



**Whole Earth Environmental, Inc.**

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281.394.2050  
whearth@msn.com

December 6, 2009

Primero Operating Co.  
P.O. Box 1433  
Roswell, NM 88202

Attn: Phelps White

Dear Mr. White:

Enclosed, please find a copy of our protocol for the Milano State No. 1 project referenced in the November 4, 2009 Letter of Violation submitted by Ron Harvey, (ref: Inspection No: iREH0930858903).

We propose to delineate the vertical extent of contamination and establish a migration barrier between the surface tanks and groundwater. The area above the barrier will be mixed and blended to achieve an average chloride concentration of less than 1,000 ppm, TPH of less than 100 ppm and benzene of less than 10 ppm.

We will re-set the tanks atop a new 20 mil high density polyethylene barrier within a bermed structure.

Thank you again for the opportunity of working with you on this very interesting project.

Warmest personal regards,

Mike Griffin  
President  
Whole Earth Environmental, Inc.



## **Executive Summary Primero Operating Milano State No. 1**

### **Location**

The site is located approximately thirty miles southeast of the City of Carlsbad, Eddy County, New Mexico on state lands. The primary land use is grazing of cattle however extensive oil and gas operations are prevalent in the area. The area is semi-arid with a net precipitation / evaporation amount of  $-73''$  per year. The legal description is: **S36, T24S, R28E**

### **Investigation Activities**

Whole Earth Environmental, Inc. conducted preliminary coring within the bermed containment and found extensive chloride concentrations to a depth of five feet below ground surface. Vertical delineation of the chloride concentrations will be done at the time of final remediation.

### **Restoration Activities**

The tanks and ancillary equipment will be set aside. Two vertical delineation bores will be advanced to demonstrate separation between the contaminants of concern and the ground water. The contaminated soils will be excavated to the greatest practical extent but a minimum of four feet below ground surface. A protective twenty mil polyethylene liner will be installed at the practical excavation limit and the excavation backfilled with mixed and blended soils to surface. The containment berms will be segregated and tested for average TPH and chloride concentrations and placed within new containment berms. The battery will be lined with twenty mil polyethylene and the tanks replaced.



## **Exhibit Index**

- A. Driving Instructions
- B. Plat Map of Location
- C. NMOSE Groundwater Depths
- D. Satellite View of Location – Zoom out
- E. Satellite View of Location – Zoom in
- F. Battery Chloride Field Titration Summary
- G. NMOCD LOV

PULLEY RD. TURN L.

1.15MI TURN R. AFTER CROSSING  
CATTLE GUARD

0.5th TURN R.

0.4TH TURN L. AFTER  
CROSSING CATTLE GUARD

**PRIMERO OPERATING LLC.**  
MILANO STATE #1  
UL/G SEC. -36 - T24S - R28E  
API# 30-015-27614  
GPS LAT & LON NAD27 (DECIMAL)  
DRIVING DIRECTIONS: In Malaga, in front of Malaga Post Office, go S. on Pecos Hwy. 2.0mi to intersection of Pulley Rd. turn L. go 1.15mi, turn R. after crossing cattle guard, go 0.4th turn L. after crossing cattle guard, go 0.5th turn R. go 0.9th, turn R. go 0.2th to location.

