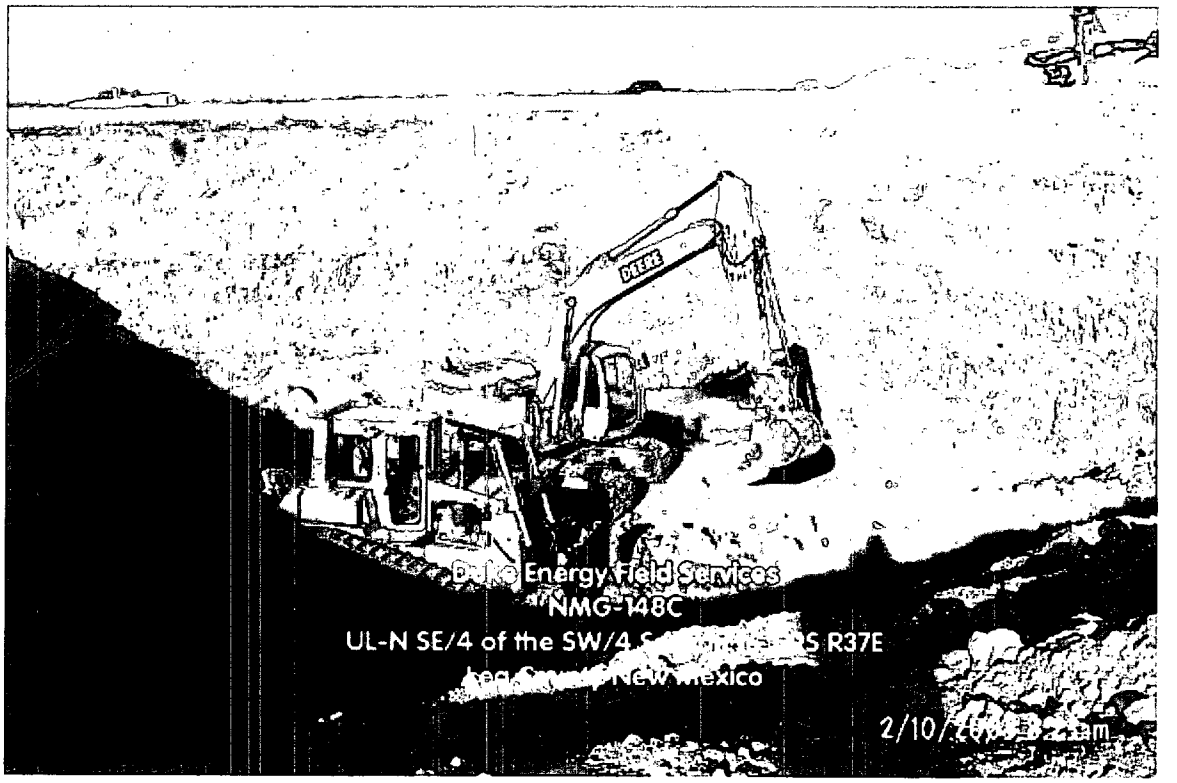
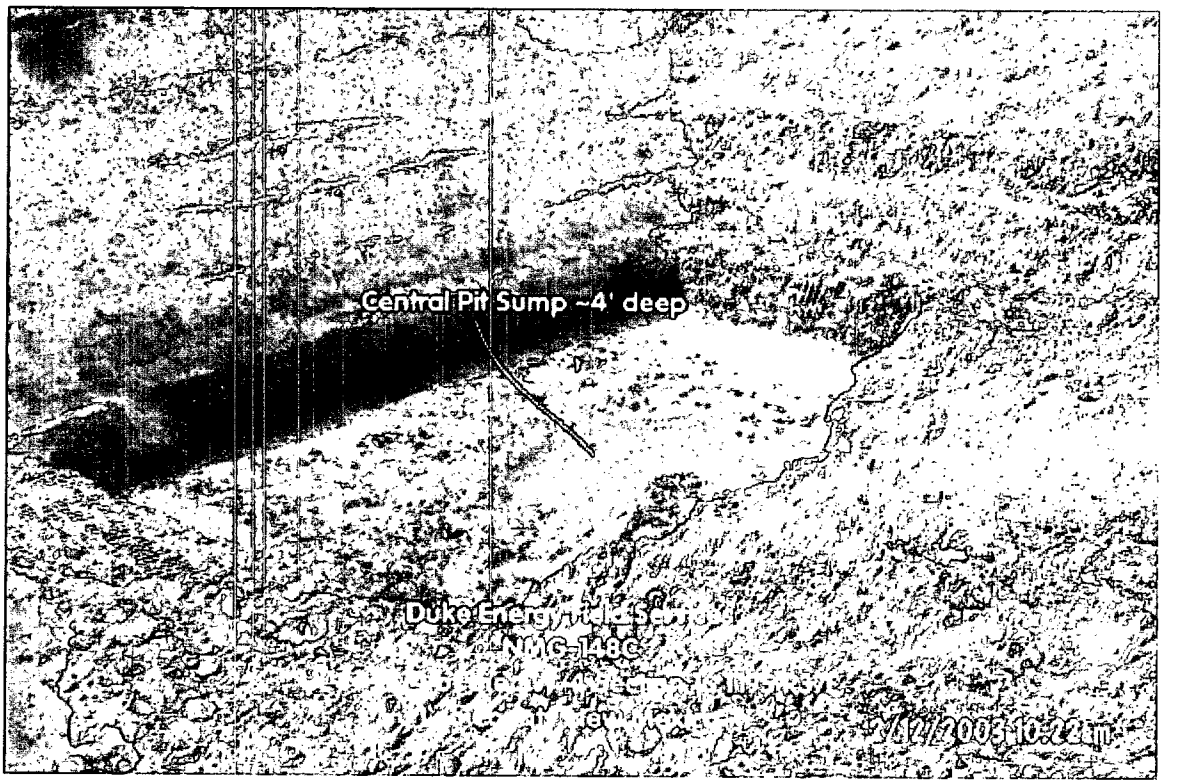
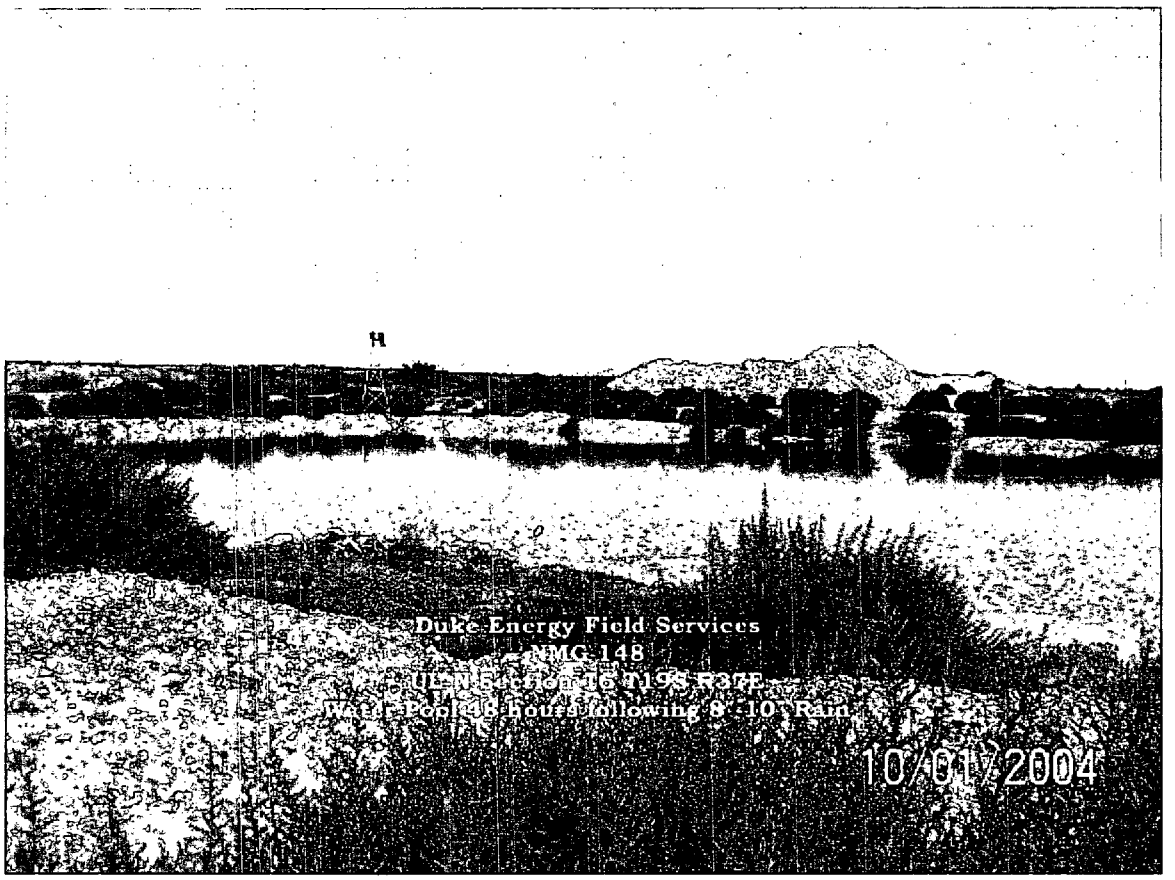
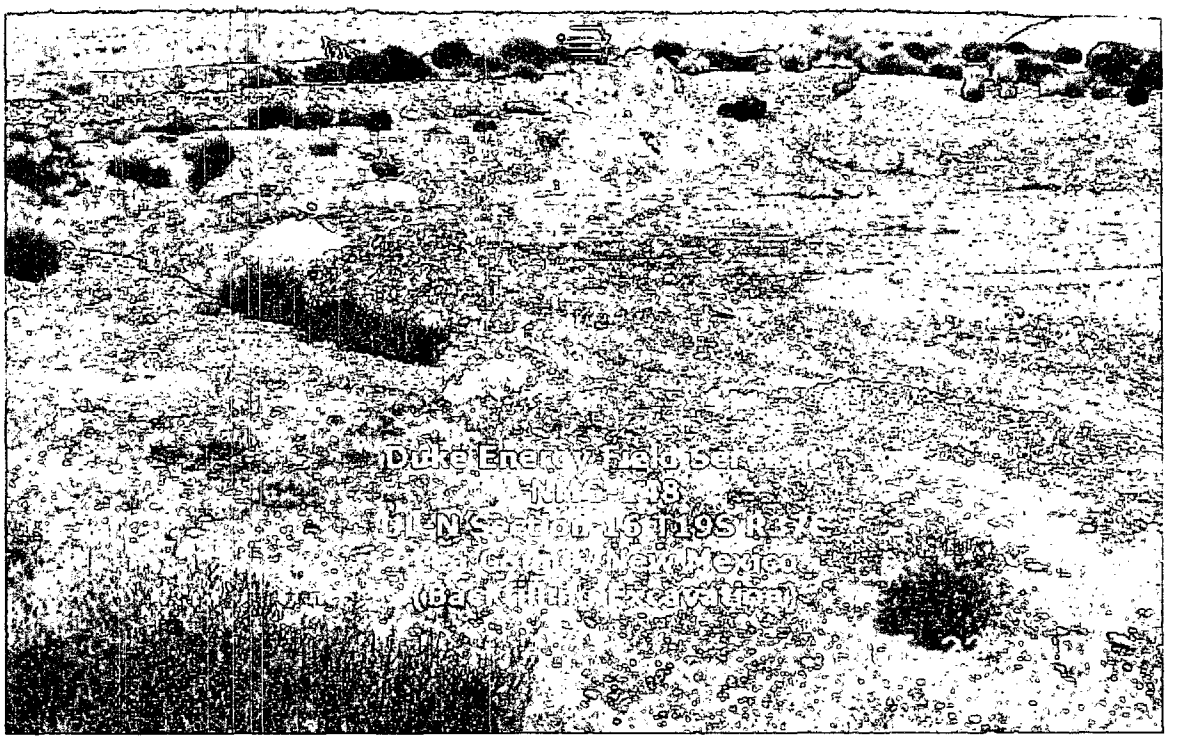
Initial Excavation
1/15/2003 11:29 am


