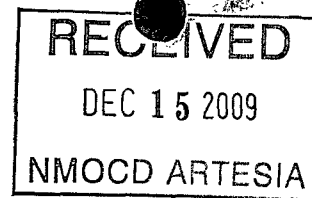




**Whole Earth Environmental, Inc.**

2103 Arbor Cove  
Katy, Tx. 77494  
281.394.2050  
whearth@msn.com



December 14, 2009

NMOCD  
1301 West Grand Ave.  
Artesia, NM 88210

Attn: Sherry Bonham

Dear Ms. Bonham:

Enclosed, please find a copy of our proposed remediation protocol for the Melrose Energy Conoco 7  
State no. 3 location.

Please review and advise of any requested amendments.

Warmest personal regards,

Mike Griffin  
President  
Whole Earth Environmental, Inc.



## **Exhibit Index**

- A. C-141 Spill Report
- B. NMOCD Ranking Worksheet
- C. Satellite View of Location – Zoom In
- D. Satellite view of Location – Zoom Out
- E. USGS 7.5' Map Zoom In
- F. USGS 7.5' Map Zoom Out
- G. Plat Map of Location
- H. Boring Log

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

SEP 23 2009

Form C-141  
Revised October 10, 2003

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

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

Release Notification and Corrective Action

OPERATOR

☒ Initial Report ☐ Final Report

Name of Company	Melrose Operating Company 184860	Contact	Barry Archer
Address	1000 W. Wilshire Blvd., Suite 223	Telephone No.	405-848-4012
Facility Name	Conoco 7 State Battery 003	Facility Type	Battery

Surface Owner	Mineral Owner	Lease No.
---------------	---------------	-----------

30-015-23694

LOCATION OF RELEASE

Unit Letter	Section	Township	Range	Feet from the	North/South Line	Feet from the	East/West Line	County
E	7	19S	29E					Eddy

Latitude N32.67714 Longitude W104.11526

NATURE OF RELEASE

Type of Release	Produced oil and water	Volume of Release	+5 bbls	Volume Recovered
Source of Release	Line to heater ruptured	Date and Hour of Occurrence	09/09/09	Date and Hour of Discovery
Was Immediate Notice Given?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Required	If YES, To Whom?		
By Whom?	Gary Newton, Field Supervisor	Date and Hour	9/09/09	
Was a Watercourse Reached?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	If YES, Volume Impacting the Watercourse.		

If a Watercourse was Impacted, Describe Fully.\*

No

Describe Cause of Problem and Remedial Action Taken.\*

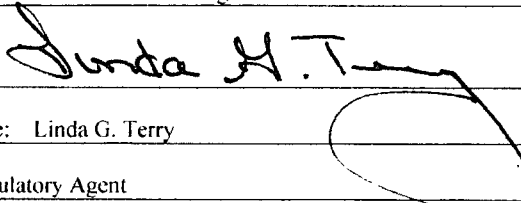
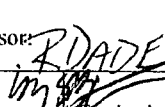
Line to heater ruptured causing discharge in bermed battery area Truck used to pull fluid from battery.

Describe Area Affected and Cleanup Action Taken.\*

Within tank bermed area.

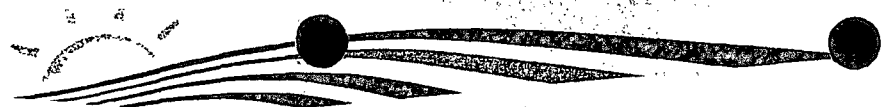
Work plan: Remove all vessels from battery area and haul off top 2 1/2 ft of soil to Lea Land Disposal. Sample soil in and around battery with OCD present and send samples to Cardinal Labs. Remove all contaminated soil and back fill with clean soil, install liner and rebuild tank battery.

