

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

NMOCOD Original

Form C-144
June 1, 2004

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

For drilling and production facilities, submit to appropriate NMOCOD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☒

Operator: Resource Development Technology LLC Telephone: (303) 716-3200 e-mail address: ras.rdt@mindspring.com

Address: P.O. Box 1020, Morrison, CO 80465

Facility or well name: Rita Com. #1 API #: 30-039-22884 U/L or Qtr/Qtr: 1680' FNL & 980' FWL, Unit 'E' of Sec. 9 T23N R6W

County: Rio Arriba Latitude _____ Longitude _____ NAD: 1927 ☐ 1983 ☐

Surface Owner: Federal ☐ State ☐ Private ☒ Indian ☐

RCVD FEB20'07

Pit	Below-grade tank	OIL CONS. DIV.
Type: Drilling ☐ Production ☒ Disposal ☐ Workover ☐ Emergency ☐ Lined ☐ Unlined ☒ Liner type: Synthetic ☐ Thickness _____ mil Clay ☐ Pit Volume <u>350 Bbl: 19' x 19' x 5'</u>	Volume: _____ Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not.	DIST. 3
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet (20 points) 50 feet or more, but less than 100 feet (10 points) 100 feet or more (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 all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet (20 points) 200 feet or more, but less than 1000 feet (10 points) 1000 feet or more (0 points)	10
Ranking Score (Total Points)		10

If this is a pit closure: (1) Attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☒ offsite ☐ If offsite, name of facility _____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☒ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

Additional Comments: One unlined production pit was remediated by recovering free fluid & excavating contaminated soil & rock. The pit was the production pit north of the separator & east of the tank battery. Approximately 110 cubic yards of soil/rocks were excavated from this pit. Initial pit samples were taken on 8/25/2004 from the pit sides & bottom, the excavated pit pile, and the existing landfarm and sent to the laboratory for TPH and BTEX analysis. The pit bottom met bedrock refusal at 8' of depth. The pit bottom & sides passed & met site remediation standards. A visual inspection by JLL indicated staining to the west edge of the excavation & RAS ordered the pit additionally excavated to the west until the staining was removed & no odor was detectable. The excavated pit bottom was fertilized & filled with clean fill from the location cut slope. The pit piles from the excavation were sampled & mixed with the old land farm. The land farm was periodically sampled, tilled & fertilized until sampling on 5/06/2005 met site remediation standards. The site diagram and sample results are attached. All FINAL sample results are less than the 1000 ppm TPH standard for the site.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCOD guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: 2/14/2007

Printed Name/Title Robert A. Schwering, PE, CES, Operations Manager

Signature [Signature]

Your certification and NMOCOD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.

Approval:

Printed Name/Title

DEPUTY OIL & GAS INSPECTOR, DIST. III

Signature

[Signature]

Date:

FEB 20 2007

WELL	Comments	Pit #	Date	Location	Depth	Benzene	BTEX	TPH	TPH	TPH	Allowable
API #	Mitigation Methodology		Of		or Lateral	PPM	PPM	GRO	DRO	DRO+GRO	TPH
Location	NMOCID Comments	Sample						PPM	PPM	PPM	MAX

