

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: Salazar 'G' Fed. 22- #1 API #: 30-039-23093 U/L or Qtr/Qtr 1850' FSL & 925' FEL, Unit 'T' of Sec 22 T 25N R 6W

County: Rio Arriba

Latitude

Longitude

NAD: 1927 ☐ 1983 ☐

Surface Owner: Federal ☒ State ☐ Private ☐ Indian ☐

RCVD SEP 6 '07

Pit

Type: Drilling ☐ Production ☒ Disposal ☐

Workover ☐ Emergency ☐

Lined ☐ Unlined ☒

Liner type: Synthetic ☐ Thickness _____ mil Clay ☐

Pit Volume 160 Bbl. (15' x 15' x 4' Deep in 20' x 20' Berm)

Below-grade tank

Volume: NA Bbl Type of fluid:

Construction material:

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

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

(20 points)

50 feet or more, but less than 100 feet

(10 points)

0

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)

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)

10

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: The original unlined approx. 160 Bbl. earthen production pit (NNE of the wellhead) was remediated by excavating contaminated soil, and land-farming the soil on-site. Approximately 107 cubic yards of soil were excavated from this pit. On 9/30/2004 a composite side sample @ 4'-5' Depth met TPH & BTEX Site Remediation Standards (excavation @ 24' x 21' x 6' Deep: the Bottom Composite Sample Failed). The excavation was deepened to absolute bedrock refusal & on 12/6/2004 a composite bottom sample was taken from the pit (24' x 21' x 7.5' Deep @ Bedrock) and sent to the laboratory for TPH and BTEX analysis. This sample SLIGHTLY EXCEEDED site remediation standards. The original excavated soil was fertilized (400# Hi-N2), tilled & sampled repeatedly until the final sample collected on 5/25/2005 met site remediation standards. The remediated sandy soil was used in battery berm construction & to prevent additional erosion on the west side of the location. The excavation was back-filled w/ 200# Hi-N2 fertilizer & clean fill mixed with another 100# of Hi-N2 fertilizer. The site diagram and sample results are attached. All FINAL excavation & sample results are less than the TPH & BTEX Remediation Standards for this site EXCEPT for the Bottom Samples the last of which was taken @ Bedrock Refusal.

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:

8/23/2007

Printed Name/Title: Robert A. Schwering, P.E., Operations Manager

Signature

Robert 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,
District #3

Printed Name/Title

Signature

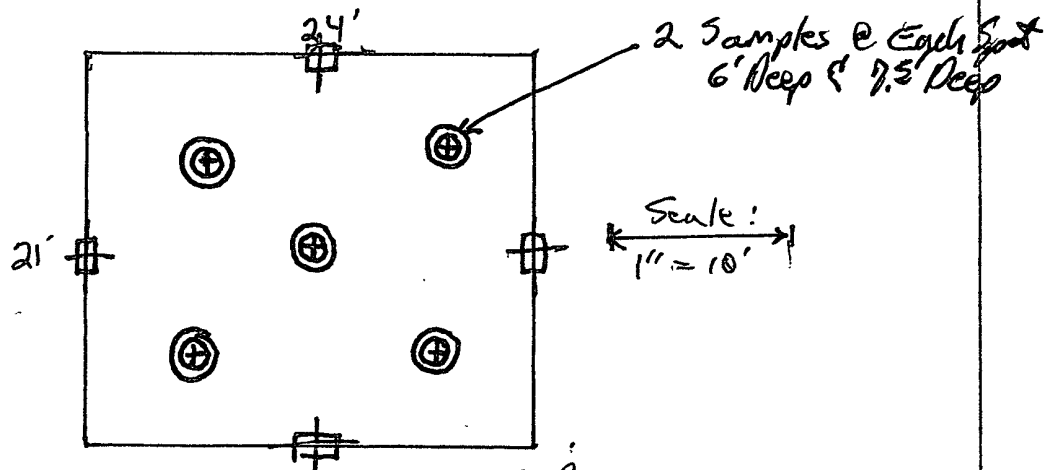
Bob Bell

Date:

SEP 20 2007

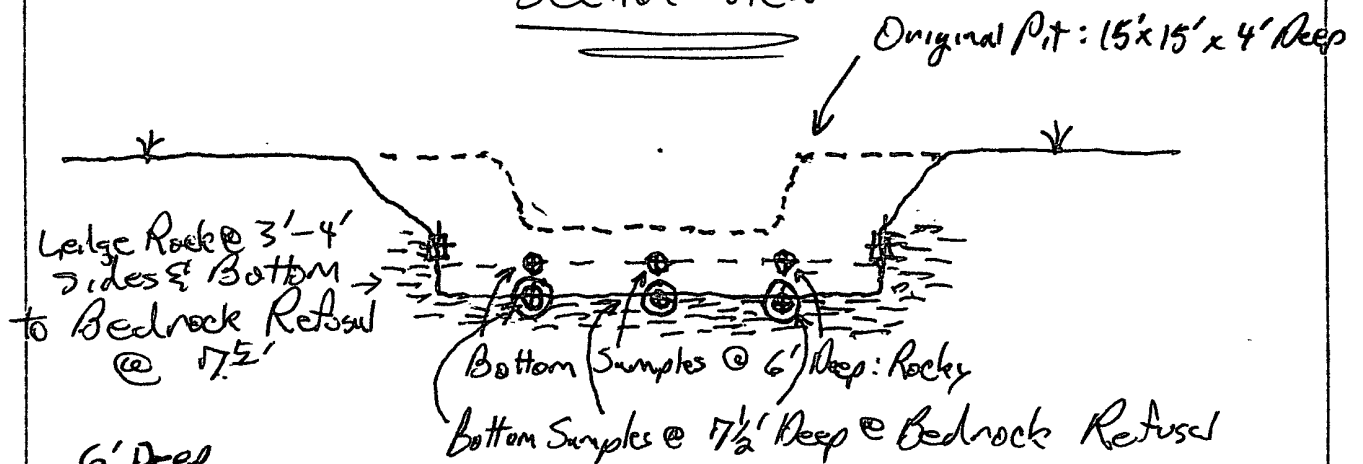
WELL	Comments	Pit #	Date Of Sample	Location	Depth or Lateral	Benzene	BTEX	TPH	TPH	TPH	Allowable TPH MAX
API #	Mitigation Methodology							GRO	DRO	DRO+GRO	
Location	NMOCD Comments							PPM	PPM	PPM	

[illegible]

Plan View

Initial Excavation: 6' Deep

Final Excavation: 7.5' Deep @ Bedrock Refusal

Section View:

6' Deep

7.5' Deep

⊗ : Approx. Sampling Points: Bottom Composite Samples:
5-Spot Pattern

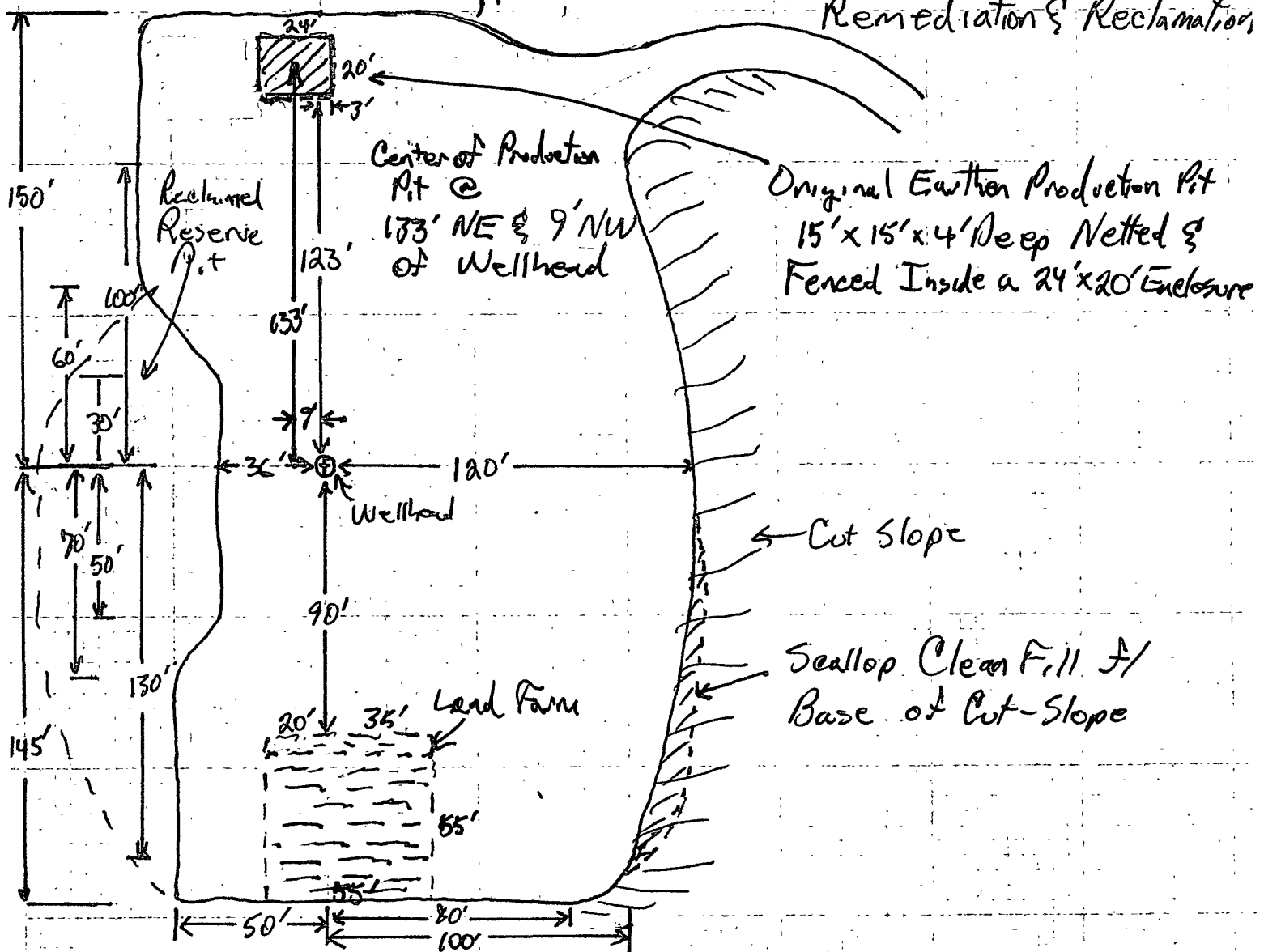
: Approx. Sampling Points: Side Composite Samples:
4-Spot Pattern