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: 	OIL CONSERVATION DIVISION	
Printed Name: Linda G. Terry	Approved by District Supervisor: 	Remediation Actions to be completed and Final C-141 submitted with confirmation analyses/documentation on or before the Expiration Date.
Title: Regulatory Agent	Approval Date: 10-26-09	Expiration Date: 12-26-09
E-mail Address: lterry@melroseenergy.com	Conditions of Approval: <u>STIPULATIONS</u>	Attached <input checked="" type="checkbox"/>
Date: 9/23/09 Phone: 405-848-4012	<u>SEE ATTACHED</u>	2AP 355

\* Attach Additional Sheets If Necessary

15EB 0929949893  
15EB 0929950000  
3EB 0929950265



# 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



October 26, 2009

Melrose Operating Co  
PO Box 953  
Midland, TX 79702

Reference: Conoco 7 State Battery 30-015-23694  
E-7-19S-29E Eddy County, New Mexico  
2RP- 355

Operator,

The New Mexico Oil Conservation Division District 2 Office (OCD) is in receipt of an Initial Report C-141 for a release of produced oil and water occurring at the above referenced facility on or about September 9, 2009. Stated on the C-141 is, "Remove all vessels from battery area and haul off top 2 ½ ft of soil to Lea Land Disposal. Sample soil in and around battery with OCD present and send samples to Cardinal Labs. Remove contaminated soil and back fill with clean soil, install liner and rebuild tank battery."

The Initial Report C-141 is accepted with the following stipulations:

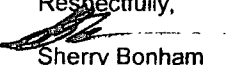
- Notify the OCD 48 hours prior to obtaining samples (preliminary, confirmation, and all additional) where analyses are to be submitted to the OCD.
- Contaminated soils shall be remediated so that residual contaminant concentrations are below the site specific recommended soil remediation action levels. Confirmation delineation soil analyses reflecting chloride, TPH, and BTEX will be required.
- Remediation requirements may be subject to change as site conditions warrant.
- Results of analytical data obtained through sampling shall be forwarded to OCD for approval **prior** to any backfilling activities.
- Final remediation actions are to be completed and a Final Report C-141 with supporting documentation is to be submitted to the OCD on or before December 26, 2009.

Remediation requirements may be subject to other federal, state, and local laws or regulations.

Please be advised that NMOCD acceptance and/or approval of documents or work plans 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 and/or approval of documents or work plans do not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

If I may be of further assistance regarding this matter or if you have any questions, please feel free to contact me.

Respectfully,



Sherry Bonham  
NMOCD District 2  
1301 W Grand Avenue  
Artesia, NM 88210  
575.748.1283 ext. 109  
[sherry.bonham@state.nm.us](mailto:sherry.bonham@state.nm.us)



# SITE ASSESSMENT CRITERIA (NMOCD)

CLOSE OPERATING

CONOCO 7 STATE #3 TANK BATTERY

III/F SEC 7 - T19S - R29E

GPS LAT & LON NAD27 N32.67685 / W104.11491

DTW: 140'>150' according to Cheron Texaco water data map for Eddy Co.

## DEPTH TO GROUND WATER

(Vertical distance from contaminants to seasonal high water elevation of ground water.)

Less than 50' BGS	(20 points)	
50' to 99' BGS	(10 points)	
Greater than 100' BGS	(0 points)	0

## WELLHEAD PROTECTION AREA

(Less than 200' from a private domestic water source, or; less than 1000' from all other water sources)

YES	(20 points)	
NO	(0 points)	<div>0</div>

## DISTANCE TO SURFACE WATER BODY

(Horizontal distance to perennial lakes, ponds, rivers, streams, creeks, irrigation canals, and ditches)

Less than 200'	(20 points)	
200' to 1000'	(10 points)	
Greater than 1000'	(0 points)	<div>0</div>

RANKING SCORE TOTAL POINTS	<div>0</div>
----------------------------	--------------

## CLEAN - UP TARGET CONCENTRATIONS FOR "SITE CLOSURE"

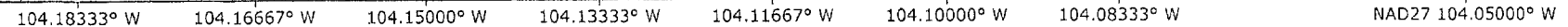
IF RANKING SCORE IS:	> 19	10 - 19	0 - 9
BENZENE (ppm)*	10	10	10
BTEX (ppm)*	50	50	50
TPH (ppm)**	100	1000	5000

\*A field vapor headspace measurement of 100 ppm may be substituted for a laboratory analysis.

