

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

NMOC Original
Form C-144
June 1, 2004
For drilling and production facilities, submit to appropriate NMOC 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: Theodore Zink Fed. Com. #1 API #: 30-039-22923 U/L or Qtr/Qtr: 460' FNL & 1005' FWL, Unit 'D' of Sec. 15, T23N R6W

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

Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

Pit

Type: Drilling ☐ Production ☒ Disposal ☐

Workover ☐ Emergency ☐

Lined ☐ Unlined ☒

Liner type: Synthetic ☐ Thickness _____ mil Clay ☐

Pit Volume 365 Bbl: 20' x 22' @ Top & 14' x 12' x 7' @ Bottom

Below-grade tank

Volume: _____ Type of fluid: _____

Construction material: _____

Double-walled, with leak detection? Yes ☐ If not, explain why not: _____

RCVD MAY18'07

OIL CONS. DIV.

Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet	(20 points)	DIST. 3 0
	50 feet or more, but less than 100 feet	(10 points)	
	100 feet or more	(0 points)	
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)	0
	No	(0 points)	
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses)	Less than 200 feet	(20 points)	10
	200 feet or more, but less than 1000 feet	(10 points)	
	1000 feet or more	(0 points)	
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 south of the separator & north of the tank battery. Approximately 120 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 land-farm and sent to the laboratory for TPH and BTEX analysis. The pit bottom exceeded Site Limits (TPH < 1000 PPM) in loose dirt @ Bedrock Refusal at 9' of depth. The pit sides @ 20' x 16' @ 7' - 8' Depth exceeded Site Limits @ 1000 PPM in loose material on sides in Bedrock. The pit bottom was fertilized w/ 200# of Hi-N2 Fertilizer & filled with clean fill from the location cut slope & the BLM approved Glenmorangie Stock Pond after airing out for a month. The pit pile from the excavation & the old land-farm were sampled & mixed with 100# Hi-N2 Fertilizer. The combined land-farm was tilled & periodically sampled until it met site remediation standards on 5/5/2005. Site diagram and sample results are attached. On 5/5/2005 Final Land-Farm results MET the Site Remediation Standards.

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 NMOC guidelines ☒, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Date: 4/27/2007

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

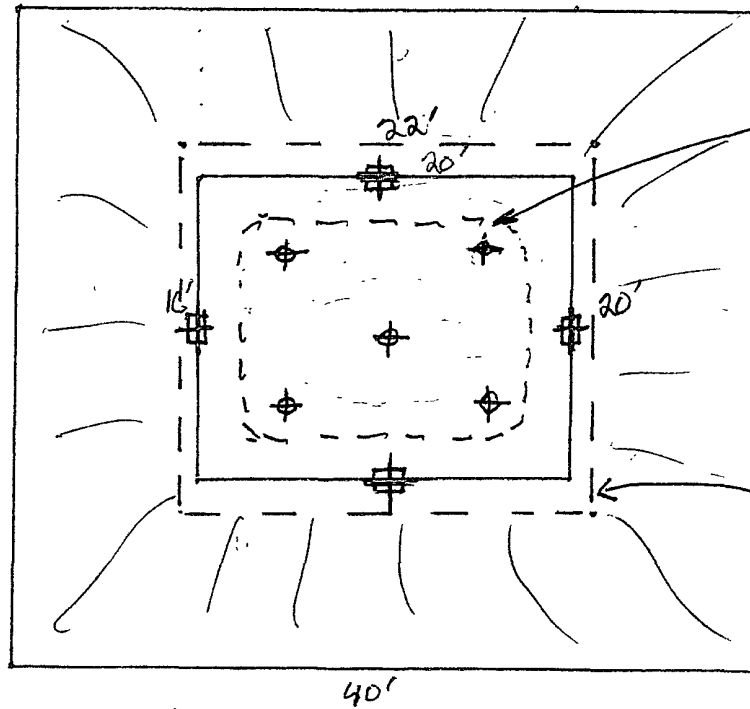
Signature *R.A. Schwering*

Your certification and NMOC 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: Deputy Oil & Gas Inspector,
Printed Name/Title District #3