Longitudinal
Location
Azimuth
N. 80° E

Salazar 'G' Fed. 22-#1

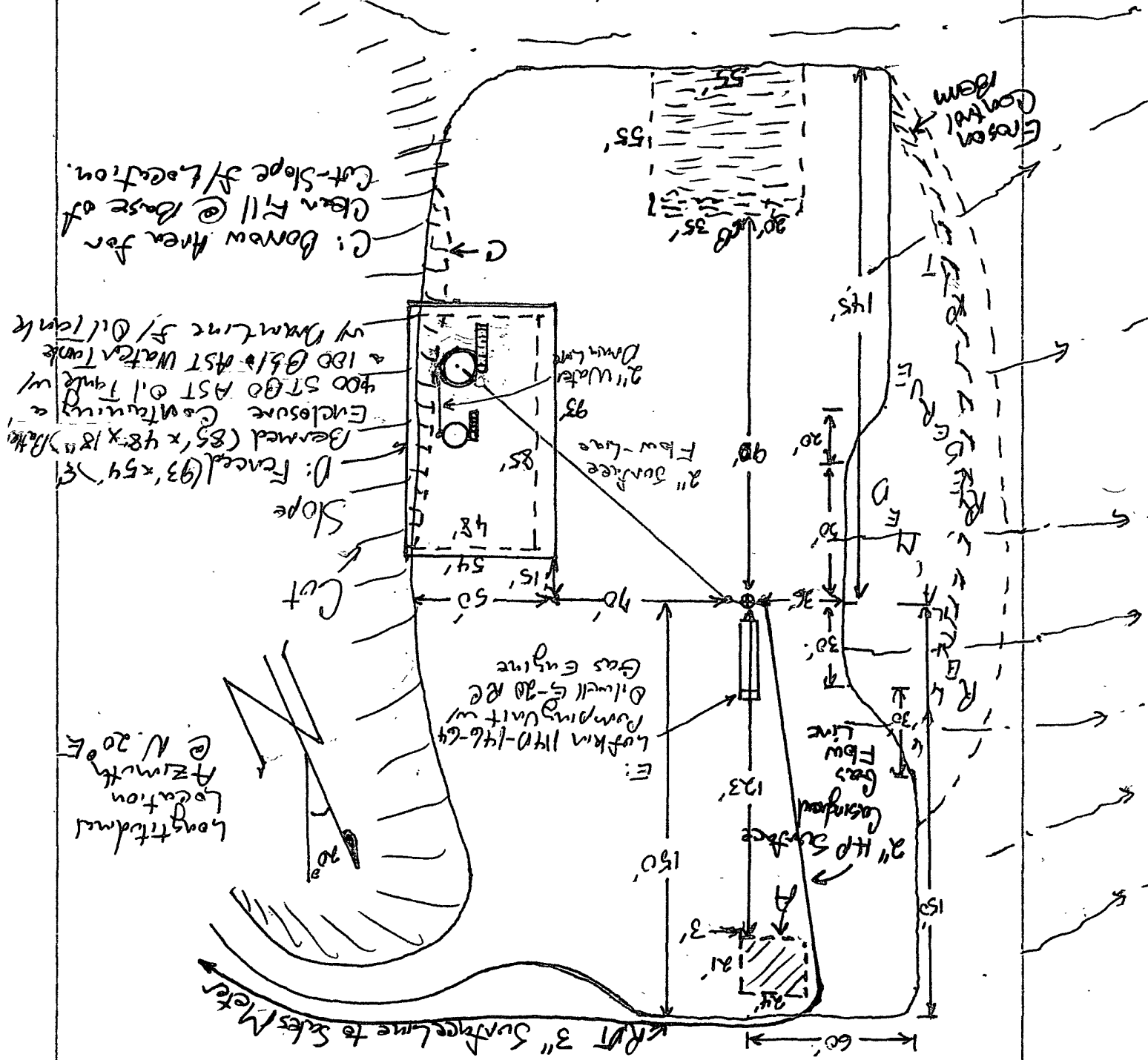
API #: 30-039-23093

Figure 2
Location Schematic
Remediation & Reclamation



1. Take down Fence & Excavate 24' x 21' x 6' Deep to Test.
Sample Bottom & Sides & Pile on 9/30/2004. Sides Passed.
2. Deepen Excavation to 24' x 21' x 7.5' @ Bedrock Refusal.
Sample Bottom & Land Farm. Bottom STILL slightly above Site TPH Limit.
3. Fertilize Pit Bottom w/ 200# Hi-Na Fertilizer. Fill pit w/ Clean Fill scalloped from foot of Cut-Slope in SE Corner of Location mixed-in w/ 100# Additional Hi-Na Fertilizer.
4. Fertilized Land Farm w/ 400# Hi-Na Fertilizer & Tilled & Tested Unit Met Site Remediation Standards. Used Material to Control erosion @ Site.

Salazar 'C' Feb 22-#1 Current Site Schematic Figure 3



A. 24' x 21' x 9.5' Deep Earthen Production Pit Excavation to Bedrock Refusal. Side Sample Met Site Remediation Standard. Bottom Sample Still slightly Above Site Remediation Standard. Filled w/ 200# H₂N₂ Fertilizer on Bottom & 100# H₂N₂ Fertilizer mixed w/ Clean Fill from Base of Cut-Slope Behind Tank Battery.