Date: 07-08-2005

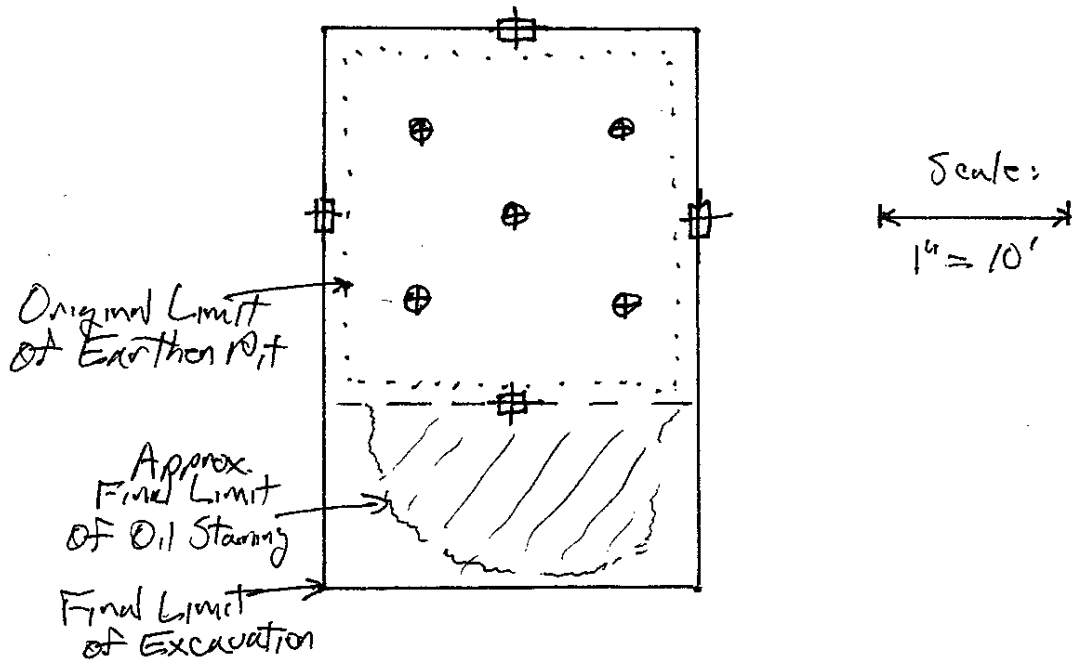
Rita Com. #1	ORDER CLOSED w/ Clean Fill: 10/7/2004.	###	8/25/2004	Pit Bottom	8'	ND	ND	ND	ND	\$4.00	54.00	1000.00
API: 30-039-22884	Initial Pit: 20' x 20' x 8' @ Bedrock.		8/25/2004	Pit Sides @ 8'	@ 8'	ND	ND	ND	ND	838.00	838.00	1000.00
1880' FNL & 980' FNL	Oil Stain on west side. Excavated till clean.											
Unit E' of Section 9	Final Pit: 30' x 20' x 8' @ Bedrock.		8/25/2004	Pit Pile 1: Sides		ND	ND	ND	ND	511.00	511.00	1000.00
123N- R8W	EXCAVATION COMPLETE & CLOSED.		8/25/2004	Pit Pile 2: Muck at Pit Bottom		ND	ND	108.00	5930.00	6038.00	1000.00	1000.00
Rio Arriba Co., NM	Re-Test Land Farm in Spring.		8/25/2004	Old Land Farm		ND	ND	ND	9770.00	9770.00	1000.00	1000.00
	Re-Test Land Farm after Cornbine Farm & Fert Old+New. Failed.		11/10/2004	Land Farm		ND	ND	12.20	2310.00	2322.20	1000.00	1000.00
	REMEDICATION COMPLETE		5/8/2005	Final Test: Land Farm		ND	ND	ND	320.00	320.00	320.00	1000.00
	Fertilize Pit Bottom w/ 100#.			PIT WORK: Pit excavated to Below Limit @ Bedrock Bottom. All oily dirt removed from sides.								
	Fertilize Land Farm w/ 200# + 100# + 150#.			Pit Excavation was Back-Filled with clean fill from location cut bank.								
				Land Farm: Mixed & Fertilized & Land-Farmed pit excavation dirt & oily dirt on location w/ Old Land Farm dirt.								