Signature *B. A. Dell*

Date: SEP 20 2007



Approx. Bottom
@ 17' Depth of
Earthen Pit
(14' x 12' x 7')

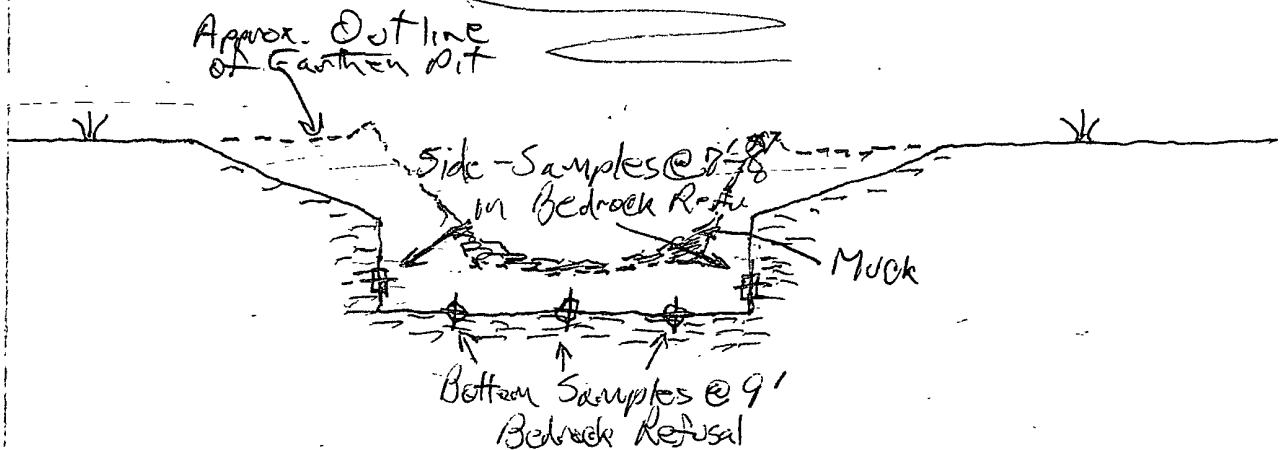
35'

Scale:
1" = 10'

Approx. Outline
of Crest of
Earthen Pit

PLAN VIEW

SECTION VIEW



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

⊕+: Approx. Sampling Points: Side Composite Samples
(4-Spot Pattern)