Duke Energy Field Services


Duke Energy Field Services
NMG-148C
UL-N SE/4 of the SW/4
R37E
New Mexico


Central Pit Sump -4' deep


Duke Energy Field Services
NMG-148
Post 48 hours following 8-10" Rain
10/01/2004



Duke Energy Field Services Site Information and Metrics	Incident Date and NMOCD Notified? 12-23-02 NMOCD notified immediately
SITE: NMG-148 C-Line	Assigned Site Reference #:
Company: Duke Energy Field Services	
Street Address: 11525 West Carlsbad Highway	
Mailing Address: 11525 West Carlsbad Highway	
City, State, Zip: Hobbs, NM 88240	
Representative: Paul Mulkey/Stan Shaver/Ronnie Gilchrest	
Representative Telephone: 505.397.5716 / 505.397.5561	
Telephone:	
Fluid volume released (bbls): >25 bbls	Recovered (bbls): 0
>25 bbls: Notify NMOCD verbally within 24 hrs and submit form C-141 within 15 days. (Also applies to unauthorized releases >500 mcf Natural Gas)	
5-25 bbls: Submit form C-141 within 15 days (Also applies to unauthorized releases of 50-500 mcf Natural Gas)	
Leak, Spill, or Pit (LSP) Name: NMG-148 C-Line	
Source of contamination: Natural Gas Gathering Line	
Land Owner, i.e., BLM, ST, Fee, Other:: State of New Mexico leased by Foley	
LSP Dimensions ~95' x 40'	
LSP Area: 2,536 ft²	
Location of Reference Point (RP)	
Location distance and direction from RP	
Latitude: 32°39'21.32"N	
Longitude: 103°15'32.90"W	
Elevation above mean sea level: 3,648'amsl	
Feet from South Section Line	
Feet from West Section Line	
Location- Unit or ¼¼: SE¼ of the SW ¼	Unit Letter: N
Location- Section: 16	
Location- Township: 19S	
Location- Range: 37E	
Surface water body within 1000 ' radius of site: None	
Domestic water wells within 1000' radius of site: None	
Agricultural water wells within 1000' radius of site: None	
Public water supply wells within 1000' radius of site: None	
Depth from land surface to ground water (DG) ~28'bgs	
Depth of contamination (DC) -	
Depth to ground water (DG – DC = DtGW) - 0.0	

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

Total Site Ranking Score and Acceptable Concentrations

Parameter		10-19 (surface to 43'bgs)	0-9
Benzene[1]		10 ppm	10 ppm
BTEX[1]		50 ppm	50 ppm
TPH		1000 ppm	5000 ppm

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

Sample Description	SAMPLE ID#	Sample Date	Lithology	HEADSPACE VOC[2] (ppm)	GRO[3] mg/Kg	DRO[4] mg/Kg	TPH[5] (8015M.) mg/Kg	BTEX mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ehtyl Benzene mg/Kg	Total Xylenes mg/Kg
Backfill	SDNMG1	10/14/2004	Caliche	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG2	10/14/2004	Caliche	0.1	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG3	10/14/2004	Caliche	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG4	10/15/2004	Caliche	0.0	0.08	nd	0.08	na	na	na	na	na
Backfill	SDNMG5	10/15/2004	Caliche	0.1	0.20	nd	0.20	na	na	na	na	na
Backfill	SDNMG6	10/15/2004	Caliche	0.6	0.14	nd	0.14	na	na	na	na	na
Backfill	SDNMG7	10/15/2004	Caliche	0.1	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG8	10/15/2004	Caliche	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG9	10/15/2004	Caliche	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10	10/15/2004	Caliche	0.4	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG11	10/18/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG12	10/18/2004	Caliche Sand	0.9	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG13	10/18/2004	Caliche Sand	1.2	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG14	10/18/2004	Caliche Sand	0.5	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG15	10/18/2004	Caliche Sand	0.1	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG16	10/18/2004	Caliche Sand	1.5	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG17	10/19/2004	Caliche Sand	0.3	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG18	10/19/2004	Caliche Sand	0.2	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG19	10/19/2004	Caliche Sand	0.9	0.36	nd	0.36	na	na	na	na	na
Backfill	SDNMG20	10/19/2004	Caliche Sand	0.7	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG21	10/19/2004	Caliche Sand	0.1	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG22	10/20/2004	Caliche Sand	0.1	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG23	10/20/2004	Caliche Sand	0.9	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG24	10/20/2004	Caliche Sand	0.1	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG25	10/20/2004	Caliche Sand	0.7	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG26	10/20/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
New Mexico Oil Conservation Division Remedial Goals				100.0			100.00	50.000	10	--	--	--

[1]bgs - below ground surface

[2]VOC-Volatile Organic Contaminants/Constituents

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

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

[5]TPH(8015 Mod.)-Total Petroleum Hydrocarbon = GRO+DRO.

Laboratory analyses were performed by Assaigai Laboratories of Albuquerque, New Mexico

[7]nd - not detected above the instrument detection limit.