Rita Com. #1

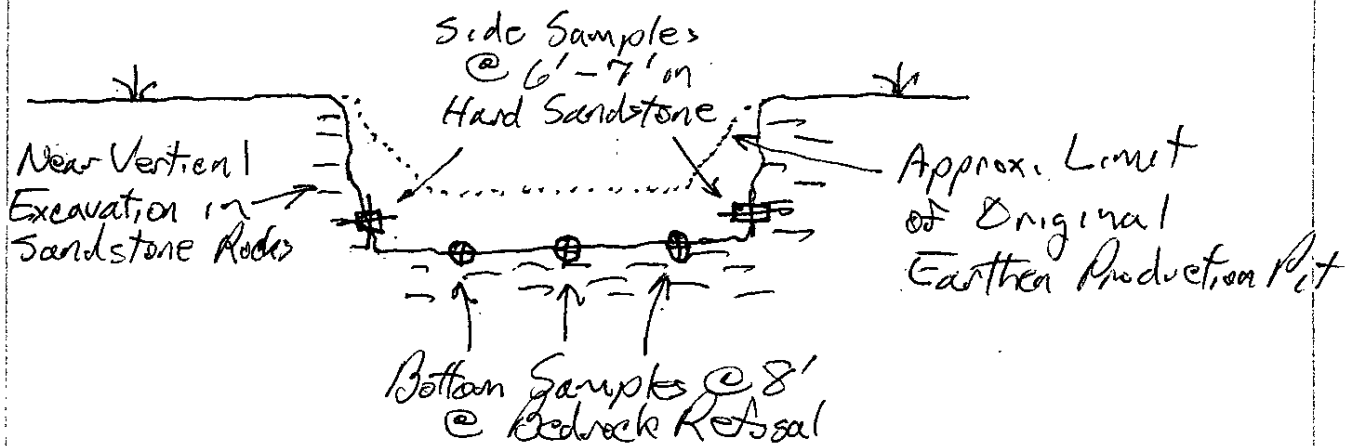
Figure 1

Earthen

PLAN VIEW:



Section View:

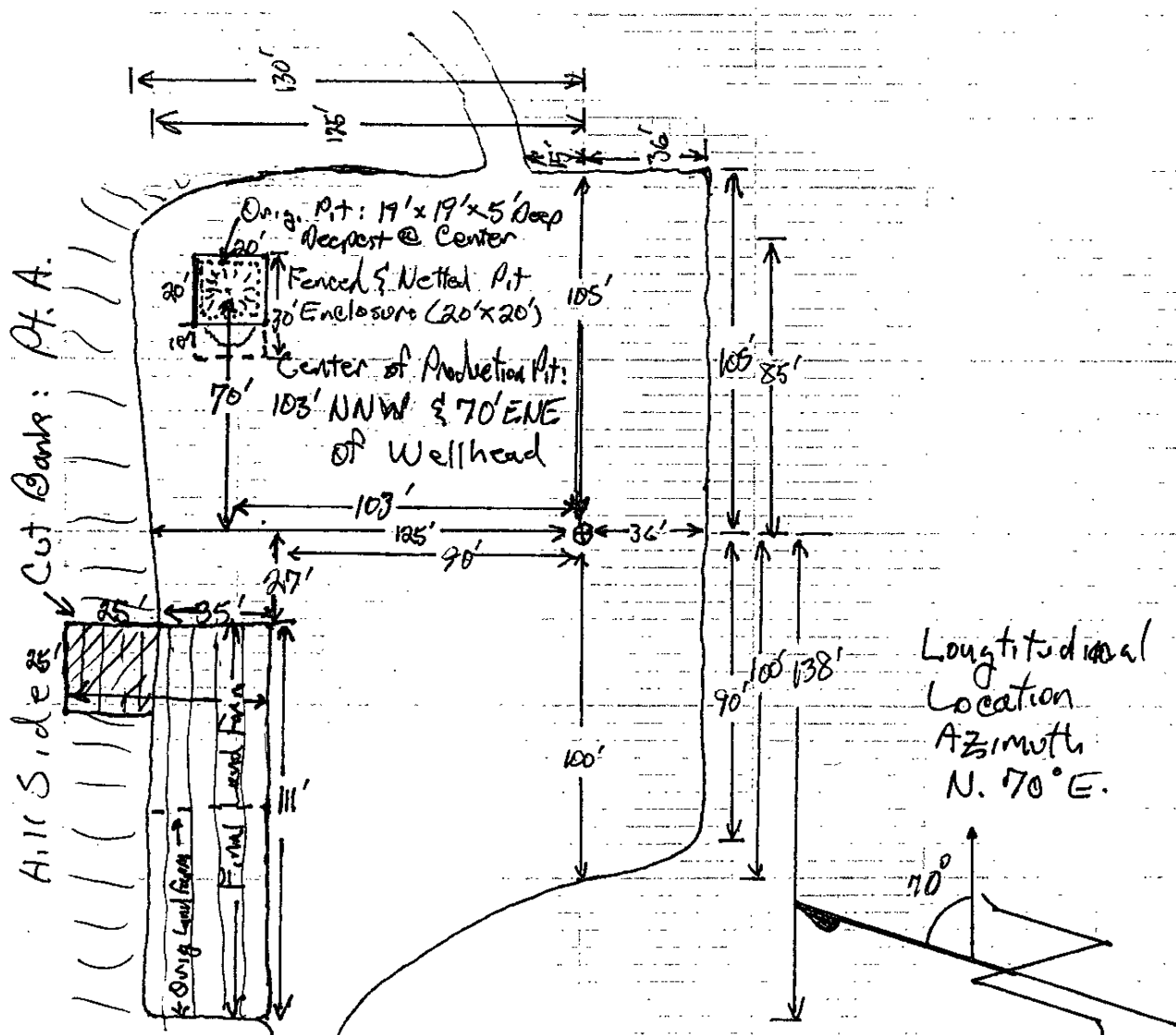


⊕ : Approx. Sampling Points : Bottom Composite Sample (5-Spot)

⊞ : Approx. Sampling