



ENVIRONMENTAL PLUS, INC.

STATE APPROVED LAND FARM AND ENVIRONMENTAL SERVICES

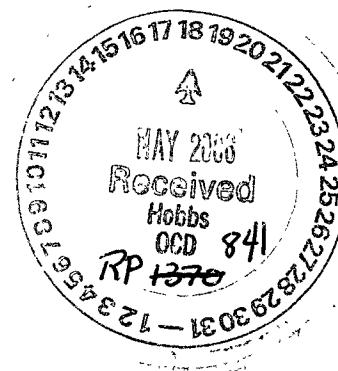
Micro-Blaze

Micro-Blaze Out™

May 16, 2006

Mr. Paul Sheeley
Environmental Engineer
New Mexico Oil Conservation Division
1625 North French Drive
Hobbs, New Mexico 88240

Re: McDonnold Operating (O-Grid #014372)
Delineation Report and Proposal
Jack A-29/Jack B-29 Comingled Battery (Ref. #110024),
UL-H (SE $\frac{1}{4}$ of the NE $\frac{1}{4}$) of Section 29, T24S, R37E
Landowner: Woolworth Trust



Dear Mr. Sheeley:

Environmental Plus, Inc. (EPI), on behalf of McDonnold Operating, submits for your consideration and approval, this delineation report and remediation proposal.

BACKGROUND

An undetermined volume of crude oil and saline produced water was released into the area around the tank battery and impacted approximately 800 square feet of surface area southwest of the tank battery. There are no surface water bodies or water wells located within a 1,000-foot radius of the site and, based on USGS and New Mexico Office of the State Engineer groundwater well information; groundwater was estimated to occur at approximately 120-feet below ground surface (bgs) (Reference the initial C-141 and supporting documentation previously submitted). These site characteristics give the site a zero (0) ranking and applies the following New Mexico Oil Conservation Division (NMOCD) remedial guidelines; total petroleum hydrocarbon (TPH) = 5,000 mg/Kg, benzene = 10 mg/Kg, benzene, and BTEX (benzene, toluene, ethylbenzene and total xylenes) = 50 mg/Kg. Soil chloride residuals cannot be capable of impacting local groundwater in excess of the New Mexico Water Quality Control Commission (WQCC) 250 mg/L domestic water supply standard. In April 2006, without removing the tanks or piping, the upper 4-feet of impacted soil inside the tank battery bermed area was excavated and disposed of in an NMOCD approved facility (exempted from RCRA 40 CFR Part 261). On April 17, 2006, after notifying the NMOCD, soil samples were collected from strategic locations (reference *Figure 4*) from within the excavated area and submitted to the laboratory for analysis of TPH, benzene, BTEX and chloride.

DISCUSSION OF RESULTS

Reported benzene and BTEX concentrations for all samples analyzed in the laboratory were below the NMOCD remedial thresholds and considered acceptable.

Chloride concentrations ranged from 16.8 mg/Kg in the southeast sidewall (SW-6) to 6,460 mg/Kg in the central portion of the excavation floor (BH-3) at 4-feet bgs.

Analytical results for samples collected from the sidewalls of the excavation indicated TPH concentrations were below the NMOCD remedial threshold of 5,000 mg/Kg for all samples with the exception of sample SW-3. Analytical results for this sample indicated TPH concentrations of 8,650 mg/Kg. Analytical results for samples collected from the excavation floor indicated TPH concentrations



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ranged from 7,790 mg/Kg to 16,200 mg/Kg, all in excess of the NMOCD remedial threshold of 5,000 mg/Kg.

DELINEATION PROPOSAL

To fully delineate the horizontal extent of TPH and chloride impacts, it is proposed to extend the northeast and northwest sidewalls of the excavation until acceptable concentrations are achieved. To fully delineate the vertical extent of TPH and chloride impacts in the current excavation, it is proposed to advance a soil boring (SB-1) in the floor of the excavation, collecting samples at five foot intervals beginning with the excavation floor. Two additional soil borings are proposed (i.e., SB-2 and SB-3) to delineate the unexcavated flowpath southwest of the tank battery (reference *Figure 5*).

CONDITIONAL REMEDIATION PROPOSAL

After the vertical extent of impact at the site has been delineated, it is proposed that soils impacted above the NMOCD remedial thresholds down to 4-feet bgs be excavated and either be disposed of in an NMOCD approved facility or blended with local clean soil to below the NMOCD remedial thresholds and used to backfill the excavation. Soils impacted in excess of the NMOCD remedial thresholds below 4-feet bgs will be isolated from the near surface environment with a 3-foot thick compacted red clay barrier. This barrier will also serve to interrupt the vertical migration pathway by which the petroleum hydrocarbon residuals could possibly impact the local groundwater. This remediation proposal assumes that local groundwater has not been impacted and is designed to restore the upper 4-feet of soil to acceptable levels and be protective of local groundwater. This proposal will be implemented upon your approval.

Should you have any questions or if additional information is required, please feel free to call Mr. Iain Olness, EPI Technical Manager, or myself.

Sincerely,

Pat McCasland
EPI Senior Consultant

cc: Craig McDonnell, McDonnell Operating
file

Enclosures

Figures
Table
Laboratory Reports
Photographs
Site Information and Metrics Form
Form C-141 (Informational)

