

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

NMOCD Original Form C-144
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD 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: <u>Resource Development Technology LLC</u> Telephone: <u>(303) 716-3200</u> e-mail address: <u>ras.rdt@mindspring.com</u> Address: <u>P.O. Box 1020, Morrison, CO 80465</u> Facility or well name: <u>Salazar G Fed. Com. 22- #3</u> API #: <u>30-039-23091</u> U/L or Qtr/Qtr <u>1810' FNL & 1820' FWL, Unit E of Sec 22 T 25N R 6W</u> County: <u>Rio Arriba</u> 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 <u>140</u> Bbl. (14' x 14' x 4' Deep in 20' x 20' Berm)	Below-grade tank Volume: <u>NA</u> Bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why not. <u>DIST. 3</u>	RCVD SEP 6 '07 OIL CONS. DIV. DIST. 3
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet 50 feet or more, but less than 100 feet 100 feet or more	(20 points) (10 points) <u>0</u> (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 No	(20 points) (0 points) <u>0</u>
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet 200 feet or more, but less than 1000 feet 1000 feet or more	(20 points) (10 points) <u>10</u> (0 points)
Ranking Score (Total Points)		<u>10</u>

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 approx. 140 Bbl. earthen production pit was remediated by excavating contaminated soil, and land farming the soil on-site. The pit was the original production pit east of the separator. Approximately 130 cubic yards of soil were excavated from this pit. On 9/30/2004 a composite wall sample from the sides at 3'-4' Depth met TPH & BTEX Site Remediation Standards (excavation @ 17' x 17' x 5' Deep: the Bottom Composite Sample Failed). The excavation was enlarged to allow deepening in rock & deepened & on 12/6/2004 a composite bottom sample was taken from the pit (26' x 21' x 8' Deep) and sent to the laboratory for TPH and BTEX analysis and met site remediation standards. The excavation was filled w/ 100# Hi-N2 fertilizer & clean fill. The soil pile was fertilized (500# Hi-N2), land-farmed & sampled repeatedly with the final sample collected on 5/25/2005 meeting site remediation standards. The site diagram and sample results are attached. All FINAL excavation & sample results are less than the TPH & BTEX Remediation Standards for this 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 NMOCD guidelines ☒, a general permit ☐, or an (attached) alternative OCD approved plan ☐.

Date: 8/22/2007
Printed Name/Title: Robert A. Schwering, P.E., Operations Manager

Signature Robert A. Schwering

Your certification and NMOCD 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,
District #3