Points : Side Composite Sample (4-Spot)

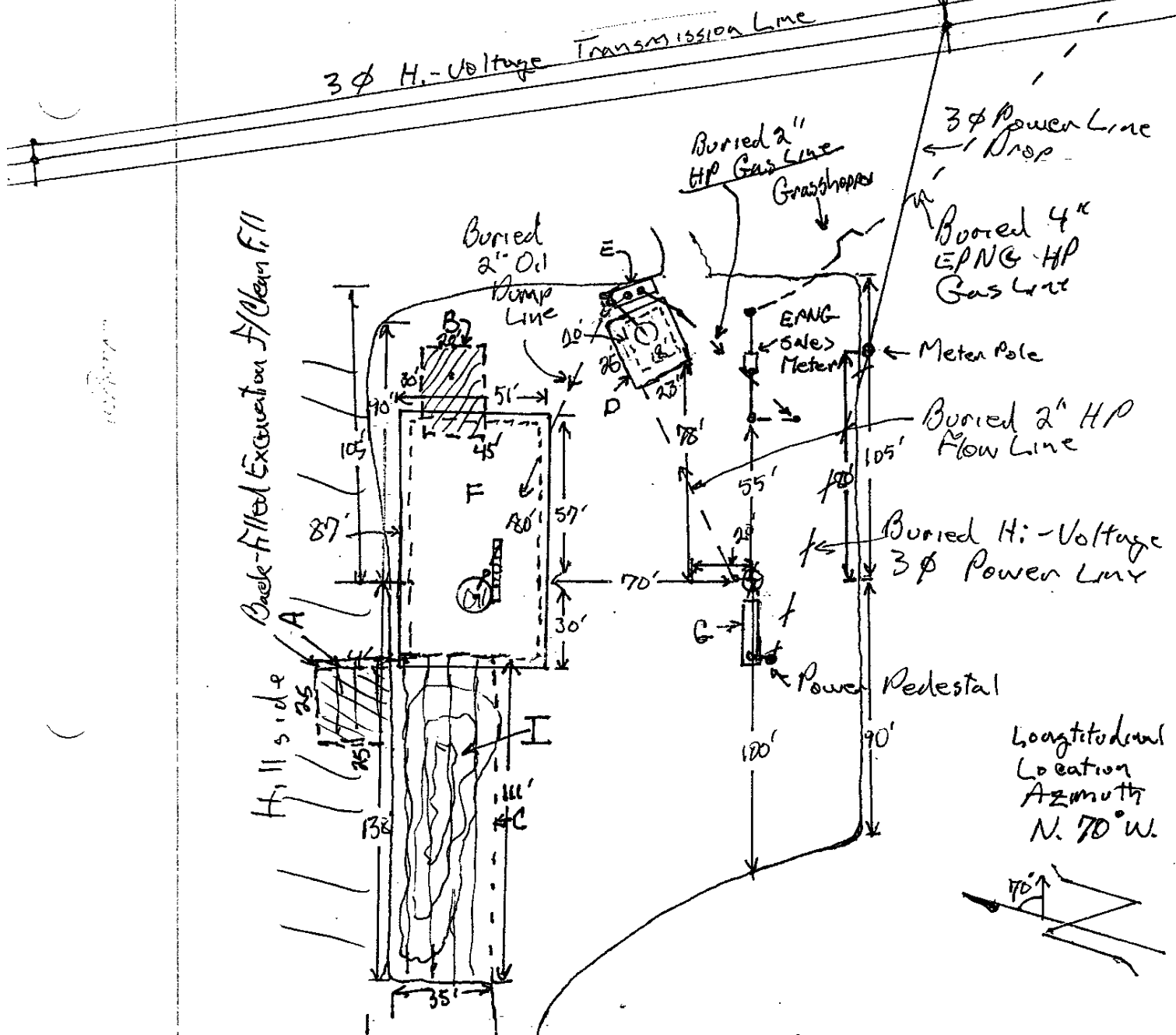
Figure 2: Location Schematic: Remediation

