

1R - 1595

# WORKPLANS

DATE:

9-20-07

HOBBS  
PIT  
CLOSURE

SITE INFORMATION			
REPORT TYPE: Investigation & Characterization Plan			
Report Date: September 20, 2007			
<b>General Site Information:</b>			
<b>Site:</b>	Rock Queen Unit Tract 11 Tank Battery		
<b>Company:</b>	Celero Energy II LP		
<b>Section, Township and Range</b>	Section 26	Township 13S	Range 31E
<b>Unit Letter:</b>	G		
<b>Lease Number:</b>			
<b>County:</b>	Chaves County, New Mexico		
<b>GPS:</b>	N33.16250° W103.78889°		
<b>Surface Owner:</b>	State		
<b>Mineral Owner:</b>	State		
<b>Directions:</b>			
<b>Release Data:</b>			
<b>Date Released:</b>	NA		
<b>Type Release:</b>	NA		
<b>Source of Contamination:</b>	Production Pit Investigation		
<b>Fluid Released:</b>	NA		
<b>Fluids Recovered:</b>	NA		
<b>Official Communication:</b>			
<b>Name:</b>	Bruce Woodard		Tim Reed
<b>Company:</b>	Celero Energy II LP		Highlander Environmental Corp.
<b>Address:</b>	400 W. Illinois, Suite 1601		1910 N. Big Spring
<b>P.O. Box</b>			
<b>City:</b>	Midland, Tx 79701		Midland, Texas
<b>Phone number:</b>	(432) 686-1883		(432) 682- 4559
<b>Email:</b>	bwoodard@celeroenergy.com		treed@hec-enviro.com

Ranking Criteria		
<b>Depth to Groundwater:</b>	<b>Ranking Score</b>	<b>Site Data</b>
<50 ft	20	
50-99 ft	10	
>100 ft.	0	Average Depth >100 BS
<b>Wellhead Protection:</b>	<b>Ranking Score</b>	<b>Site Data</b>
Water Source <1,000 ft., Private <200 ft.	20	None
Water Source >1,000 ft., Private >200 ft.	0	
<b>Surface Body of Water:</b>	<b>Ranking Score</b>	<b>Site Data</b>
<200 ft.	20	None
200 ft - 1,000 ft.	10	None
>1,000 ft.	0	
<b>Total Ranking Score:</b>		0

Acceptable Soil RRAL (mg/kg)		
<b>Benzene</b>	<b>Total BTEX</b>	<b>TPH</b>
10	50	5,000



**RECEIVED**  
2007 SEP 27 PM 12:20  
*Highlander Environmental Corp.*

*Midland, Texas*

CERTIFIED MAIL

RETURN RECIEPT NO. 7001 0320 0004 3736 4576

September 20, 2007

Mr. Larry Johnson  
Oil Conservation Division- District I  
1625 N. French Drive  
Hobbs, New Mexico 88240

**RE: INVESTIGATION & CHARACTERIZATION WORK PLAN, CELERO  
ENERGY II, LP, ROCK QUEEN UNIT TRACT 11 TANK BATTERY,  
UNIT G, SECTION 26, T-13-S, R-31-E, CHAVES COUNTY, NEW  
MEXICO.**

Mr. Johnson:

Celero Energy II, LP (Celero) has retained Highlander Environmental Corp. (Highlander) to address potential environmental concerns at the above-referenced site. In response, Highlander presents the following Investigation and Characterization Plan (ICP) for assessment and closure of an open pit at the above-mentioned location.

**BACKGROUND & PREVIOUS WORK**

Celero retained Highlander Environmental (Highlander) of Midland, Texas to investigate this site as part of a due diligence in an acquisition of property operated by Palisades Asset Holding Company, LLC (Palisades). This production was originally developed in the mid-1950's. The primary surface owner in this Unit is the State of New Mexico, with the exception of one section of fee ownership. Highlander installed one monitoring well at the pit location. The monitoring well (MW-1) at the pit had elevated chlorides. A Groundwater Impact Notification was submitted to the NMOCD on June 18, 2007. The site is shown on Figures 1 and 2.

