New Mexico Energy, Minerals and Natural Resources Department

Bill Richardson
Governor

Joanna Prukop
Cabinet Secretary
Reese Fullerton
Deputy Cabinet Secretary

Mark Fesmire
Division Director
Oil Conservation Division

December 2, 2008

Certified Letter—Return Receipt Requested
7007 2560 0002 2222 8216

EnerVest Operating LLC
Attn: Mr. Elroy Ardoin
1001 Fannin Street, Suite 800
Houston, TX 77002

Reference: West Loco Hills Unit Tract 1 #6 30-015-04496
R-7-18S-30E Eddy County, New Mexico
2RP-279

Operator,

The New Mexico Oil Conservation Division District 2 Office (OCD) is in receipt of a work plan proposal (plan) submitted on behalf of operator by Baseline Solutions LLC for the remediation of a release of crude oil occurring at the above referenced facility.

Under section 7.0 Conclusion/Recommendations, the plan states, "The caliche pad will provide an impermeable barrier." Please be aware that OCD does not consider a caliche pad to be an impermeable barrier.

The plan is accepted with the following stipulations:

- Procedures for land-farming contaminated soils as proposed in the plan are to conform to the criteria found in section VI *Guidelines for Remediation of Leaks, Spills, and Releases*. This publication can be found on OCD's website.
- Contaminated soils shall be remediated so that residual contaminant concentrations are below the recommended soil remediation action levels.
- Confirmation soil samples will be required of the bioremediation contents and soils beneath the bioremediation cell.
- Soil analytical data shall be submitted to OCD for approval **prior** to any backfilling activities.
- Notify the OCD 48 hours prior to obtaining samples where analyses are to be submitted to the OCD.
- Remediation requirements may be subject to change as site conditions warrant.
- Upon completion of remedial activities, a final report summarizing all actions taken (including the watering, tilling, monitoring activities proposed in the work plan) to mitigate environmental damage related to the release is to be provided to OCD.
- A final Report C-141 is to be submitted to the OCD upon satisfactory completion of remediation project.
- Remediation to be completed on or before November 30, 2009.

Please be advised that NMOCD acceptance of this plan does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of this plan does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

Respectfully,

Sherry Bonham
NMOCD District 2

Cc: Andy Price, Baseline Solutions LLC

PHASE II
ENVIRONMENTAL SAMPLING ASSESSMENT

EnerVest Operating, LLC
West Loco Hills Unit Tract 1 #6
Environmental Sampling Investigation
For Reported Minor Spill
Section 7, T18S – R30E – API #30-025-04496
Eddy County, NM
Coordinates:
Longitude -104.01804
Latitude 32.76332

September 23, 2008

A Report For:
New Mexico Oil Conservation Division, Artesia
EnerVest Operating LLC
Mr. Elroy Ardoin
1001 Fannin Street, Suite 800
Houston, Texas 77002

Prepared by:
Baseline Solutions LLC
Andy Price
511 West Ohio, Suite 400
Midland, Texas 79701

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Baseline Solutions conducted a Phase II Environmental Sampling Assessment at the WLHU Tract 1 #6 tank battery - minor oil spill site. The site location is described as a flow line leak/spill located immediately behind the tank battery (north side).

- Section 7, T18S – R30E (API #30-025-04496)
- Eddy County, NM
- Coordinates: Longitude -104.01804 Latitude 32.76332

A summary of the analytical information, research and observations gathered during the sampling investigation is as follows:

WLHU Tract 1 #6

Lab results for Chloride levels are listed below (please see app. G).

Sample field code	Chloride PPM		Sample field code	TPH PPM
1-A - 1ft. depth	224		1-A - 1ft. depth	164
1-B - 2ft. depth	448		1-B - 2ft. depth	1850
2-A - 1ft. depth	<100		2-A - 1ft. depth	<50
2-B - 2ft. depth	<100		2-B - 2ft. depth	<50
3-A - 1ft. depth	<100		3-A - 1ft. depth	4910
3-B - 2ft. depth	<100		3-B - 2ft. depth	<50

NMOCD acceptable level for Chlorides is 250ppm and less.
NMOCD acceptable level for Total Petroleum Hydrocarbons is 5000ppm and less.

Contaminated Area Delineated: Soil borings with field and laboratory analysis indicate the oil spill area to be an approximate average of 200ft X 15ft.

Hydrology: Hydrology information was identified and submitted in the preliminary Remediation Plan proposal and assessment plan, to the NMBLM and NMOCD. No Surface hydrology issues were identified for surface run-off due to topographical gradient and rain fall average. Subsurface hydrology data indicates groundwater for this area to be at an approximate average depth of 141 ft.

