

Risk - below

JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528

SUBMIT COPY TO:
NATURAL RESOURCES
AND OIL & GAS ADMINISTRATION

DEC - 2 1988
OIL & GAS DIV.
DIST. 3

PIT REMEDIATION AND CLOSURE REPORT

APPROVED

Operator: ELM RIDGE RESOURCES Telephone: (505) 326-7099

Address: 312 W. LA PLATA STREET, FARMINGTON, NM 87401

Facility or Well Name: JICARILLA APACHE "H" TRACT 2 WELL #3

Location: Unit or Qtr/Qtr Sec M Sec 9 T 23N R 24W County RIO ARriba

Pit Type: Separator ☐ Dehydrator ☐ Other BLOW

Land Type: _____

Pit Location: Pit dimensions: length 21', width 21', depth 14'
(Attach diagram)

Reference: wellhead X, other _____

Footage from reference: 55'

Direction from reference: 140° Degrees X East → North X
_____ of _____
_____ West _____ South _____

Depth To Groundwater: (Vertical distance from contaminants to seasonal high water elevation of groundwater)
Less than 50 feet (20 points)
50 feet to 99 feet (10 points)
Greater than 100 feet (0 points) 0

Distance to an Ephemeral Stream: (Downgradient dry wash greater than ten feet in width)
Less than 100 feet (10 points)
Greater than 100 feet (0 points) 0

Distance to Nearest Lake, Playa, or Watering Pond: (Downgradient lakes, playas and livestock or wildlife watering ponds)
Less than 100 feet (10 points)
Greater than 100 feet (0 points) 0

Wellhead Protection Area: (Less than 200 feet from a private domestic water source, or: less than 1000 feet from all other water sources)
Yes (20 points)
No (0 points) 0

Distance To Surface Water: (Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals and ditches)
Less than 100 feet (20 points)
100 feet to 1000 feet (10 points)
Greater than 1000 feet (0 points) 0

RANKING SCORE (TOTAL POINTS): 0

Date Remediation Started: 10/23/97

Date Completed: 10/28/97

Remediation Method: Excavation ☒

Approx. cubic yards 290

(Check all appropriate sections)

Landfarmed ☒

In situ Bioremediation ☐

Other ☐

Remediation Location: Onsite ☒ Offsite ☐

(i.e. landfarmed onsite, name and location of offsite facility)

General Description of Remedial Action: removed contaminated soil from pit and placed in an on-site landfarm

Groundwater Encountered: No ☒ Yes ☐ Depth

Final Pit:

Sample location mid-pit • bottom at bedrock

Closure Sampling:

(if multiple samples, attach sample results and diagram of sample locations and depths)

Sample depth 14'

Sample date 10/27/97 Sample time 1130

4 BANKS N, S, E, W

TPH = 29 (PPM)

METHOD = EPA 418.1

PID = 17 (PPM)

Sample Results

Soil: Benzene (ppm) ND

Water: Benzene (ppb) N/A

Total BTEX (ppm) 23.2

Toluene (ppb) N/A

Field Headspace (ppm) 2000+

Ethylbenzene (ppb) N/A

TPH (ppm) 3691

Total Xylenes (ppb) N/A

Groundwater Sample: Yes ☐ No ☒ (If yes, attach sample results)

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE

PRINTED NAME SHAWN ADAMS

SIGNATURE

AND TITLE ENV. CONSULTANT

AFTER REVIEW OF THE PIT CLOSURE INFORMATION, PIT CLOSURE IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES ☒ NO ☐ (REASON) R-A Attached

SIGNED: [Signature] DATE: 12-7-98

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: **Shawn Adams**
Company: **Contract Environmental Services, Inc.**
Address: **P.O. Box 3376**
City, State: **Farmington, NM 87499**

Date: **29-Oct-97**
COC No.: **6544**
Sample No.: **16669**
Job No.: **2-1000**

Project Name: **Jicarilla Apache 'H' Tract 2, Well #3**
Project Location: **JAHT2-3-100; Pit Bottom @ Bedrock**
Sampled by: **DGM** Date: **27-Oct-97** Time: **11:30**
Analyzed by: **HR** Date: **29-Oct-97**
Sample Matrix: **Soil**

Laboratory Analysis

Parameter	Results as Received	Limit of Quantitation	Unit of Measure	Method
Total Petroleum Hydrocarbons, TPH	3691	250	mg/kg	EPA Method 418.1

ND - Not Detected at Limit of Quantitation

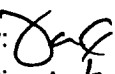
Quality Assurance Report

Laboratory Fortified Blank/Spike Soil

Laboratory Identification	Analyzed Value	Acceptable Range	Unit of Measure
Laboratory Fortified Blank Soil - QCBS2	ND	ND	mg/kg
Laboratory Fortified Spike Soil - QCSS1	895	800-1200	mg/kg