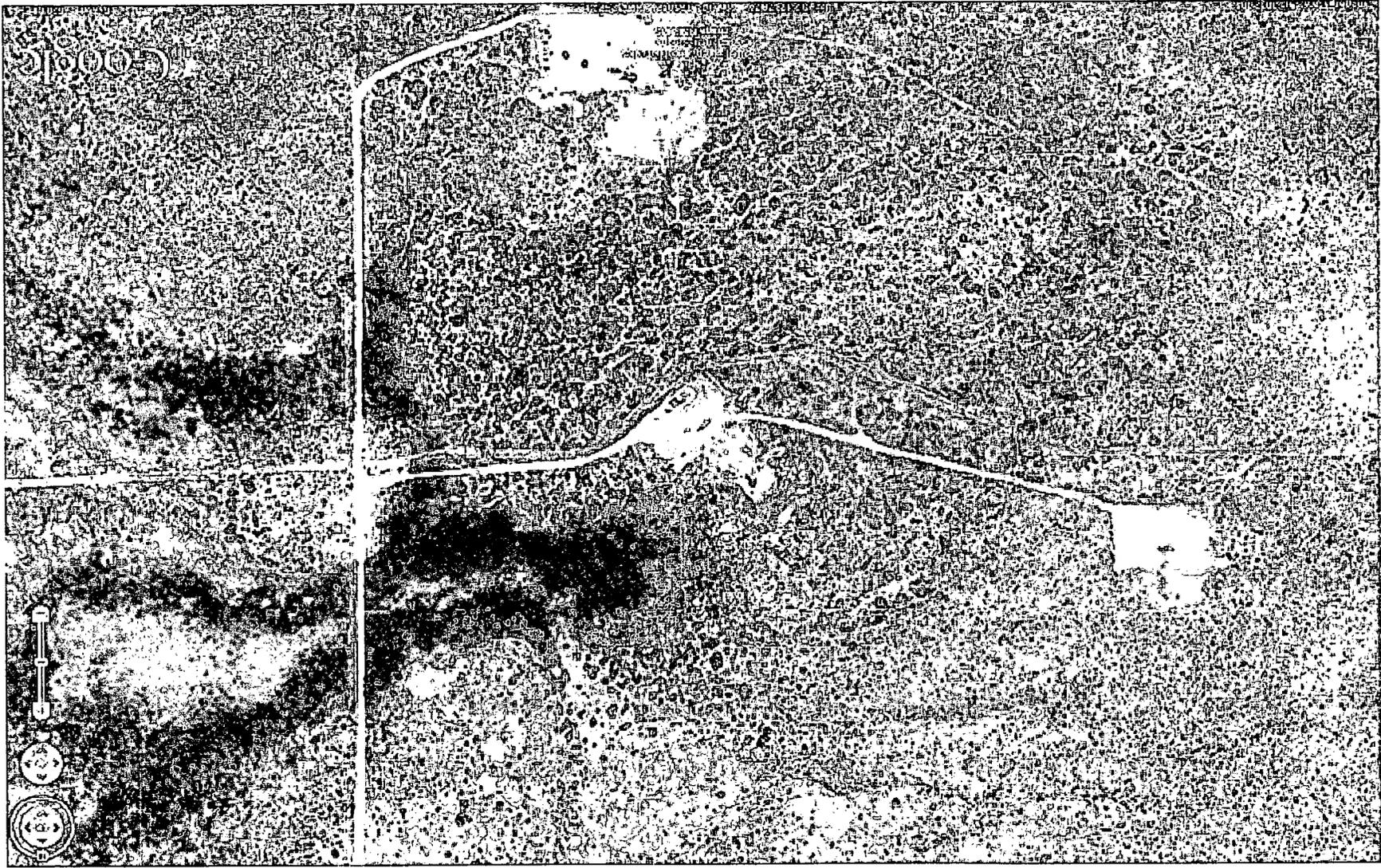
0.2TH TO LOCATION