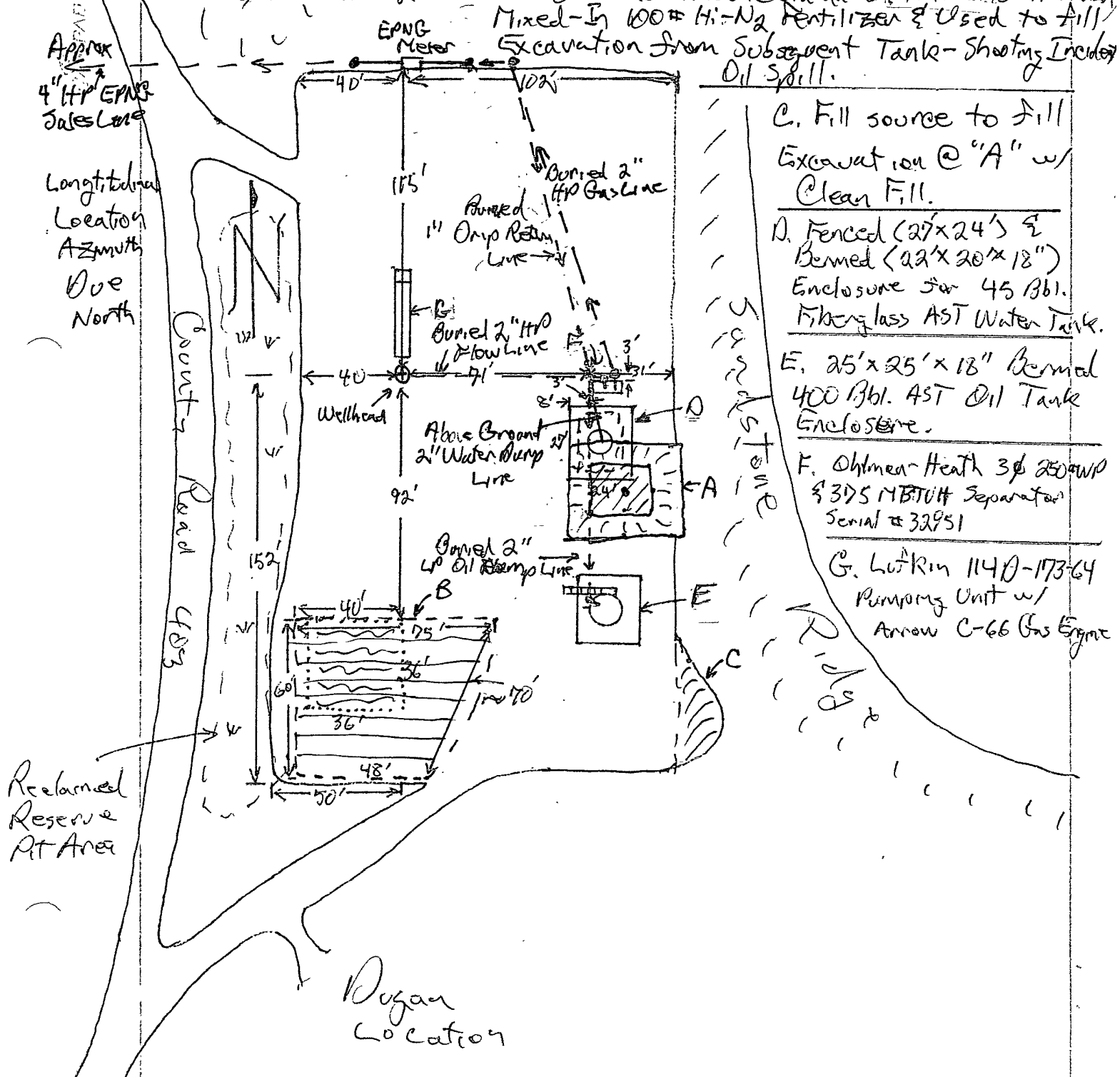
2. Load Frame: Max in Original Load from Material ($36 \times 36 \times 18"$) from Meman w/
Exhausted Oil-Stained Material & Mix - in w/ 100 $\pm$ High NA. Feutl. 1.75
Till Sample until Material Passed Final Test on 5/5/2005.

4/30/2005

Before Oil-Spill @ Tank-Shooting Incident

- A. 40' x 35' x 4' Excavation to Center 20' x 16' x 9' Excavation former Tank Drain/ Separator Earth Pit Excavated to Bedrock Refused @ Sides & Bottom in Center Excavation. Back-Filled w/ Clean-Fill w/ Glenmorangie Com #1 Stock Sand & from Cut-Slope C @ location AFTER place 200# Hi-N₂ Fertilizer in Pit Bottom. Pit Bottom Final TPH = 3490 ppm (NO BTEX) was Above Site Standard (TPH = 1000 ppm) & Pit Sides TPH = 1,110.45 ppm (NO BTEX) was Slightly Above Site Standards

- B. 75' x 60' x 48' x ~70' x 18" Land Farm Tilled until remediated. Mixed w/ 100# Hi-N₂ Fertilizer until exceeded Site Standards (TPH = 140 ppm; NO BTEX) Mixed-In 100# Hi-N₂ Fertilizer & Used to Fill Excavation from Subsequent Tank-Shooting Incident Oil Spill.