\*\* The contaminant concentration for TPH is the concentration above background levels.



104.18333° W    104.16667° W    104.15000° W    104.13333° W    104.11667° W    104.10000° W    104.08333° W    NAD27 104.05000° W



g°

12/12/09

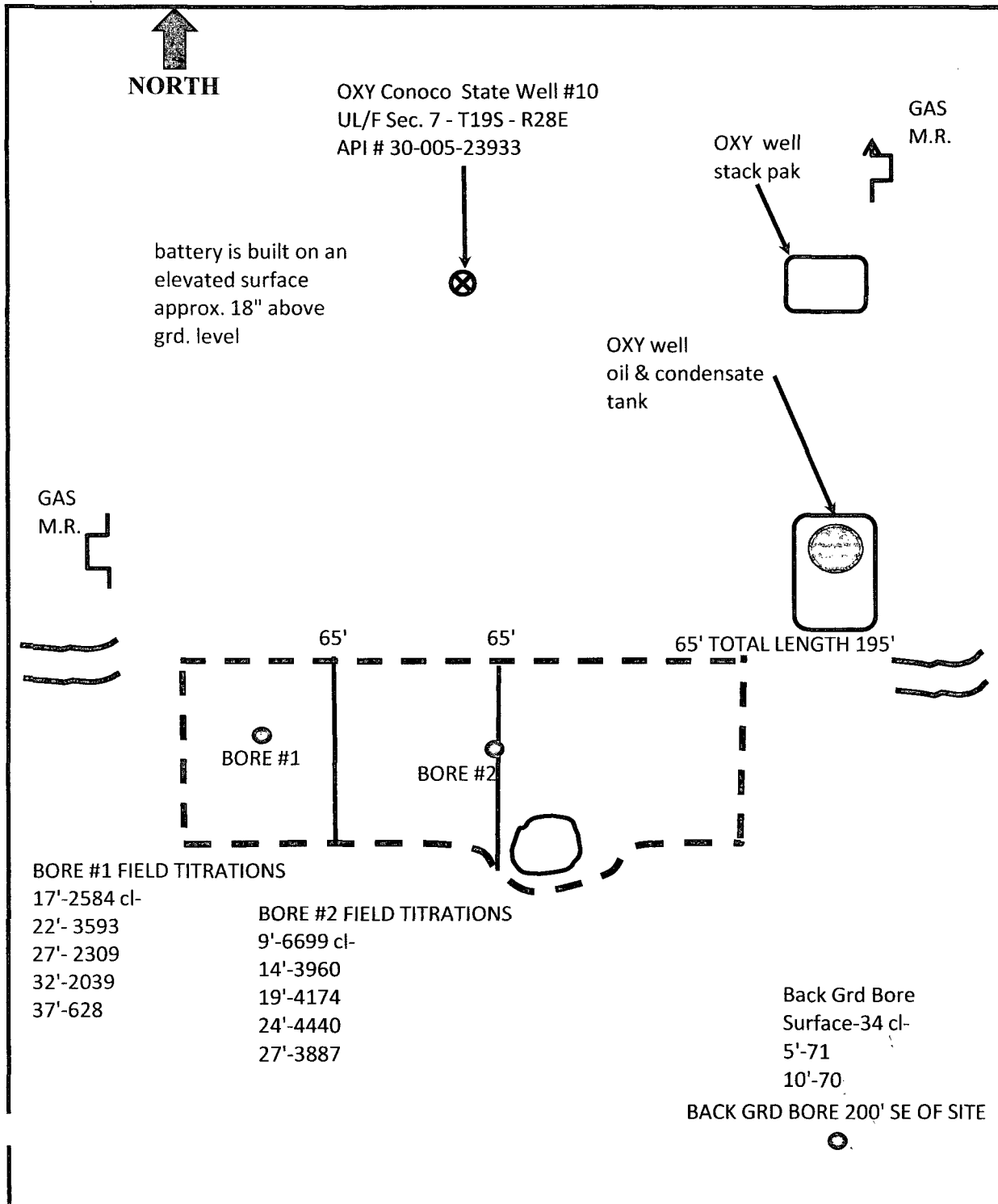