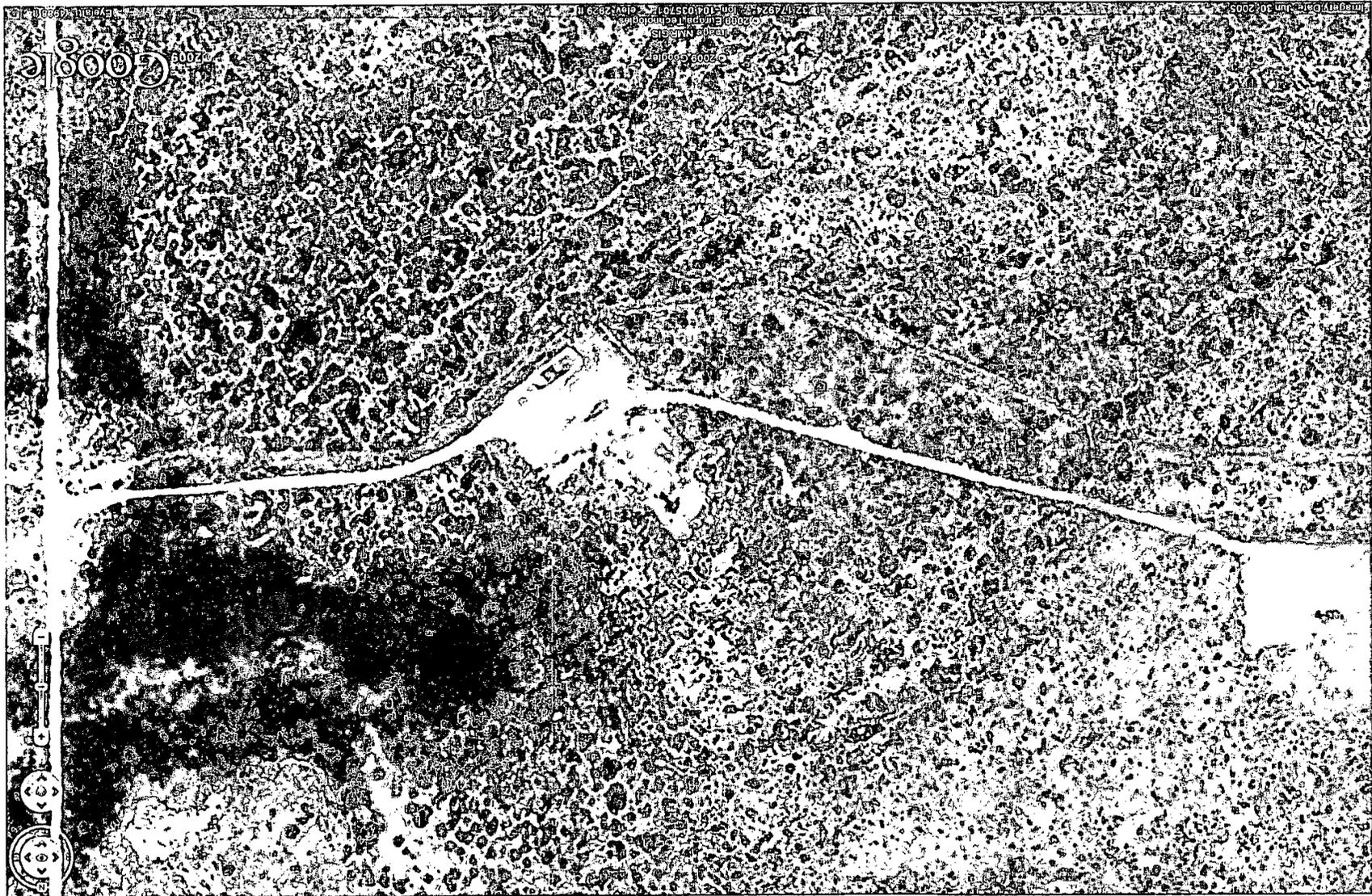
0.9TH TURN R.

