

## **SITE REMEDIATION**

**DOYLE HARTMAN OIL OPERATORS  
RELEASE SITE: ARNOTT RAMSAY (NCT-B) JOB#01061  
UNIT LETTER "G"  
SECTION 32, TOWNSHIP 25 SOUTH, RANGE 37 EAST  
LEA COUNTY, NEW MEXICO**

*Doyle  
Hartman 74752  
facility - fPAC0608130422  
incident - nPAC0608130593  
application - pPAC0608130656*

M.C.C.  
Environmental Services  
P.O. BOX 1030  
JAL, NEW MEXICO  
505-395-2776  
FAX 505-395-3476

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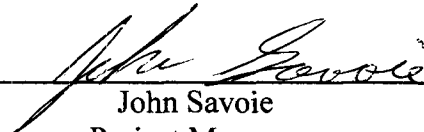
PREPARED FOR:

**DOYLE HARTMAN OIL OPERATORS  
HWY. 128  
JAL, NEW MEXICO 88252**

Mr. Doyle Hartman

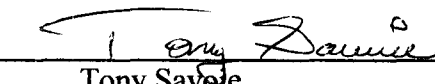
PREPARED BY:  
MERRYMAN CONSTRUCTION  
ENVIRONMENTAL SERVICES

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John Savoie  
Project Manager

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Tony Savoie  
Senior Project Manager

**M.C.C. Job # 01061  
May 25, 2001**

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**ASSESSMENT:**

Assessment activities began on 5/22/01. The area was sketched, and photographed. An oil stained area approximately 75 ft. by 30 ft. was observed within the lease road at the Doyle Hartman Arnott Ramsay (NCT-B) Tank Battery; site details are recorded in figure 1.

An average depth to water report was downloaded from the State Engineers Office web site. There were no registered wells found in Section 32, Township 25S, Range 37E. Depth to water and distance to surface water was determined by researching the surrounding sections. A total of 5 water wells were found in section 29 just to the north of section 32 with an average depth to water of 187 ft. Monitor wells at the Equilon Tank Farm average 105 ft. to water

A NMOCD form C-141 was filled out on 5/22/01 reporting an estimated loss of 45 bls of crude oil with all but 5 bls recovered. The release has been classified as a major release under the guidelines of NMOCD rule 116.

## CLOSURE STANDARDS

The New Mexico Oil Conservation Division "NMOCD" Guidelines for Remediation of Leaks, Spills, and Releases contains the standard criteria for remediation activities. A ranking analysis for the site was performed to determine appropriate soil remediation levels. The ranking analysis is as follows:

Depth to Ground Water	Greater Than 100 Feet	0 Points
Well Head Protection	Greater Than 1000 Feet to Water Source Greater Than 200 Feet to Private Water Source	0 Points
Surface Water Body	Greater Than 1000 Feet	0 Points
<b>Total Ranking Score</b>		<b>0 Points</b>

Based on the total ranking score, the closure objectives for this site for concentrations of benzene, BTEX, and TPH in soil are summarized below.

CONSTITUENT	CLOSURE CONCENTRATIONS (mg/kg)
BENZENE	10
BTEX	50
TPH	5000

**REMEDIATION:**

Excavation of stained soil began on 05/22/01. The stained soil was placed on the lease road north of the site. The soil from surface to 2.5 ft. was sandy loam; all of the visibly stained soil was excavated by 5/22/01; samples were collected from the bottom and sloped exit of the excavation, and one sample was collected from the stockpile. The sample locations and site description are identified in Figure 1, and table 1 below. Approximately 200 cubic yards of soil had been excavated at this time. Based on the volume of soil excavated and the TPH analytical, approximately 6.64 bls of hydrocarbon liquids were absorbed into the soil.

Stained soil around the release was identified as historic spills from previous operations or pipeline spills. The stained soil within the tank battery yard will be addressed if and when the facility is abandoned.

All soil samples were screened in the field using a photo-ionization detector (PID). Prior to use, the PID was calibrated to an isobutylene gas standard. Soil samples were prepared and shipped to the laboratory for analysis.

Soil TPH concentrations will be analyzed using one or all of the following methods:

EPA 418.1

EPA SW 846-8015M GRO/DRO

A vapor headspace reading taken when the samples are collected can substitute for BTEX lab samples.

At least one sample will be collected to verify Benzene and BTEX in soil concentrations using the following method:

EPA SW 846-8021B, 5030

**TABLE 1**

Site Assessment Soil Samples  
DOYLE HARTMAN OIL OPERATORS  
LEA COUNTY, NEW MEXICO

SITE: ARNNOT RAMSEY "B" JOB # 01061

SAMPLE LOCATION	SAMPLE DEPTH (FEET)	DATE SAMPLED	PID READING	TPH GRO Mg/Kg	TPH DRO Mg/Kg	Benzene Mg/Kg	BTEX Mg/Kg
Area #1 composite	2.5 ft. average	5/22/01	3.5	<10	<10	N/T	N/T
Area #2 composite	2.5 ft. average	5/22/01	4.5	<10	<10	<0.025	<0.025
Area #3 composite	2.5 ft. average	5/22/01	4.0	<10	<10	N/T	N/T
Area #4 composite	2.5 ft. average	5/22/01	3.5	<10	<10	N/T	N/T
Stockpile		5/22/01	78.0	1114	4044	N/T	N/T

The excavation samples have met the NMOCD guidelines for closure.