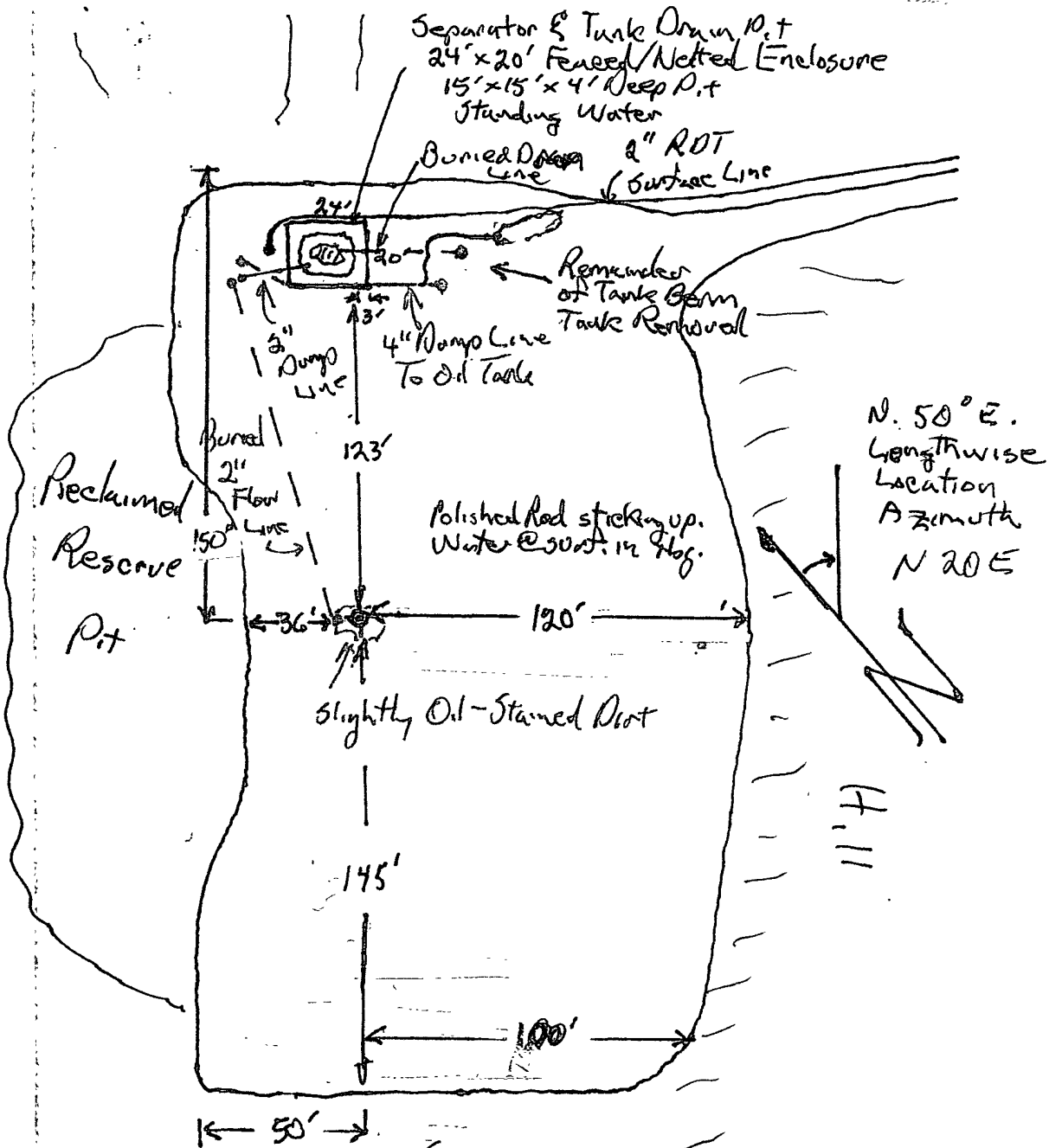
B. 55' x 55' x 12' Deep Land-Fill. Fertilized w/ 400# H₂N₂ Fertilizer & Tilled until met Site Remediation Standard. Used Material for Tank Battery Beam & Erosion Control Beam on West Side of Location.