Conclusion:

Total Petroleum Hydrocarbon (TPH), levels were lower than expected at one and two foot depths. TPH levels at one and two foot depths, within the spill area did not exceed OCD action levels of 5,000ppm. The expected excavation area is considered to be 200'X15' to an average depth of 18". The estimated soil to be removed is 167 cubic yards.

Chloride levels for the spill area were determined to be below NMOCD action levels except for one small section, which had levels of 448ppm. According to sampling data gathered in this investigation, chloride levels do not present an obstacle for conducting land farming remediation for this site.

1.0 INTRODUCTION

Baseline Solutions, (Andy Price) was retained by EnerVest Operating LLC of Houston, TX, to conduct a Phase II Environmental Sampling Assessment at the WLHU Tract 1 #6, Section 13, T14S – R33E, Lea County, NM, Coordinates: Longitude - 103.57570 Latitude 33.1004

A. Site Description / Location

- Spill Location
  - *Legal Description:*

    WLHU Tract 1 #6
    Environmental Sampling Investigation
    For Reported Minor Spill
    Section 7, T18S – R30E – API #30-025-04496
    Eddy County, NM
    Coordinates:
    Longitude -104.01804
    Latitude 32.76332
- Discharge Event

A flow line connection/union was replaced which later developed into a leak resulting in the saltwater spill. The approximate spill area is 200ft X 12ft.

2.0 Purpose

A. The purpose of the investigation was to quantify the level of Chlorides and Total Petroleum Hydrocarbons (TPH), associated with a pipeline leak located on the subject site. The Environmental Sampling Assessment was to delineate the area and level of contamination for the WLHU Tract 1 #6 spill site.

3.0 PROCEDURES AND METHODS

The procedures and methods for this project were conducted according to EPA protocol and conducted in a professional manner within the parameters as established in the scope and purpose of this investigation.

A. Sampling Methods and Procedures

- Visual site reconnaissance of entire property with photos
- Grab samples were taken and screened for Chlorides with an Electrical Conductivity Meter (Milwaukee Model SM802). This process is used to identify any elevated levels for chlorides for a specific depth and area.
- Grab samples were taken and screened for Total Petroleum Hydrocarbons (TPH), with a Photo Ionization Detector (Mini Rae Plus - model # PGM-76IS). This process is used to identify any elevated levels for TPH for a specific depth and area.

- The parameter of the spill area was delineated first by visual reconnaissance and screening surface samples and then with soil borings.
- A site grid was developed from data collected with grab sample screening.
- Grid samples were taken and combined within specific areas which made up the identified composite samples.
- Samples were systematically taken at Surface, 1ft depths and 2ft depths. Samples were screened with EC meter and PID detector. According to field screening and supported by Lab analysis, Chlorides were below OCD requirements except for a small section approximately 10ft X10ft within area 2 on sampling grid.
- TPH levels at surface in most of the spill area exceeded OCD action levels but were below action levels at 1ft and 2ft depths.
- Lab Samples: Samples were taken at 3 specific grid locations, and at levels which were surface, 1ft and 2 ft depths for the entire area. The 1ft and 2ft level samples were combined into 2 samples per area to make up 6 separate composite soil samples which were delivered to the lab.
- Decontamination procedures were maintained
- All samples were kept on ice until delivered to lab
- A field log was maintained
- A formal chain of custody was maintained
- Composite samples were delivered to Trace Analysis in Midland, TX - an EPA approved lab.