Duplication

Laboratory Identification	RPD	Limit RPD
16669-6544	7.2	15.0

Approved by: 
Date: **10/30/97**

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: **Shawn Adams**
Company: **Contract Environmental Services, Inc.**
Address: **P.O. Box 3376**
City, State: **Farmington, NM 87499**

Date: **30-Oct-97**
COC No.: **6544**
Sample No.: **16669**
Job No.: **2-1000**

Project Name: **Jicarilla Apache 'H' Tract 2, Well #3**
Project Location: **JAHT2-3-100; Pit Bottom @ Bedrock**
Sampled by: **DGM**
Analyzed by: **DC**
Sample Matrix: **Soil**

Date: **27-Oct-97** Time: **11:30**
Date: **28-Oct-97**

Laboratory Analysis

Parameter	Results as Received	Unit of Measure	Limit of Quantitation	Unit of Measure
<i>Benzene</i>	ND	ug/kg	1000	ug/kg
<i>Toluene</i>	3458	ug/kg	1000	ug/kg
<i>Ethylbenzene</i>	2181	ug/kg	1000	ug/kg
<i>m,p-Xylene</i>	10523	ug/kg	1000	ug/kg
<i>o-Xylene</i>	7055	ug/kg	1000	ug/kg
TOTAL		23217	ug/kg	

ND - Not Detected at Limit of Quantitation

Method - SW-846 EPA Method 8020A Aromatic Volatile Organics by Gas Chromatography

Approved by: 
Date: **10/30/97**

P.O. BOX 2606 • FARMINGTON, NM 87499

TECHNICAL REPORTS: INSTRUCTIONS FOR THE USER

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Attn: **Shawn Adams**
Company: **Contract Environmental Services, Inc.**
Address: **P.O. Box 3376**
City, State: **Farmington, NM 87499**

Date: **31-Oct-97**
COC No.: **6549**
Sample No.: **16695**
Job No.: **2-1000**

Project Name: **Jicarilla Apache 'H' Tract 2, Well #3**
Project Location: **JAHT2-3-200; 4 Bank Composite**
Sampled by: **DGM**
Analyzed by: **HR**
Sample Matrix: **Soil**

Date: **28-Oct-97** Time: **11:30**
Date: **31-Oct-97**

Laboratory Analysis

Parameter	Results as Received	Limit of Quantitation	Unit of Measure	Method
Total Petroleum Hydrocarbons, TPH	29	25	mg/kg	EPA Method 418.1

ND - Not Detected at Limit of Quantitation

Quality Assurance Report

Laboratory Fortified Blank/Spike Soil

Laboratory Identification	Analyzed Value	Acceptable Range	Unit of Measure
Laboratory Fortified Blank Soil - QCBS2	ND	ND	mg/kg
Laboratory Fortified Spike Soil - QCSSI	890	800-1200	mg/kg

Duplication

Laboratory Identification	RPD	Limit RPD
16698-6549	14.9	15.0

Approved by:

Date:

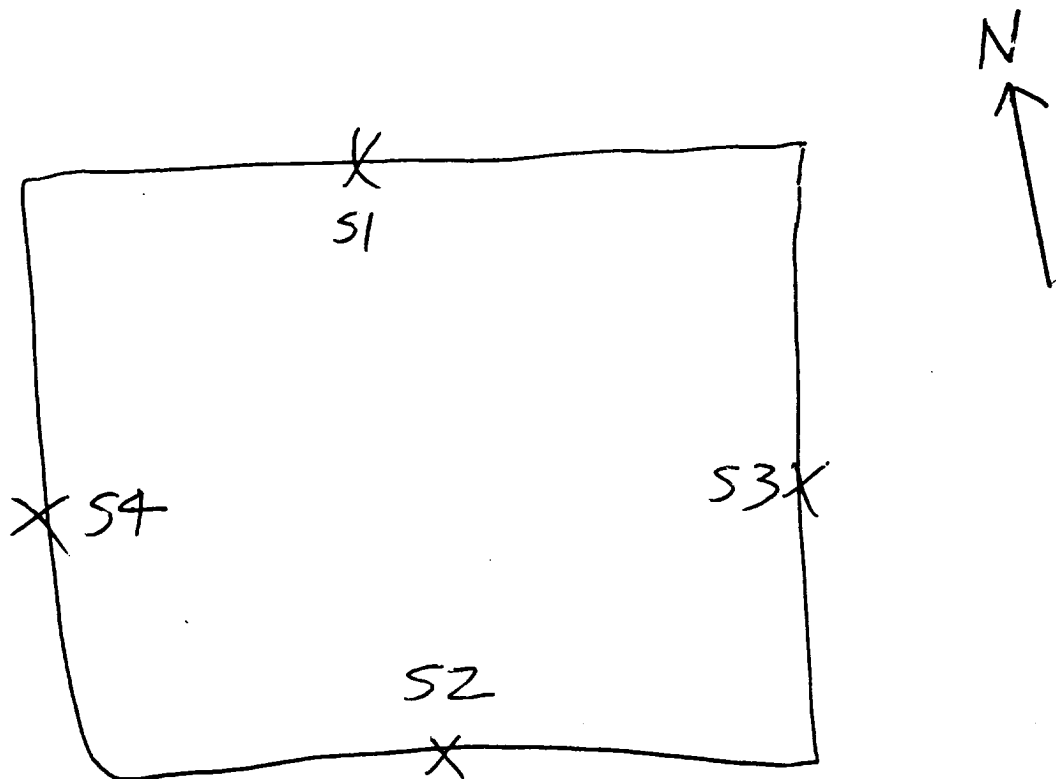
[Signature]
11/4/97

Elm Ridge
10/28/97
JAHT Tract 2
Well #3

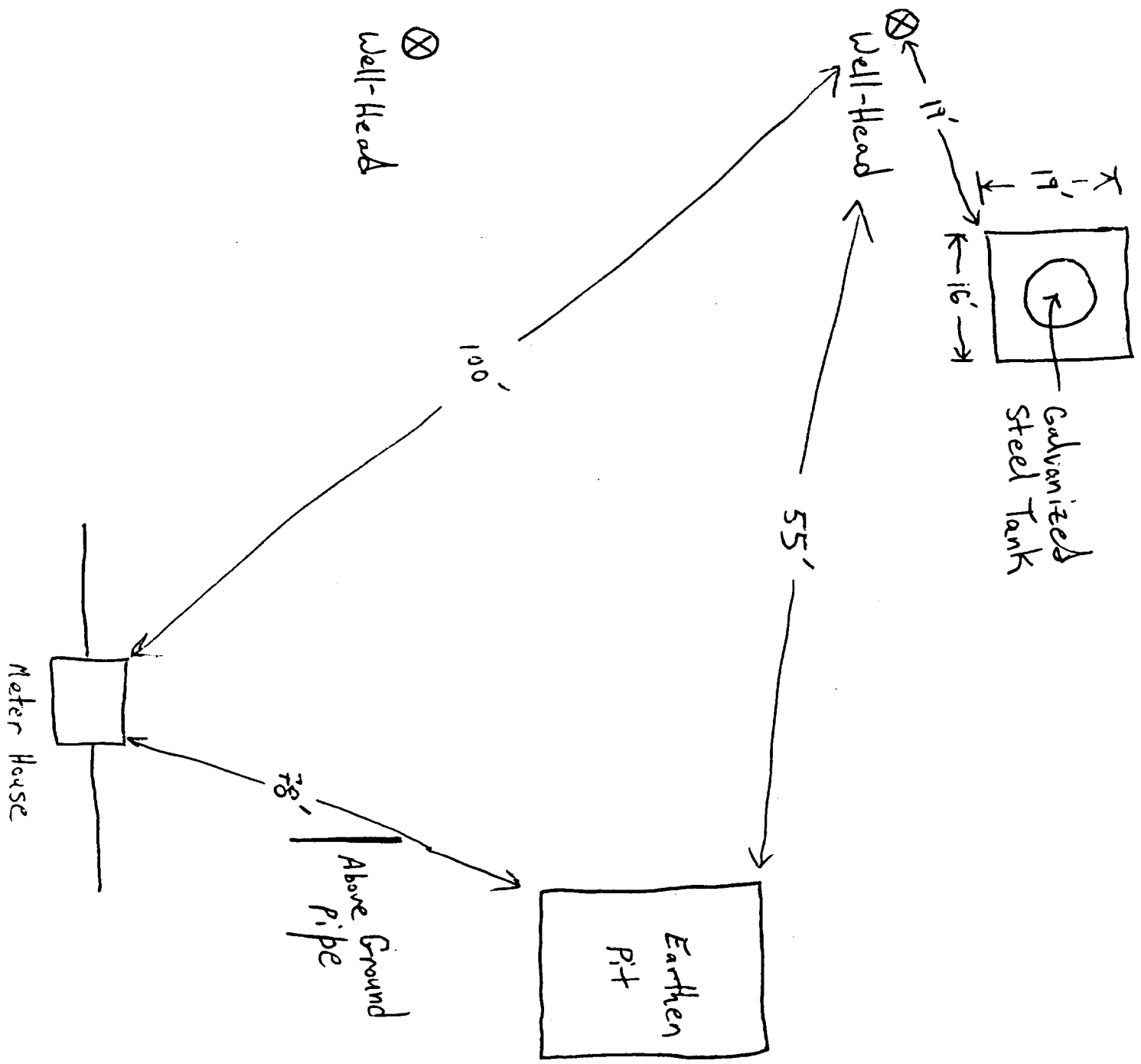
- arrived on-site @ ≈ 1000
- pit is now 22' x 25' x 14' deep
- bottom is bedrock so just need to clean banks