Primero Operating Milano #1

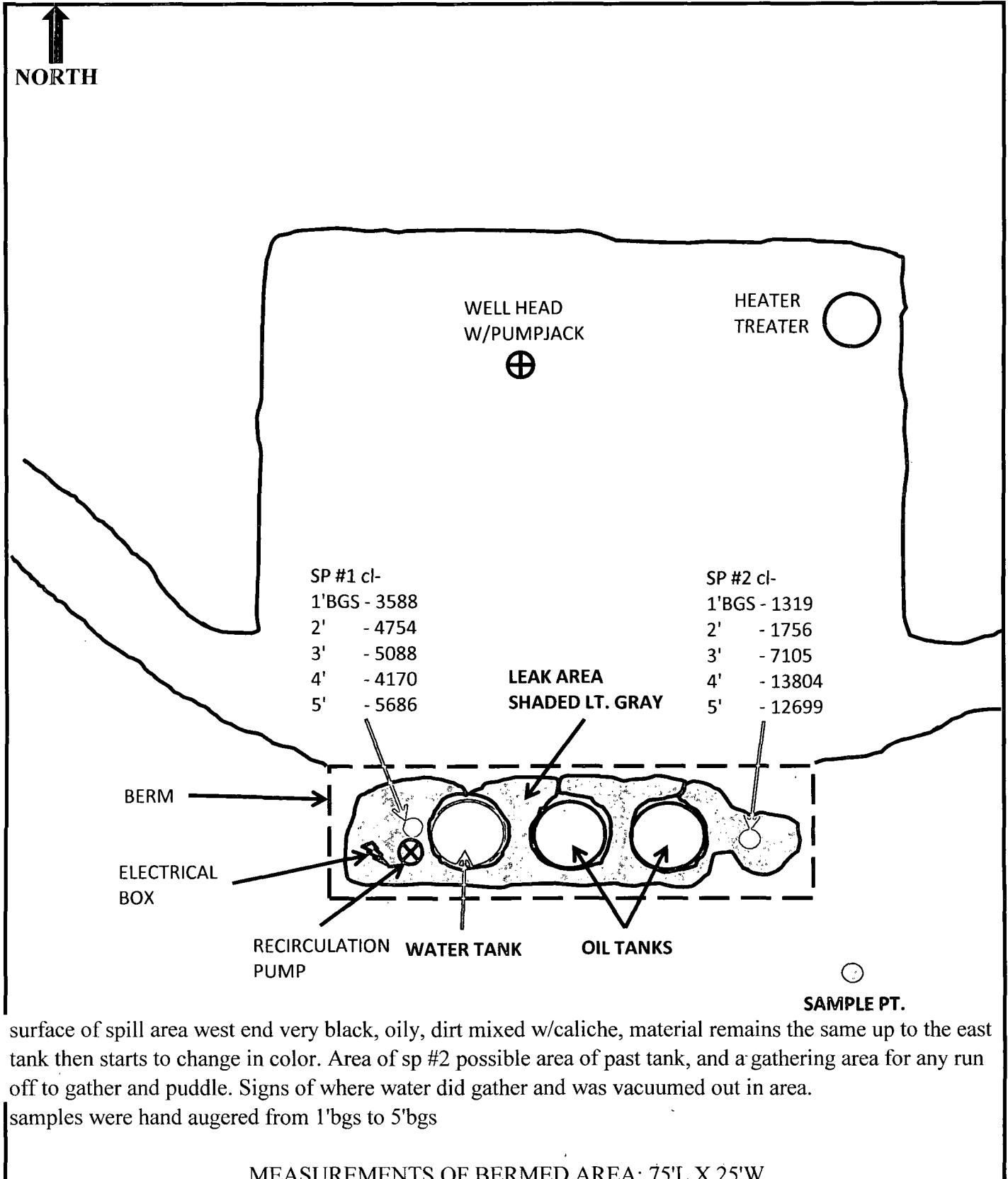
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Image NMRGIS  
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Google





Primero Operating, LLC  
 Milano State #1 SITE MAP  
 UL/G Sec 36 - T24S - R28E  
 GPS LAT & LON NAD27 (Decimal)  
 N32.174797 / W104.035082