[8]na - Not Analyzed

Sample Description	SAMPLE ID#	Sample Date	Lithology	HEADSPACE VOC[2] (ppm)	GRO[3] mg/Kg	DRO[4] mg/Kg	TPH[5] (8015M.) mg/Kg	BTEX mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ehtyl Benzene mg/Kg	Total Xylenes mg/Kg
Backfill	SDNMG27	10/21/2004	Caliche Sand	0.7	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG28	10/21/2004	Caliche Sand	0.2	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG29	10/21/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG30	10/21/2004	Caliche Sand	0.1	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG31	10/21/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG32	10/21/2004	Caliche Sand	0.5	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG33	10/22/2004	Caliche Sand	0.3	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG34	10/22/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG35	10/22/2004	Caliche Sand	0.3	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG36	10/22/2004	Caliche Sand	0.0	nd	51.00	51.00	na	na	na	na	na
Backfill	SDNMG37	10/22/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG38	10/22/2004	Caliche Sand	0.3	nd	nd	nd	na	na	na	na	na
East Sidewall	SDNMG39 NSWC	10/22/2004	Caliche	4.6	nd	nd	nd	na	na	na	na	na
West Sidewall	SDNMG40 WSWC	10/22/2004	Caliche	6.0	nd	nd	nd	na	na	na	na	na
North Sidewall	SDNMG41 NSWC	10/22/2004	Caliche	3.6	nd	nd	nd	na	na	na	na	na
South Sidewall	SDNMG42 SSWC	10/22/2004	Caliche	5.8	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10250443	10/25/2004	Caliche Sand	1.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10250444	10/25/2004	Caliche Sand	0.9	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10250445	10/25/2004	Caliche Sand	0.4	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10250446	10/25/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10250447	10/25/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10250448	10/25/2004	Caliche Sand	0.1	nd	nd	nd	na	na	na	na	na
New Mexico Oil Conservation Division Remedial Goals				100.0			100.00	50.000	10	--	--	--

[1]bgs - below ground surface

[2]VOC-Volatile Organic Contaminants/Constituents

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

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[5]TPH(8015 Mod.)-Total Petroleum Hydrocarbon = GRO+DRO.

Laboratory analyses were performed by Assaigai Laboratories of Albuquerque, New Mexico

[7]nd - not detected above the instrument detection limit.

[8]na - Not Analyzed

Sample Description	SAMPLE ID#	Sample Date	Lithology	HEADSPACE VOC[2] (ppm)	GRO[3] mg/Kg	DRO[4] mg/Kg	TPH[5] (8015M.) mg/Kg	BTEX mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ehtyl Benzene mg/Kg	Total Xylenes mg/Kg
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Backfill	SDNMG10260451	10/26/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
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Backfill	SDNMG10270454	10/27/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10270455	10/27/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10270456	10/27/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10270457	10/27/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10270458	10/27/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10270459	10/27/2004	Caliche Sand	2.9	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10280460	10/28/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10280461	10/28/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10280462	10/28/2004	Caliche Sand	0.9	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10280463	10/28/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10280464	10/28/2004	Caliche Sand	0.5	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10280465	10/28/2004	Caliche Sand	1.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10290466	10/29/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10290467	10/29/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10290468	10/29/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10290469	10/29/2004	Caliche Sand	0.8	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG10290470	10/29/2004	Caliche Sand	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG11010471	11/1/2004	Brown Clay Loam	0.0	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG11010472	11/1/2004	Brown Clay Loam	0.3	nd	nd	nd	na	na	na	na	na
Backfill	SDNMG11010473	11/1/2004	Brown Clay Loam	0.0	nd	nd	nd	na	na	na	na	na
New Mexico Oil Conservation Division Remedial Goals				100.0			100.00	50.000	10	--	--	--

[1]bgs – below ground surface

[2]VOC–Volatile Organic Contaminants/Constituents

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

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

[5]TPH(8015 Mod.)-Total Petroleum Hydrocarbon = GRO+DRO.

Laboratory analyses were performed by Assaigai Laboratories of Albuquerque, New Mexico

[7]nd - not detected above the instrument detection limit.

[8]na - Not Analyzed

ASSAIGAI ANALYTICAL LABORATORIES, INC.
4301 Masthead NE • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgewood, Ste. N • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820
127 Eastgate Drive, 212-C • Los Alamos, New Mexico 87544 • (505) 662-2558

Explanation of codes	
B	analyte detected in Method Blank
E	result is estimated
H	analyzed out of hold time
N	tentatively identified compound
S	subcontracted
1-9	see footnote

ENVIRONMENTAL PLUS, INC.
attn: **PAT McCASLAND**
P.O. BOX 1558
EUNICE **NM 88231**

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **NMG 148**
Order: **0410577** **ENV03** Receipt: **10-26-04**

William P. Beaty, President of Assaigai Analytical Laboratories, Inc.

Sample: ***SDNMG1*** Collected: *10-14-04 10:30:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-01A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041397	XG.2004.1903.8		Gasoline Range Organics	ND	mg / Kg	1	0.05		10-28-04	10-28-04
0410577-01A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.5		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG2*** Collected: *10-14-04 12:25:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-02A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041397	XG.2004.1903.10		Gasoline Range Organics	ND	mg / Kg	1	0.05		10-28-04	10-28-04
0410577-02A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.8		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG3*** Collected: *10-14-04 14:00:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-03A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041397	XG.2004.1903.11		Gasoline Range Organics	ND	mg / Kg	1	0.05		10-28-04	10-28-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **NMG 148**
Order: **0410577 ENV03** Receipt: **10-26-04**

Sample: ***SDNMG3*** Collected: *10-14-04 14:00:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-03A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.8		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG4*** Collected: *10-15-04 8:30:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-04A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041397	XG.2004.1903.12		Gasoline Range Organics	0.078	mg / Kg	1	0.05		10-28-04	10-28-04
0410577-04A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.10		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG5*** Collected: *10-15-04 9:15:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-05A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041397	XG.2004.1903.13		Gasoline Range Organics	0.20	mg / Kg	1	0.05		10-28-04	10-28-04
0410577-05A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.11		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG6*** Collected: *10-15-04 9:40:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-06A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041397	XG.2004.1903.15		Gasoline Range Organics	0.14	mg / Kg	1	0.05		10-28-04	10-28-04
0410577-06A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.12		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG7*** Collected: *10-15-04 10:15:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-07A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041397	XG.2004.1903.17		Gasoline Range Organics	ND	mg / Kg	1	0.05		10-28-04	10-28-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **NMG 148**
Order: **0410577 ENV03** Receipt: **10-26-04**

Sample: ***SDNMG7*** Collected: *10-15-04 10:15:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-07A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.16		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG8*** Collected: *10-15-04 12:10:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-08A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041397	XG.2004.1903.18		Gasoline Range Organics	ND	mg / Kg	1	0.05		10-28-04	10-28-04
0410577-08A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.16		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG9*** Collected: *10-15-04 13:45:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-09A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041397	XG.2004.1903.19		Gasoline Range Organics	ND	mg / Kg	1	0.05		10-28-04	10-28-04
0410577-09A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.17		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG10*** Collected: *10-15-04 14:45:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-10A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041397	XG.2004.1903.20		Gasoline Range Organics	ND	mg / Kg	1	0.05		10-28-04	10-28-04
0410577-10A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.18		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG11*** Collected: *10-18-04 8:00:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-11A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041397	XG.2004.1903.21		Gasoline Range Organics	ND	mg / Kg	1	0.05		10-28-04	10-28-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **NMG 148**
Order: **0410577 ENV03** Receipt: **10-26-04**

Sample: ***SDNMG11*** Collected: *10-18-04 8:00:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-11A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.19		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG12*** Collected: *10-18-04 9:20:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-12A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041397	XG.2004.1903.22		Gasoline Range Organics	ND	mg / Kg	1	0.05		10-28-04	10-28-04
0410577-12A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.20		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG13*** Collected: *10-18-04 10:45:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-13A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041397	XG.2004.1903.23		Gasoline Range Organics	ND	mg / Kg	1	0.05		10-28-04	10-28-04
0410577-13A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.21		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG14*** Collected: *10-18-04 11:15:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-14A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041397	XG.2004.1903.24		Gasoline Range Organics	ND	mg / Kg	1	0.05		10-28-04	10-28-04
0410577-14A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.22		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG15*** Collected: *10-18-04 12:40:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-15A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.8		Gasoline Range Organics	ND	mg / Kg	1	0.25		10-29-04	10-29-04

STANDARD

Assalgai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **NMG 148**
Order: **0410577** **ENV03** Receipt: **10-26-04**