FIGURES

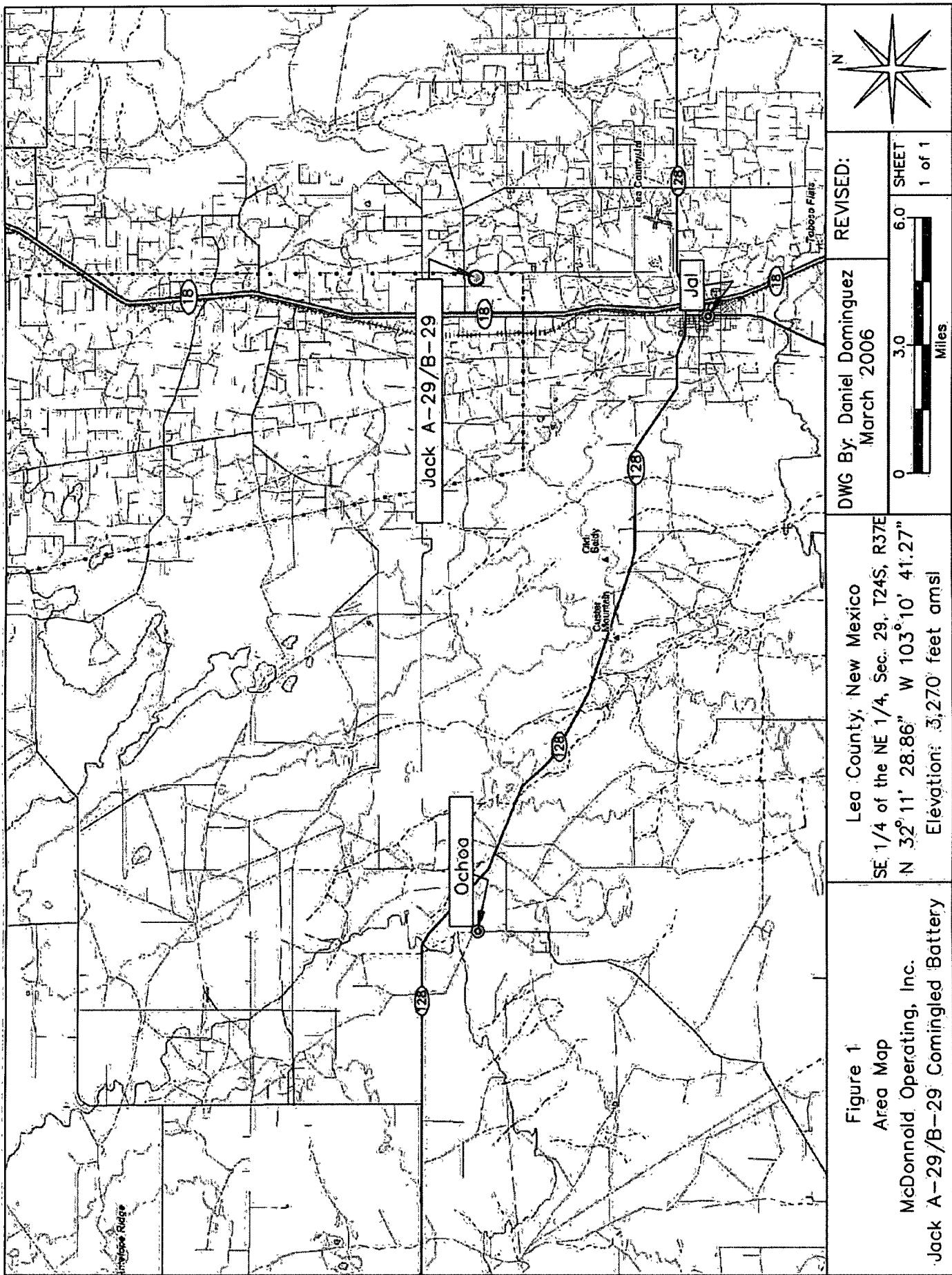


Figure 1
 Area Map
 McDonnell Operating, Inc.
 Jack A-29/B-29 Cominged Battery