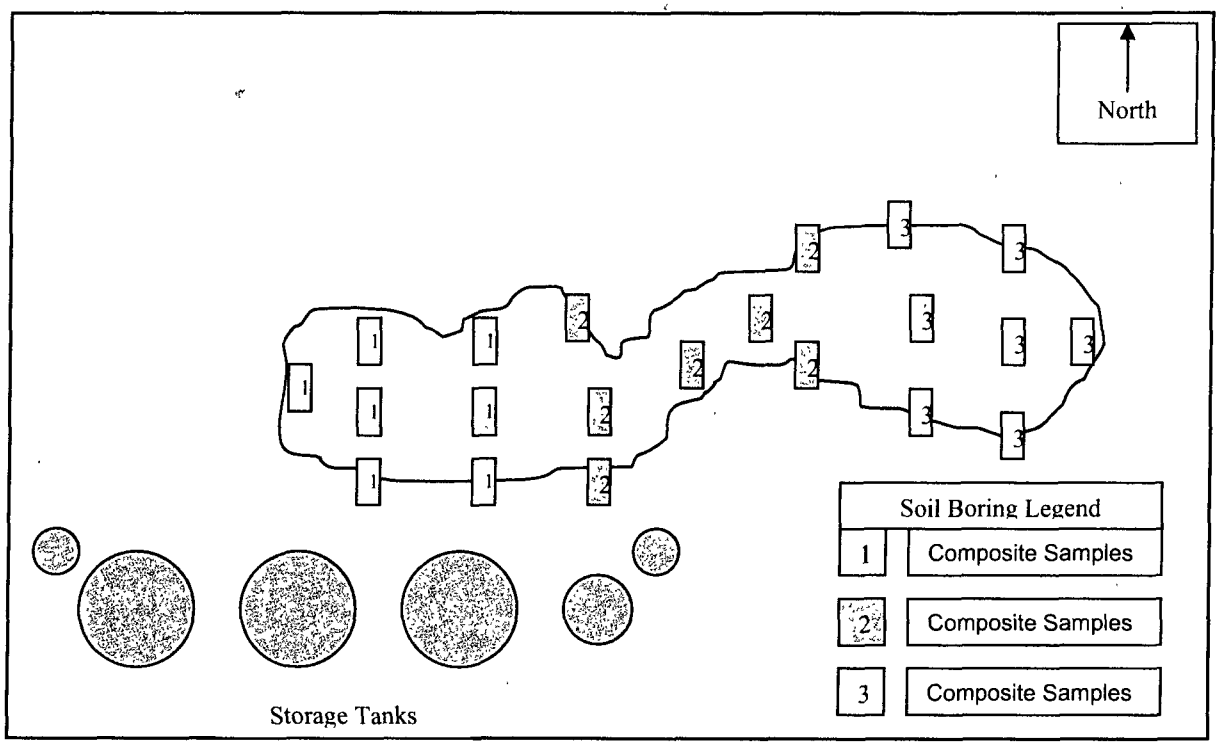
4.0 FINDINGS AND INVESTIGATION RESULTS

The lab results for Chlorides and TPH levels are listed below. Please see attached Trace Lab Analysis Report (app. C).

Sample field code	Chloride PPM		Sample field code	TPH PPM
1-A - 1ft. depth	224		1-A - 1ft. depth	164
1-B - 2ft. depth	448		1-B - 2ft. depth	1850
2-A - 1ft. depth	<100		2-A - 1ft. depth	<50
2-B - 2ft. depth	<100		2-B - 2ft. depth	<50
3-A - 1ft. depth	<100		3-A - 1ft. depth	4910
3-B - 2ft. depth	<100		3-B - 2ft. depth	<50

NMOCD acceptable level for Chlorides is 250ppm and less.
NMOCD acceptable level for Total Petroleum Hydrocarbons is 5000ppm and less.

Sampling Grid: Field screening at surface, 1ft depth and 2ft depth. Composite samples taken in three designated areas making up a total of six lab samples. Three samples at 1ft depth and 3 at 2ft depth.



5.0 HYDROLOGY

Hydrology information was identified and submitted in the preliminary Remediation Plan proposal and assessment plan, to the New Mexico Oil Conservation Division. No Surface hydrology issues were identified for surface run-off due to topographical gradient and rain fall average. Subsurface hydrology data indicates groundwater for this area to be at an approximate average depth of 141 ft.

6.0 REGULATORY REVIEW

A. The NMOCD form C141 was submitted and approved on 5/5/08 to Mike Bratcher, OCD Artesia office. This sampling investigation is intended to be in compliance with New Mexico Oil Conservation Division:

- Rule 116 RELEASE NOTIFICATION AND CORRECTIVE ACTION [1-1-50...2-1-96; A, 3-15-97]
  1. 116.D. CORRECTIVE ACTION: The responsible person must complete Division approved corrective action for releases which endanger public health or the environment. Releases will be addressed in accordance

with a remediation plan submitted to and approved by the Division or with an
abatement plan submitted in accordance with Rule 19 (19 NMAC 15.A. 19). [3-15-97]

- Rule 19 (19 NMAC 15.A. 19). [3-15-97].

7.0 CONCLUSIONS / RECOMMENDATIONS

Total Petroleum Hydrocarbon (TPH), levels were lower than expected at one and two foot depths. TPH levels at one and two foot depths, within the spill area did not exceed OCD action levels of 5,000ppm. The expected excavation area is considered to be 200'X15' to an average depth of 18". The estimated soil to be removed is 167 cubic yards.

Chloride levels for the spill area were determined to be below NMOCD action levels except for one small section, which had levels of 448ppm. According to sampling data gathered in this investigation, chloride levels do not present an obstacle for conducting land farming remediation for this site.

Recommendation: Excavate the contaminated soil and land farm on the adjoining caliche pad which is larger than usual. This location was at one time used for CO2 injection. The caliche pad will provide an impermeable barrier. Dikes constructed for proper containment would also be put in place. The land farming process is estimated to take one year. The alternative method of remediation is "dig and haul" to the closest OCD approved disposal site.