Rita Com. #1: API# 30-039-22884

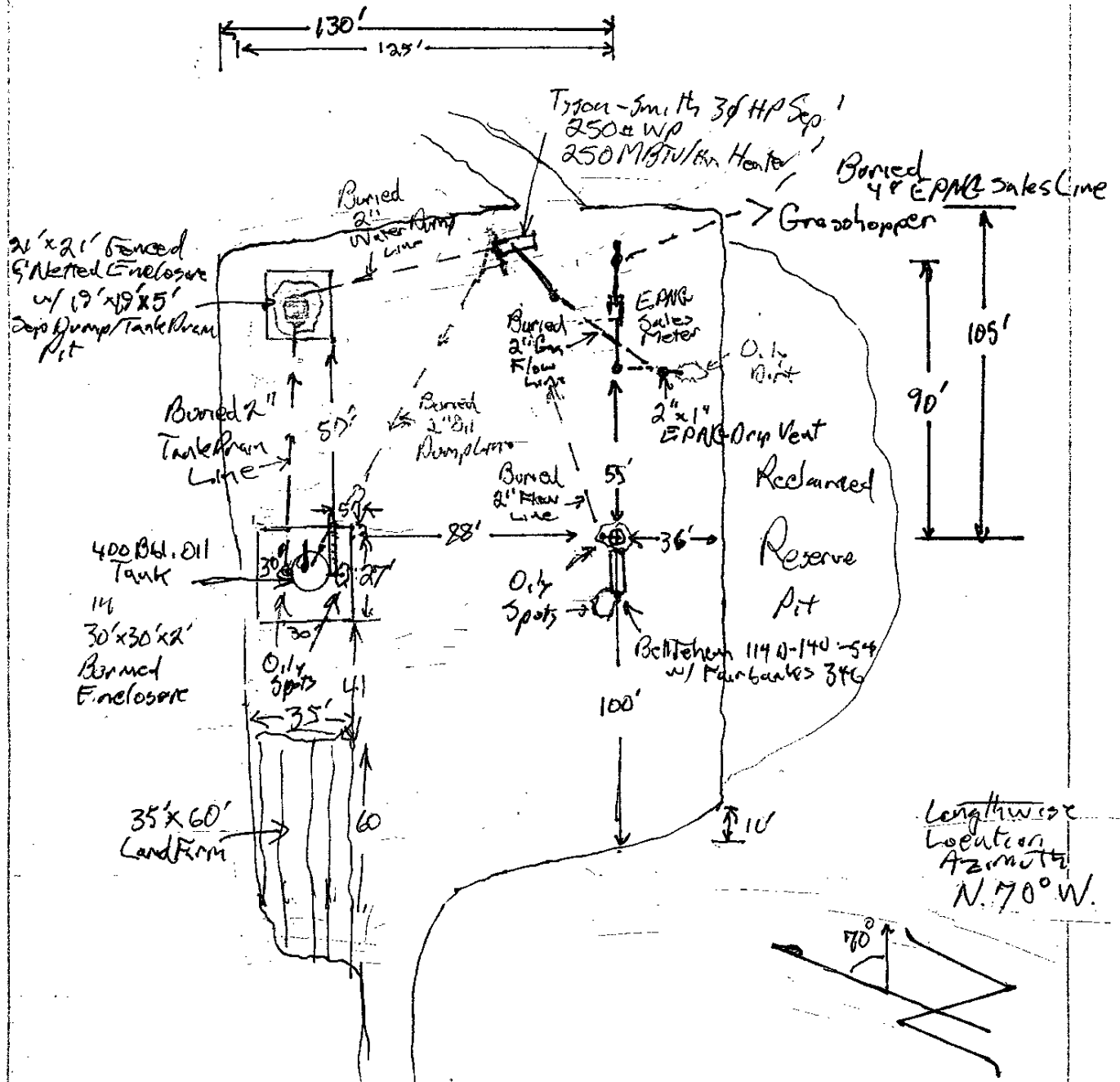


Remediation Method:

1. Excavate Pit-Muck into Pile 2 & Dry Material into Pile 1. Encounter Solid Bedrock @ 8'. Sample Pit Bottom & Sides & Pile 1 & Pile 2 & Old Land Farm. Pit Bottom & Side Samples came back OK.
2. JLT and Stain on West Side of Pit on subsequent visit. RAS ordered. Excavate all stained Material to West until No Stain Visible & No Odor Detectable.
3. Place 100# Hi-N₂ Fertilizer in Pit Bottom. Back-Fill Pit Excavation with clean fill excavated from Cut-Bank in 25' x 25' x 14' High Area @ Pts. A.
4. Land-Farm & Mix all Excavated Material & Old Land Farm & Till Repeatedly. Initially Apply 200#, then 100# & Finally 100# more Hi-N₂ Fertilizer. Finally Land Farm Test on 5/6/2005 OK.
5. Use Remediated Land-Farm Material for various Berms & Fill @ Location.



- A.: Cut Bank 25' x 25' x 14': Soil used to Fill Production Pit Excavation.
- B: 30' x 20' x 8' Deep Production Pit Excavated to Bedrock Refusal @ 8' & Laterally until no visible stain or detectable odor. Back-Filled w/ 100# Hi-Na Fertilizer & Clean Fill from Cut Bank @ A.
- C: Land Farm: 111' x 35' & 25' x 25' approx. 18" Deep. Tilled until remediate w/ approx. 450# of Hi-Na Fertilizer Mixed-In. Pushed into Stockpile.
- D: Fenced (25' x 23') & Bermed (20' x 18' x 18") Enclosure w/ 44 Bbl. Fiberglass Above-Ground Water Tank.
- E: Weathered 3 ϕ 30" x 6' 3P-L20-150A4 250# WP Separator (Serial # 34666) w/ a 125 MBTU/Hr. Heater.
- F: Fenced (87' x 51') & Bermed (80' x 45' x 2' Bermed) Enclosure w/ Above-Ground 400 Bbl. Oil Tank
- G: Bettschew 114D-140-54 Pumping Unit w/ Baldor 20Hp. Electric Motor
- I: The Remediated Land-Farm Material has been used to Build Berms. After all site Berms are constructed & Cut Bank A is re-contoured a stockpile may remain.