	Sample No.	Location	Depth (ft)	Conc (ppm)	Remarks
JAHT 2-3-200 + Bulk Comp	1	N. Bank - Mid	8	17	
	2	S. " "	8	9	
	3	E. " "	8	11	
	4	W. " "	8	6	

- landfarm and spoil pile on-site
- left site @ ≈ 1215



Elm Ridge
10/27/97
JAH Tract 2 UH#3
Site Diagram



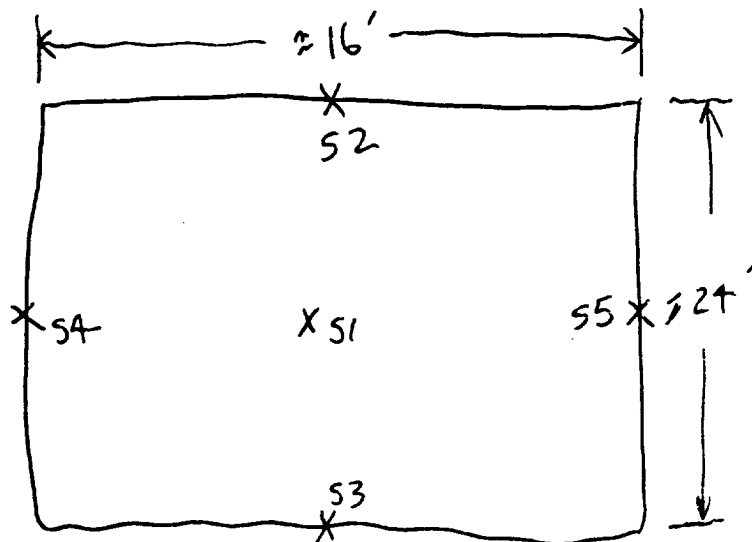
Elm Ridge
10/27/87
JA 'H' Tract 2
Well #3

- stopped by the 'I' #3 to see if it was dug out; still needs work
- arrived 'H' 2-3 @ ≈ 1025 ; roads required 4-wheel drive
- pit is now 16' x 24' x 13' deep

Sample No	Location	Depth (ft)	Conc (ppm)	Remarks
TAHT2-3-100 1	mid-pit bottom	14	2000+	bedrock
2	north bank	8	186	
3	south "	8	33	
4	west "	8	591	
5	east "	8	56	

- will have excavation enlarged:
 - 3' on west
 - 2' on north
 - 1' on east & south