Any remediation method is subject to BLM and OCD approval. No further action for site remediation will be conducted until proper approval has been obtained.

8.0 LIMITATIONS

This report was prepared exclusively for use by EnerVest Operating. The contents of the report shall not be disseminated to, or used by any other party without EnerVest Operating written consent.

Baseline Solutions hereby gives notice that any statement or opinion in this report shall not be construed to create any warranty or representation that the real property on which the investigation was conducted is free of pollution or complies with any or all applicable regulatory or statutory requirements, or that the property is fit for any particular purpose.

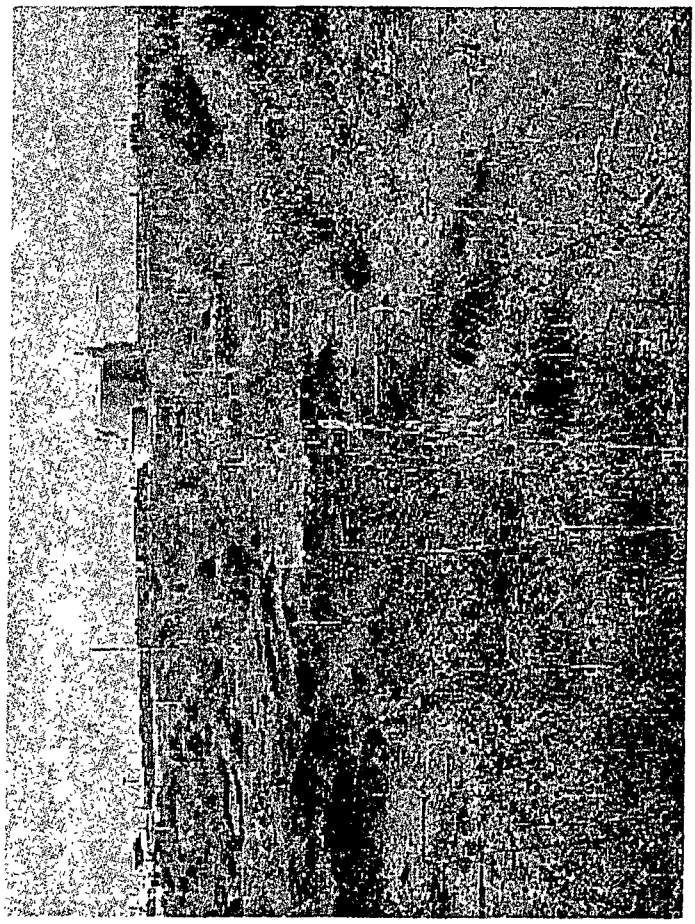
Unless otherwise indicated in this report, no attempt was made to check on the compliance of present or past owners of the site with federal, state or local laws and regulations.