Sample: ***SDNMG15*** Collected: *10-18-04 12:40:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-15A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.23		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG16*** Collected: *10-18-04 15:05:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-16A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.9		Gasoline Range Organics	ND	mg / Kg	1	0.25		10-29-04	10-29-04
0410577-16A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.24		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG17*** Collected: *10-19-04 8:16:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-17A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.10		Gasoline Range Organics	ND	mg / Kg	1	0.25		10-29-04	10-29-04
0410577-17A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.27		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG18*** Collected: *10-19-04 9:38:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-18A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.11		Gasoline Range Organics	ND	mg / Kg	1	0.25		10-29-04	10-29-04
0410577-18A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.28		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG19*** Collected: *10-19-04 11:20:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-19A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.12		Gasoline Range Organics	0.35	mg / Kg	1	0.25		10-29-04	10-29-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **NMG 148**
Order: **0410577 ENV03** Receipt: **10-26-04**

Sample: ***SDNMG19*** Collected: *10-19-04 11:20:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-19A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.29		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG20*** Collected: *10-19-04 13:30:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-20A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.13		Gasoline Range Organics	ND	mg / Kg	1	0.25		10-29-04	10-29-04
0410577-20A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041403	XG.2004.1922.30		Diesel Range Organics	ND	mg / Kg	1	25		10-29-04	10-29-04

Sample: ***SDNMG21*** Collected: *10-19-04 15:12:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-21A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.15		Gasoline Range Organics	ND	mg / Kg	1	0.25		10-29-04	10-29-04
0410577-21A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.6		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG22*** Collected: *10-20-04 8:16:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-22A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.16		Gasoline Range Organics	ND	mg / Kg	1	0.25		10-29-04	10-29-04
0410577-22A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.9		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG23*** Collected: *10-20-04 9:36:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-23A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.17		Gasoline Range Organics	ND	mg / Kg	1	0.25		10-29-04	10-29-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **NMG 148**
Order: **0410577 ENV03** Receipt: **10-26-04**

Sample: ***SDNMG23*** Collected: *10-20-04 9:38:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-23A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.10		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG24*** Collected: *10-20-04 11:20:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-24A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.18		Gasoline Range Organics	ND	mg / Kg	1	0.25		10-29-04	10-29-04
0410577-24A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.11		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG25*** Collected: *10-20-04 13:30:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-25A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.19		Gasoline Range Organics	ND	mg / Kg	1	0.25		10-29-04	10-29-04
0410577-25A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.12		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG26*** Collected: *10-20-04 15:00:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-26A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.20		Gasoline Range Organics	ND	mg / Kg	1	0.25		10-29-04	10-29-04
0410577-26A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.13		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG27*** Collected: *10-21-04 7:30:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-27A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.21		Gasoline Range Organics	ND	mg / Kg	1	0.25		10-29-04	10-29-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **NMG 148**
Order: **0410577 ENV03** Receipt: **10-26-04**

Sample: ***SDNMG27*** Collected: *10-21-04 7:30:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-27A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.16		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG28*** Collected: *10-21-04 9:12:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-28A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.22		Gasoline Range Organics	ND	mg / Kg	1	0.25		10-29-04	10-29-04
0410577-28A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.17		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG29*** Collected: *10-21-04 10:41:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-29A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.23		Gasoline Range Organics	ND	mg / Kg	1	0.25		10-29-04	10-29-04
0410577-29A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.18		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG30*** Collected: *10-21-04 12:45:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-30A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041402	XG.2004.1913.24		Gasoline Range Organics	ND	mg / Kg	1	0.25		10-29-04	10-29-04
0410577-30A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.19		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG31*** Collected: *10-21-04 13:33:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-31A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041406	XG.2004.1921.6		Gasoline Range Organics	ND	mg / Kg	1	0.5		10-30-04	10-30-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **NMG 148**
Order: **0410577 ENV03** Receipt: **10-26-04**

Sample: ***SDNMG31*** Collected: *10-21-04 13:33:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-31A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.20		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG32*** Collected: *10-21-04 14:55:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-32A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041406	XG.2004.1921.9		Gasoline Range Organics	ND	mg / Kg	1	0.5		10-30-04	10-30-04
0410577-32A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.21		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG33*** Collected: *10-22-04 8:00:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-33A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041406	XG.2004.1921.10		Gasoline Range Organics	ND	mg / Kg	1	0.5		10-30-04	10-30-04
0410577-33A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.22		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG34*** Collected: *10-22-04 10:15:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-34A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041406	XG.2004.1921.11		Gasoline Range Organics	ND	mg / Kg	1	0.5		10-30-04	10-30-04
0410577-34A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.23		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG35*** Collected: *10-22-04 11:30:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-35A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041406	XG.2004.1921.12		Gasoline Range Organics	ND	mg / Kg	1	0.5		10-30-04	10-30-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **NMG 148**
Order: **0410577 ENV03** Receipt: **10-26-04**

Sample: ***SDNMG35*** Collected: *10-22-04 11:30:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-35A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.24		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG36*** Collected: *10-22-04 13:40:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-36A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041405	XG.2004.1921.13		Gasoline Range Organics	ND	mg / Kg	1	0.5		10-30-04	10-30-04
0410577-36A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.25		Diesel Range Organics	51	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG37*** Collected: *10-22-04 14:30:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-37A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041412	XG.2004.1933.8		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-02-04	11-02-04
0410577-37A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.26		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG38*** Collected: *10-22-04 15:15:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-38A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041412	XG.2004.1933.11		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-02-04	11-02-04
0410577-38A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041414	XG.2004.1924.29		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-01-04

Sample: ***SDNMG39 NSWC*** Collected: *10-22-04 15:20:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-39A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041412	XG.2004.1933.12		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-02-04	11-02-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **NMG 148**
Order: **0410577 ENV03** Receipt: **10-26-04**

Sample: ***SDNMG39 NSWC*** Collected: *10-22-04 15:20:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-39A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
XD41414	XG.2004.1924.30		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-02-04

Sample: ***SDNMG40 ESWC*** Collected: *10-22-04 15:25:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-40A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
XD41412	XG.2004.1933.13		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-02-04	11-02-04
0410577-40A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
XD41414	XG.2004.1924.31		Diesel Range Organics	ND	mg / Kg	1	25		11-01-04	11-02-04

Sample: ***SDNMG41 SSWC*** Collected: *10-22-04 15:30:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-41A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
XD41412	XG.2004.1933.14		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-02-04	11-02-04
0410577-41A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
XD41398	XG.2004.1900.6		Diesel Range Organics	ND	mg / Kg	1	25		10-28-04	10-28-04

Sample: ***SDNMG42 WSWC*** Collected: *10-22-04 15:35:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0410577-42A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
XD41412	XG.2004.1933.15		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-02-04	11-02-04
0410577-42A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
XD41398	XG.2004.1900.7		Diesel Range Organics	ND	mg / Kg	1	25		10-28-04	10-28-04

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

ASSAIGAI ANALYTICAL LABORATORIES, INC.

4301 Masthead N.E.
ALBUQUERQUE, NEW MEXICO 87109
(505) 345-3964

3332 WEDGEWOOD
EL PASO, TEXAS 79925
(915) 593-6000

127 EASTGATE DRIVE, 212-C
LOS ALAMOS, NEW MEXICO 87544
(505) 662-2858

Chain of Custody Record

Lab Job No.: 0410577 Date: _____ ORIGINAL

Page 1 of 1

Client: Duke

Address: _____

City / State / Zip: _____

Project Name / Number: NMG 148

Contract / Purchase Order / Quote: _____

Project Manager / Contact: Pat McCasland

Telephone No.: 505-394-3481

Fax No.: 505-394-2601

Samplers: (signature) Morris Burkett

AALL Fraction Number	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation: Temp.	Preservation: Chemical	No. of Containers	BTEX/MTBE 8021B	Remarks
01A	SDNMG1	10-14	10:30	C				1	X	
02A	SDNMG2	10-14	12:25	C				1	X	
03A	SDNMG3	10-14	2:20	C				1	X	
04A	SDNMG4	10-15	8:30	C				1	X	
05A	SDNMG5	10-15	9:15	C				1	X	
06A	SDNMG6	10-15	9:40	C				1	X	
07A	SDNMG7	10-15	10:15	C				1	X	
08A	SDNMG8	10-15	12:10	C				1	X	
09A	SDNMG9	10-15	1:45	C				1	X	
10A	SDNMG10	10-15	2:45	C				1	X	
11A	SDNMG11	10-18	8:00	C				1	X	
12A	SDNMG12	10-18	9:20	C				1	X	

Relinquished by: Signature: Morris Burkett Printed: Morris Burkett Company: EPI Reason: _____ Date: 10-25 Time: 0900

Received by: Signature: Roger Boone Printed: Roger Boone Company: EPI Reason: Process

Relinquished by: Signature: Roger Boone Printed: Roger Boone Company: EPI Reason: Ship Date: 10-25 Time: 9:00

Received by: Signature: [illegible] Printed: [illegible] Company: [illegible] Reason: Analyses

Method of Shipment: _____

Shipment No.: _____

Special Instructions: _____

Comments: _____

After analysis, samples are to be:

- ☐ Disposed of (additional fee)
- ☐ Stored (30 days max)
- ☐ Stored over 30 days (additional fee)
- ☐ Returned to customer

LABORATORY

Duke Energy Field Services

Chain of Custody Record

ASSAIGAI ANALYTICAL LABORATORIES, INC.