- left site @ ≈ 1300

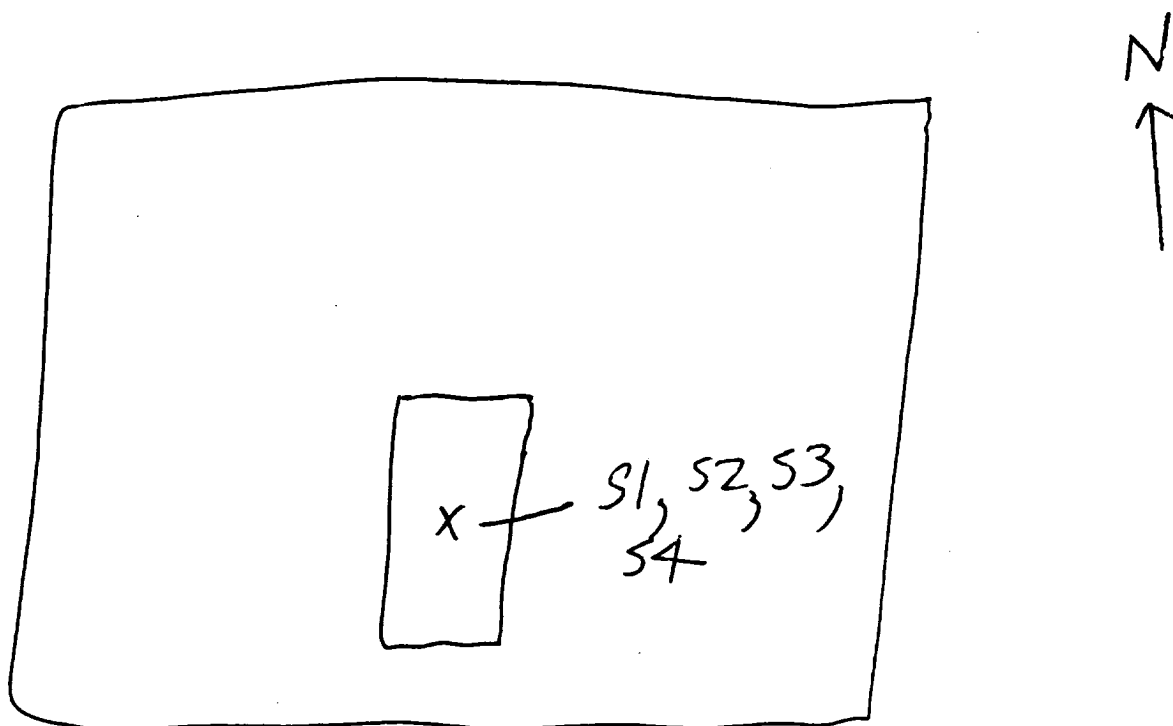


Elm Ridge
 JA H Tract 2
 Well # 3
 10/23/97

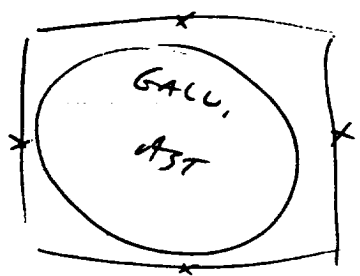
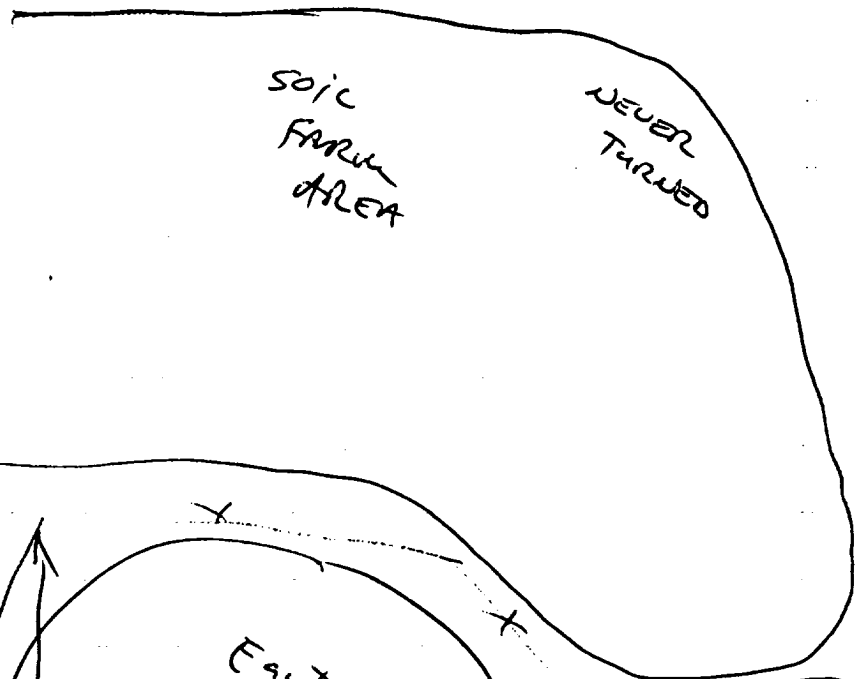
- SW SW Sec. 9 - 23N-2W
- arrived on-site @ 1245
- hit bedrock @ 14'; a hard shale/sandstone

Sample No	Location			depth (ft)	conc (ppm)	Remark
1	mid-pit	bottom		12	2000+	grey
2	"	"	"	9	2000+	brown
3	"	"	"	6	2000+	"
4	"	"	"	4	491	grey (ha)

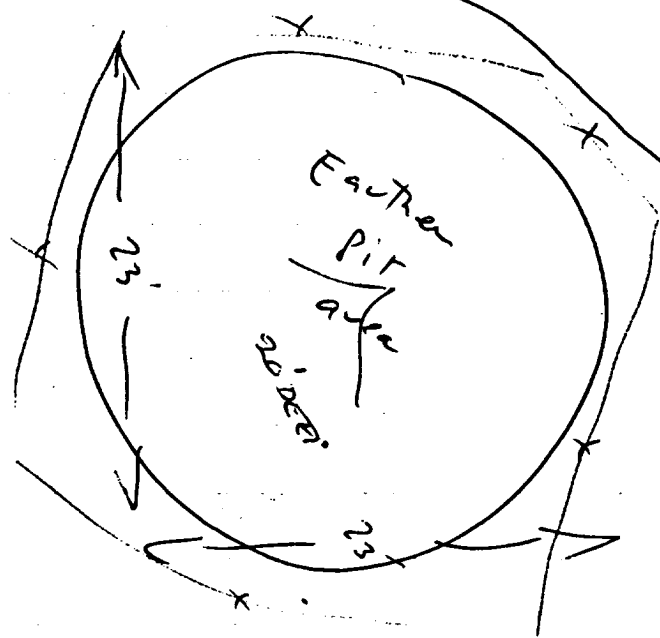
- pit was : 21' x 21' x 4' ; fence was 30' x 30'
- pit was 55' from well-head @ 140° E of N
- no wells, or surface water w/i 1000'



ELM-72
 6/17/98 "H"
 JIC. AP.
 Tract 2 Well 3
 Sec 9 T23N R2W



OWHED



appears to have shale layer
 at about 12' DEEP. CAME TO
 LOCATION TO RISK ANALYSIS AND
 SAMPLE SOIL FROM.