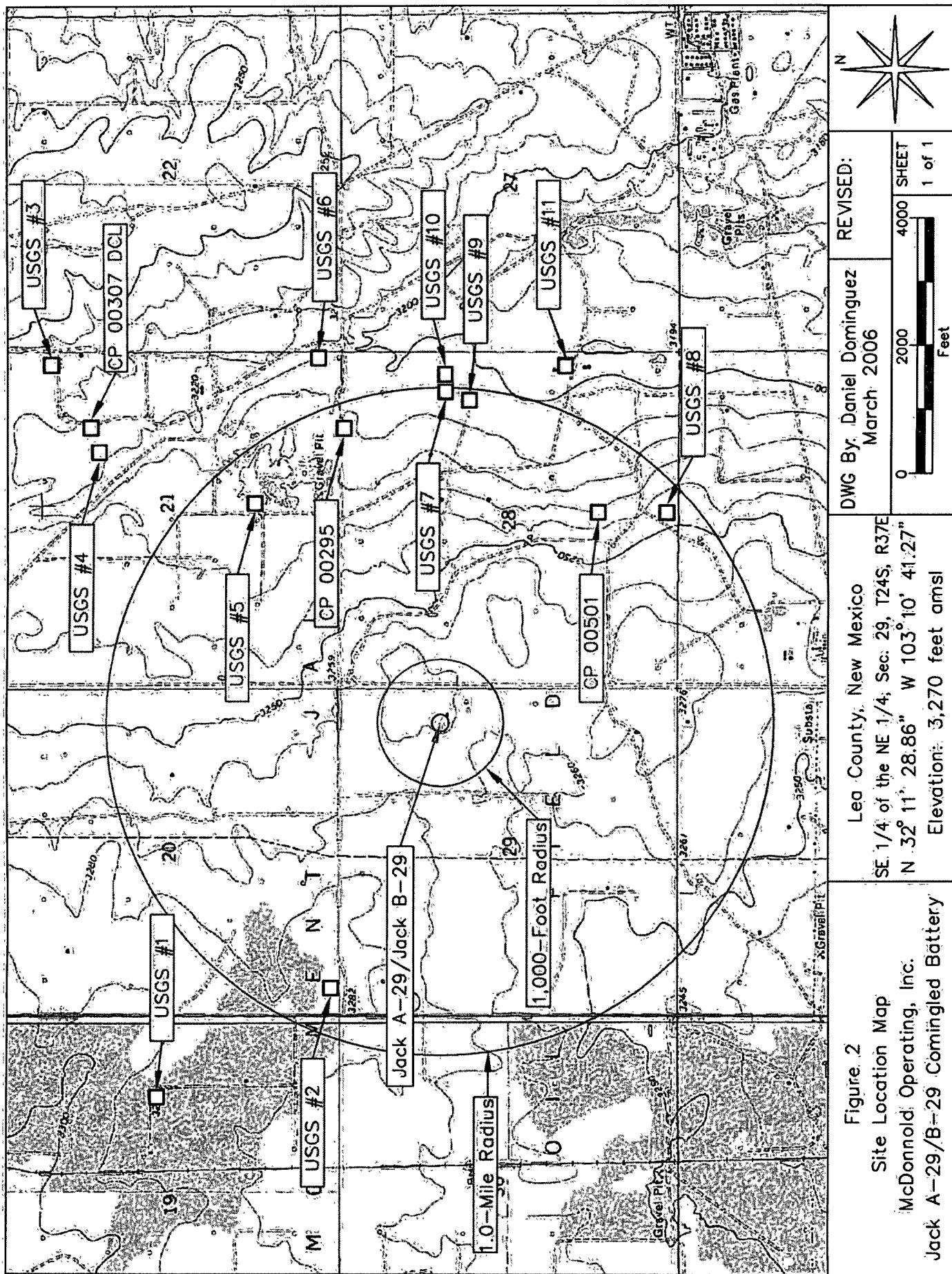


Figure 2
Site Location Map
McDonnell Operating, Inc.