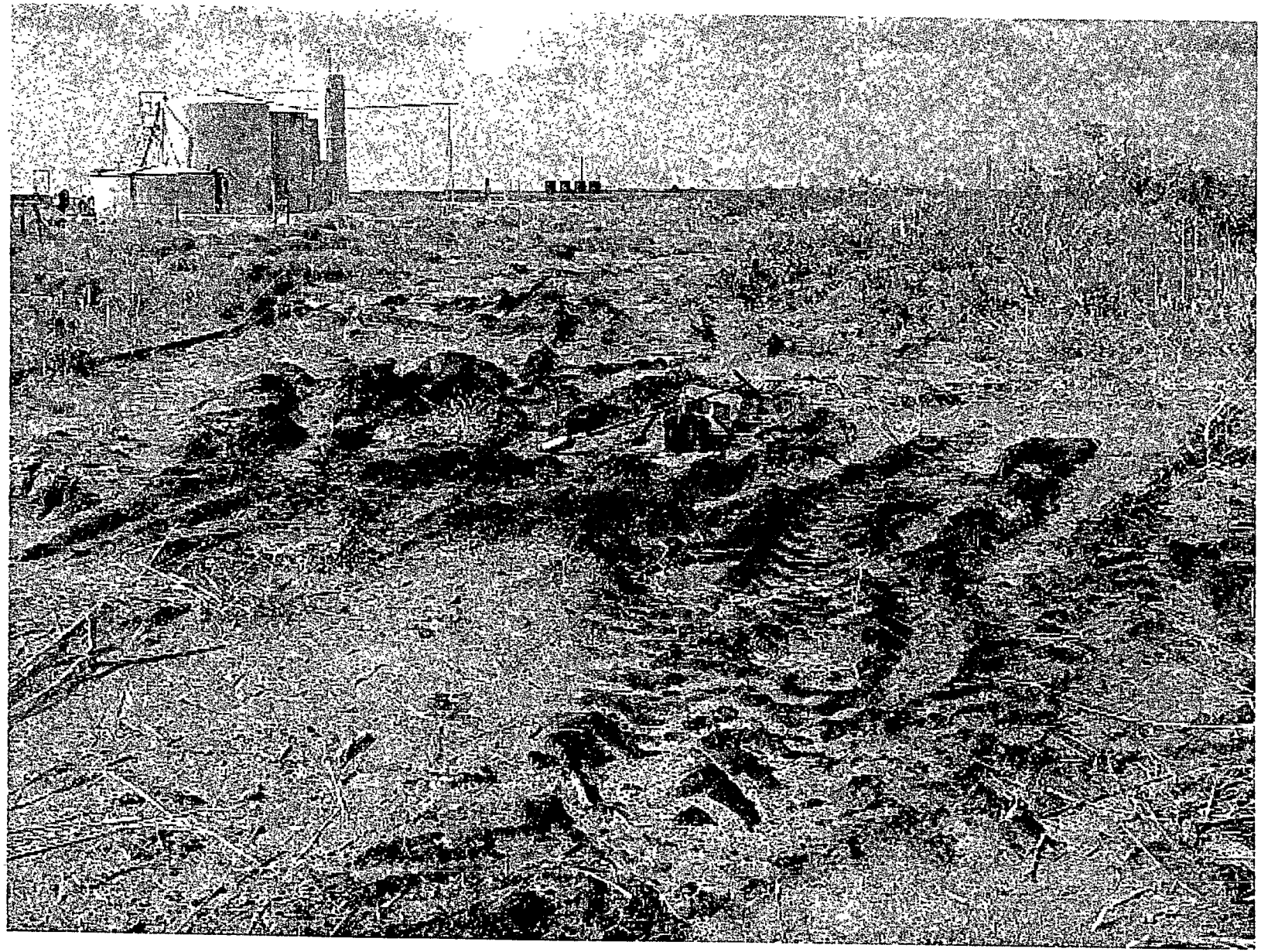
The conclusions presented in this report were based on the services described, and not on specific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by EnerVest Operating.

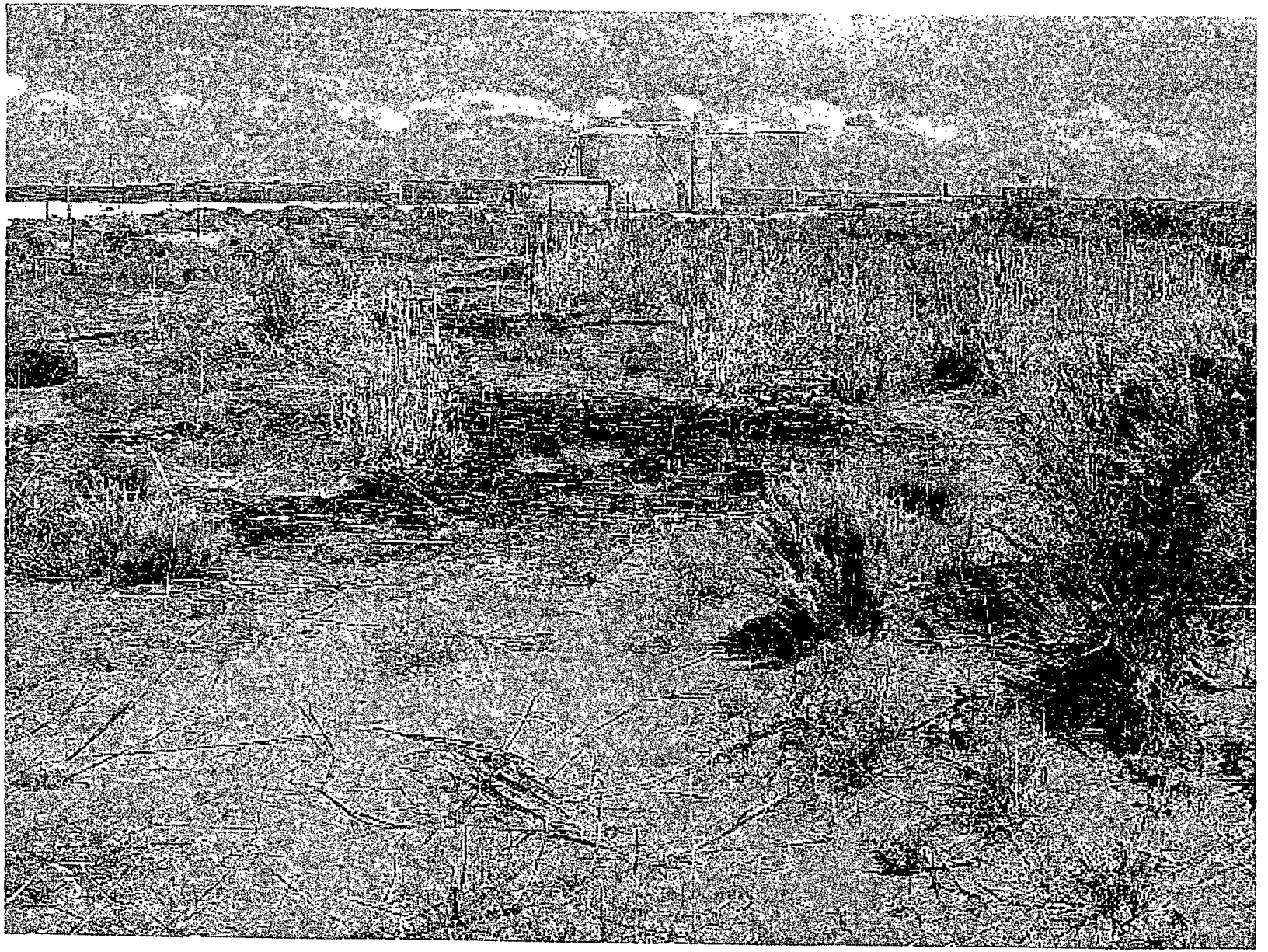
Person or entity considering use, acquisition, or other involvement or activity concerning the property shall be solely responsible for determining the adequacy of the property for any and all uses for which that person or entity shall use the property. Any person or entity considering the use, acquisition, or other involvement or activity concerning the property which is the subject of this report should enter into any use, occupation, acquisition, or the like on sole reliance of its own judgment and on its own personal investigation of such property, and not in reliance on any representation made by Baseline Solutions regarding such property, the character quality, or its value. Baseline Solutions performed environmental services in a professional manner using that degree of skill and care exercised for similar projects under similar conditions by reputable and competent environmental consultants. Baseline Solutions shall not be responsible for conditions or consequences arising from relevant facts that were concealed, withheld, or not fully disclosed at the time the environmental services were conducted.