SAMPLE NO.	DESCRIPTION	PIU (PPM)	
1	Soil farm South	2.9	JAH23-402
2	Soil farm East	16	JAH23-403



JICARILLA APACHE TRIBE
ENVIRONMENTAL PROTECTION OFFICE
P.O. BOX 507
DULCE, NEW MEXICO 87528

SUBMIT TO:
NATURAL RESOURCE
AND OIL & GAS ADMINISTRATION

ON-SITE SOIL REMEDIATION REPORT

APPROVED

Operator: ELM RIDGE RESOURCES * Telephone: (505) 326-7099

Address: 312 W. LA PLATA STREET, FARMINGTON, NM 87401

Facility or Well Name: JICARILLA APACHE "H" TRACT 2 WELL #3 LAND FARM

Location: Unit or Qtr/Qtr Sec M Sec 9 T 23N R 2W County RIO ARriba

Land Type: _____

Date Remediation Started: 10/23/97

Date Completed: 10/28/97

Remediation Method: Landfirmed X

Approx. cubic yards 290

Composted _____

Other _____

Depth To Groundwater: (pts.) 0

Distance to an Ephemeral Stream (pts.) 0

Distance to Nearest Lake, Playa, or Watering Pond (pts.) 0

Wellhead Protection Area: (pts.) 0

Distance To Surface Water: (pts.) 0

RANKING SCORE (TOTAL POINTS): 0

Final Closure Sampling:

Sampling Date: 7/24/98 Time: 10:50

Sample Results:

Field Headspace (ppm) 1.4 ppm

TPH (ppm) Gas - ND Method 8015M

Other DIE - ND

I HEREBY CERTIFY THAT THE INFORMATION ABOVE IS TRUE AND COMPLETE TO THE BEST OF MY KNOWLEDGE AND BELIEF

DATE

12/22/98

PRINTED NAME

SHAWN ADAMS

SIGNATURE

Shawn Adams

AND TITLE

ENV. CONSULTANT

AFTER REVIEW OF THE SOIL REMEDIATION INFORMATION, ON-SITE REMEDIATION IS APPROVED IN ACCORDANCE TO THE JICARILLA APACHE TRIBE PIT CLOSURE ORDINANCE.

APPROVED: YES X NO _____ (REASON) May be used as backfill, if needed.

SIGNED:

Karena L. Callado

DATE:

22 DEC 98

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 30-Jun-98

Client:	Contract Environmental Services, Inc.	Client Sample Info:	Jic. Apache "H" Tract 2 Well 3
Work Order:	9806074	Client Sample ID:	JAH23-403; Soil Farm East
Lab ID:	9806074-08A	Matrix:	SOIL
Project:	Pit Remediation	Collection Date:	6/17/98 1:20:00 PM
		COC Record:	6987

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	6/27/98
GASOLINE RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	6/22/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr - Surrogate

1 of 1

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TECHNOLOGY BLENDING INNOVATION WITH YOU

OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 30-Jun-98

Client:	Contract Environmental Services, Inc.	Client Sample Info:	Jic. Apache "H" Tract 2 Well 3
Work Order:	9806074	Client Sample ID:	JAH23-402; Soil Farm South
Lab ID:	9806074-07A	Matrix:	SOIL
Project:	Pit Remediation	Collection Date:	6/17/98 1:14:00 PM
		COC Record:	6987

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	6/27/98
GASOLINE RANGE ORGANICS		SW8015				Analyst: DC
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	6/22/98

Qualifiers:

PQL - Practical Quantitation Limit

ND - Not Detected at Practical Quantitation Limit

J - Analyte detected below Practical Quantitation Limit

B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Surr: - Surrogate

1 of 1

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TECHNOLOGIES, LTD. 10000 N. MEXICO AVE. SUITE 200 FARMINGTON, NM 87401

CONTRACT ENVIRONMENTAL

Daily Site Sheet

Site Name: J. Apache "H" TR2 well 3

Date: 7/24/88

Time Started: 10:20

Time Finished: 10:45

Pit starting size: _____

Pit size when finished: _____

Land farm size: 40x40

Distance to wash > or < 100': > 100'

Distance to lake or pond: > 1000'

Distance to private or domestic water source > or < 1000': > 1000'