1. Excavate & Remediate Earthen Pit
2. Clean-up Oily Spots & Remediate Land Farm

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

Resource Development Technology LLC
PO Box 1020
Morrison, CO 80465
Attention: Bob Schwering

GAL I.D.: 408-127-08

Date Received: 08/26/04

Date Reported: 09/10/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: RITA 1 Pit Bottom

*Sample Dirt @ Bottom
@ 8' @ Bedrock Refusal
OK.*

Sample Date: 08/25/04

Sample Matrix: Soil

Petroleum Hydrocarbons

RESULTS

PARAMETER	METHOD	REPORT		DIL	UNITS	DATE	
		LIMIT	RESULT			ANALYZED	ANALYST
Benzene	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
Ethylbenzene	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
Toluene	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
Xylene, total	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
TPHGRO	8015	100	<100	1	µg/kg	09/10/04	LM
TPHDRO	8015	10	54	1	mg/kg	09/08/04	LM

*TPH @ 54 PPM < 1,000 PPM
BTX @ N.D.*

for D3
John Green, Laboratory Manager

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

Resource Development Technology LLC
PO Box 1020
Morrison, CO 80465
Attention: Bob Schwering

GAL I.D.: 408-127-09

Date Received: 08/26/04

Date Reported: 09/10/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: RITA 1 Pit Sides

Sample Date: 08/25/04

Sample Matrix: Soil

*Pit Sides OK
@ 6'-7'
in 20' x 20' Excavation.*
Petroleum Hydrocarbons

RESULTS

PARAMETER	METHOD	REPORT		DIL	UNITS	DATE	ANALYST
		LIMIT	RESULT			ANALYZED	
Benzene	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
Ethylbenzene	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
Toluene	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
Xylene, total	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
TPHGRO	8015	100	<100	1	µg/kg	09/10/04	LM
TPHDRO	8015	10	939	1	mg/kg	09/08/04	LM

*TPH @ 939 PPM < 1,000 PPM
BTEX @ N.D.*

*Further Excavated West Side of Pit
where stain appeared after sampling
until NO Visible Stain &
NO Detectable Odor.*

Bob Schwering

D3
Col John Green, Laboratory Manager

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

Resource Development Technology LLC
PO Box 1020
Morrison, CO 80465
Attention: Bob Schwering

GAL I.D.: 408-127-11

Date Received: 08/26/04

Date Reported: 09/10/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: RITA 1 Pile 1

Large Pile Soil & Rock.
OK.

Sample Date: 08/25/04

Sample Matrix: Soil

Petroleum Hydrocarbons

RESULTS

PARAMETER	METHOD	REPORT		DIL	UNITS	DATE	
		LIMIT	RESULT			ANALYZED	ANALYST
Benzene	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
Ethylbenzene	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
Toluene	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
Xylene, total	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
TPHGRO	8015	100	<100	1	µg/kg	09/10/04	LM
TPHDRO	8015	10	511	1	mg/kg	09/08/04	LM

TPH @ 511 PPM < 1,000 PPM.
BTEX @ N.D.

D3
for John Green, Laboratory Manager

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

Resource Development Technology LLC
PO Box 1020
Morrison, CO 80465
Attention: Bob Schwering

GAL I.D.: 408-127-12

Date Received: 08/26/04

Date Reported: 09/10/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: RITA 1 Pile 2

*Mucky Muddy Material
from Production Pit
after Roll-Off Free
Fluid. Failed:*

Sample Date: 08/25/04

Sample Matrix: Soil

Petroleum Hydrocarbons

RESULTS

PARAMETER	METHOD	REPORT		DIL	UNITS	DATE	
		LIMIT	RESULT			ANALYZED	ANALYST
Benzene	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
Ethylbenzene	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
Toluene	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
Xylene, total	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
TPHGRO	8015	100	108000 $\approx$ 108 PPM	1	µg/kg	09/10/04	LM
TPHDRO	8015	10	5930 6,038 PPM	1	mg/kg	09/08/04	LM

Fails: TPH = 6,038 > 1,000 PPM TPH Limit.

Passes: BTEX @ N.D.