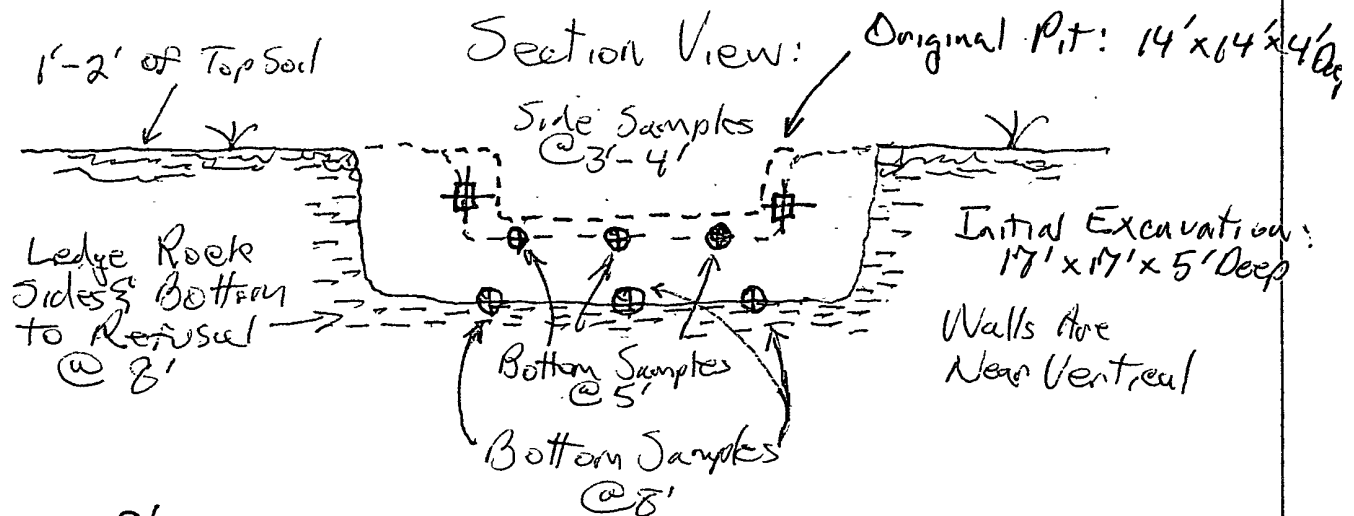
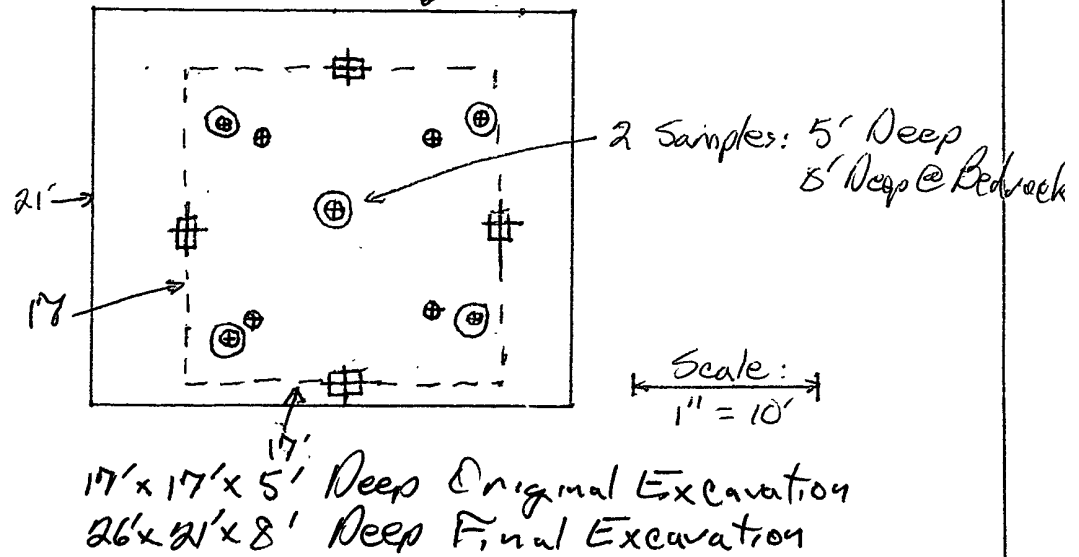
Printed Name/Title _____

Signature Bob O'Neil

Date: _____

SEP 20 2007

Plan View:



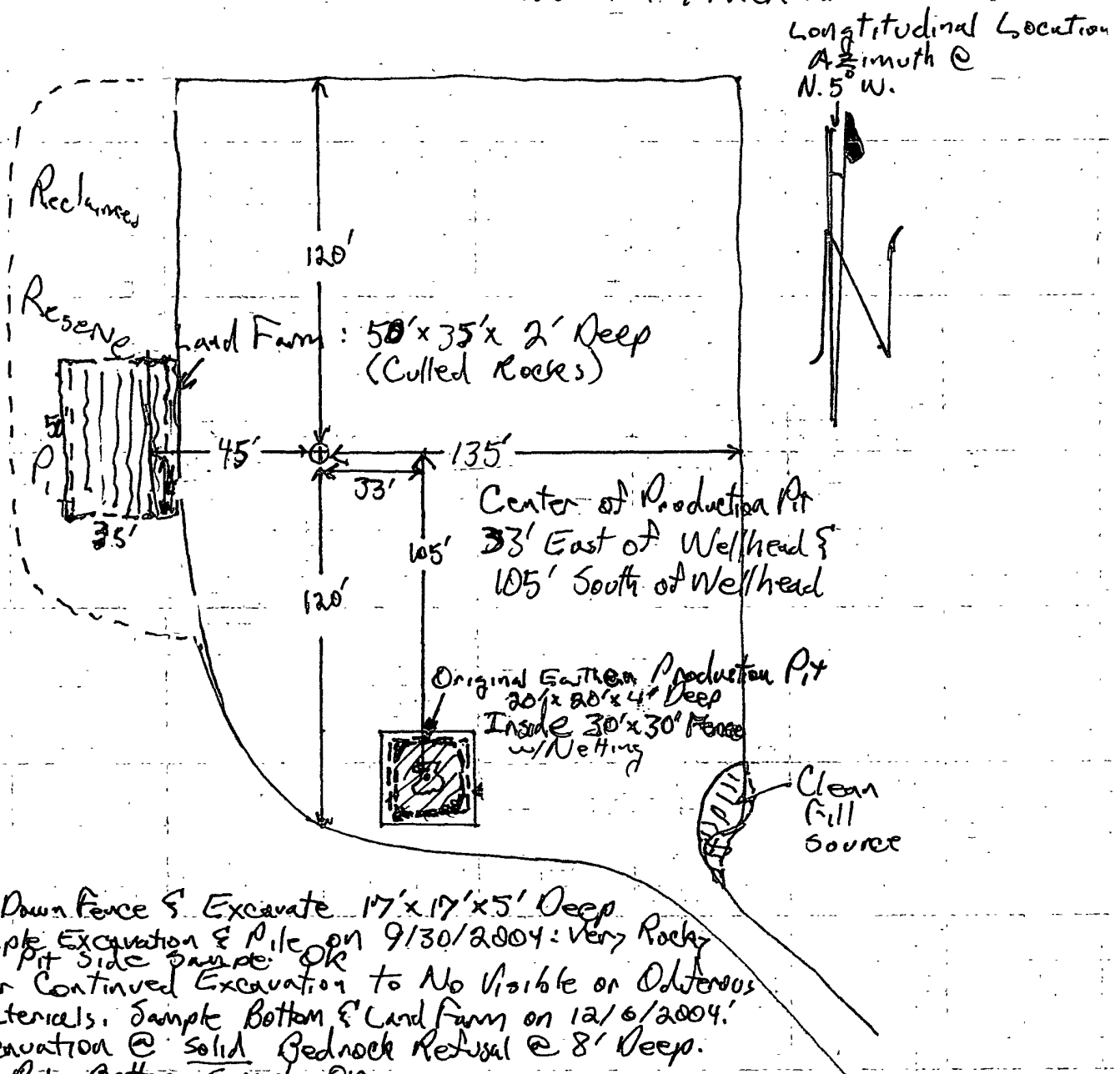
5' 8'
↓ ↓ : Approx. Sampling Points: Bottom Composite Sample
5-Spot Pattern

3'-4'
: Approx. Sampling Points: Side Composite Sample
4-Spot Pattern

Salazar 'G' Fed. Com. 22-#3

API # 30-039-23091

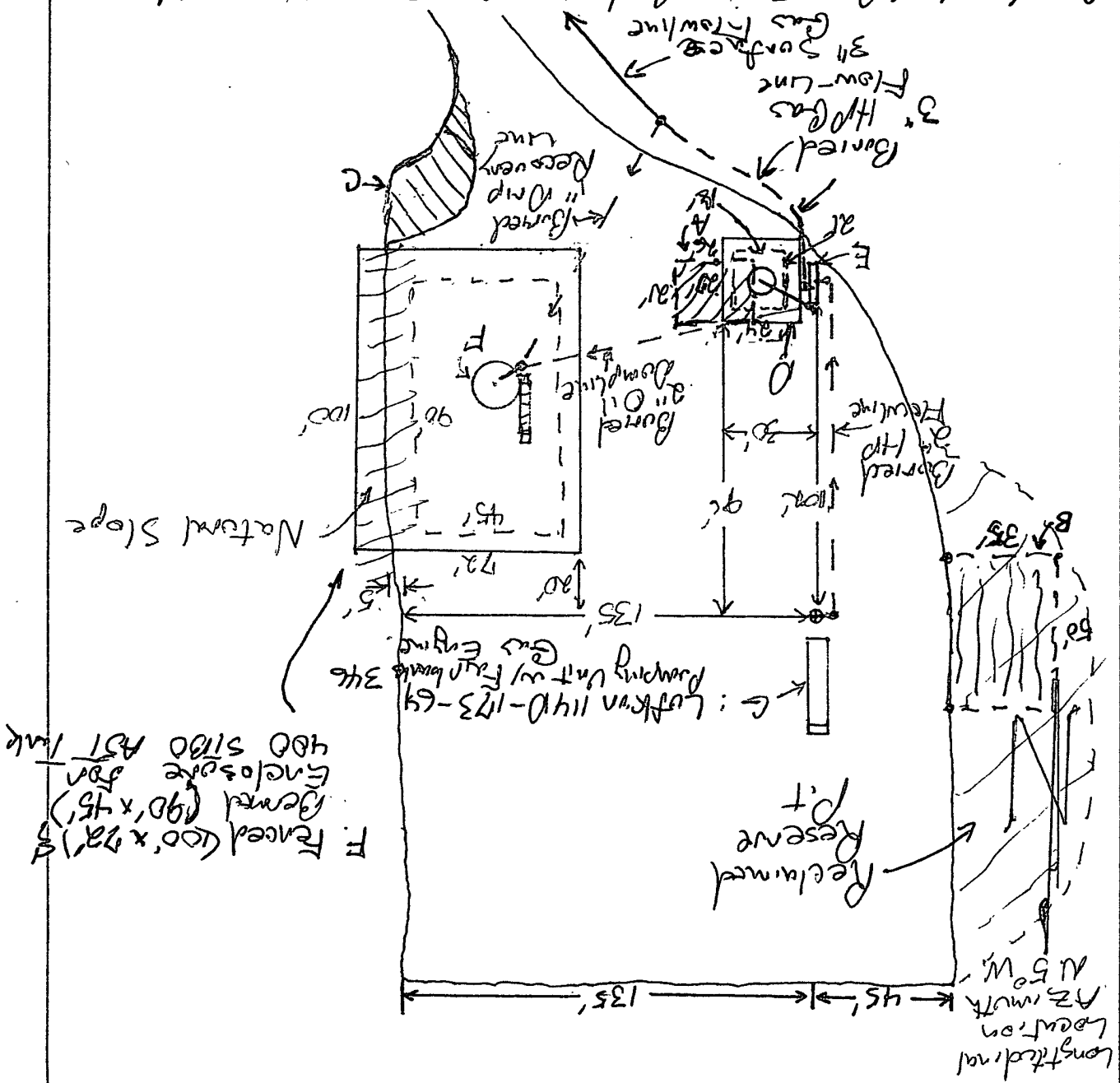
Figure 2 : Location Schematic
Remediation & Reclamation