**CLOSURE:**

The stockpiled soil (approximately 200 cubic yds.) was hauled to B&K Landfarm. Form C-138 is attached

Having achieved closure levels in the excavation, fresh caliche was hauled in and placed into the excavated area; all backfill and leveling operations were completed by 5/24/01.

**SUMMARY:**

All of the samples taken during the remediation and closure activities demonstrate that the NMOCD guidelines have been achieved in remediation of this site.

*New Mexico Office of the State Engineer*  
**Well Reports and Downloads**

Township:  Range:  Sections: NAD27 X:  Y:  Zone:  Search Radius: County:  Basin:  Number:  Suffix: Owner Name: (First)  (Last)  ☐ Non-Domestic  
☐ Domestic ☒ All

WELL DATA REPORT 05/23/2001

DB File Nbr      (acre ft per annum)  
                    Use      Diversion      Owner(quarters are  
(quarters are  
Well Number

No Records found, try again

monitor wells at The Equilon Tank Farm  
Approximately 1/2 mile S.E. of The Site  
Average 105 Ft. to the top of the water.



*New Mexico Office of the State Engineer*  
**Well Reports and Downloads**

Township:  Range:  Sections:

NAD27 X:  Y:  Zone:  Search Radius:

County:  Basin:  Number:  Suffix:

Owner Name: (First)  (Last)  ☐ Non-Domestic  
☐ Domestic ☒ All

Well Data Report

Avg Depth to Water Report

Water Column Report

Clear Form

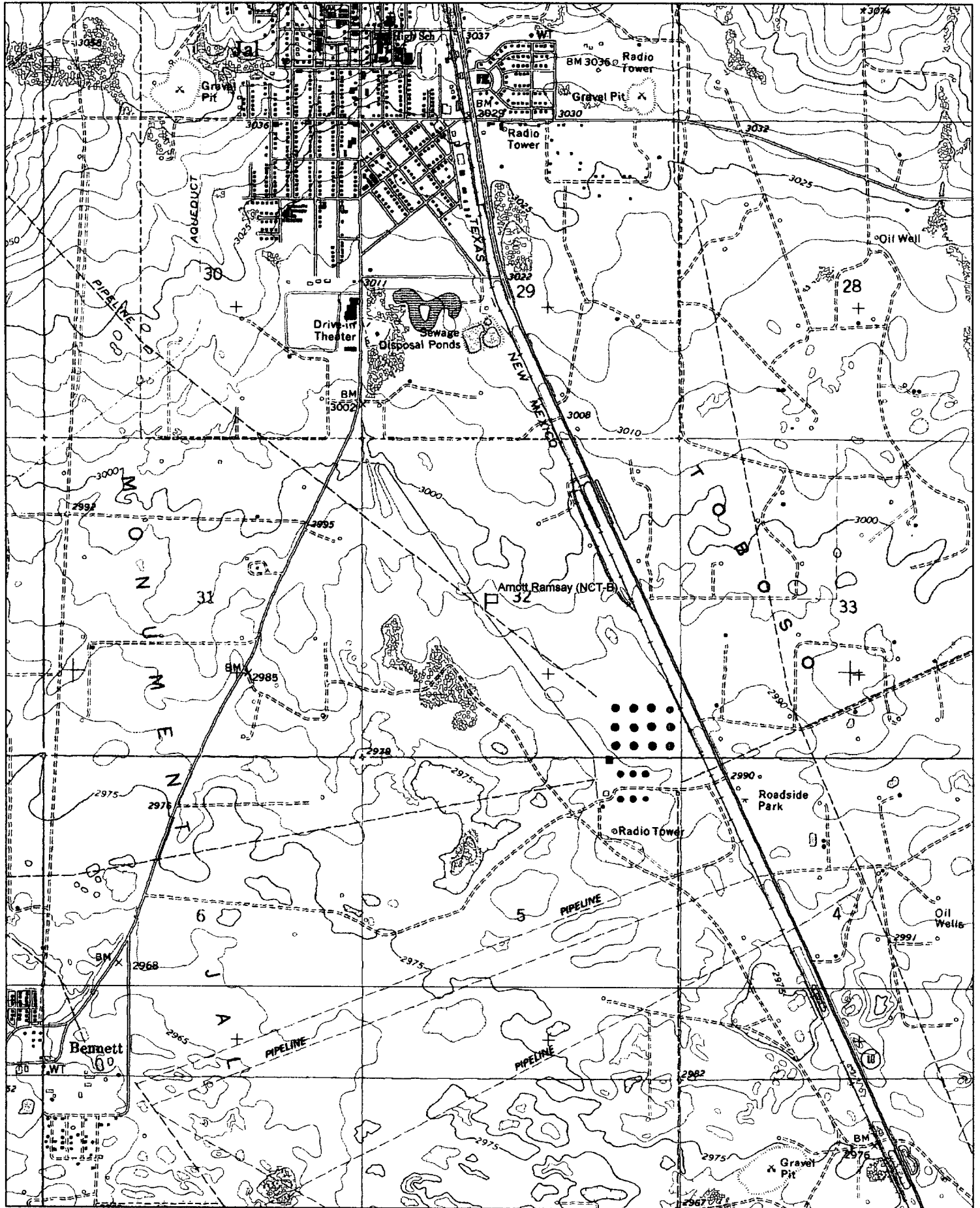
WATERS Menu

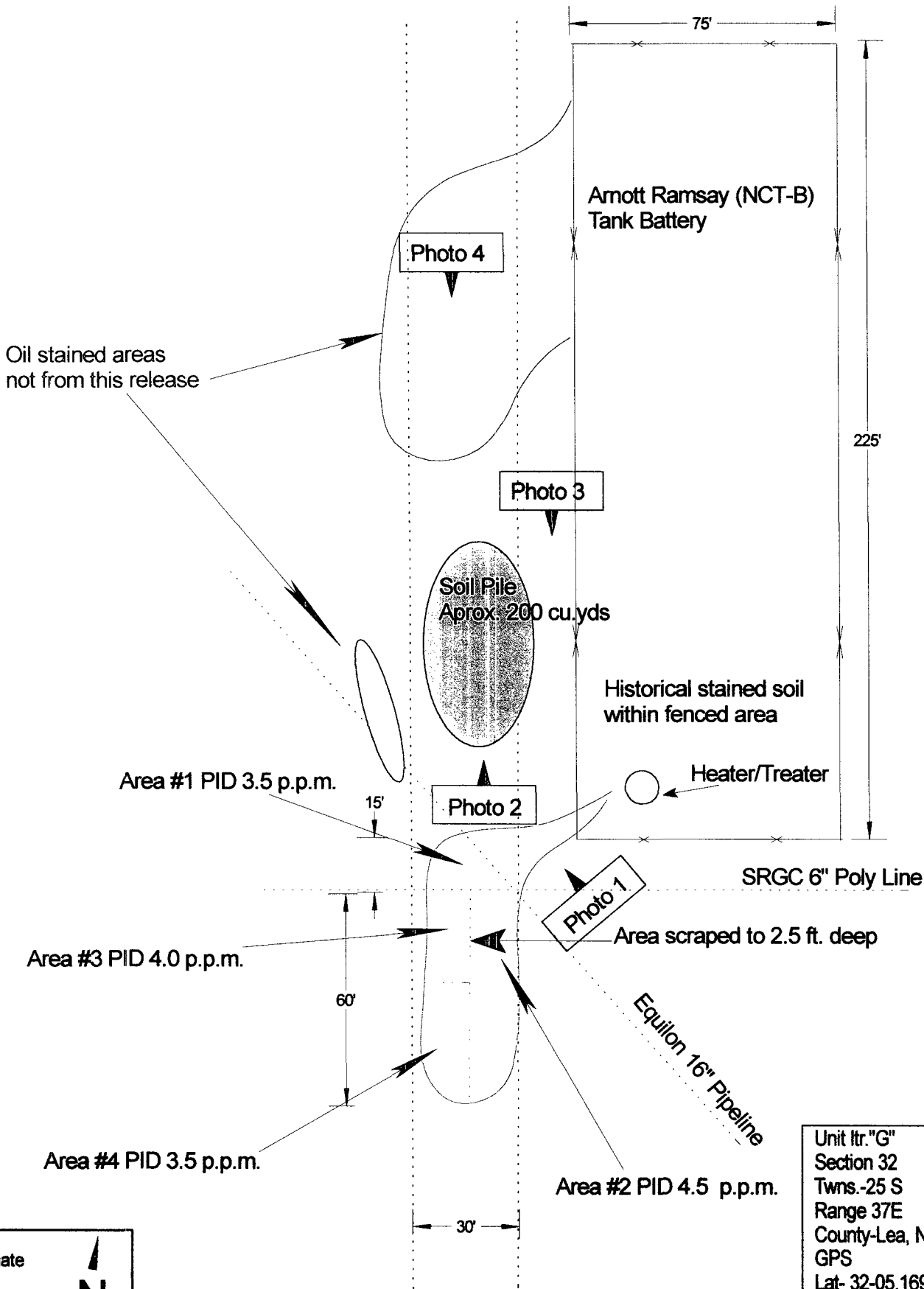
Help

**AVERAGE DEPTH OF WATER REPORT 05/23/2001**

Bsn	Tws	Rng	Sec	Zone	X	Y	Wells	(Depth Water in Feet)		
								Min	Max	Avg
CP	25S	37E	29				5	187	250	219