Jack A-29/B-29 Commingled Battery

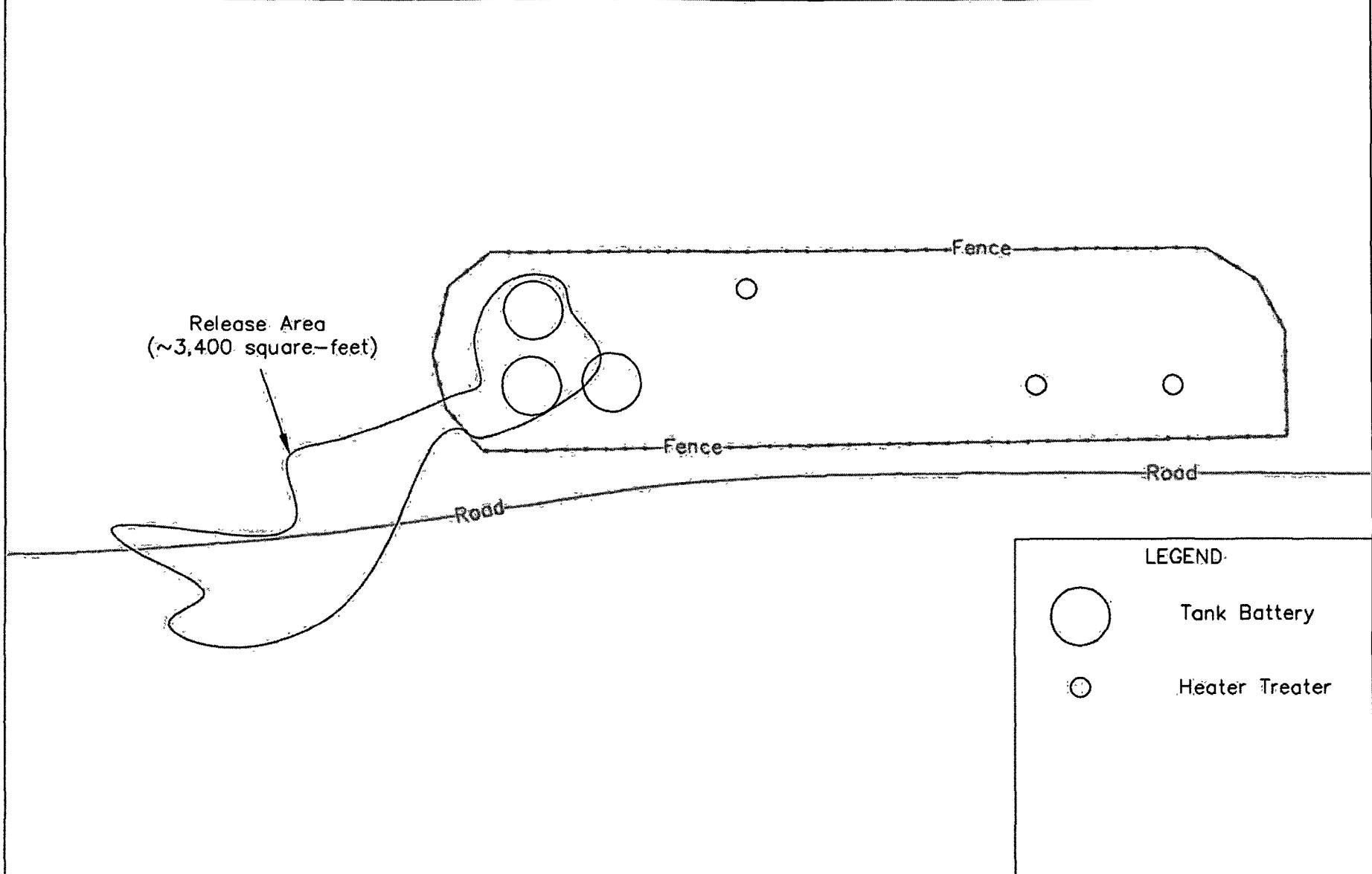
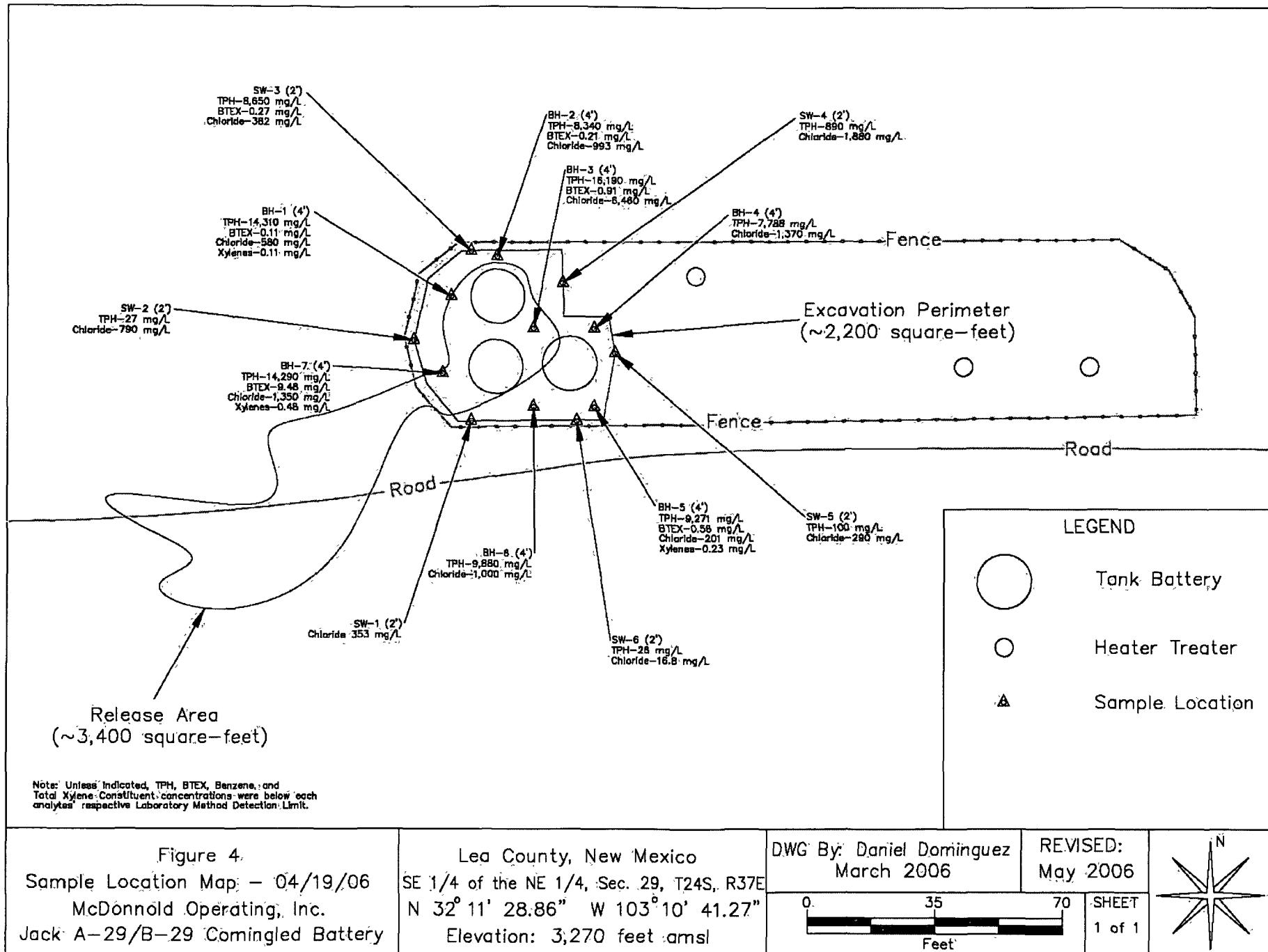