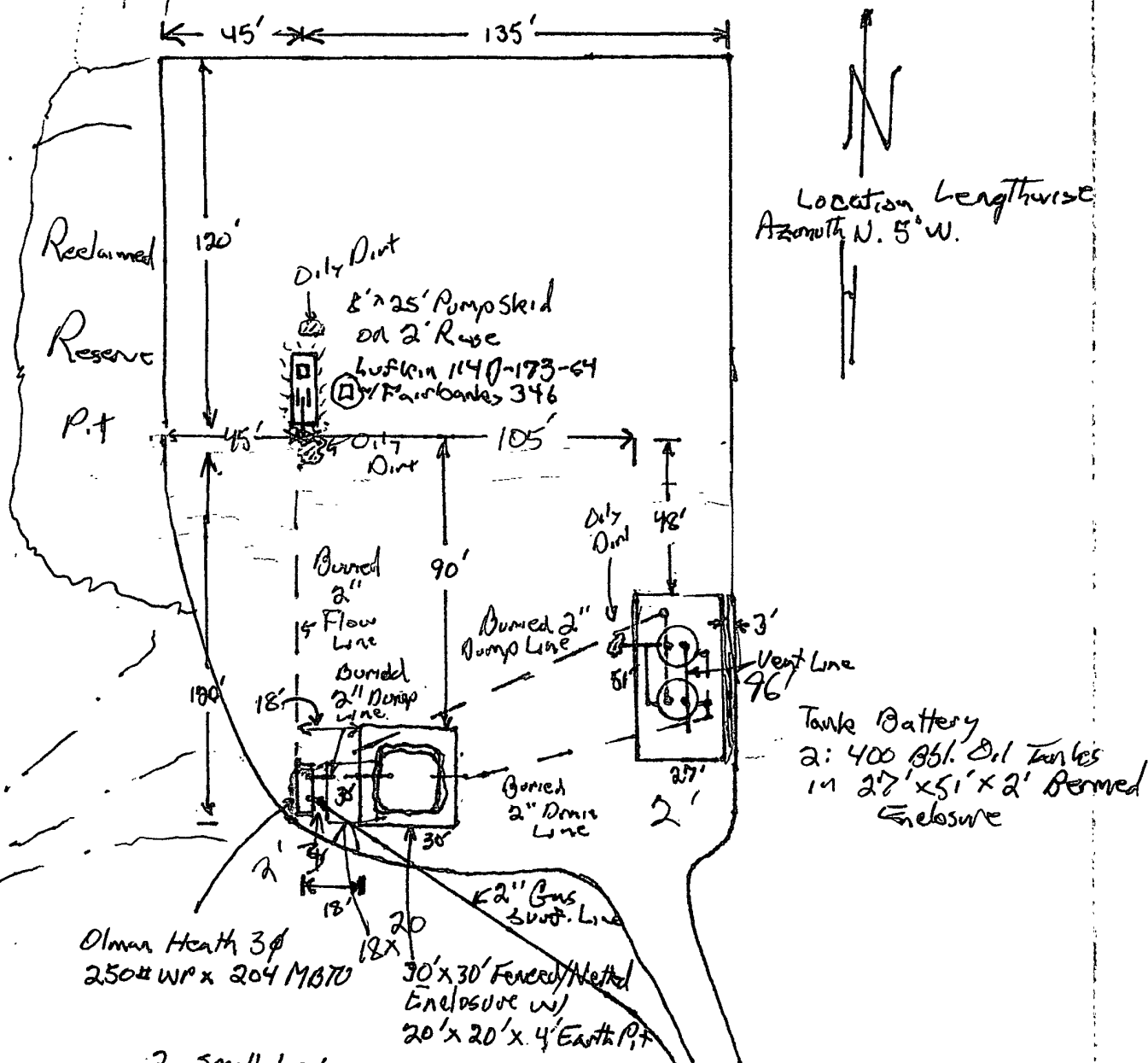
1. Take Down Fence & Excavate 17' x 17' x 5' Deep
Sample Excavation & Pile on 9/30/2004: Very Rocky
Pit Side Sample OK
2. Order Continued Excavation to No Visible or Odorous
Materials. Sample Bottom & Land Farm on 12/6/2004.
Excavation @ Solid Bedrock Refusal @ 8' Deep.
Pit Bottom Sample OK.
3. Order Pit Fertilized w/ 100 # Hi-Na Fertilizer/
Back-Fill w/ Clean Fill from Bank @ SE Location Corner
4. Fertilize Land Farm w/ 500# Hi-Na Fertilizer & Till
Repeatedly until Land Farm Passed Test < 1000 PPH TPH.
Placed all Dirty Dirt from Site in Land Farm.