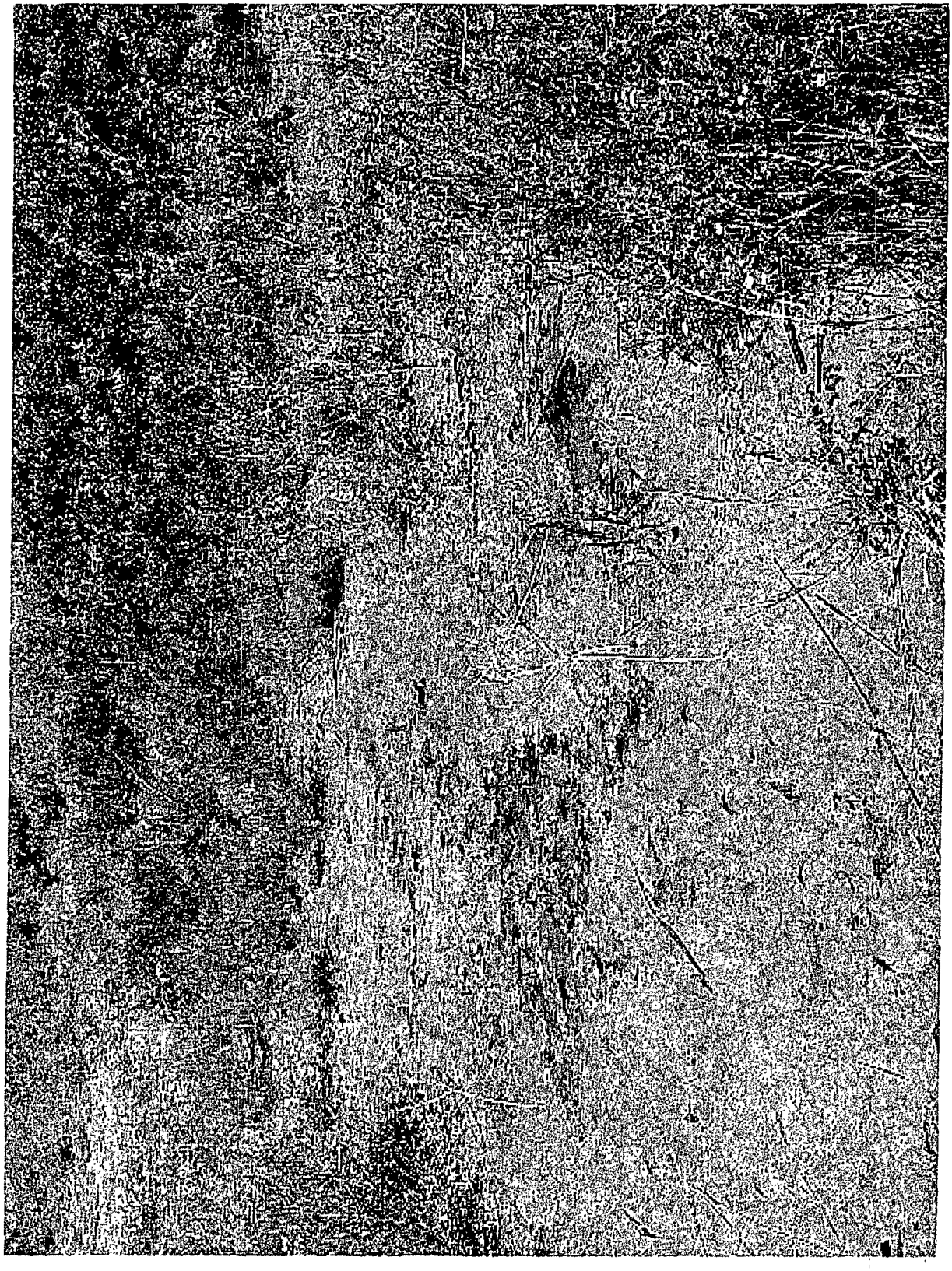
APPENDICES

A. Site Photos
B. Chain of Custody
C. Lab Report
D. NMOCD Form 141









LAB Order ID # 8090231 Page _____ of _____

TraceAnalysis, Inc.

email: lab@traceanalysis.com

6701 Aberdeen Avenue, Suite 9, Lubbock, Texas 79424, Tel (806) 794-1296, Fax (806) 794-1298, 1 (800) 378-1296
5002 Basin Street, Suite A1, Midland, Texas 79703, Tel (432) 689-6301, Fax (432) 689-6313
200 East Sunset Rd., Suite E, El Paso, Texas 79922, Tel (915) 585-3443, Fax (915) 585-4944, 1 (888) 588-3443
8808 Camp Bowie Blvd West, Suite 180, Ft. Worth, Texas 76116, Tel (817) 201-5260, Fax (817) 560-4336

Company Name: EnerVest Operating LLC Phone #: 432-352-6400
Address: (Street, City, Zip) 1001 Fannin Street, Ste 800, Houston, TX 77002 Fax #:
Contact Person: Andy Price E-mail:
Invoice to: (If different from above) Same Attn. Elroy Ardoin
Project #: WHHV Tract 1 Well #6 Project Name: → Same
Project Location (including state): West Loco Hills Unit Tract 1 #6, Loco Hills NM Sampler Signature: Andy Price

LAB # (LAB USE ONLY)	FIELD CODE	# CONTAINERS	Volume / Amount	MATRIX: WATER	SOIL	AIR	SLUDGE	PRESERVATIVE METHOD: HCl	HNO_3	H_2SO_4	NaOH	ICE	NONE	SAMPLING: DATE	TIME
172505	1-A				✓							✓		8/29	8:15
506	1-B				✓							✓		8/29	9:10
507	2-A				✓							✓		8/29	10:21
508	2-B				✓							✓		8/29	11:39
509	3-A				✓							✓		8/29	1:05
510	3-B				✓							✓		8/29	2:56

ANALYSIS REQUEST (Circle or Specify Method No.)

MTBE 8021B / 602 / 8260B / 624	BTEX 8021B / 602 / 8260B / 624	TPH 418.1 / TX1005 / TX1005 Ext(C35)	TPH 8015 GRO / DRO / TVHC	PAH 8270C / 625	Total Metals Ag As Ba Cd Cr Pb Se Hg 6010B/200.7	TCLP Metals Ag As Ba Cd Cr Pb Se Hg	TCLP Volatiles	TCLP Semi Volatiles	TCLP Pesticides	RCI	GC/MS Vol. 8260B / 624	GC/MS Semi Vol. 8270C / 625	PCB's 8082 / 608	Pesticides 8081A / 608	BOD, TSS, pH	Moisture Content	Chlorides					Turn Around Time if different from standard	Hold
			✓		✓											✓	✓						
			✓		✓											✓	✓						
			✓		✓											✓	✓						
			✓		✓											✓	✓						
			✓		✓											✓	✓						
			✓		✓											✓	✓						

Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°C:
Andy Price	Baseline Solutions	9/2/08	4:40	Lindsey Wilson	Trace	9-2'08	16:30	4.0
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°C:
Relinquished by:	Company:	Date:	Time:	Received by:	Company:	Date:	Time:	Temp°C:

LAB USE ONLY
Intact Y / N
Headspace Y / N / NA
Log-in Review: 4.0

REMARKS: All tests Midland

- ☐ Dry Weight Basis Required
- ☐ TRRP Report Required
- ☐ Check If Special Reporting Limits Are Needed

Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.