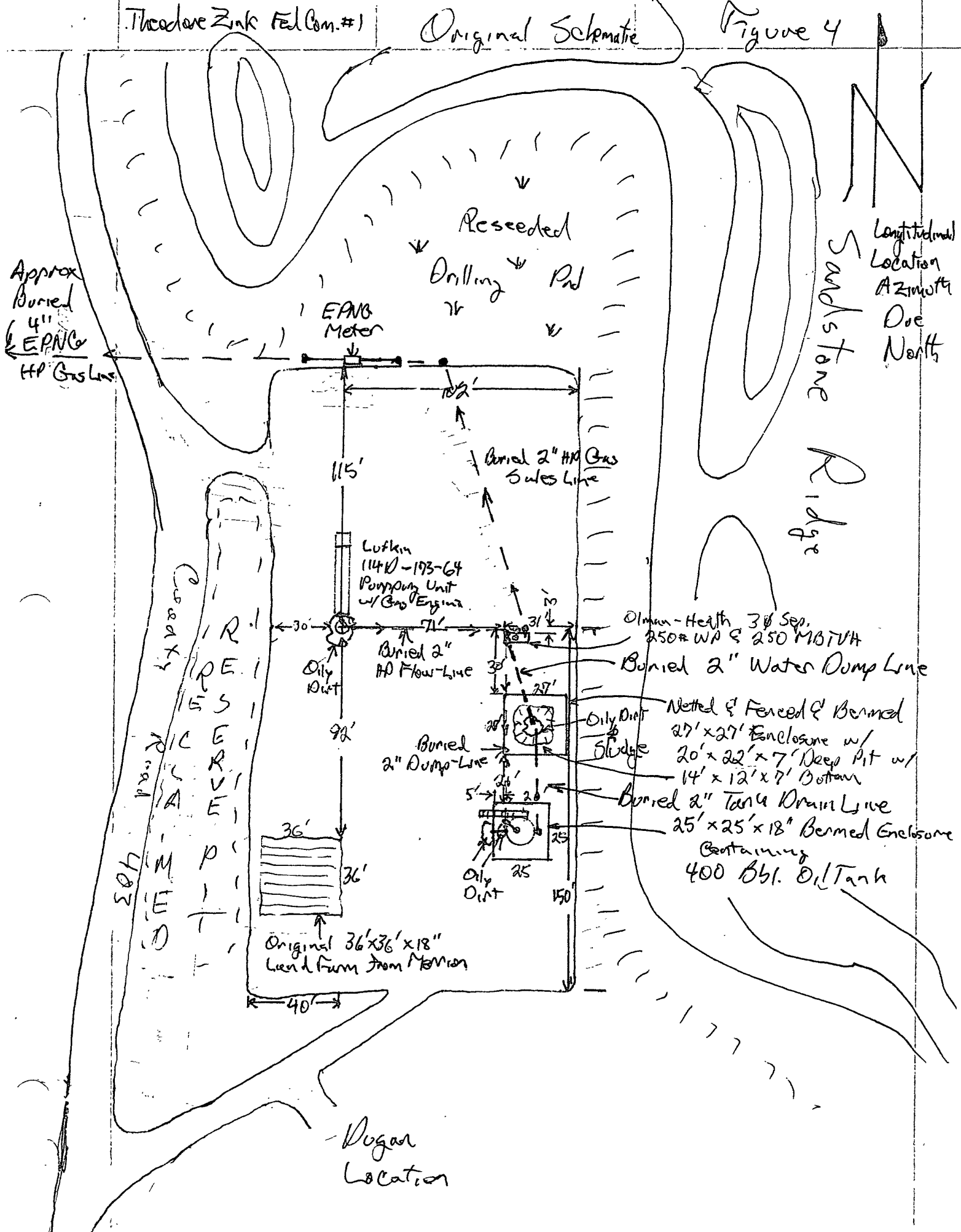
- C. Fill source to fill Excavation @ "A" w/ Clean Fill.

- D. Fenced (27' x 24') & Bermed (22' x 20' x 18") Enclosure for 45 Bbl. Fiberglass AST Water Tank.