Record Count: 5





MCC

# SITE PLAN: Arnott Ramsay (NCT-B)

01061

Doyle Hartman Oil Operators

Figure 1

Photo 1

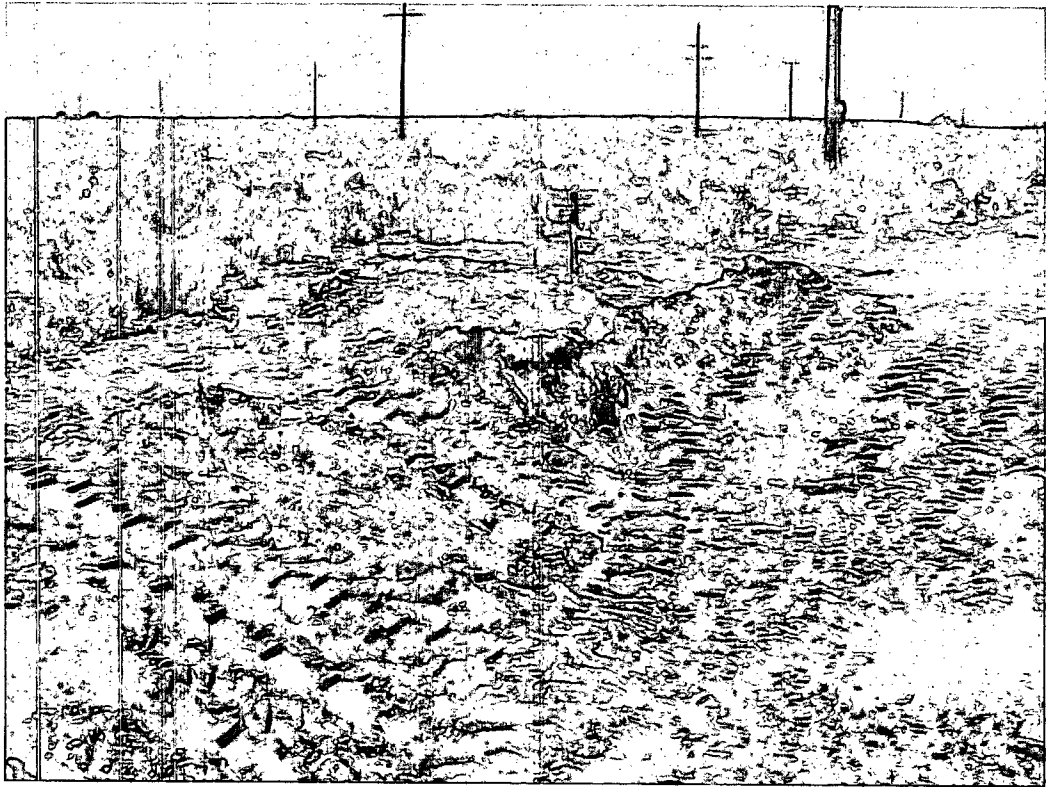
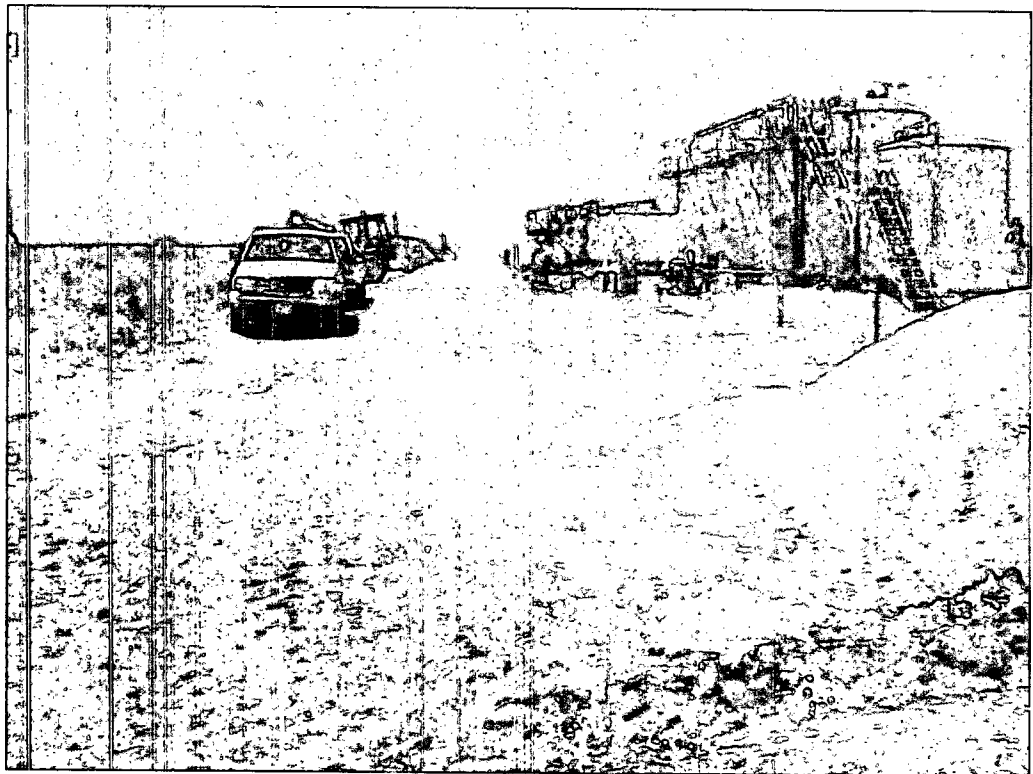