4301 Masthead N.E.
ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8964

3332 WEDGEWOOD
EL PASO, TEXAS 79925
(915) 593-4000

127 EASTGATE DRIVE, 212-C
LOS ALAMOS, NEW MEXICO 87544
(505) 662-2994

Lab Job No.: 0410577 Date: _____

Page 2 of 4

ORIGINAL

Client: DUKE

Address: _____

City / State / Zip: _____

Project Name / Number: NMG 148

Contract / Purchase Order / Quote: _____

Project Manager / Contact: Pat McCasland

Telephone No.: 505-394-3481

Fax No.: 505-394-2601

Samplers: (signature) Mavis Burkett

AAL Fraction Number	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation: Temp.	Preservation: Chemical	No. of Containers	8015M GRO	8015M DRO	Remarks
13A	SDNMG 13	10-18	10:45	C				1	X		
14A	SDNMG 14	10-18	11:15	C				1	X		
15A	SDNMG 15	10-18	12:40	C				1	X		
16A	SDNMG 16	10-18	3:05	C				1	X		
17A	SDNMG 17	10-19	8:16	C				1	X		
18A	SDNMG 18	10-19	9:38	C				1	X		
19A	SDNMG 19	10-19	11:20	C				1	X		
20A	SDNMG 20	10-19	1:30	C				1	X		
21A	SDNMG 21	10-19	3:12	C				1	X		
22A	SDNMG 22	10-20	8:16	C				1	X		
23A	SDNMG 23	10:20	9:38	C				1	X		
24A	SDNMG 24	10-20	11:20	C				1	X		

Relinquished by:
Signature: Mavis Burkett
Printed: Mavis Burkett
Company: EPI
Reason: _____
Date: 10-25
Time: 0700

Received by:
Signature: Roger Boone
Printed: Roger Boone
Company: EPI
Reason: Process

Relinquished by:
Signature: Roger Boone
Printed: Roger Boone
Company: EPI
Reason: Ship

Date: 10/26/04
Time: 1103MM

Received by:
Signature: Desiree Mayfield
Printed: Desiree Mayfield
Company: AAL
Reason: Analysis

Method of Shipment: _____
Shipment No.: _____
Special Instructions: _____

Comments: _____

After analysis, samples are to be:
- ☐ Disposed of (additional fee)
- ☐ Stored (30 days max)
- ☐ Stored over 30 days (additional fee)
- ☐ Returned to customer

LABORATORY

Duke Energy Field Services

Chain of Custody Record

ASSAIGAI ANALYTICAL LABORATORIES, INC.

4301 Masthead N.E.
ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8964

3332 WEDGEWOOD
EL PASO, TEXAS 79925
(915) 593-4000

127 EASTGATE DRIVE, 212-C
LOS ALAMOS, NEW MEXICO 87544
(505) 662-2558

Lab Job No. 0410577 Date

Page 3 of 4

ORIGINAL

Client: Duke

Address:

City / State / Zip:

Project Name / Number: DINEL 148

Contract / Purchase Order / Quote:

Project Manager / Contact: Pat McCasland

Telephone No. 505-394-3481

Fax No. 505-394-2601

Samplers : (signature) Morris Bartlett

AALI Fraction Number	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation: Temp.	Preservation: Chemical	No. of Containers	BTEX MTBE 8021B	Remarks
25A	SDNMG 25	10-20	1:30					1	X	
26A	SDNMG 26	10-20	3:00					1	X	
27A	SDNMG 27	10-21	7:30					1	X	
28A	SDNMG 28	10-21	9:12					1	X	
29A	SDNMG 29	10-21	10:41					1	X	
30A	SDNMG 30	10-21	12:45					1	X	
31A	SDNMG 31	10-21	1:33					1	X	
32A	SDNMG 32	10-21	2:55					1	X	
33A	SDNMG 33	10-22	8:00					1	X	
34A	SDNMG 34	10-22	10:16					1	X	
35A	SDNMG 35	10-22	11:30					1	X	
36A	SDNMG 36	10-22	1:40					1	X	

Analysis Required

Relinquished by:	Date	Received by:	Relinquished by:	Date	Received by:
Signature: Morris Bartlett	10-25	Signature: Roger Boone	Signature: Roger Boone	10/26/04	Signature: Desiree Martinez
Printed: MORRIS BARTLETT	Time: 0700	Printed: ROGER BOONE	Printed: ROGER BOONE	Time: 1103AM	Printed: DESIREE MARTINEZ
Company: EPF		Company: EPI	Company: EPI		Company: AAL
Reason:		Reason: Pulses	Reason: Ship		Reason: Analysis

Method of Shipment:

Shipment No.:

Special Instructions:

Comments:

After analysis, samples are to be:

- ☐ Disposed of (additional fee)
- ☐ Stored (30 days max)
- ☐ Stored over 30 days (additional fee)
- ☐ Returned to customer

LABORATORY

Duke Energy Field Services

Chain of Custody Record

ASSAIGAI ANALYTICAL LABORATORIES, INC.

4301 Westhead N.E.
ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8964

3622 WEDGEWOOD
EL PASO, TEXAS 79925
(915) 591-6000

127 EASTGATE DRIVE, 212-C
LOS ALAMOS, NEW MEXICO 87544
(505) 662-2558

Lab Job No. 041057T Date _____ ORIGINAL

Page 4 of 4

Client: Duke

Address: _____

City / State / Zip: _____

Project Name / Number: NMG148

Contract / Purchase Order / Quote: _____

Project Manager / Contact: Pat McCasland

Telephone No.: 505-394-3481

Fax No.: 505-394-2601

Samplers : (signature): Morris Burkett

AALI Fraction Number	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation: Temp.	Preservation: Chemical	No. of Containers	Analysis Required: 8015M GRO DRO	Remarks
37A	SDNMG 37	10-22	2:50					1	X	
38A	SDNMG 38	10-22	3:15					1	X	
39A	SDNMG 39 NSWC	10-22	3:20					1	X	
40A	SDNMG 40 ESWC	10-22	3:25					1	X	
41A	SDNMG 41 SSWC	10-22	3:30					1	X	
42A	SDNMG 42 WSWC	10-22	3:35					1	X	

Relinquished by:
Signature: Morris Burkett
Printed: Morris Burkett
Company: EPI
Reason: _____
Date: 10-25
Time: 7:00

Received by:
Signature: Roger Boone
Printed: Roger Boone
Company: EPI
Reason: Process

Relinquished by:
Signature: Roger Boone
Printed: Roger Boone
Company: EPI
Reason: Shipping
Date: 10/30/04
Time: 1103AM

Received by:
Signature: _____
Printed: _____
Company: AAL
Reason: Analysis

Method of Shipment: _____
Shipment No.: _____
Special Instructions: _____

Comments: _____

After analysis, samples are to be:
- ☐ Disposed of (additional fee)
- ☐ Stored (30 days max)
- ☐ Stored over 30 days (additional fee)
- ☐ Returned to customer

LABORATORY

ASSAIGAI ANALYTICAL LABORATORIES, INC.

4301 Masthead NE • Albuquerque, New Mexico 87109 • (505) 345-8964 • FAX (505) 345-7259
3332 Wedgewood, Ste. N • El Paso, Texas 79925 • (915) 593-6000 • FAX (915) 593-7820
127 Eastgate Drive, 212-C • Los Alamos, New Mexico 87544 • (505) 662-2558

Explanation of codes	
B	analyte detected in Method Blank
E	result is estimated
H	analyzed out of hold time
N	tentatively identified compound
S	subcontracted
1-9	see footnote

ENVIRONMENTAL PLUS, INC.
attn: **PAT McCASLAND**
P.O. BOX 1558
EUNICE NM 88231

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **DUKE ENERGY NMG 148**
Order: **0411146 ENV03** Receipt: **11-05-04**

William P. Biava, President of Assaigai Analytical Laboratories, Inc.