Figure 3 Site Map McDonnold Operating, Inc. Jack A-29/B-29 Comingled Battery	Lea County, New Mexico SE 1/4 of the NE 1/4, Sec. 29, T24S, R37E N 32° 11' 28.86" W 103° 10' 41.27" Elevation: 3,270 feet amsl	DWG By: Daniel Dominguez March 2006	REVISED:	N * (Compass rose)
0	35	70	SHEET 1 of 1	Feet



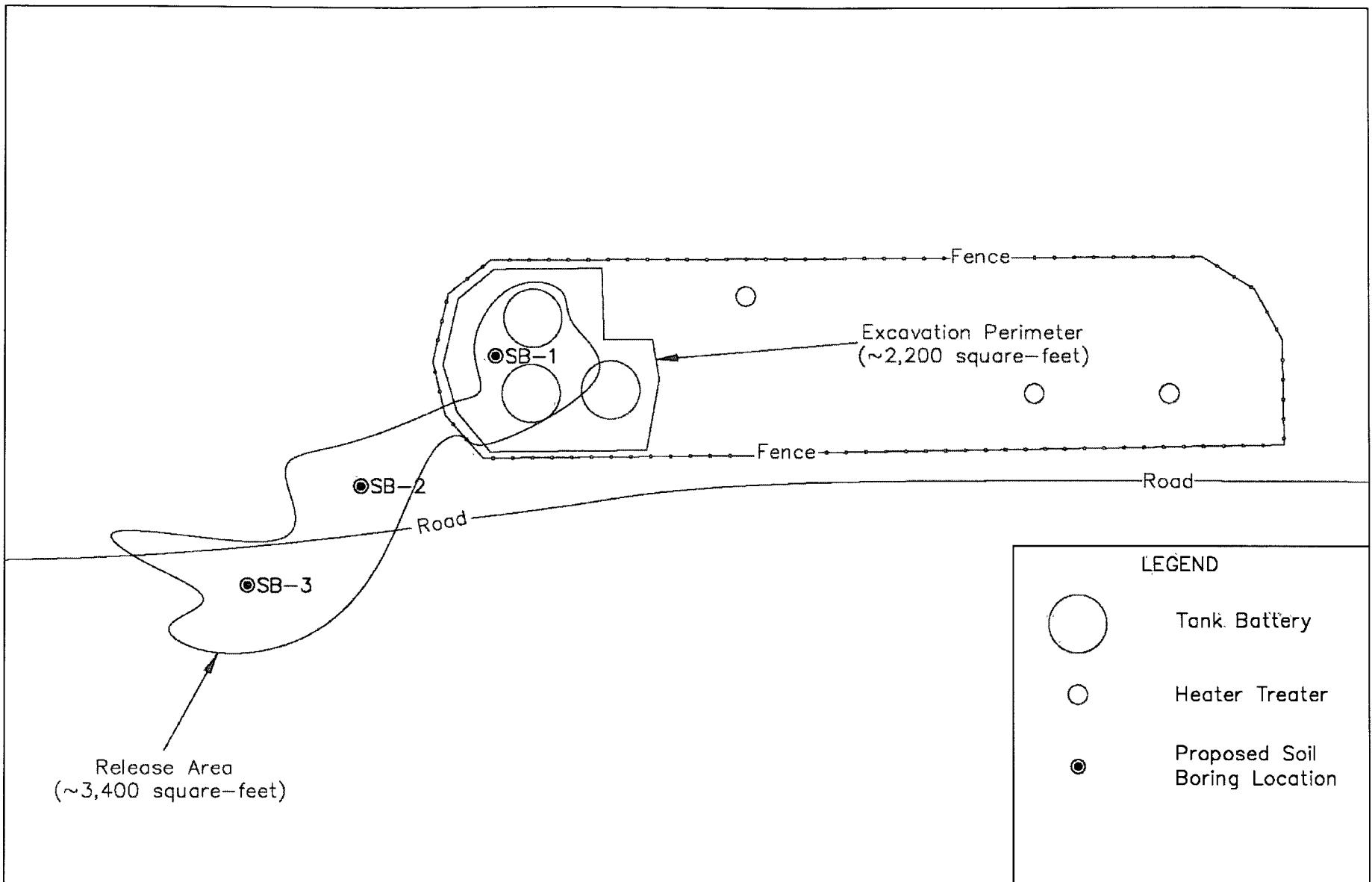


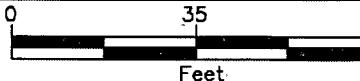
Figure 5 Proposed Soil Boring Location Map McDonnold Operating, Inc. Jack A-29/B-29 Comingled Battery	Lea County, New Mexico SE 1/4 of the NE 1/4, Sec. 29, T24S, R37E N 32° 11' 28.86" W 103° 10' 41.27" Elevation: 3,270 feet amsl	DWG By: Daniel Dominguez March 2006	REVISED: May 2006	N *-----*
		 0 35 70 Feet	SHEET 1 of 1	

Table 1
McDonnold Operating, Inc.
Jack A29/B29 Comingled Battery (Ref. #110024)
Excavation Sample Analytical Results

Sample Location	Sampling Interval (feet-bgs ¹)	Sample ID#	Date	Lithology	VOC ² (ppm)	GRO ³ mg/Kg	DRO ⁴ mg/Kg	TPH ⁵ mg/Kg	BTEX mg/Kg	Benzene mg/Kg	Toluene mg/Kg	Ethylbenzene mg/Kg	Total Xylene mg/Kg	Laboratory Chloride mg/Kg	Field Chloride mg/Kg
Excavation Bottom	4	BH-1	4/19/2006	Sand	na ⁸	310	14,000	14,300 ⁶	0.110	<0.005 ⁷	<0.005	<0.005	0.110	580	560
	4	BH-2	4/19/2006	Sand	na	240	8,100	8,340	0.210	<0.005	<0.005	0.210	<0.010	993	1,280
	4	BH-3	4/19/2006	Sand	na	190	16,000	16,200	0.910	<0.005	<0.005	0.910	<0.010	6,460	>4,000
	4	BH-4	4/19/2006	Sand	na	88	7,700	7,790	<0.010	<0.005	<0.005	<0.005	<0.010	1,370	1,040
	4	BH-5	4/19/2006	Sand	na	71	9,200	9,270	0.560	<0.005	<0.005	0.330	0.230	201	320
	4	BH-6	4/19/2006	Sand	na	80	9,800	9,880	<0.010	<0.005	<0.005	<0.005	<0.010	1,000	800
	4	BH-7	4/19/2006	Sand	na	290	14,000	14,300	9.48	<0.005	<0.005	9.00	0.480	1,350	1,360
Southwest Sidewall	2	SW-1	4/19/2006	Sand	na	<0.55	<0.25	<0.55	<0.010	<0.005	<0.005	<0.005	<0.010	353	320
West Sidewall	2	SW-2	4/19/2006	Sand	na	<0.55	27	27	<0.010	<0.005	<0.005	<0.005	<0.010	790	400
Northwest Sidewall	2	SW-3	4/19/2006	Sand	na	450	8,200	8,650	0.270	<0.005	<0.005	0.270	<0.010	382	560
Northeast Sidewall	2	SW-4	4/19/2006	Sand	na	<0.55	890	890	<0.010	<0.005	<0.005	<0.005	<0.010	1,880	1,440
East Sidewall	2	SW-5	4/19/2006	Sand	na	<0.55	100	100	<0.010	<0.005	<0.005	<0.005	<0.010	290	240
Southeast Sidewall	2	SW-6	4/19/2006	Sand	na	<0.55	26	26	<0.010	<0.005	<0.005	<0.005	<0.010	16.8	800
New Mexico Oil Conservation Division Remedial Thresholds					100			1,000	.50	10					250 ⁹

¹bgs = below ground surface

²VOC=Volatile Organic Contaminants/Constituents, i.e., organic vapors

³GRO=Gasoline Range Organics C₆-C₁₂

⁴DRO=Diesel Range Organics C₁₂-C₂₂

⁵TPH=Total Petroleum Hydrocarbon = GRO+DRO

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

⁷Italicized values are < the method detection limit

⁸na=Not Analyzed

⁹New Mexico Water Quality Control Commission Standard: Residual concentrations cannot be capable of impacting local water resources in excess of 250 mg/L

Assalga Analytical Laboratories, Inc.

Certificate of Analysis

All samples are reported on an "as received" basis, unless otherwise noted (i.e. - Dry Weight).

Client: ENVIRONMENTAL PLUS, INC.