Photo 2



Doyle Hartman Arnott Ramsay (NCT-B) Job #01061

During Excavation and Sampling Event 5/22/01

Photo 3

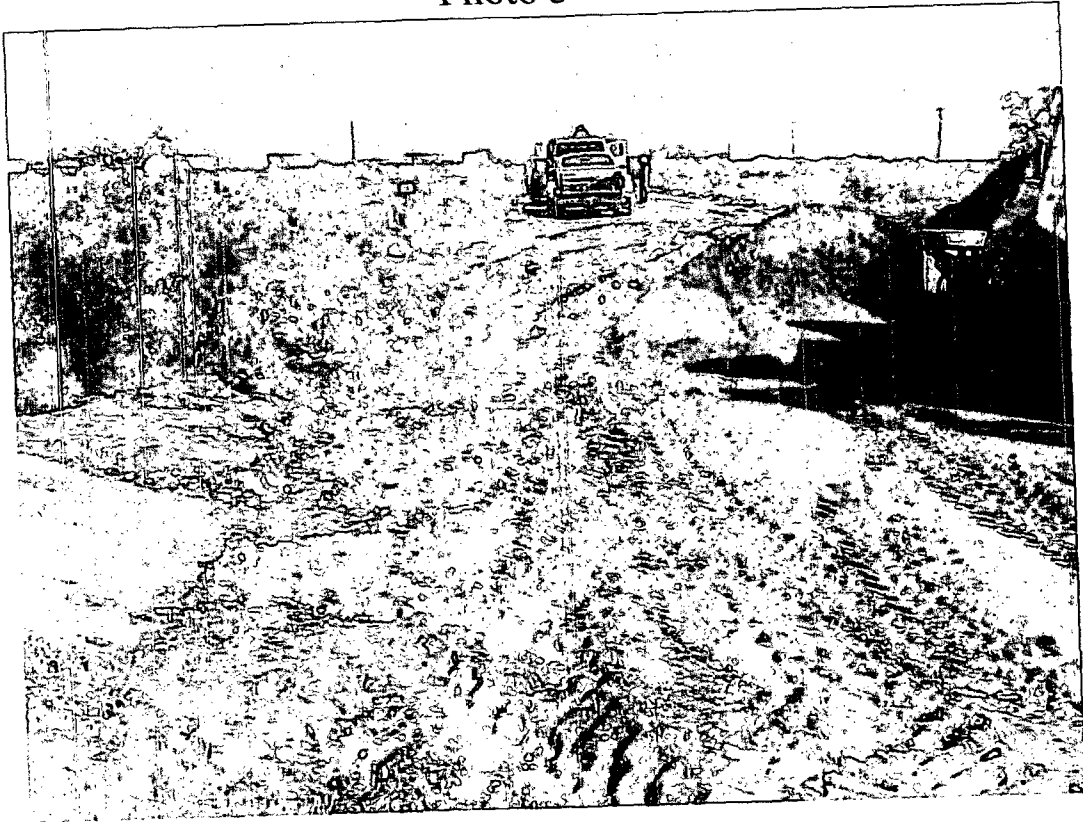
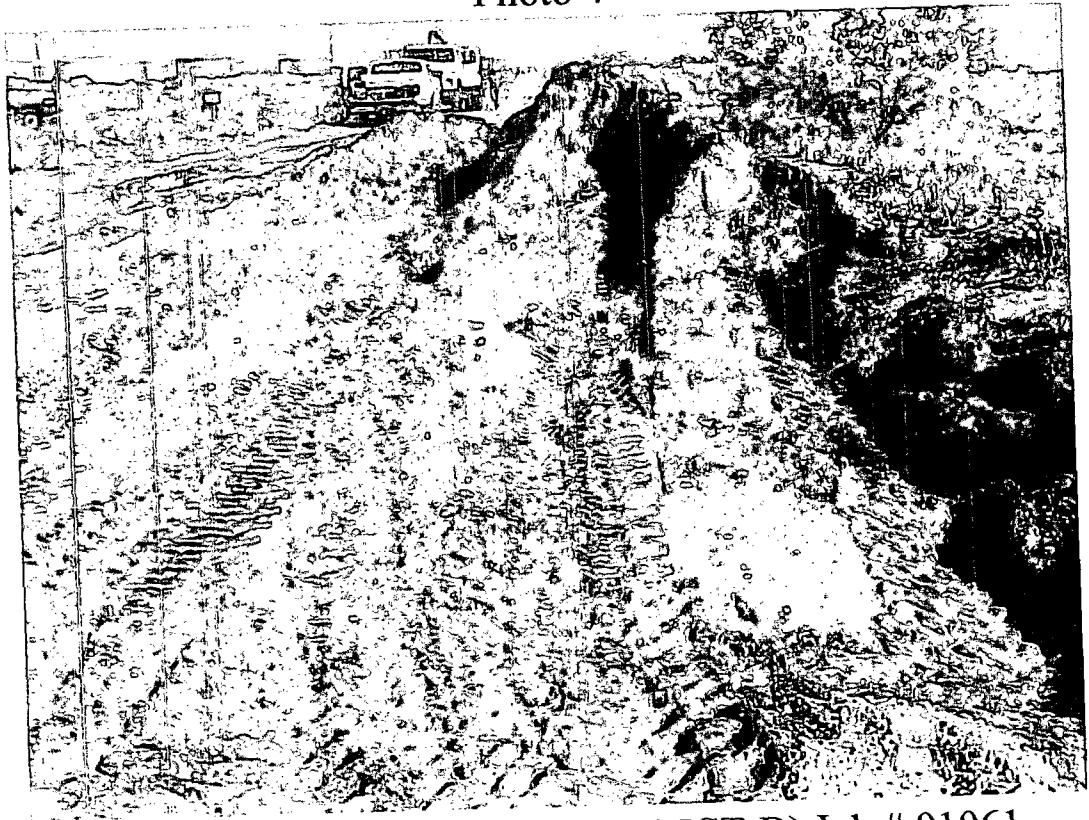


Photo 4



Doyle Hartman Arnott Ramsay (NCT-B) Job # 01061

During Excavation and Sampling Event 5/22/01

Oil stained areas  
not from this release

Photo 5

Arnott Ramsay (NCT-B)  
Tank Battery

Historical stained soil  
within fenced area

Heater/Treater

Stained area

SRGC 6" Poly Line

Lease Road

88'