Salina 2006 Fld Com. 22#3 Current Site Schematic

Figure 3



- A. 26' x 21' x 8' Deep Earthen Production Pit Excavation to Meet Site Remediation Standards. Back-Filled w/ 100# High-Alg. Fertilizer. Filled w/ Clean Fill w/ Cut-Slope C in SE Corner of Location.
- B. 55' x 35' x 2' Land Farm Area Filled & Fertilized w/ 500 # H₂O Fertilizer. Fertilizer Unit met Site Remediation Standards. Will use material in Battery Berms and Enclosure Control.
- C. Borrow Area of Clean-Fill w/ Battery Production Pit.
- D. Fenced (27' x 24') & Bermed (21' x 18") Enclosure Containing 45 Bbl. Netted Filtration Units & Produced Water.
- E. Oilwater-Heath 30 30-40-150' w/ 200/175V Separation.



Location Lengthwise
Azimuth N. 5° W.

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.: 410-003-32

Date Received: 10/01/04

Date Reported: 10/27/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: SAL 22-3 PIT BOTTOM @ 5'

Sample Date: 09/30/04

Sample Matrix: Soil

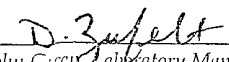
Petroleum Hydrocarbons

RESULTS

PARAMETER	METHOD	REPORT		DIL	UNITS	DATE ANALYZED	ANALYST
		LIMIT	RESULT				
Benzene	8021	5.0	<5.0	1	µg/kg	10/21/04	LM
Ethylbenzene	8021	5.0	<5.0	1	µg/kg	10/21/04	LM
Toluene	8021	5.0	<5.0	1	µg/kg	10/21/04	LM
Xylene, total	8021	5.0	<5.0	1	µg/kg	10/21/04	LM
TPH GRO	8015	100	19200 = 19.2 PPM	1	µg/kg	10/26/04	LM
TPH DRO	8015	10	1710	1	mg/kg	10/20/04	LM

FAILS: TPH = 1,729.2 PPM > 1000PPM Site Standard

PASSED: BTEX @ N.D. < 50 PPB Site Standard


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.: 410-003-33

Date Received: 10/01/04

Date Reported: 10/27/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: SAL 22-3 PIT SIDES: @ 3'-4' Depth