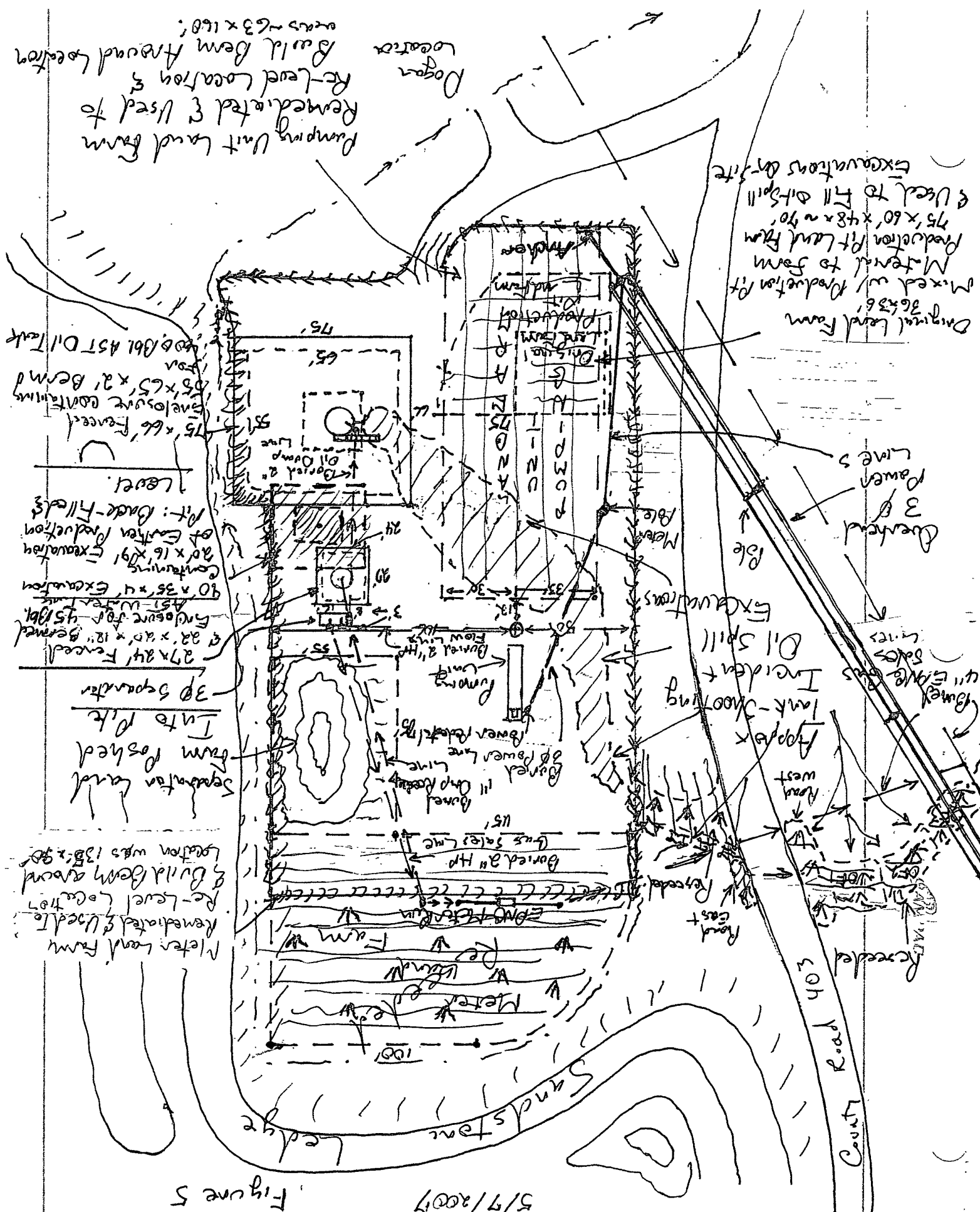
- E. 25' x 25' x 18" Bermed 400 Bbl. AST Oil Tank Enclosure.