**Meirose Energy Co.**

Conoco 7 State #3 Tank Battery

UL/F Sec. 7 - T19S - R29E

GPS LAT & LON NAD27 (DECIMAL) N32.67685 / W104.11491

WATER LEVEL: Approx. 140' to 150' bgs







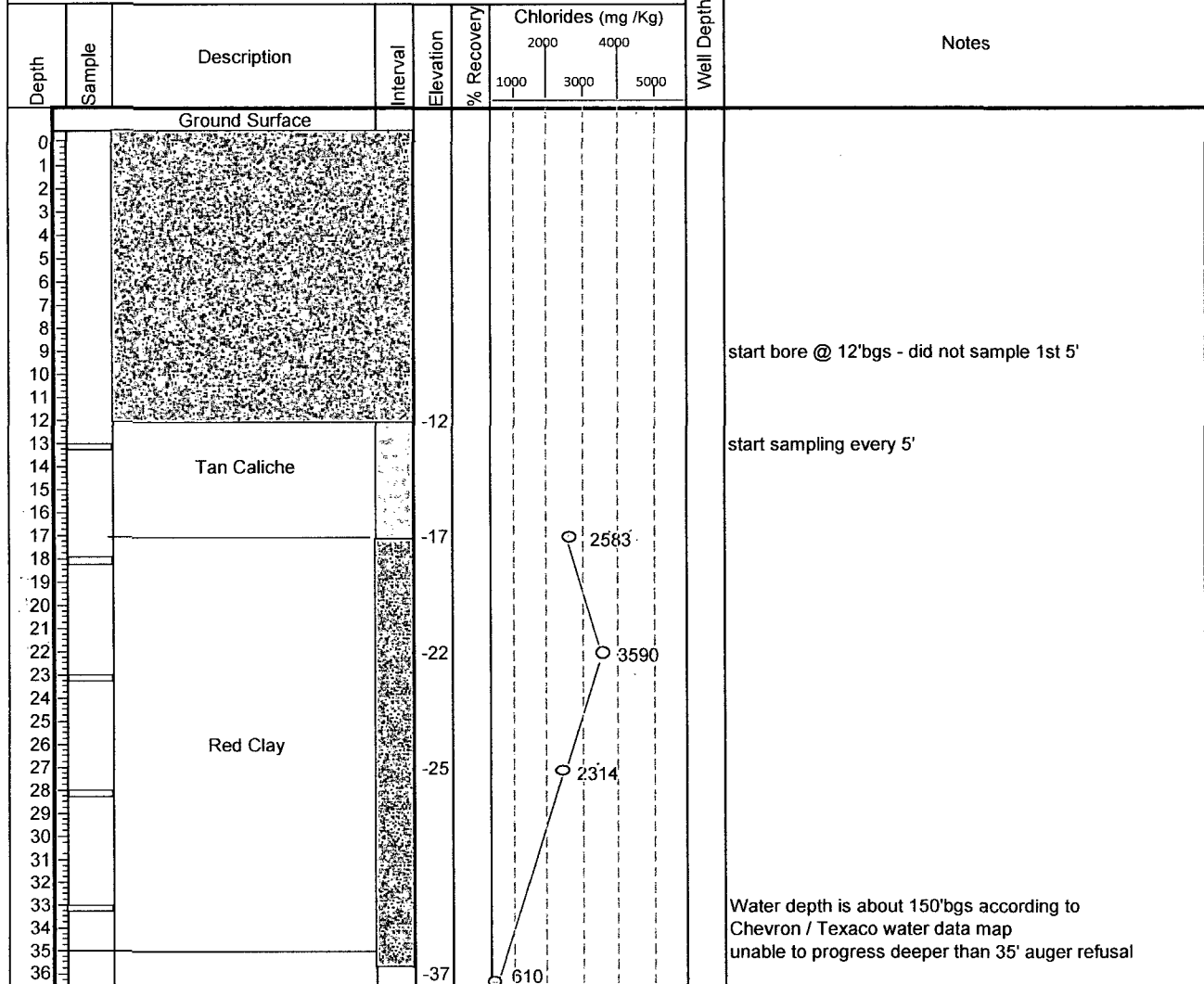
Whole Earth Environmental, Inc.