Sample: ***SDNMG10250443*** Collected: *10-25-04 7:30:00* By: *MB*
Matrix: C

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-01A		**SW846 5035B/8015B GRO by GC/FID**					By: TRS			
X041437	XG.2004.1885.7		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04
0411146-01A		**SW846 8015B Diesel Range Organics by GC/FID**					By: MDE			
X041461	XG.2004.1998.8		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10250444*** Collected: *10-25-04 8:36:00* By: *MB*
Matrix: C

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-02A		**SW846 5035B/8015B GRO by GC/FID**					By: TRS			
X041437	XG.2004.1885.10		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04
0411146-02A		**SW846 8015B Diesel Range Organics by GC/FID**					By: MDE			
X041461	XG.2004.1998.9		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10250445*** Collected: *10-25-04 9:45:00* By: *MB*
Matrix: C

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-03A		**SW846 5035B/8015B GRO by GC/FID**					By: TRS			
X041437	XG.2004.1885.11		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **DUKE ENERGY NMG 148**
Order: **0411146 ENV03** Receipt: **11-05-04**

Sample: ***SDNMG10250445*** Collected: *10-25-04 9:45:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-03A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041461	XG.2004.1998.10		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10250446*** Collected: *10-25-04 11:24:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-04A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041437	XG.2004.1985.12		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04
0411146-04A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041461	XG.2004.1998.21		Diesel Range Organics	ND	mg / Kg	1	25	1	11-11-04	11-11-04

Sample: ***SDNMG10250447*** Collected: *10-25-04 13:16:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-05A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041437	XG.2004.1985.13		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04
0411146-05A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041461	XG.2004.1998.12		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10250448*** Collected: *10-25-04 15:03:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-06A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041437	XG.2004.1985.14		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04
0411146-06A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041461	XG.2004.1998.15		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10260449*** Collected: *10-26-04 8:20:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-07A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041437	XG.2004.1985.16		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **DUKE ENERGY NMG 148**
Order: **0411146 ENV03** Receipt: **11-05-04**

Sample: ***SDNMG10260449*** Collected: *10-26-04 8:20:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-07A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041461	XG.2004.1998.16		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10260450*** Collected: *10-26-04 9:33:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-08A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041437	XG.2004.1985.17		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04
0411146-08A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041461	XG.2004.1998.17		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10260451*** Collected: *10-26-04 11:21:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-09A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041437	XG.2004.1985.18		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04
0411146-09A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041461	XG.2004.1998.18		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10260452*** Collected: *10-26-04 13:10:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-10A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041437	XG.2004.1985.19		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04
0411146-10A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041461	XG.2004.1998.19		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10260453*** Collected: *10-26-04 14:31:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-11A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041437	XG.2004.1985.20		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **DUKE ENERGY NMG 148**
Order: **0411146 ENV03** Receipt: **11-05-04**

Sample: ***SDNMG10260453*** Collected: *10-26-04 14:31:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-11A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041461	XG.2004.1998.20		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10270454*** Collected: *10-27-04 7:35:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-12A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041437	XG.2004.1985.21		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04
0411146-12A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041464	XG.2004.1999.8		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10270455*** Collected: *10-27-04 8:37:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-13A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041437	XG.2004.1985.22		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04
0411146-13A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041464	XG.2004.1999.9		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10270456*** Collected: *10-27-04 9:50:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-14A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041437	XG.2004.1985.23		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04
0411146-14A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041464	XG.2004.1999.10		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10270457*** Collected: *10-27-04 11:44:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-15A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041437	XG.2004.1985.24		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **DUKE ENERGY NMG 148**
Order: **0411146 ENV03** Receipt: **11-05-04**

Sample: ***SDNMG10270457*** Collected: *10-27-04 11:44:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-15A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041484	XG.2004.1999.11		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10270458*** Collected: *10-27-04 13:20:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-16A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041439	XG.2004.1979.7		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-08-04	11-08-04
0411146-16A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041484	XG.2004.1999.12		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10270459*** Collected: *10-27-04 15:00:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-17A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041439	XG.2004.1979.10		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-08-04	11-08-04
0411146-17A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041484	XG.2004.1999.13		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10280460*** Collected: *10-28-04 8:04:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-18A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041439	XG.2004.1979.11		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-08-04	11-08-04
0411146-18A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041484	XG.2004.1999.16		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10280461*** Collected: *10-28-04 9:11:00* By: *MB*
Matrix: ***C***

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-19A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041439	XG.2004.1979.12		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-08-04	11-08-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **DUKE ENERGY NMG 148**
Order: **0411146 ENV03** Receipt: **11-05-04**

Sample: ***SDNMG10280461*** Collected: *10-28-04 9:11:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-19A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041464	XG.2004.1999.17		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10280462*** Collected: *10-28-04 10:40:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-20A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041439	XG.2004.1979.13		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-08-04	11-08-04
0411146-20A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041464	XG.2004.1999.18		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10280463*** Collected: *10-28-04 11:50:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-21A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041439	XG.2004.1979.14		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-08-04	11-08-04
0411146-21A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041464	XG.2004.1999.19		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10280464*** Collected: *10-28-04 13:45:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-22A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041439	XG.2004.1979.15		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-08-04	11-08-04
0411146-22A		SW846 8015B Diesel Range Organics by GC/FID						By: MDE		
X041464	XG.2004.1999.20		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-11-04

Sample: ***SDNMG10280465*** Collected: *10-28-04 15:20:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-23A		SW846 5035B/8015B GRO by GC/FID						By: TRS		
X041439	XG.2004.1979.17		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-08-04	11-08-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **DUKE ENERGY NMG 148**
Order: **0411146 ENV03** Receipt: **11-05-04**

Sample: ***SDNMG10280465*** Collected: *10-28-04 15:20:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-23A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041464	XG.2004.1999.21		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-12-04

Sample: ***SDNMG10290466*** Collected: *10-29-04 7:58:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-24A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041439	XG.2004.1979.18		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-08-04	11-08-04
0411146-24A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041464	XG.2004.1999.22		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-12-04

Sample: ***SDNMG10290467*** Collected: *10-29-04 9:31:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-25A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041439	XG.2004.1979.19		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-08-04	11-08-04
0411146-25A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041464	XG.2004.1999.23		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-12-04

Sample: ***SDNMG10290468*** Collected: *10-29-04 11:06:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-26A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041439	XG.2004.1979.20		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-08-04	11-08-04
0411146-26A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041464	XG.2004.1999.24		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-12-04

Sample: ***SDNMG10290469*** Collected: *10-29-04 11:55:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-27A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041439	XG.2004.1979.21		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-08-04	11-08-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **DUKE ENERGY NMG 148**
Order: **0411146 ENV03** Receipt: **11-05-04**

Sample: ***SDNMG10290469*** Collected: *10-29-04 11:55:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-27A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041464	XG.2004.1999.25		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-12-04

Sample: ***SDNMG10290470*** Collected: *10-29-04 13:20:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-28A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041437	XG.2004.1985.25		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-09-04	11-09-04
0411146-28A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041464	XG.2004.1999.26		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-12-04

Sample: ***SDNMG11010471*** Collected: *11-01-04 9:41:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-29A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041438	XG.2004.1979.23		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-08-04	11-08-04
0411146-29A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041464	XG.2004.1999.29		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-12-04

Sample: ***SDNMG11010472*** Collected: *11-01-04 10:49:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-30A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041439	XG.2004.1979.24		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-08-04	11-08-04
0411146-30A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041464	XG.2004.1999.30		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-12-04

Sample: ***SDNMG11010473*** Collected: *11-01-04 12:45:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-31A		**SW846 5035B/8015B GRO by GC/FID**						By: TRS		
X041439	XG.2004.1979.25		Gasoline Range Organics	ND	mg / Kg	1	0.5		11-08-04	11-08-04

STANDARD

Assaigai Analytical Laboratories, Inc.

Certificate of Analysis

Client: **ENVIRONMENTAL PLUS, INC.**
Project: **DUKE ENERGY NMG 148**
Order: **0411146 ENV03** Receipt: **11-05-04**

Sample: ***SDNMG11010473*** Collected: *11-01-04 12:45:00* By: *MB*
Matrix: *C*

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Code	Prep Date	Run Date
0411146-31A		**SW846 8015B Diesel Range Organics by GC/FID**						By: MDE		
X041404	XG:2004.1999:31		Diesel Range Organics	ND	mg / Kg	1	25		11-11-04	11-12-04

Unless otherwise noted, all samples were received in acceptable condition and all sampling was performed by client or client representative. Sample result of ND indicates Not Detected, ie result is less than the sample specific Detection Limit. Sample specific Detection Limit is determined by multiplying the sample Dilution Factor by the listed Reporting Detection Limit. All results relate only to the items tested. Any miscellaneous workorder information or footnotes will appear below.

Analytical results are not corrected for method blank or field blank contamination.

* The percent recovery of the surrogate, associated with this sample, is outside of QA/QC criteria (low). This is attributed to matrix interference.

Duke Energy Field Services

ASSAIGAI ANALYTICAL LABORATORIES, INC.