New  
Caliche

30'

Equilon 16" Pipeline

Photo 6

Facility Berm

225'

75'

Approximate  
Scale 1"= 40'

N

Unit ltr."G"  
Section 32  
Twns.-25 S  
Range 37E  
County-Lea, N.M.  
GPS  
Lat- 32-05.169 N  
Long-103-11.206 W

MCC

SITE PLAN: Arnott Ramsay (NCT-B)

01061

Doyle Hartman Oil Operators

Figure 2

Photo 5

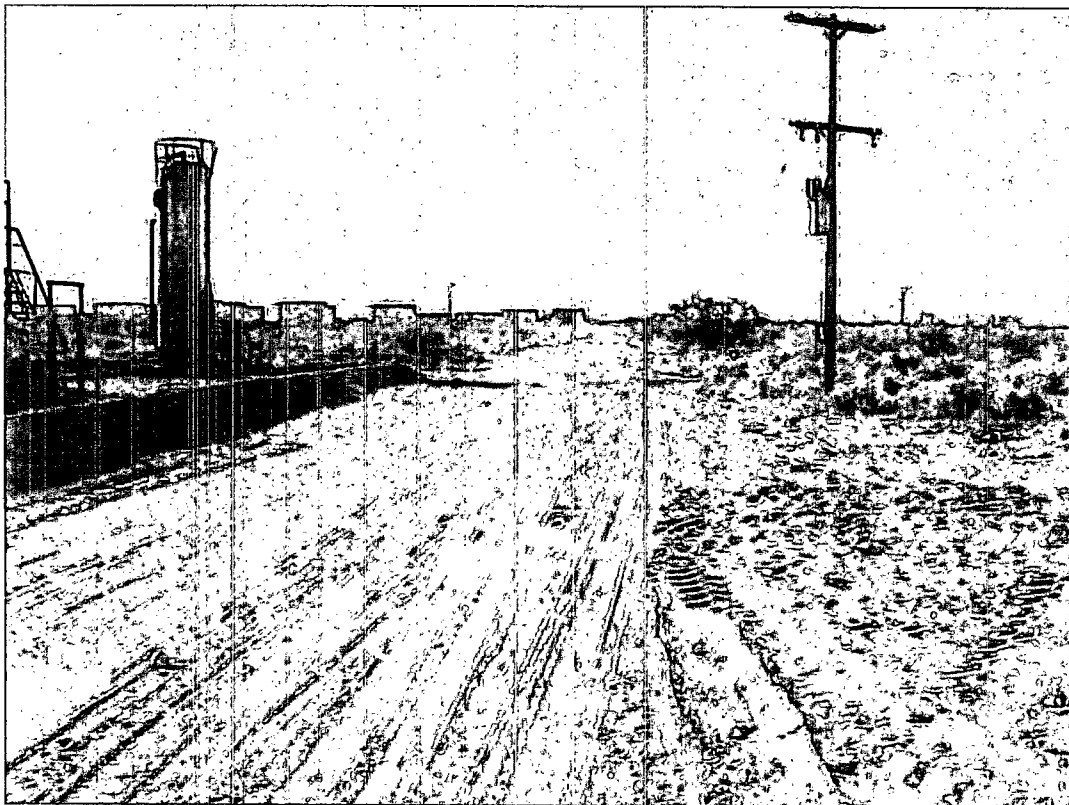
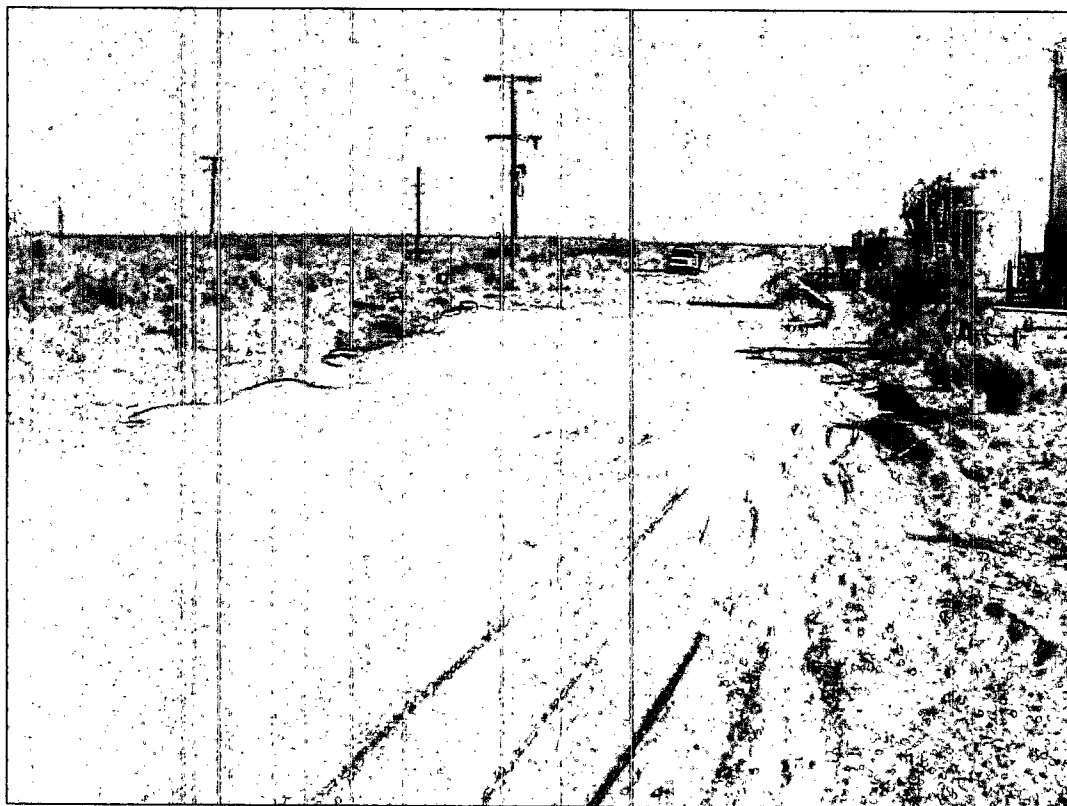