2103 Arbor Cove  
Katy, Tx. 77494  
281.394.2050  
mikeg@vadose.us

**Chloride Delineation Boring Log of Melrose Conoco 7 St. No. 3**

Client	Isramco/Jay Mgmt	Drill Method	Solid Stem Auger
Project	Conoco 7 St. No. 3	Borehole Dia.	5 1/4"
Location	Lea County, N.M.	Total Depth	35' bgs
Latitude	32.67685N	Driller	Whole Earth
Longitude	104.11491W	Bore Purpose	Delineation
Date Drilled	12/11/2009	Status	Grouted
Date Completed	12/11/2009	Technician	R. Rascon

**Subsurface Profile**





PR-152

**Remediation Protocol  
Melrose Energy Co.  
Conoco 7 State No. 3 Battery**

**1.0 Purpose**

This protocol is to provide a detailed outline of the steps to be employed in the remediation and closure of the Conoco 7 State No. 3 location in Eddy County, New Mexico.

**2.0 Scope**

This protocol is site specific for the Conoco 7 State No. 3 remediation project.

**3.0 Preliminary**

Prior to any field operations, Whole Earth Environmental shall conduct the following activities:

**3.1 Client Review**

3.1.1 Whole Earth shall meet with cognizant personnel within Melrose and the NMOCD to review and approve this protocol.

3.1.2 Changes to this protocol will be documented and submitted for final review by all parties prior to the initiation of actual field work.

**4.0 Safety**

4.1 Prior to work on the site, Whole Earth shall obtain the location and phone numbers of the nearest emergency medical treatment facility. We will review all safety related issues with the appropriate Client personnel, sub-contractors and exchange phone numbers.

4.2 A tailgate safety meeting shall be held and documented each day. All sub-contractors must attend and sign the daily log-in sheet.

4.3 Anyone allowed on to location must be wearing sleeved shirts, steel toed boots, and long pants. Each vehicle must be equipped with two way communication capabilities.

4.4 Prior to any excavation, New Mexico One Call will be notified. If lines are discovered within the area to be excavated they shall be marked with pin flags on either side of the line at maximum five-foot intervals.

### **5.0 Remediation**

5.1 All tanks and ancillary equipment will be moved from their existing location to permit access to the affected area.

5.2 The battery area will be cored to a depth necessary to demonstrate chloride concentrations of <1,000 ppm, TPH concentrations <500 ppm and benzene concentrations <10 ppm are achieved. The highly contaminated soils shall be excavated and transported to commercial disposal. The remaining soils shall be excavated to practical vertical extent and set aside to be mixed and blended with native topsoils. A high density polyethylene liner will be installed at a minimum depth of six feet below ground surface to serve as a retardant to future vertical migration of the contaminants of concern.

5.3 The area within containment shall be backfilled with soils tested as being within the concentrations specified within paragraph 5.2 of this protocol. The initial backfill should bring the excavated area to ground level. Containment berms of sufficient dimensions to contain 1.5 times the capacity of all storage vessels and related piping shall be installed at the battery perimeter and the entire battery area will be covered with a twenty mil high density polyethylene liner. Prior to laying the liner, the sub strait materials will be inspected to insure that no sharp or protruding objects may endanger the liner's integrity.

5.4 A light covering of caliche shall be placed atop the liner to anchor it in place.

### **6.0 Closure Report**

6.1 At the conclusion of the project, Whole Earth shall prepare a closure report that contains the following minimum information:

- Photographs of the location prior to remediation
- Photographs of the site at the point of maximum excavation
- Final photographs of the restored site
- Satellite photographs of the location
- Copies of this protocol
- Disposal manifests of all soils sent to commercial disposal
- Laboratory analytical reports