Carrier # Carry-in

ORIGINAL COPY

Summary Report

Andy Price
Baseline Solutions LLC
511 W. Ohio
P.O. Box 8061
Midland, TX, 79708

Report Date: September 9, 2008

Work Order: 8090231

Project Location: West Loco Hills Unit Tract 1 #6, Loco Hills, NM
Project Name: WLHU Tract 1 Well #6
Project Number: WLHU Tract 1 Well #6

Sample	Description	Matrix	Date Taken	Time Taken	Date Received
172505	1-A	soil	2008-08-29	08:15	2008-09-02
172506	1-B	soil	2008-08-29	09:10	2008-09-02
172507	2-A	soil	2008-08-29	10:21	2008-09-02
172508	2-B	soil	2008-08-29	11:39	2008-09-02
172509	3-A	soil	2008-08-29	13:05	2008-09-02
172510	3-B	soil	2008-08-29	14:56	2008-09-02

Sample - Field Code	TPH DRO DRO (mg/Kg)	TPH GRO GRO (mg/Kg)
172505 - 1-A	**164**	**6.07**
172506 - 1-B	**1850**	**318**
172507 - 2-A	<50.0	**2.56**
172508 - 2-B	<50.0	<1.00
172509 - 3-A	**4910**	**1180**
172510 - 3-B	<50.0	**13.2**

Sample: 172505 - 1-A

Param	Flag	Result	Units	RL
Chloride		**224**	mg/Kg	2.00

Sample: 172506 - 1-B

continued ...

sample 172506 continued ...

Param	Flag	Result	Units	RL
Param	Flag	Result	Units	RL
Chloride		**448**	mg/Kg	2.00

Sample: 172507 - 2-A

Param	Flag	Result	Units	RL
Chloride		<100	mg/Kg	2.00

Sample: 172508 - 2-B

Param	Flag	Result	Units	RL
Chloride		<100	mg/Kg	2.00

Sample: 172509 - 3-A

Param	Flag	Result	Units	RL
Chloride		<100	mg/Kg	2.00

Sample: 172510 - 3-B

Param	Flag	Result	Units	RL
Chloride		<100	mg/Kg	2.00

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

Form C-141
Revised October 10, 2003

Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

ENERVEST OPERATING LLC 143199 **OPERATOR** ☒ Initial Report ☐ Final Report

Name of Company - Texas ReExploration Operating LC	Contact - Dean Brooks
Address –3025 Maxroy, Houston, TX 77008	Telephone No. 713-622-2425
Facility Name – WLHU Tract 1 #6	Facility Type – Tank Battery

WLH G&S UNIT 006

Surface Owner – Steve Hanes	Mineral Owner - BLM	API No. 30-015-04496

30-015-04496

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	South Line	Feet from the	East/West Line	County
F	7	18S	30E					Eddy

Latitude _____ **Longitude**_____

NATURE OF RELEASE

Type of Release - Oil	Volume of Release – estimated 20bbls	Volume Recovered - 0bbls
Source of Release – Flow Line	Date and Hour of Occurrence. ?	Date and Hour of Discovery 3/24/08
Was Immediate Notice Given? ☐ Yes ☐ No ☒ Not Required	If YES, To Whom?	
By Whom?	Date and Hour -	
Was a Watercourse Reached? ☐ Yes ☒ No	If YES, Volume Impacting the Watercourse.	

If a Watercourse was Impacted, Describe Fully.*

Describe Cause of Problem and Remedial Action Taken *
The spill at this site is considered to be approximately 15bbls. The cause of the leak was a flowline failure which was quickly repaired.
No remedial action taken yet. The remediation plan is to remove contaminated soil and dispose of at nearest NMOCD approved disposal site. This plan will be implemented upon NMOCD approval. Please see attached photos.

Describe Area Affected and Cleanup Action Taken.*
The approximate area effected is 3yds X 30yds. The spill ran behind the tanks in a low lying area. Any soil with elevated levels of Total Petroleum Hydrocarbons will be removed. The choice of abatement is to remove contaminated soil and dispose of at the nearest NMOCD approved disposal site. in Eddy County.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

Signature: Dean Brooks	OIL CONSERVATION DIVISION	
Printed Name: Dean Brooks	Approved by District Supervisor: Accepted for record - NMOCD	
Title: Vice President of Engineering	Approval Date:	Expiration Date: 11-30-09
E-mail Address: dbrooks@tex-rex.com	Conditions of Approval:	Attached ☑
Date: 4/15/08 Phone: 713-622-2425	Work plan approval with stipulations	

* Attach Additional Sheets If Necessary

2RP-279