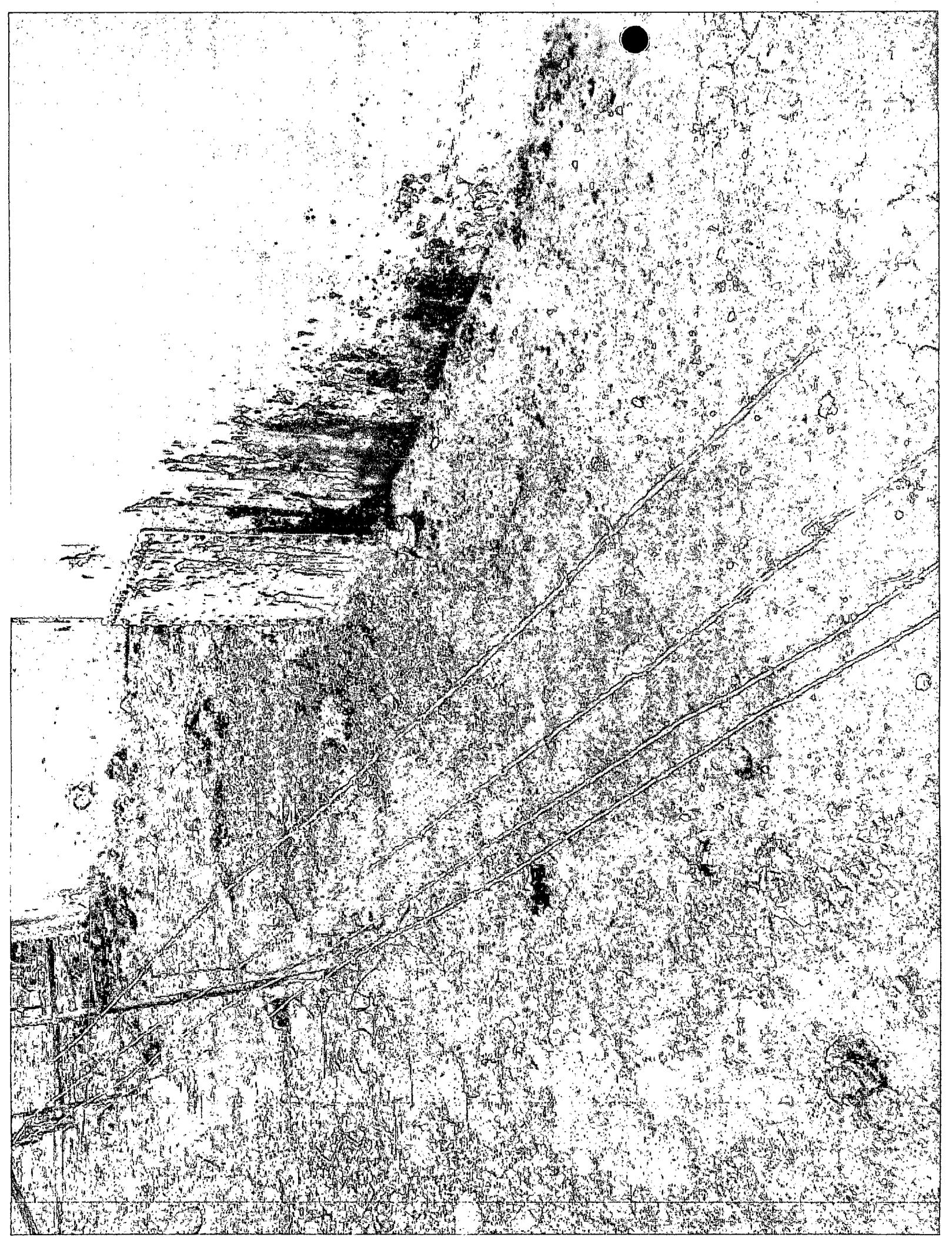
surface of spill area west end very black, oily, dirt mixed w/caliche, material remains the same up to the east tank then starts to change in color. Area of sp #2 possible area of past tank, and a gathering area for any run off to gather and puddle. Signs of where water did gather and was vacuumed out in area. samples were hand augered from 1'bgs to 5'bgs