Photo 6



Doyle Hartman Arnott Ramsay (NCT-B) Job # 01061

After soil removal and backfill 5/24/01

District I - (505) 393-6161

P.O. Box 1940

Hobbs, NM 88241-1980

District II - (505) 748-1283

811 So. First

Artesia, NM 88210

District III - (505) 334-6178

1000 Rio Brazos Rd.

Aztec, NM 87410

District IV - (505) 827-7131

## State of New Mexico

### Energy Minerals and Natural Resources Department

Oil Conservation Division

2040 South Pacheco Street

Santa Fe, New Mexico 87505

(505) 827-7131

Form C-141

Originated 2/13/97

Submit 2 copies to

appropriate District

Office in accordance

with Rule 116 on

back side of form

#### Release Notification and Corrective Action

##### OPERATOR

☒

Initial Report

☐

Final Report

Name <b>Doyle Hartman Oil Operator</b>	Contact <b>E. Smith</b>
Address <b>Hwy. 128 West of Jal</b>	Telephone No. <b>505-395-3367</b>
Facility Name <b>Arnott Ramsay (NCT-B)</b>	Facility Type <b>Tank Battery</b>

Surface Owner <b>State of N.M.</b>	Mineral Owner	Lease No.
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#### LOCATION OF RELEASE

unit letter <b>G</b>	Section <b>32</b>	Township <b>25 S</b>	Range <b>R37E</b>	Feet from	Nor/So Line	Feet from	East/West Line	County <b>Lea</b>
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#### NATURE OF RELEASE

Type of Release <b>Crude oil</b>	Volume of Release <b>45 bls</b>	Volume Rec <b>40 bls</b>
Source of Release <b>Heater/Treater</b>	Date and Hour of Occurrence <b>no known</b>	Date and Hour of Discovery <b>8:00 a.m. 5/22/01</b>
Was immediate Notice Given? <input checked="" type="checkbox"/> yes <input type="checkbox"/> No <input type="checkbox"/> N/R	If YES, To Whom? <b>NMOCD Hobbs, New Mexico</b>	
By Whom? <b>E. Smith/ Doyle Hartman Emp.</b>	Date and Hour <b>4:00 p.m. 5/22/01</b>	
Was a Watercourse reached? <b>NO</b>	If YES, Volume Impacting the Watercourse.	

If a Water course was impacted, Describe Fully\*

**N/A**

Describe Cause of Problem and Remedial Action Taken.\*

**Problem caused by internal corrosion. Heater by-passed. Tube will be replaced**

Describe Area Affected and Cleanup Action Taken.\*

**Tank battery yard and lease road. Oil soaked soil scraped into pile pending sampling, and removal**

**Approximately 200 cubic yards of soil has been stockpiled in the lease road.**

Describe General Conditions Prevailing (Temperature, Precipitation, etc).\*

**Clear, Dry, approx. 75 degrees.**

I here by certify that the information given above is true and complete to the best of my knowledge and belief.

Signature:

Printed Name:

Title:

Date: 5/23/01

Phone: 505-395-3367

**Oil Conservation Division**

Approved by  
District Supvsr:

Approval Date:

Conditions of Approval:

Expiration Date:

Attached ☐

ORIGINAL



District I - (505) 393-6161  
P. O. Box 1980  
Hobbs, NM 88241-1980  
District II - (505) 748-1283  
811 S. First  
Artesia, NM 88210  
District III - (505) 334-6178  
1000 Rio Brazos Road  
Aztec, NM 87410  
District IV - (505) 827-7131

New Mexico  
Energy Minerals and Natural Resources Department  
Oil Conservation Division  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

Form C-138  
Originated 8/8/95

Submit Original  
Plus 1 Copy  
to appropriate  
District Office

ORIGINAL

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

1. RCRA Exempt: <input checked="" type="checkbox"/> Non-Exempt: <input type="checkbox"/> Verbal Approval Received: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	4. Generator <u>Doyle Hartman</u> 5. Originating Site <u>Arnett Benzoy B</u> 6. Transporter <u>Concho Pipeline Contr</u> 8. State <u>NM</u>
2. Management Facility Destination <u>B &amp; K Land Farm</u>	
3. Address of Facility Operator <u>P.O. Box 398 Jct NM 88252</u>	
7. Location of Material (Street Address or ULSTR) <u>" 6, 32, 255, 37E</u>	
9. Circle One: <input checked="" type="radio"/> A. All requests for approval to accept oilfield exempt wastes will be accompanied by a certification of waste from the Generator; one certificate per job. <input type="radio"/> B. All requests for approval to accept non-exempt wastes must be accompanied by necessary chemical analysis to PROVE the material is not-hazardous and the Generator's certification of origin. No waste classified hazardous by listing or testing will be approved.  All transporters must certify the wastes delivered are only those consigned for transport.	