Sample Date: 09/30/04

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	10/21/04	LM
Ethylbenzene	8021	5.0	<5.0	1	µg/kg	10/21/04	LM
Toluene	8021	5.0	<5.0	1	µg/kg	10/21/04	LM
Xylene, total	8021	5.0	<5.0	1	µg/kg	10/21/04	LM
TPH GRO	8015	100	35600 35.6	1	µg/kg	10/26/04	LM
TPH DRO	8015	10	214	1	mg/kg	10/20/04	LM

Passed: TPH = 249.6 PPM < 1000 PPM Site Standard
Passed: BTEX @ N.D. < 50 PPB Site Standard

D. Zufelt
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.: 410-003-34

Date Received: 10/01/04

Date Reported: 10/28/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: SAL 22-3 PILE

Sample Date: 09/30/04

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	10/21/04	LM
Ethylbenzene	8021	5.0	<5.0	1	µg/kg	10/21/04	LM
Toluene	8021	5.0	306	0.306 1	µg/kg	10/21/04	LM
Xylene, total	8021	5.0	1260	1.26 1	µg/kg	10/21/04	LM
TPHGRO	8015	100	335000	335.0 1	µg/kg	10/26/04	LM
TPHDRO	8015	10	4140	1	mg/kg	10/20/04	LM

Failed: TPH @ 44% 566 PPM > 1,000 PPM Site Standard

Failed: BTEX @ 1,566 PPB > 50 PPB Site Standard

Land Farm Materials On-Site

D. Zupelt
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.: 412-030-11

Date Received: 12/07/04

Date Reported: 12/20/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: Sal 22-3 Pit Bottom @ 8' Bedrock Refusal

Sample Date: 12/06/04

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	12/17/04	LM
Ethylbenzene	8021	5.0	<5.0	1	µg/kg	12/17/04	LM
Toluene	8021	5.0	<5.0	1	µg/kg	12/17/04	LM
Xylene, total	8021	5.0	<5.0	1	µg/kg	12/17/04	LM
TPHGRO	8015	100	<100	1	µg/kg	12/17/04	LM
TPHDRO	8015	10	27.5	1	mg/kg	12/17/04	LM

PASSED: TPH @ 27.5 PPM < 1000 PPM Site Standard

PASSED: BTEX @ N.D. < 50 PPB Site Standard

D. Zufelt
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.: 412-030-12

Date Received: 12/07/04

Date Reported: 12/20/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.:

Sal 22-3 Pile Initial Land Farm Test

Sample Date: 12/06/04

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	12/17/04	LM
Ethylbenzene	8021	5.0	<5.0	1	µg/kg	12/17/04	LM
Toluene	8021	5.0	<5.0	1	µg/kg	12/17/04	LM
Xylene, total	8021	5.0	<5.0	1	µg/kg	12/17/04	LM
TPHGRO	8015	100	52700 52.2	1	µg/kg	12/17/04	LM
TPHDRO	8015	10	3220	1	mg/kg	12/17/04	LM

FAILED: TPH = 3,272.2 PPM > 1,000 PPM Site Standard
PASSED: BTEX @ N.D. < 50 PPB Site Standard

for D. Zupelt
John Green, Laboratory Manager

Green Analytical
75 Suttle Street
Durango CO, 81303

Project: RDT Pits
Project Number: S05-099
Project Manager: Bob Schwening

Reported:
07/01/05 15:45

Salmon 22-#3 Land Farm RAS2-015
T500649-15 (Soil)

Final Land Farm Test

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	5052709	05/27/05	06/01/05	EPA 8015m	D-12
Surrogate: 4-Bromofluorobenzene		95.2 %	65-135		"	"	"	"	

Extractable Petroleum Hydrocarbons by 8015

Diesel Range Hydrocarbons	ND	10	mg/kg	1	5052707	05/27/05	06/03/05	EPA 8015m	
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Volatile Organic Compounds by EPA Method 8021B

Benzene	ND	5.0	ug/kg	1	5052709	05/27/05	06/01/05	EPA 8021B	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
m,p-Xylene	ND	10	"	"	"	"	"	"	
o-Xylene	ND	5.0	"	"	"	"	"	"	

Surrogate: 4-Bromofluorobenzene		105 %	65-135		"	"	"	"	
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PASSED: TPH @ N.D. < 1,000 PPM Site Standard
PASSED: BTEX @ N.D. < 50 PPB Site Standard

SunStar Laboratories, Inc.



John Shepler For 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.