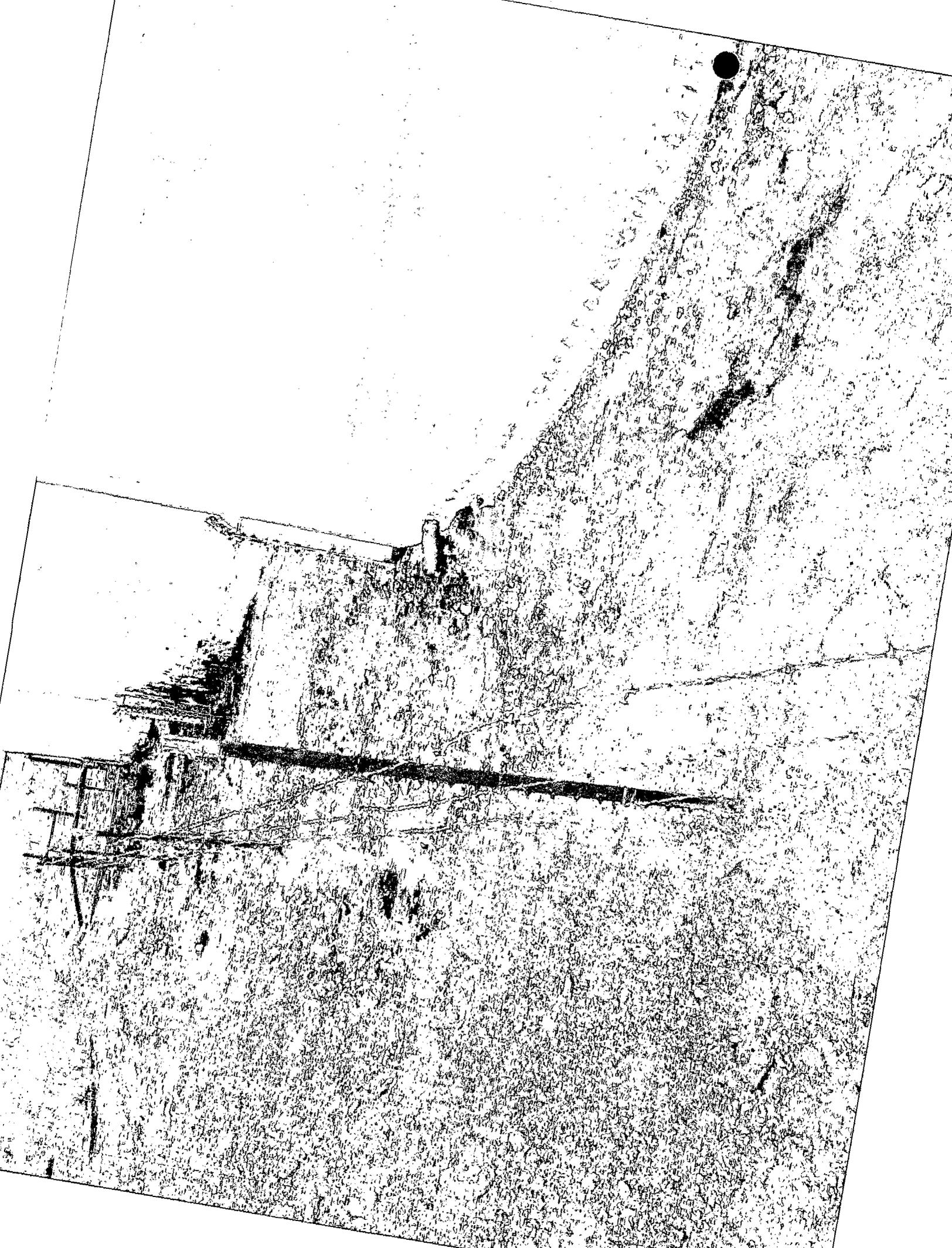
MEASUREMENTS OF BERMED AREA: 75'L X 25'W

# CL- FIELD TITRATION RESULTS

LOCATION: PRIMERO OPERATING LLC. MILANO STATE #1 SPILL SITE							
DEPTH TO GW: 40' according to Chevron/Texaco Eddy Co. depth to gw map							
Sample pt.	DEPTH	SOIL	WATER	CF	AGNO3	CL-	SOIL LITHOLOGY
SP #1	1'	9.5	27.5	2.89	1.24	3588	2.5YR - 4/4 weak red oily rocky sandy sand damp slight odor
	2'	8.8	31	3.52	1.35	4754	10R - 4/4 weak red oily sandy sand damp no odor
	3'	8.8	31.1	3.53	1.44	5088	10R - 4/4 weak red sandy sand damp no odor
	4'	7.5	31.6	4.21	0.99	4170	10R - 4/4 weak red sandy sand damp no odor
	5'	9.2	29.9	3.25	1.75	5686	10R - 4/4 weak red sandy sand damp no odor
SP #2	1'	13.1	24.7	1.89	0.7	1319	10R - 4/4 weak red sandy sand damp no odor
	2'	8.8	27.6	3.14	0.56	1756	10R - 4/4 weak red sandy sand damp no odor
	3'	8.6	33.4	3.88	1.83	7105	10R - 4/4 weak red sandy sand damp no odor
	4'	7.3	31.5	4.32	3.2	13804	10R - 4/4 weak red sandy sand damp no odor
	5'	7.2	30.9	4.29	2.96	12699	10R - 4/4 weak red sandy sand damp no odor