P.I.D. Readings

North wall: N/A

South wall: N/A

East wall: N/A

West wall: N/A

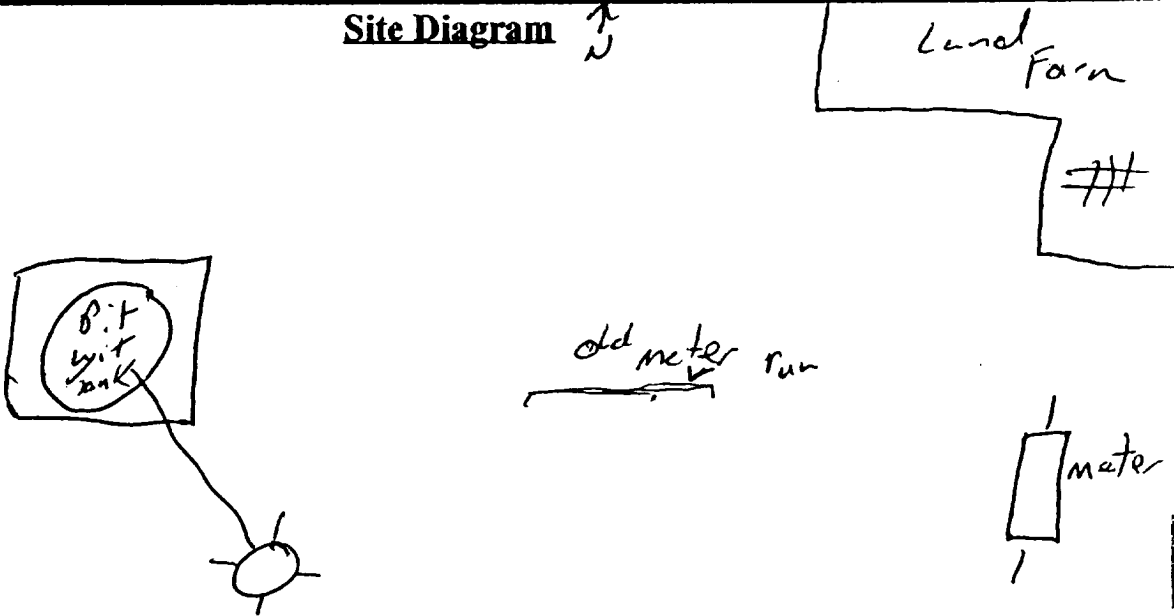
Land farm: 1.4

Equipment used: Tractor P.I.D.

Remarks: Turned Land Farm Two Time

Took samples of Land Farm
Sample # JH23-103

Site Diagram



OFF: (505) 325-5667



LAB: (505) 325-1556

ANALYTICAL REPORT

Date: 07-Aug-98

Client: Contract Environmental Services, Inc.
Work Order: 9807082
Lab ID: 9807082-04A **Matrix:** SOIL
Project: Pit Remediation

Client Sample Info: Jicarilla Apache T2 W3
Client Sample ID: JH23-103 Tract 2 Well 3 LF
Collection Date: 7/24/98 10:50:00 AM
COC Record: 6991

Parameter	Result	PQL	Qual	Units	DF	Date Analyzed
DIESEL RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C10-C28	ND	25		mg/Kg	1	8/5/98
GASOLINE RANGE ORGANICS		SW8015				Analyst: HR
T/R Hydrocarbons: C6-C10	ND	0.18		mg/Kg	1	7/29/98

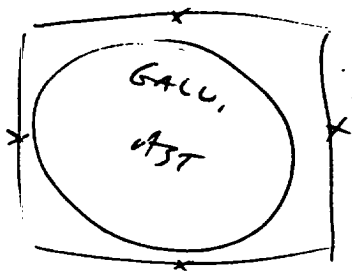
Qualifiers: PQL - Practical Quantitation Limit
ND - Not Detected at Practical Quantitation Limit
J - Analyte detected below Practical Quantitation Limit
B - Analyte detected in the associated Method Blank

S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
E - Value above quantitation range
Surr: - Surrogate