BRIEF DESCRIPTION OF MATERIAL:

Approx 200 cubic yards Crude Oil Saturated Soil

Estimated Volume 200 cy Known Volume (to be entered by the operator at the end of the haul) 152 cy  
SIGNATURE: Jay Anthony TITLE: operator DATE: 5-23-2001  
Waste Management Facility Authorized Agent  
TYPE OR PRINT NAME: Jay Anthony TELEPHONE NO. 505-395-3264

(This space for State Use)

APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_  
APPROVED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_ DATE: \_\_\_\_\_

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

MERRYMAN CONSTRUCTION  
ATTN: MR. JOHN SAVOIE  
P.O. BOX 1030  
JAL, N.M. 88252  
FAX: 505-395-3476

Sample Type: Soil  
Sample Condition: Intact/ Iced/ 4 deg C  
Project #: 01061  
Project Name: Arnot Ramsey "B"  
Project Location: South of Jal

Sampling Date: 05/22/01  
Receiving Date: 05/23/01  
Analysis Date: 05/23/01

ELT#	FIELD CODE	GRO C6-C10 mg/kg	DRO >C10-C28 mg/kg
40403	Area 1 Comp.	<10	<10
40404	Area 2 Comp.	<10	<10
40405	Area 3 Comp.	<10	<10
40406	Area 4 Comp.	<10	<10
40407	Stock Pile	1114	4044
QUALITY CONTROL		525	442
TRUE VALUE		500	500
% INSTRUMENT ACCURACY		105	88
SPIKED AMOUNT		500	500
ORIGINAL SAMPLE		766	1833
SPIKE		1595	2713
SPIKE DUP		1743	3009
% EXTRACTION ACCURACY		114	98
BLANK		<10	<10

Methods: EPA SW 846-8015M GRO/DRO

  
Raland K. Tuttle

5-24-01  
Date

# ENVIRONMENTAL LAB OF , INC.

"Don't Treat Your Soil Like Dirt!"

MERRYMAN CONSTRUCTION  
ATTN: MR. JOHN SAVOIE  
P.O. BOX 1030  
JAL, N.M. 88252  
FAX: 505-395-2776

Sample Type: Soil  
Sample Condition: Intact/ Iced/ 4 deg C  
Project #: 01061  
Project Name: Arnot Ramsey "B"  
Project Location: South of Jal

Sampling Date: 05/22/01  
Receiving Date: 05/23/01  
Analysis Date: 05/23/01

ELT#	FIELD CODE	BENZENE mg/kg	TOLUENE mg/kg	ETHYLBENZENE mg/kg	m,p-XYLENE mg/kg	o-XYLENE mg/kg
40404	Area 2 Comp.	<0.025	<0.025	<0.025	<0.025	<0.025
QUALITY CONTROL		0.100	0.102	0.099	0.217	0.103
TRUE VALUE		0.100	0.100	0.100	0.200	0.100
% INSTRUMENT ACCURACY		100	102	99	109	103
SPIKED AMOUNT		0.100	0.100	0.100	0.200	0.100
ORIGINAL SAMPLE		<0.025	<0.025	<0.025	<0.025	<0.025
SPIKE		0.098	0.099	0.096	0.213	0.101
SPIKE DUP		0.099	0.100	0.097	0.216	0.103
% EXTRACTION ACCURACY		98	99	96	107	101
BLANK		<0.025	<0.025	<0.025	<0.025	<0.025

METHODS: EPA SW 846-80218 ,5030

  
Raland K. Tuttle

5-24-01  
Date

Project Name & Address:		Phone #:		FAX #:			
Project #:		Project Name:		Sampler Signature:			
Project Location:		Project Name:		Sampler Signature:			
John Savoie		01061		Arnaot Ramsey B			
Merry Men Const.		South of Isl		John P. Savoie			
LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	VOLUME/AMOUNT	MATRIX	PRESERVATIVE METHOD	SAMPLING DATE	TIME
	Area 1 Camp.	202	✓	WATER		5/22	16:30
	Area 2 "	✓	✓	AIR		✓	17:00
	Area 3 "	✓	✓	SOIL		✓	18:00
	Area 4 "	✓	✓	SLUDGE		✓	18:30
	Stack Pile	✓	✓	OTHER		✓	18:30
ANALYSIS REQUEST							
BTEX 8020/5030							
TPH 418.1							
TCLP Metals Ag As Ba Cd Cr Pb Hg Se							
Total Metals Ag As Ba Cd Cr Pb Hg Se							
TCLP Volatiles							
TOS							
NCI							
8015 DRO/6FD							
REMARKS							
Rec-40C							
Relinquished by:		Date:	Time:	Received by:			
J.P.S.		5/23/01	12:00	Tony Savoie			
Relinquished by:		Date:	Time:	Received by:			
Tony		5/23/01	1600	L.L. d.f.			
Relinquished by:		Date:	Time:	Received by Laboratory:			