Field titration preformed by Roy R. Rascon on 11-23-09







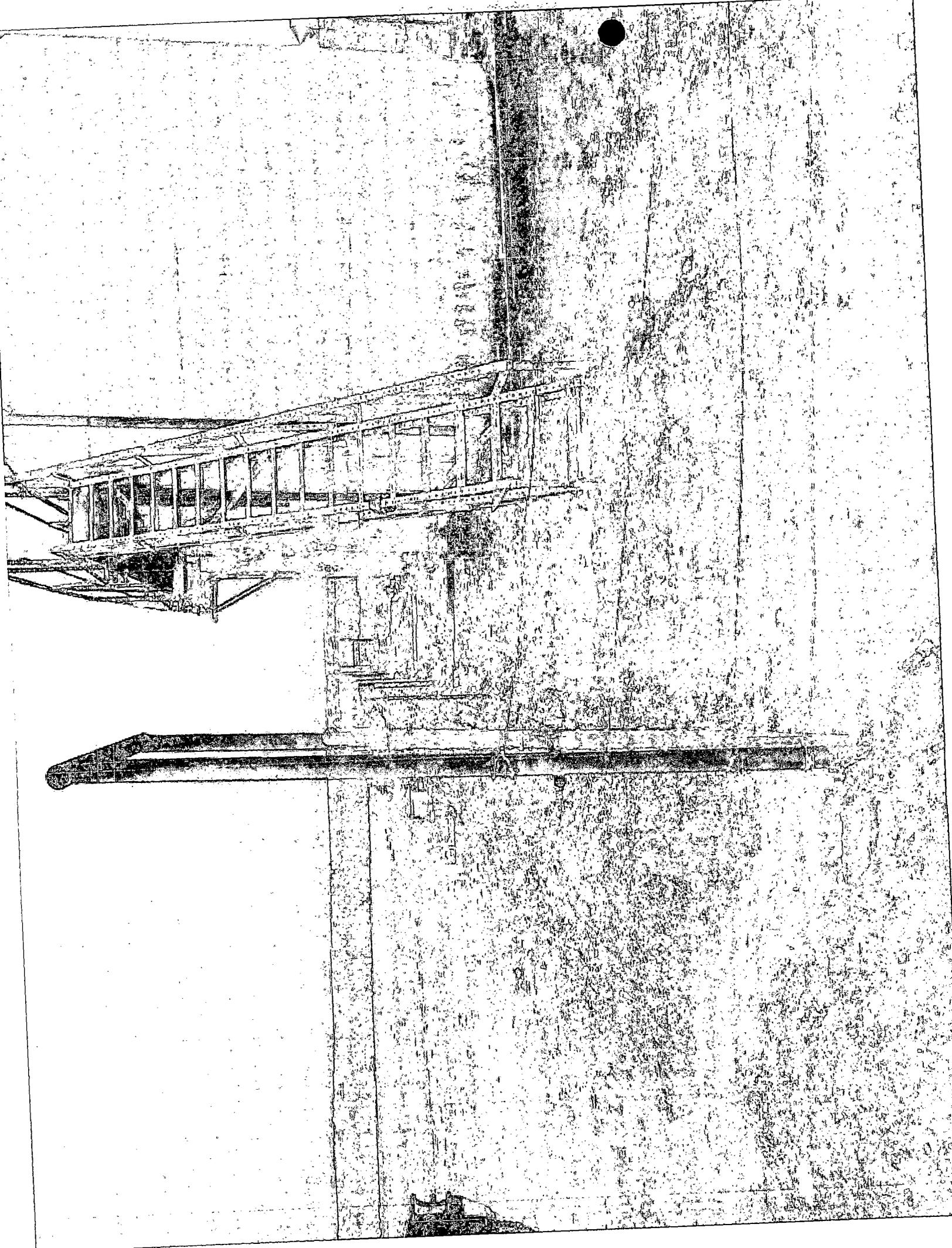


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PRODUCED WATER







# NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

**BILL RICHARDSON**

Governor

**Joanna Prukop**

Cabinet Secretary

**Mark E. Fesmire, P.E.**

Director

**Oil Conservation Division**

**\*Response Required – Deadline Enclosed\***

*Field Inspection Program*

*"Preserving the Integrity of Our Environment"*

04-Nov-09

**LOV NO. 02-09-107**

**PRIMERO OPERATING INC**

PO BOX 1433

ROSWELL NM 88202

**LETTER OF VIOLATION - Inspection**

Dear Operator:

The following inspection(s) indicate that the well, equipment, location or operational status of the well(s) failed to meet standards of the New Mexico Oil Conservation Division as described in the detail section below. To comply with standards imposed by Rules and Regulations of the Division, corrective action must be taken immediately and the situation brought into compliance. The detail section indicates preliminary findings and/or probable nature of the violation. This determination is based on an inspection of your well or facility by an inspector employed by the Oil Conservation Division on the date(s) indicated.

Please notify the proper district office of the Division, in writing, of the date corrective actions are scheduled to be made so that arrangements can be made to reinspect the well and/or facility.

### INSPECTION DETAIL SECTION

MILANO STATE No.001		H-36-24S-28E		30-015-27614-00-00		
Inspection Date	Type Inspection	Inspector	Violation?	*Significant Non-Compliance?	Corrective Action Due By:	Inspection No.
11/04/2009	Routine/Periodic	Ron Harvey	Yes	No	11/19/2009	iREH0930858903
<b>Comments on Inspection:</b> Moderate hydrocarbon contamination in tank battery area. Violation of NMAC 19.15.29. Operator must submit C-141 to OCD District II office no later than 11-19-2009. Work plan may be required.						