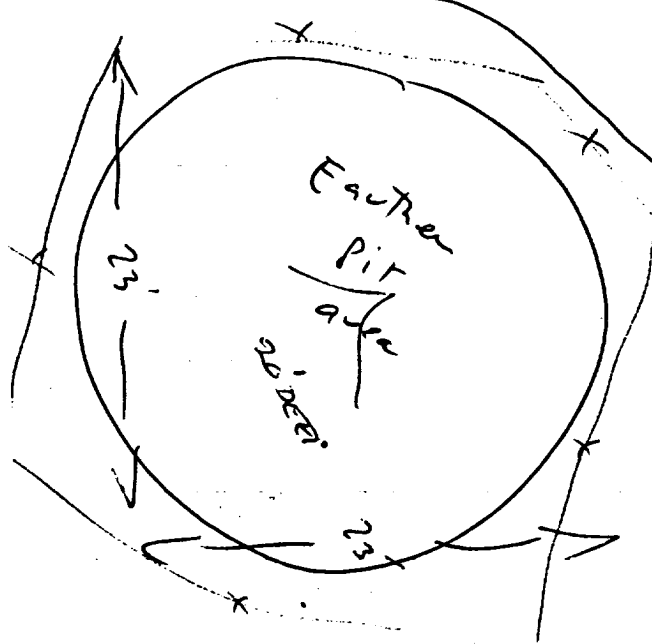
P.O. BOX 2606 • FARMINGTON, NM 87499

1 of 1

ELM-72
 6/17/98 "H"
 Jic. AP.
 Tract 2 WEL 3
 Sw/sw sec 9 T23N R2W5



©WHEN



SOIL
 FARM
 AREA

NEVER
 TURNED

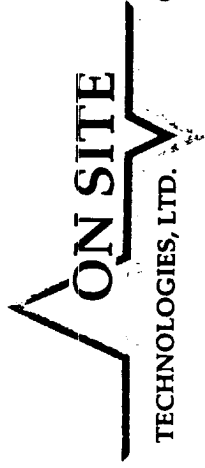
Stock
 Piled
 Soil

appears to have shale layer
 at about 12' DEEP. CAME TO
 LOCATION TO RISK ANALYSIS AND
 SAMPLE SOIL FARM.

SAMPLE NO.	DESCRIPTION	PIA (PPM)	
1	Soil farm South	2.9	JAH23-402
2	Soil farm East	16	JAH23-403

same
 SF

WEL 3



657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

CHAIN OF CUSTODY RECORD

6987

Date: 6/12/92

Page 1 of 1

Purchase Order No.:		Job No.		Name		Title	
Name: SHAWN ADAMS		Company: ENV SERVICES INC		City, State, Zip: Farmington NM 87499		Telephone No.:	
Address: 2030 3376		Dept.:		City, State, Zip: Farmington NM 87499		Telefax No.:	
City, State, Zip: Farmington NM 87499		Sampling Location: JACARILLA # 71-16		ANALYSIS REQUESTED			
JACARILLA APACHE "H" TREAT 1 WELL 3		JACARILLA APACHE "H" TREAT 2 WELL 3					
JACARILLA APACHE "H" TREAT 2 WELL 3		SAMPLER: SAMS					
SEND INVOICE TO		SAMPLE IDENTIFICATION		SAMPLE		LAB ID	
		DATE		TIME			
J.C. 7116-200		7:07		Soil		1.9	
J.C. 7116-701		7:09		Soil		1.0/0.0	
J.A. 71-1600 NE Corner		7:53		Soil		7.5	
J.A. 71-1601 NE Wall		7:55		Soil		4.0	
J.A. 71-4020 Soil from NW		12:00		Soil		4.2	
J.A. 71-401 Soil from NE		12:00		Soil		0.5	
J.A. 71-402 Soil from South		12:00		Soil		2.9	
J.A. 71-403 Soil from East		12:00		Soil		1.6	
Relinquished by:		Date/Time		Received by:		Date/Time	
Relinquished by:		Date/Time		Received by:		Date/Time	
Relinquished by:		Date/Time		Received by:		Date/Time	
Method of Shipment:		Rush		24-48 Hours		10 Working Days	
Authorized by:		Date		Special Instructions:			

4-7
C-2
C-3
C-4

Page 1 of 1

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657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

[illegible]



CHAIN OF CUSTODY RECORD

6549

Page 1 of 1

657 W. Maple • P. O. Box 2606 • Farmington NM 87499
LAB: (505) 325-5667 • FAX: (505) 325-6256

Purchase Order No.:		Job No.		Name		Title	
SEND INVOICE TO		Name: Shawn Adams		Company:		Company:	
Address: PO Box 3376		City, State, Zip: Farmington, NM 87411		Mailing Address: SAME		City, State, Zip:	
Sampling Location: Jicarilla Apache "H" Tract 2 Well #3		Telephone No. 325-1178		Telefax No.:		ANALYSIS REQUESTED	
Sampler: DGM		Number of Containers		RESULTS TO		Name	
SAMPLE IDENTIFICATION		DATE		TIME		LAB ID	
JAHT 2-3-200 4 bank composite		10/23/17		1330		13 11111-1111	
JAHT 2-1-101 4 bank composite		10/23/17		1330		9 11111-	
JAHT 2-1-100 pit bottom @ 10'		10/23/17		1340		65 11117-	
JAHT 1-3-100 pit bottom @ 11', bedrock		10/23/17		1345		20304 11111-	
Relinquished by: TD [Signature]		Date/Time: 10/23/17		Received by: DC		Date/Time: 10/23/17	
Relinquished by:		Date/Time:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Received by:		Date/Time:	
Method of Shipment:		Rush		24-48 Hours		10 Working Days	
Authorized by: (Client Signature Must Accompany Request)		Date:		Special Instructions:			

White - On Site Yellow - LAB Pink - Sampler Goldenrod - Client