Chain of Custody Record

Lab Job No.: 01111146 Date

Page 1 of 3

ORIGINAL

4901 Matthead N.E.
ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8964

2332 WESTWOOD
EL PASO, TEXAS 79925
(915) 593-6000

127 EASTGATE DRIVE, 212-C
LOS ALAMOS, NEW MEXICO 87544
(505) 662-2555

Client: DUKE ENERGY

Address:

City / State / Zip:

Project Name / Number: NMG 148

Contract / Purchase Order / Quote:

Project Manager / Contact: Pat McCasland

Telephone No.: 505-394-3481

Fax No.: 505-394-2601

Samplers : (signature) Morris Burkett

ASAI Fraction Number	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation: Temp.	Preservation: Chemical	Analysis Required: No. of Containers	Analysis Required: TPH Basin	Remarks
01A	SDNMG102504 43	10-25	7:30	C				1	X	
02A	SDNMG 102504 44	10:25	8:36	C				1	X	
03A	SDNMG 102504 45	10:25	9:45	C				1	X	
04A	SDNMG102504 46	10:25	11:24	C				1	X	
05A	SDNMG102504 47	10:25	1:16	C				1	X	
06A	SDNMG 102504 48	10:25	3:03	C				1	X	
07A	SDNMG 102604 49	10-26	8:20	C				1	X	
08A	SDNMG 102604 50	10-26	9:33	C				1	X	
09A	SDNMG 102604 51	10-26	11:21	C				1	X	
10A	SDNMG 102604 52	10-26	1:10	C				1	X	
11A	SDNMG 102604 53	10-26	2:31	C				1	X	

Relinquished by:	Date	Received by:	Relinquished by:	Date	Received by:
Signature: Morris Burkett	11-2	Signature: Roya Boone	Signature:	11/05/04	Signature:
Printed: Morris Burkett	Time: 0700	Printed: Roya Boone	Printed:	Time: 0455PM	Printed:
Company: EPI		Company: EPI	Company:		Company:
Reason: Ship		Reason: Ship	Reason:		Reason:

Method of Shipment:

Shipment No.:

Special Instructions:

Comments: 10 C

After analysis, samples are to be:

- ☐ Disposed of (additional fee)
- ☐ Stored (30 days max)
- ☐ Stored over 30 days (additional fee)
- ☐ Returned to customer

LABORATORY

ASSAIGAI ANALYTICAL LABORATORIES, INC.

Chain of Custody Record

Lab Job No. 011146 Date

Page 2 of 3

ORIGINAL

4301 Masthead N.E.
ALBUQUERQUE, NEW MEXICO 87109
(505) 345-8964

5332 WEDGEWOOD
EL PASO, TEXAS 79925
(915) 595-4009

127 EASTGATE DRIVE, 212-C
LOS ALAMOS, NEW MEXICO 87544
(505) 662-2554

Client: DUKE ENERGY

Address:

City / State / Zip:

Project Name / Number: NMG 148

Contract / Purchase Order / Quote:

Project Manager / Contact: Pat McCasland

Telephone No.: 505-394-3481

Fax No.: 505-394-2601

Samplers : (signature) Morris Burkett

AALI Fraction Number	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation: Temp.	Preservation: Chemical	Analysis Required: TPH 8015M	No. of Containers	Remarks
12A	SDNMG102704 54	10-27	7:35	C				X	1	
13A	SDNMG102704 55	10-27	8:37	C				X	1	
14A	SDNMG102704 56	10-27	9:30	C				X	1	
15A	SDNMG102704 57	10-27	11:44	C				X	1	
16A	SDNMG102704 58	10-27	1:20	C				X	1	
17A	SDNMG102704 59	10-27	3:00	C				X	1	
18A	SDNMG102804 60	10-28	8:04	C				X	1	
19A	SDNMG102804 61	10-28	9:11	C				X	1	
20A	SDNMG102804 62	10-28	10:40	C				X	1	
21A	SDNMG102804 63	10-28	11:50	C				X	1	
22A	SDNMG102804 64	10-28	1:45	C				X	1	
23A	SDNMG102804 65	10-28	3:20	C				X	1	

Relinquished by:	Date	Received by:	Relinquished by:	Date	Received by:
Signature: Morris Burkett	11-2	Signature: Roger Boone	Signature:	11/5/01	Signature:
Printed: Morris Burkett	Time: 0700	Printed: Roger Boone	Printed:	Time: 945AM	Printed:
Company: EPI		Company: EPI	Company:		Company: AALI
Reason: Ship		Reason: Ship	Reason:		Reason: Analyses

Method of Shipment:

Shipment No.:

Special Instructions:

Comments:

After analysis, samples are to be:

- ☐ Disposed of (additional fee)
- ☐ Stored (30 days max)
- ☐ Stored over 30 days (additional fee)
- ☐ Returned to customer

LABORATORY

ASSAIGAI ANALYTICAL LABORATORIES, INC.

Chain of Custody Record

4301 Masthead N.E. ALBUQUERQUE, NEW MEXICO 87109 (505) 345-8964

3332 WEDGEWOOD EL PASO, TEXAS 79925 (915) 593-6000

127 EASTGATE DRIVE, 212-C LOS ALAMOS, NEW MEXICO 87544 (505) 662-2558

Lab Job No.: 0411146 Date ______ ORIGINAL

Page 3 of 3

Client: DUKE ENERGY
Address:
City / State / Zip:
Project Name / Number: NMG 148
Contract / Purchase Order / Quote:

Project Manager / Contact: Pat McCasland
Telephone No. 505-394-3481
Fax No. 505-394-2601
Samplers: (signature) Morris Burkett

Analysis Required: TPH 8015M

AALI Fraction Number	Field Sample Number / Location	Date	Time	Sample Type	Type / Size of Container	Preservation Temp.	Preservation Chemical	No. of Containers	TPH 8015M								Remarks
24A	SDNMG10290466	10-29	7:58	C				1	X								
25A	SDNMG10290467	10-29	9:31	C				1	X								
26A	SDNMG10290468	10-29	11:06	C				1	X								
27A	SDNMG10290469	10-29	11:55	C				1	X								
28A	SDNMG10290470	10-29	1:20	C				1	X								
29A	SDNMG11010471	11-1	9:41	C				1	X								
30A	SDNMG11010472	11-1	10:49	C				1	X								
31A	SDNMG11010473	11-1	12:45	C				1	X								

Relinquished by	Date / Time	Received by	Relinquished by	Date / Time	Received by
Signature: Morris Burkett Printed: Morris Burkett Company: EPT Reason: Ship	Date: 11-2 Time: 0700	Signature: Roger Boone Printed: Roger Boone Company: EPT Reason: Ship	Signature: Printed: Company: Reason:	Date: 11/05/04 Time: 945am	Signature: Desiree Nylaf Printed: Desiree Dyk Company: AAL Reason: Analyses

Method of Shipment:
Shipment No.:
Special Instructions:

Comments:

After analysis, samples are to be:
- ☐ Disposed of (additional fee)
- ☐ Stored (30 days max)
- ☐ Stored over 30 days (additional fee)
- ☐ Returned to customer

LABORATORY

NEW MEXICO STATE LAND OFFICE
Ray B. Powell, Commissioner of Public Lands
New Mexico State Land Office Building
P.O. Box 1148, Santa Fe, NM 87504-1148

RIGHT OF ENTRY PERMIT
CONTRACT NO. 707

1. RIGHT OF ENTRY PERMIT
This permit is hereby issued under the authority established by Section 19-1-2 NMSA (1985). Therefore, and in consideration of and subject to the terms, covenants, conditions, agreements, obligations and reservations contained in the permit and all other existing rights, the Commissioner of Public Lands, New Mexico State Land Office, State of New Mexico, hereinafter called "COMMISSIONER," grants to **Duke Energy Field Services c/o Environmental Plus, Inc. of PO Box 1558, Eunice, NM 88231 hereinafter** called "PERMITTEE," authorized use of a specific tract(s) of state trust land described in this permit.

2. TERM AND LAND DESCRIPTION
Right of entry is granted for a term of 3 months commencing **December 18, 2002 to March 18, 2003** to the following state lands: **NE4SW4 of Section 16, Township 19 South, Range 37 East.** SE

3. FEE.
$300.00 (Three Hundred Dollars)

4. PERMITTED USE
Permitted use is for the purpose of: **Delineate and characterize the extent pipeline fluid contamination and excavate soil for remediation purposes, i.e., off-site disposal, mechanically shred/aerate, land spread, blend and treat the released pipeline fluids. An undetermined number of ground water observation monitor wells will be installed. The granting of this permit does not allow access across private lands.**

5. IMPROVEMENTS
No improvements shall be placed on the premises without the prior written consent of the Commissioner.

6. RESERVATIONS
Commissioner reserves the right to execute permits on the land granted by this permit for mining purposes and for the extraction of oil, gas, salt, geothermal resources, and other mineral deposits therefrom and the right to go upon, explore for, mine, remove and sell same.