Project: #110024

Order: 0604475 ENV03 Receipt: 04-20-06

Sample: SW6

Collected: 04-19-06 11:15:00 By: JM

Matrix: SOIL

QC Group	Run Sequence	CAS #	Analyte	Result	Units	Dilution Factor	Detection Limit	Prep Code	Prep Date	Run Date
0604475-0013A SW846 5035B/8260B Purgeable VOCs by GC/MS										
V06211	XG.2006.509.21	71-43-2	Benzene	ND	mg / Kg	1	0.005	By: TRS	04-28-06	04-28-06
V06211	XG.2006.509.21	100-41-4	Ethylbenzene	ND	mg / Kg	1	0.005		04-28-06	04-28-06
V06211	XG.2006.509.21	95-47-6	o-Xylene	ND	mg / Kg	1	0.005		04-28-06	04-28-06
V06211	XG.2006.509.21	108-38-3 3/106-42	p/m-Xylenes	ND	mg / Kg	1	0.01		04-28-06	04-28-06
V06211	XG.2006.509.21	108-86-3	Toluene	ND	mg / Kg	1	0.005		04-28-06	04-28-06
0604475-0013A SW846 8015B Diesel Range Organics by GC/FID										
S06210	XG.2006.481.21		Diesel Range Organics	26	mg / Kg	1	25	By: RLG	04-21-06	04-24-06
0604475-0013A SW846 9056 Anions by Ion Chromatography										
W06314	WC.2006.1041.24	16887-00-6	Chloride	16.8	mg / Kg	2	0.5	By: JTK	04-25-06	04-26-06

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, i.e. 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

Environmental Plus, Inc.

2100 Avenue O, Eunice, NM 88231

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

P.O. Box 1558, Eunice, NM 88231

CUC475
ORIGINAL

Chain of Custody Form

LAB: Assaigai
1 of 2

Company Name		Environmental Plus, Inc.										Bill To:		ANALYSIS REQUEST						
EPI Project Manager		Pat McCasland										 Environmental Plus, Inc. Attn: Accounts Payable P.O. Box 1558, Eunice, NM 88231								
Mailing Address		P.O. BOX 1558																		
City, State, Zip		Eunice New Mexico 88231																		
EPI Phone#/Fax#		505-394-3481 / 505-394-2601																		
Client Company		McDonnold Operating																		
Facility Name		Jack A29/B29 Comingled Bat.																		
Location		UL-H-Sec 29 T24S R37E Lea Co NM																		
Project Reference		#110024																		
EPI Sampler Name		Jacob Melancon																		
LAB I.D.	SAMPLE I.D.	(G)RAB OR (C)OMP.	# CONTAINERS	MATRIX			PRESERV.	SAMPLING			DATE			TIME	BTEX 8021B	TPH 8015M	CHLORIDES (Cl ⁻)	SULFATES (SO ₄ ²⁻)	pH	TCLP
				GROUND WATER	WASTEWATER	SOIL		CRUDE OIL	SLUDGE	OTHER:		ACID/BASE	ICE/COOL							
10010A 1	BH1	G	1	X				X		19-Apr-06	8:00	X	X	X						
10010A 2	BH2	G	1	X				X		19-Apr-06	8:10	X	X	X						
10010A 3	BH3	G	1	X				X		19-Apr-06	8:20	X	X	X						
10010A 4	BH4	G	1	X				X		19-Apr-06	8:30	X	X	X						
10010A 5	BH5	G	1	X				X		19-Apr-06	8:40	X	X	X						
10010A 6	BH6	G	1	X				X		19-Apr-06	8:50	X	X	X						
10010A 7	BH7	G	1	X				X		19-Apr-06	9:00	X	X	X						
10010A 8	SW1	G	1	X				X		19-Apr-06	9:45	X	X	X						
10010A 9	SW2	G	1	X				X		19-Apr-06	10:00	X	X	X						
10010A 10	SW3	G	1	X				X		19-Apr-06	10:20	X	X	X						
Sampler Relinquished: <i>Jacob Melancon</i>				Date: 4/19/06	Received By: <i>Steph J. Jr.</i>	E-mail results to: pmccasland@envplus.net.														
Relinquished by:				Time: 3:00		REMARKS: CoC requested.														
Delivered by:				Date: 4/20/06	Received By: Lab staff															
				Time: 3:00																
				Sample Cool & intact Yes: <input checked="" type="checkbox"/> No: <input type="checkbox"/>	Checked By:															

5 day TAT

Environmental Plus, Inc.