C: Borew Area for Clean Fill @ Base of Cut-Slope of Location.

D: Fence (93' x 54') Enclosure Containing a 400 ST 80 AST Oil Tank w/ a 100 ST 31 AST Water Tank w/ Drumline 5' Oil Tank

E: Location of Azimuth @ N. 20° E Longitudinal

F: Lufkin 1140-146-64 Pumping Unit w/ Oilwell 5-30 RC Gas Engine



1. Drain, excavate and Remediate P.t
2. 2 Spare Concrete Piers & MeOH Drip on Location
 Can Use Drip @ Salazar 22-23
3. NO SIGN

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.: 410-003-26

Date Received: 10/01/04

Date Reported: 10/27/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: SAL 22-1 PIT BOTTOM @ 6'

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	<5.0	1	µg/kg	10/21/04	LM
Xylene, total	8021	5.0	<5.0	1	µg/kg	10/21/04	LM
TPHGRO	8015	100	33400 33.4	1	µg/kg	10/26/04	LM
TPHDRO	8015	10	2060	1	mg/kg	10/20/04	LM
			2093.4				

Failed: TPH @ 2093.4 PPM > 1,000 PPM Site Standard
Passed: BTEX @ N.D. < 50 PPB Site Standard

Order Pit Deepened: Very Rocky.

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.: 412-030-13

Date Received: 12/07/04

Date Reported: 12/20/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.:

Sal 22-1 Pit Bottom

@ 7.5'
@ Bedrock Refusal
Petroleum Hydrocarbons

Sample Date: 12/06/04

Sample Matrix: Soil

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	25500	1	µg/kg	12/17/04	LM
TPHDRO	8015	10	1020	1	mg/kg	12/17/04	LM

* Failed: TPH @ 1,045.5 PPM > 1,000 PPM Site Standard,

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

* @ Bedrock Refusal. No further progress.

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.: 410-003-27

Date Received: 10/01/04

Date Reported: 10/27/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: SAL 22-1 PIT SIDES @ 4'-5'

Sample Date: 09/30/04

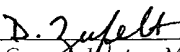
Sample Matrix: Soil

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	<5.0	1	µg/kg	10/21/04	LM
Xylene, total	8021	5.0	<5.0	1	µg/kg	10/21/04	LM
TPHGRO	8015	100	<100	1	µg/kg	10/26/04	LM
TPHDRO	8015	10	567	1	mg/kg	10/20/04	LM

Passed: TPH@567 PPM < 1,000 PPM 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.: 410-003-28

Date Received: 10/01/04

Date Reported: 10/27/04

QC Batches: -----

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: SAL 22-1 PILE

Sample Date: 09/30/04

Sample Matrix: Soil

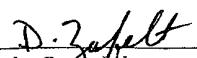
Petroleum Hydrocarbons

RESULTS

PARAMETER	METHOD	REPORT		DIL	UNITS	DATE	ANALYST
		LIMIT	RESULT			ANALYZED	
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
TPHGRO	8015	100	14800 14.8	1	µg/kg	10/26/04	LM
TPHDRO	8015	10	1770	1	mg/kg	10/20/04	LM

Failed: TPH @ 1784.8 PPM > 1,000 PPM Site Standard

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


John Grech, 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.: 412-030-14

Date Received: 12/07/04

Date Reported: 12/20/04

QC Batches:

PROJECT NAME: RDT Pits

PROJECT NUMBER:

SAMPLE I.D.: Sal 22-1 Land Farm

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	30000 30.0	1	µg/kg	12/17/04	LM
TPHDRO	8015	10	4660	1	mg/kg		LM

4,690

Failed: TPH@ 4,690 PPM > 1,000 PPM site standard.