- F. Oilman-Heath 3φ 250 HP & 375 MBTUH Separator Serial # 32951

- G. Lukin 1140-173-64 Pumping Unit w/ Arrow C-66 Gas Engine



5/7/2007



[illegible]

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.: 408-127-14

Date Received: 08/26/04

Date Reported: 09/10/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: THEO 1 Pit Bottom @ 9'
Bedrock Refusal

Sample Date: 08/25/04

Sample Matrix: Soil

Petroleum Hydrocarbons

RESULTS

PARAMETER	METHOD	REPORT		DIL	UNITS	DATE	ANALYST	
		LIMIT	RESULT			ANALYZED		
Benzene	8021	5.0	<5.0	} N.D.	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	40.2 100	40200	1	µg/kg	09/10/04	LM	
TPHDRO	8015	10	2740	1	mg/kg	09/08/04	LM	

Fail : TPH = 2780.20 PPM > 1000 PPM Site Standard

Pass : BTEX = N.D. < 50 PPM Site Standard

Oil stain Visible in Joints & Fractures
in Otherwise Massive Sandstones

D2
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.: 408-127-15

Date Received: 08/26/04

Date Reported: 09/10/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: THEO 1 Pit Sides @ 7'-8'

Bedrock Refusal

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	20.4 100	20400	1	µg/kg	09/10/04	LM
TPHDRO	8015	10	1090	1	mg/kg	09/08/04	LM

Fail: TPH = 1,110.4 PPM > 1000 PPM site Standard

Pass: BTEX = N.D. < 50 PPM site Standard

Oil Stain Visible in Joints & Fractures in
Bottom 3" - 4" of Sides Only
in Otherwise Massive Sandstone

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.: 408-127-16

Date Received: 08/26/04

Date Reported: 09/10/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: THEO 1 Pile

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		µg/kg	09/10/04	LM
Toluene	8021	5.0	<5.0		µg/kg	09/10/04	LM
Xylene, total	8021	5.0	<5.0		µg/kg	09/10/04	LM
TPHGRO	8015	109,2	109000	1	µg/kg	09/10/04	LM
TPHDRO	8015	10	3110	1	mg/kg	09/08/04	LM

Fail: TPH = 3,219 PPM > 1000 PPM Site Standard
Pass: BTEX = N.D. < 50 PPM Site Standard

Mix w/ Original Land Farm
Material & Till & Fertilize.

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.: 408-127-17

Date Received: 08/26/04

Date Reported: 09/10/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.:

THEO 1 Land :

*Original Land Farm
Purchased w/Well From Morrison*

Sample Date: 08/25/04

Sample Matrix: Soil

Petroleum Hydrocarbons

RESULTS

PARAMETER	METHOD	REPORT		DIL	UNITS	DATE ANALYZED	ANALYST
		LIMIT	RESULT				
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	3490	1	mg/kg	09/08/04	LM

Fail: TPH = 3,490 PPM > 1000 PPM Site Standard.

Pass: BTEX = N.D. < 50 PPM Site Standard.

Mix w/ Excavated Material & 100# Fertilizer.

Till & Sample Until Remediated.

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.: 411-061-01

Date Received: 11/11/04

Date Reported: 11/22/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER: RAS 0005

SAMPLE I.D.: Theodore Zinc #1 Land Farm

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	<100	1	µg/kg	11/17/04	LM
TPHDRO	8015	10	1220	1	mg/kg	11/22/04	LM

Fail: TPH = 1220 PPM > 1000 PPM Site Standard.
Pass: BTEX = N.D. < 50 PPM Site Standard.

D. Zupfelt
for John Green, Laboratory Manager

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

**Zink Old Land
T500565-01 (Soil)**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
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	
Surrogate: 4-Bromofluorobenzene		79.4 %	65-135		"	"	"	"	
Extractable Petroleum Hydrocarbons by 8015									
Diesel Range Hydrocarbons	140	10	mg/kg	1	5051006	05/10/05	05/10/05	EPA 8015m	D-09
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		75.0 %	65-135		"	"	"	"	

Passed : TPH = 140 PPM < 1000 PPM Site Standard
BTEx = N.D. < 50 PPM Site Standard

Used this remediated material to fill excavations
due to Tank-Shooting Oil-Spill @ Theodone Zink Fed. Com. #1.
The Tank Shooting Release occurred on 5/1-2/2005.
The Excavations occurred from 5/2/2007 - 6/20/2007.
Back-filling of Excavations on-site with this material
occurred on 6/22-23/2007 after Excavation Bottoms
w/ Fertilizer.

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.