2100 Avenue O, Eunice, NM 88231

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

P.O. Box 1558, Eunice, NM 88231

000475

ORIGINAL

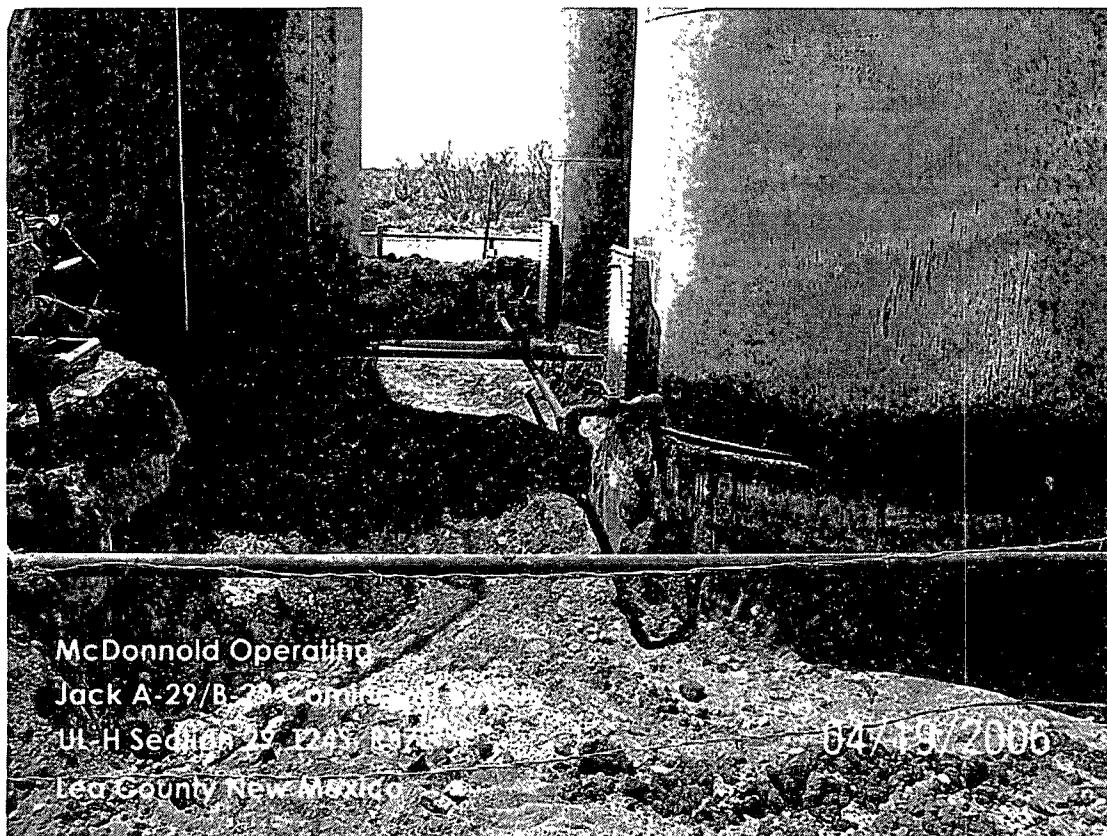
Chain of Custody Form

LAB: Assaigai

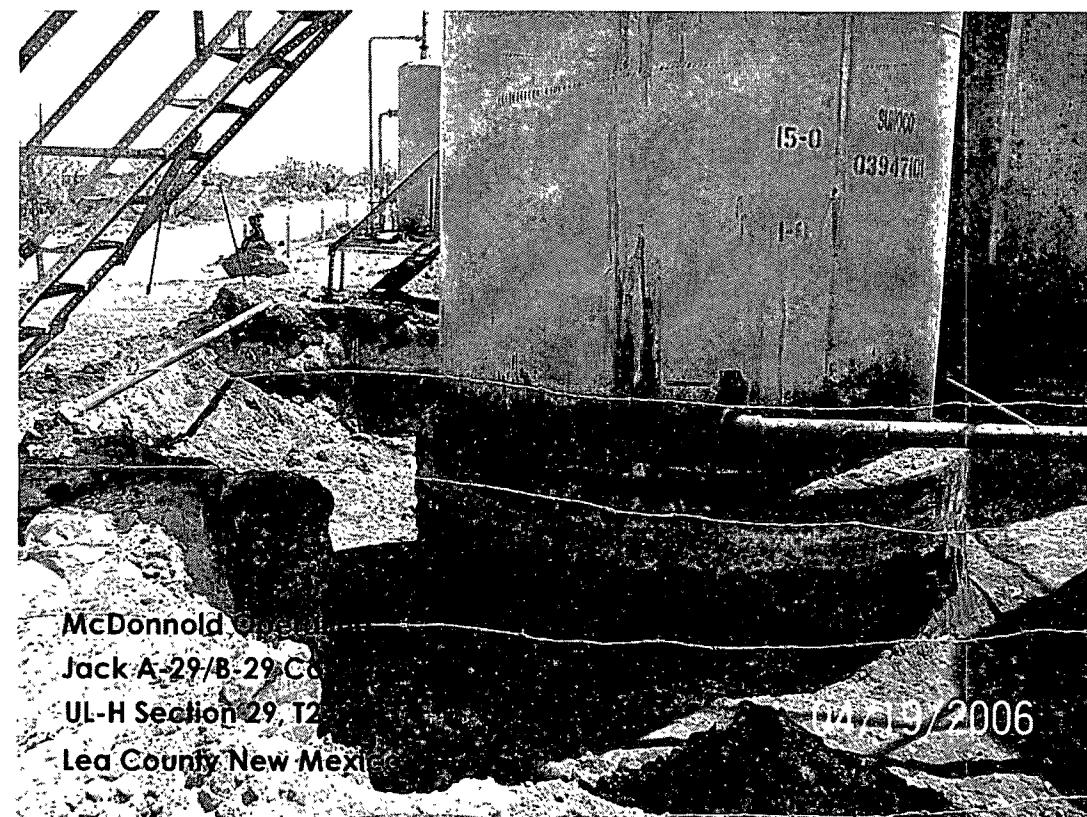
2 of 2

Company Name		Environmental Plus, Inc.										Bill To		Analysis Request																
EPI Project Manager	Pat McCasland																													
Mailing Address	P.O. BOX 1558																													
City, State, Zip	Eunice, New Mexico 88231																													
EPI Phone#/Fax#	505-394-3481 / 505-394-2601																													
Client Company	McDonnold Operating																													
Facility Name	Jack A29/B29 Comingled Bat.																													
Location	UL-H Sec 29 T24S R37E Lea Co NM																													
Project Reference	#110024																													
EPI Sampler Name	Jacob Melancon																													
LAB ID.	SAMPLE ID.	MATRIX						PRESERV.			SAMPLING				BTEX 8021B		TPH 8015M		CHLORIDES (Cl ⁻)		SULFATES (SO ₄ ²⁻)		PH		TCLP		OTHER >>		PAH	
		(G)RAB OR (C)OMP.	# CONTAINERS	GROUND WATER	WASTEWATER	SOIL	CRUDE OIL	SLUDGE	OTHER:	ACID/BASE	ICE/COOL	OTHER	DATE	TIME																
11A	1 SW4	G	1	X				X			19-Apr-06	10:38	X	X	X															
12A	2 SW5	G	1	X					X		19-Apr-06	11:00	X	X	X															
13A	3 SW6	G	1	X					X		19-Apr-06	11:15	X	X	X															
4																														
5																														
6																														
7																														
8																														
9																														
10																														
Sampler Relinquished:		Date: 4/19/06	Received By: <i>Shawn</i>	E-mail results to: pmccasland@envplus.net																										
Relinquished by: <i>Jacob Melancon</i>		Date: 4/19/06	Received by: (Lab staff)	REMARKS: CoC requested:																										
Delivered by:		Time: 3:05	4/20/06	Sample Cool & Intact			Checked By:																							
		Yes	No																											