Passed: BTEX@ N.D. < 50 PPB site standard.

Very Sandy Soil

for: D. Zufelt
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

Salazar 22-#1 Land Farm

RAS2-013
T500649-13 (Soil)

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	05/30/05	EPA 8015m	
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Surrogate: 4-Bromofluorobenzene	75.4 %	65-135			"	"	"	"	
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Extractable Petroleum Hydrocarbons by 8015

Diesel Range Hydrocarbons	410	10	mg/kg	1	5052707	05/27/05	06/03/05	EPA 8015m	D-02
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Volatile Organic Compounds by EPA Method 8021B

Benzene	ND	5.0	ug/kg	1	5052709	05/27/05	05/30/05	EPA 8021B	
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Toluene	ND	5.0	"	"	"	"	"	"	
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Ethylbenzene	ND	5.0	"	"	"	"	"	"	
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m,p-Xylene	ND	10	"	"	"	"	"	"	
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o-Xylene	ND	5.0	"	"	"	"	"	"	
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Surrogate: 4-Bromofluorobenzene	77.9 %	65-135			"	"	"	"	
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*Passed: TPH @ 410 PPM < 1,000 PPM Site Standard.
Passed: BTEX @ N.D. < 50 PPB Site Standard.*

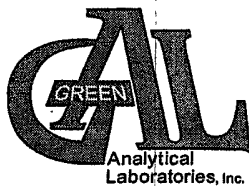
Very Sandy Soil responded well to Fertilizer.

SunStar Laboratories, Inc.

John J. Shepler

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.



CHAIN OF CUSTODY RECORD

Page 2 of 2

Client: Resource Development

Contact: Bob Schwerling

Address: PO Box 1020

Morrison, CO 80465

Phone Number: 303-716-3200

FAX Number: 303-716-5780

NOTES:

- 1) Ensure proper container packaging.
- 2) Ship samples promptly following collection.
- 3) Designate Sample Reject Disposition.

PO#

Project Name: RDT Pits

Table 1. - Matrix Type

1 = Surface Water, 2 = Ground Water
3 = Soil/Sediment, 4 = Rinsate, 5 = Oil
6 = Waste, 7 = Other (Specify) _____

FOR GAL USE ONLY

GAL JOB #
505-099

Samplers Signature: _____

Lab Name: Green Analytical Laboratories, Inc. (970) 247-4220 FAX (970) 247-4227										Analyses Required										Comments	
Address: 75 Suttle Street, Durango, CO 81303																					
Sample ID	Collection		Collected by: (Init.)	Miscellaneous			Preservative(s)					BTEX	GRO	DRO							
	Date	Time		Matrix Type From Table 1	No. of Containers	Sample Filtered ? Y/N	Unpreserved (Ice Only)	HNO3	HCL	H2SO4	NAOH									Other (Specify)	
1. RAS2-011	5-25-05	6:00pm		3	1		X					X	X	X							Warner 26 #1 Land Fa
2. RAS2-012		6:15pm		3	1		X					X	X	X							Salazar 23 #1 Land Fa
3. RAS2-013		6:30pm		3	1		X					X	X	X							Salazar 22 #1 Land Fa
4. RAS2-014		6:45pm		3	1		X					X	X	X							Salazar 22 #1 Land Fa
5. RAS2-015		7:00pm		3	1		X					X	X	X							Salazar 22 #3 Land Fa
6.																					
7.																					
8.																					
9.																					
10.																					
Relinquished by: <u>RA Schwerling</u>			Date: <u>5/26</u>	Time: <u>9:30am</u>	Received by: <u>Dellia Zuffelt</u>			Date: <u>5-26-05</u>	Time: <u>09:30</u>												
Relinquished by: _____			Date: _____	Time: _____	Received by: _____			Date: _____	Time: _____												

* Sample Reject: [] Return [] Dispose [] Store (30 Days)