Commissioner further reserves the right to sell or dispose of natural surface products of said lands and to grant such other right-of-way and easements as provided for by law.

7. COMPLIANCE WITH LAWS

Permittee shall at its own expense comply fully with and be subject to all regulations, rules, ordinances, and requirements of the Commissioner including, but not limited to the Cultural Properties Act, NMSA 1978 as amended. It is illegal for any person or his agent to appropriate, excavate, injure, or destroy any historic, or prehistoric ruin or monument, or any object of historical, archaeological, architectural, or scientific value situated on lands owned or controlled by the State Land Office without a valid permit issued by the Cultural Properties Review Committee and approved by the Commissioner of Public Lands.

8. HOLD HARMLESS

Permittee shall have, save, and hold harmless, indemnify and defend Commissioner and the State of New Mexico, and their agent or agents, in their official and individual capacities, of and from any and all liability claims, losses, or damages arising out of or alleged to arise out of or indirectly connected with the operations of Permittee under this permit off or on the Commissioner' premises or arising out of the presence on the Commissioner's premises of any agent, contractor or subcontractor of Permittee.

9. AMENDMENT

This permit shall not be altered, changed or amended except by an instrument in writing executed by Commissioner and Permittee.

10. WITHDRAWAL

Commissioner reserves the right to withdraw any or all of the land authorized for use under this permit. If applicable, Permittee shall vacate the acreage specified within 30 days after receipt of written notification of withdrawal from the Commissioner.

11. CANCELLATION

The violation by Permittee of any of the terms, conditions or covenants of this permit or the nonpayment by Permittee of the fees due under this permit shall at the option of the Commissioner be considered a default and shall cause the cancellation of this permit 30 days after Permittee has been sent written notice of such.

12. PRESERVE AND PROTECT

The Permittee agrees to preserve and protect the natural environmental conditions of the land encompassed in this permit, and to take those reclamation or corrective actions that are accepted soil and water conservation practices and that are deemed necessary by the Commissioner to protect the land from pollution, erosion, or other environmental degradation.

13. RECLAMATION

The Permittee agrees to reclaim those areas that may be damaged by activities conducted thereon.

14. SPECIAL INSTRUCTIONS AND OR RESTRICTIONS

1. No off road traffic allowed

2. No wood collection or tree cutting allowed.

3. Disturbing, dislodging, damaging, defacing, destroying or removing historical archaeological, paleontological or cultural sites or artifacts is prohibited.

4. Disturbing, dislodging, damaging, defacing, destroying any improvement, fixture, item, object or thing placed or located in, under or upon the land is prohibited.

5. Entries to lands are limited to those State Lands with public access.

6. Any other activities not listed are not allowed unless prior written approval from the Commissioner of Public Lands is granted.

WITNESS the hands and seals of PERMITTEE and COMMISSIONER on the day and year first above written.

John Wood Telephone: 505 394 3481

PERMITTEE

ACKNOWLEDGMENT

STATE OF NEW MEXICO)

)

COUNTY OF Lea **)**

The foregoing instrument was acknowledged before me this 27th day of December, 2002.

My Commission Expires: 8-21-2004 Linda Carol Cage

NOTARY PUBLIC

Patrick H Lyons

COMMISSIONER OF PUBLIC LANDS

Closure Proposal Approval Letter - October 7, 2004

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Lori Wrotenbery
Director
Oil Conservation Division

October 7, 2004

Mr. Stephen Weathers
Duke Energy Field Services, Inc.
370 17th St., Suite 900
Denver, Colorado 80202

RE: NMG-148C PIPELINE RELEASE SITE
ELDRIDGE RANCH ABATEMENT PLAN AP-33
MONUMENT, NEW MEXICO

Dear Mr. Weathers:

The New Mexico Oil Conservation Division (OCD) has reviewed the following Duke Energy Field Services' (Duke) February 25, 2004 "SOIL REMEDIATION STATUS AND CLOSURE PROPOSAL, NMG-148C PIPELINE RELEASE, LEA COUNTY, NEW MEXICO (UNIT N, SECTION 16, T19S R37E)" and accompanying January 2004 "NMG-148C RELEASE SITE, SOIL REMEDIATION STATUS AND CLOSURE PROPOSAL." These documents contain Duke's proposal for the remediation of soils and closure of the excavation at the NMG-148C Pipeline Release Site located at the north end of the Eldridge Ranch Abatement Plan (AP-33) Site.

The above-referenced proposal is approved with the following conditions:

1. Duke shall obtain a composite sample from each 200 yards of backfill to demonstrate that the soils have been remediated to OCD soil guidance levels. The samples shall be analyzed for concentrations of BTEX (benzene, toluene, ethylbenzene and xylene) and total petroleum hydrocarbons (TPH) using EPA approved methods and quality assurance/quality control (QA/QC) procedures. A field PID reading of less than 100 ppm of organic vapor may be substituted for a laboratory measurement of BTEX.

2. Only soils that meet the OCD's recommended soil remediation levels shall be placed back in the excavation.

3. Upon completion of the excavation activities, Duke shall install a ground water monitoring well directly adjacent to and downgradient of the excavated area to demonstrate that ground water in the source area has been remediated to New Mexico Water Quality Control Commission (WQCC) ground water standards.

4. The monitor well shall be installed and developed in accordance with OCD's prior investigation work plan approval.

5. No less than 24 hours after well development, ground water from the newly installed monitor well shall be purged, sampled and analyzed for concentrations of BTEX and polynuclear aromatic hydrocarbons using EPA approved methods and QA/QC procedures.

6. In order to provide a point in time snapshot of overall ground water conditions throughout the site, water quality sampling of the newly installed wells shall be coordinated to coincide with a sampling event of all previously installed monitoring wells.

7. All wastes generated shall be disposed of at an OCD approved facility or in an OCD approved manner.

8. A comprehensive report containing the results of all remediation and investigation activities shall be submitted to the OCD Santa Fe Office by December 31, 2004 with a copy provided to the OCD Hobbs District Office. The report shall contain:

    a. A comprehensive description and summary of the results of all past and present soil and ground water investigation, remediation and monitoring activities.

    b. A site map showing the location of pipelines, excavations, spills, monitoring wells, recovery wells, and any other pertinent site features.

    c. Summary tables of all past and present soil and ground water quality sampling results including copies of all recent laboratory analytical data sheets and associated QA/QC data.

    d. The disposition of all wastes generated.

9. Duke shall notify the OCD at least 48 hours in advance of all scheduled activities such that the OCD has the opportunity to witness the events and split samples.

Please be advised that OCD approval does not relieve Duke of responsibility if the plan fails to adequately remediate and investigate the extent of contamination related to Duke's activities, or if contamination exists which is outside the scope of the plan. In addition, OCD approval does not relieve Duke of responsibility for compliance with any other federal, state or local laws and regulations.

If you have any questions, please contact me at (505) 476-3491.

Sincerely,

Original signed by William C. Olson

William C. Olson
Hydrologist
Environmental Bureau

cc: Chris Williams, OCD Hobbs District Office
Frank Eldridge
Gene Samberson, Heidel, Samberson, Newell, Cox & McMahon
Robert G. McCorkle, Rodey, Dickason, Sloan, Akin & Robb

Final form C-141

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

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

Form C-141
Revised October 10, 2003

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

☐ Initial Report ☒ Final Report

Name of Company:	Contact:
Address	Telephone No.
Facility Name	Facility Type

Surface Owner:	Mineral Owner	Lease No.

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County: Lea

Latitude: 32 39' 21.32"N Longitude: 103 15' 32.90"W

Type of Release	Volume of Release	Volume Recovered
Source of Release	Date and Hour of Occurrence	Date and Hour of Discovery
Was Immediate Notice Given? ☒ Yes ☐ No ☐ Not Required	If YES, To Whom?	
By Whom?	Date and Hour	
Was a Watercourse Reached? ☒ Yes ☐ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken.*
4" Steel Pipeline

Describe Area Affected and Cleanup Action Taken.*
2,536 sqft ~95 x 40': Site soil has been remediated to NMOCD standards and the surface contoured. Reseeding will occur in the spring of 2005. Remedial Goals: TPH 8015m = 100 mg/Kg, Benzene = 10 mg/Kg, and BTEX, i.e., the mass sum of Benzene, Ethyl Benzene, Toluene, and Xylenes = 50 mg/Kg or <100 ppm VOC Headspace.

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:		
Printed Name: Steve Weathers	Approved by District Supervisor:	
E-mail Address: SWWeathers@Duke-Energy.com	Approval Date:	Expiration Date:
Title: Environmental Projects Manager	Conditions of Approval:	Attached ☐
Date: December 27, 2004 Phone: 303.605.1718		

* Attach Additional Sheets If Necessary