MILANO STATE No.002		G-36-24S-28E		30-015-28141-00-00		
Inspection Date	Type Inspection	Inspector	Violation?	*Significant Non-Compliance?	Corrective Action Due By:	Inspection No.
11/04/2009	Routine/Periodic	Ron Harvey	Yes	No	11/19/2009	iREH0930859049
<b>Comments on Inspection:</b> Fresh chlorides visible in old drilling pit area. Violation of NMAC 19.15.29. Operator must submit C-141 to OCD District II office no later than 11-19-2009. Work plan may be required.						

In the event that a satisfactory response is not received to this letter of direction by the "Corrective Action Due By:" date shown above, further enforcement will occur. Such enforcement may include this office applying to the Division for an order summoning you to a hearing before a Division Examiner in Santa Fe to show cause why you should not be ordered to permanently plug and abandon this well. Such a hearing may result in imposition of CIVIL PENALTIES for your violation of OCD rules.

Sincerely,

  
Artesia OCD District Office

Note: Information in Detail Section comes directly from field inspector data entries - not all blanks will contain data.  
\*Significant Non-Compliance events are reported directly to the EPA, Region VI, Dallas, Texas.



**Remediation Protocol  
Primero Operating, LLC  
Milano State No. 1**

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**1.0 Purpose**

This protocol is to provide a detailed outline of the steps to be employed in the remediation and closure of the Milano State No. 1 location in Eddy County, New Mexico.

**2.0 Scope**

This protocol is site specific for the Milano State No. 1 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 Primero 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 to practical extent and set aside to be mixed and blended with native topsoils. A high density polyethylene liner will be installed at the point of maximum excavation 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
- Laboratory analytical reports