5 day TAT



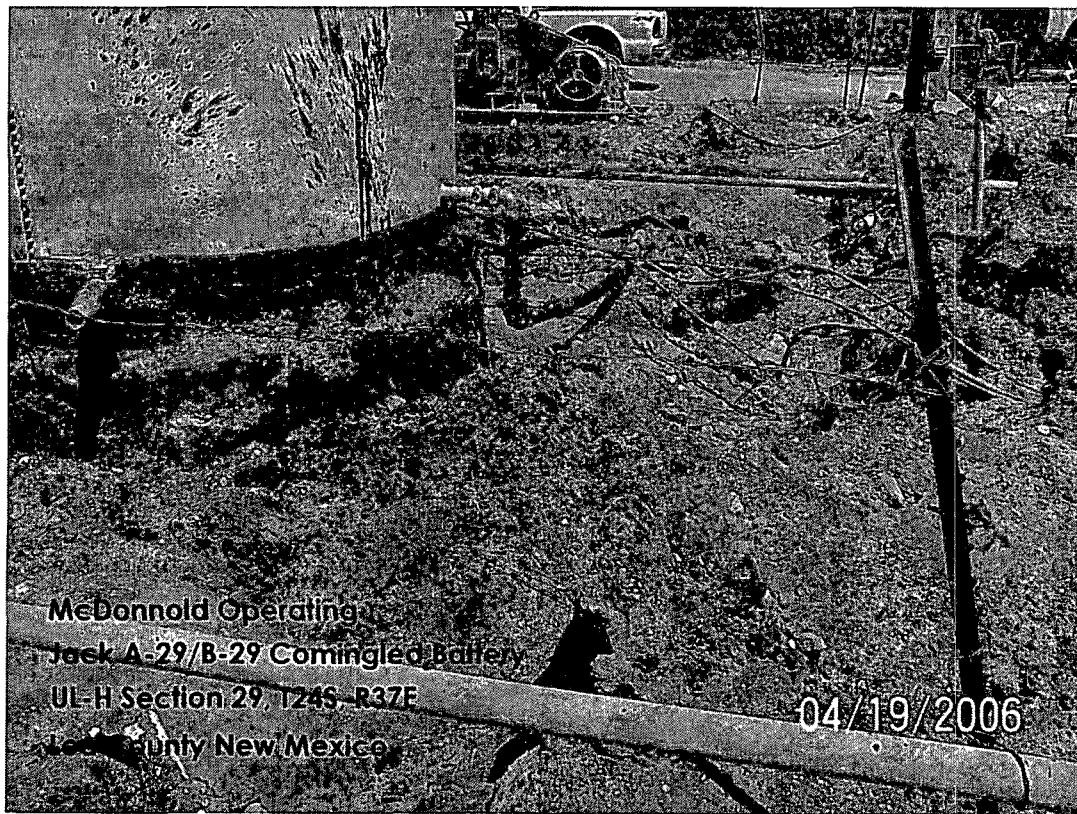
Photograph #1: Current excavation looking south from north perimeter.



Photograph #2: Current excavation, looking east from west perimeter.



Photograph #3: Current excavation, looking north from south perimeter.



Photograph #4: Current excavation, looking northwest from southeast corner.

McDonnold Operating, Inc. Site Information and Metrics		Incident Date: Historical	NMOCD Notified: 3/17/2006
SITE: Jack A-29/Jack B-29 Comingled Battery		Assigned Site Reference #110024	
Company: McDonnold Operating, Inc. (O-Grid #014372)			
Street Address:			
Mailing Address: 505 North Big Spring, Suite 204			
City, State, Zip: Midland, Texas 79701			
Representative: Craig M. McDonnold			
Representative Telephone: 432.682.3499			
Telephone:			
Fluid volume released (bbls): unknon		Recovered (bbls): unknown	
>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: Jack A-29/Jack B-29 Comingled Battery			
Source of contamination: Tank Battery			
Land Owner, i.e., BLM, ST, Fee, Other:			
LSP Dimensions			
LSP Area: ft ²			
Location of Reference Point (RP)			
Locatjon distance and direction from RP			
Latitude: 32°11'28.86"N			
Longitude: 103°10'41.27"W			
Elevation above mean sea level: 3,270'amsl			
Feet from South Section Line			
Feet from West Section Line			
Location- Unit or ¼¼: SE¼ of the NE¼		Unit Letter: H	
Location- Section: 29			
Location- Township: T24S			
Location- Range: R37E			
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:			
Agricultural water wells within 1000' radius of site: 1.0 miles west			
Public water supply wells within 1000' radius of site: none			
Depth from land surface to ground water (DG) >100-feet bgs			
Depth of contamination (DC) -			
Depth to ground water (DG – DC = DtGW) -			
1. Ground Water		2. Wellhead Protection Area	
If Depth to GW <50 feet: 20 points		If <1000' from water source, or; <200' from private domestic water source: 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	
Ground water Score = 0		Wellhead Protection Area Score= 0	
Site Rank (1+2+3) = 0		Surface Water Score= 0	
Total Site Ranking Score and Acceptable Concentrations			
Parameter	>19	10-19	0-9
Benzene ¹	10 ppm	10 ppm	10 ppm
BTEX ¹	50 ppm	50 ppm	50 ppm
TPH	100 ppm	1000 ppm	5000 ppm

¹100 ppm field VOC headspace measurement may be substituted for lab analysis