D3
For John Green, Laboratory Manager

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

Resource Development Technology LLC
PO Box 1020
Morrison, CO 80465
Attention: Bob Schwering

GAL I.D.: 408-127-10

Date Received: 08/26/04

Date Reported: 09/10/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: RITA 1 Land

*Original Land Farm.
Source Unknown.
Fails.*

Sample Date: 08/25/04

Sample Matrix: Soil

Petroleum Hydrocarbons

RESULTS

PARAMETER	METHOD	REPORT		DIL	UNITS	DATE	
		LIMIT	RESULT			ANALYZED	ANALYST
Benzene	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
Ethylbenzene	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
Toluene	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
Xylene, total	8021	5.0	<5.0	1	µg/kg	09/10/04	LM
TPHGRO	8015	100	<100	1	µg/kg	09/10/04	LM
TPHDRO	8015	10	9770	1	mg/kg	09/08/04	LM

*Fails: TPH @ 9,770 PPM > 1,000 PPM Limit.
Passes: BTEX @ N.D.*

D3
for John Green, Laboratory Manager

Green Analytical Laboratories, Inc.
75 Suttle Street
Durango, CO 81303

Resource Development Technology
PO Box 1020
Morrison, CO 80465
Attention: Bob Schwering

GAL I.D.: 411-061-14

Date Received: 11/11/04

Date Reported: 11/22/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER: RAS 0018

SAMPLE I.D.: Rita #1 Land Farm

Combined Land Farm
ALL Material

Fails.

Sample Date: 11/10/04

Sample Matrix: Soil

Petroleum Hydrocarbons

RESULTS

PARAMETER	METHOD	REPORT		DIL	UNITS	DATE	
		LIMIT	RESULT			ANALYZED	ANALYST
Benzene	8021	5.0	<5.0	1	µg/kg	11/15/04	LM
Ethylbenzene	8021	5.0	<5.0	1	µg/kg	11/15/04	LM
Toluene	8021	5.0	<5.0	1	µg/kg	11/15/04	LM
Xylene, total	8021	5.0	<5.0	1	µg/kg	11/15/04	LM
TPHGRO	8015	100	12200 = 12.2 PPM	1	µg/kg	11/17/04	LM
TPHDRO	8015	10	2310	1	mg/kg	11/22/04	LM

2322.2 PPM

Fails: TPH = 2,322.2 PPM > 1,000 PPM Limit.

Passes: BTEX @ N.D.

FOR: D. Zupelt
John Green Laboratory Manager

Sample Date: 5/6/2005

Green Analytical
75 Suttle Street
Durango CO, 81303

Project: Resource Development
Project Number: GA05-092
Project Manager: Debbie Zufelt

Reported:
05/16/05 11:22

Rita 1 Land
T500565-05 (Soil)

Combined Land Farm. OK.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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SunStar Laboratories, Inc.

Purgeable Petroleum Hydrocarbons by EPA 8015m

C6-C12 (GRO)	ND	500	ug/kg	1	5051014	05/10/05	05/13/05	EPA 8015m	D-12
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Surrogate: 4-Bromofluorobenzene

80.8 % 65-135

Extractable Petroleum Hydrocarbons by 8015

Diesel Range Hydrocarbons	320	10	mg/kg	1	5051006	05/10/05	05/11/05	EPA 8015m	D-09
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Volatile Organic Compounds by EPA Method 8021B

Benzene	ND	5.0	ug/kg	1	5051014	05/10/05	05/13/05	EPA 8021B
Toluene	ND	5.0	"	"	"	"	"	"
Ethylbenzene	ND	5.0	"	"	"	"	"	"
m,p-Xylene	ND	10	"	"	"	"	"	"
o-Xylene	ND	5.0	"	"	"	"	"	"

Surrogate: 4-Bromofluorobenzene

77.5 % 65-135

TPH = 320 PPM

Final Test

Pass: TPH = 320 PPM < 1,000 PPM Limit. OK.

Pass: BTEX @ N.D.

SunStar Laboratories, Inc.



Dennis Dorning, Project Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.