**Hydrology**

Chaves County is located in the southeastern corner of New Mexico. The area is located in the High Plains Valley section of the Great Plains physiographic province. Rocks of Quaternary, Tertiary, and Triassic age are exposed and contain the principal aquifers. The most prominent aquifer is the Ogallala formation, which underlies the Llano Estacado and forms outliers south of it. Below the Cenozoic rocks are sandstones and shales of the Dockum group of

Late Triassic age, from which small quantities of water are obtained. No usable groundwater is obtained from rocks older than the Triassic.

The Ogallala formation consists chiefly of sediments deposited by streams that had their headwaters in the mountainous regions to the west and northwest. The Ogallala formation rests unconformably upon an erosional surface of the underlying Triassic and Cretaceous rocks. The Ogallala is made of beds and lenses of clay, silt, sand, and gravel. Caliche occurs as a secondary deposit in many places in the formation.

Uncontaminated water from the Ogallala formation is high in silica (49 to 73 ppm), and contains moderate concentrations of calcium and magnesium. The dissolved solids content is relatively low, being typically less than 1,100 ppm. Water wells east of Mescalero Ridge derive their water from the Ogallala. The reported depth to groundwater in this area ranges from 100' to 200'. Water wells west of Mescalero Ridge derive water from the Triassic Dockum or Quaternary alluvium. No reported depths to groundwater were found for this area.

### **Regulatory**

Neither the New Mexico State Engineer's Office database nor the USGS database show any wells in Section 26, Township 13 South, Range 31 East. The monitor well installed at this site had a depth to groundwater of 138'. A risk-based evaluation was performed for the Site in accordance with the New Mexico Oil Conservation Division (NMOCD) Guidelines for Remediation of Leaks, Spills and Releases, dated August 13, 1993. The guidelines require a risk-based evaluation of the site to determine recommended remedial action levels (RRAL) for benzene, toluene, ethylbenzene and xylene (collectively referred to as BTEX) and total petroleum hydrocarbons (TPH) in soil. The proposed RRAL for benzene was determined to be 10 parts per million (ppm) or milligrams per kilogram (mg/kg) and 50 ppm for total BTEX (sum of benzene, toluene, ethylbenzene, and xylene). Based upon the depth to groundwater, the proposed RRAL for TPH is 5,000 mg/kg.

As discussed above, existing site data document impairment of groundwater quality. Therefore the work elements described below are designed to assist Celero in selecting an appropriate vadose zone remedy.

### **Task 1 - Dewater Pit**

The Tract 11 Tank Battery pit has been dewatered. The residual sludge, tank bottom materials, and liner will be removed. The fluids will be placed into an existing SWD system or taken to disposal, while the sludge, tank bottom materials, and liner will be disposed of at the Gandy-Marley, Inc. landfill site in Lovington, New Mexico.

### **Task 2 - Evaluate Concentrations of Constituents of Concern in Soil**

Upon completion of the removal of the fluids, sludge and liner, the underlying soils will be visually inspected for obvious signs of impact. Any soils excavated will be hauled to Gandy-Marley, Inc. for disposal. If necessary, the pit will be excavated to a point where the subsoil will

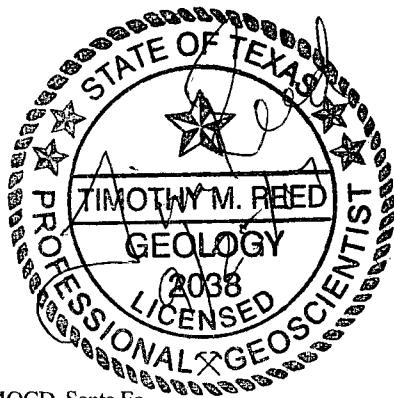


support a soil boring rig that will be utilized to determine vertical extents. Additionally, soil boring may be performed around the perimeter of the pits to determine horizontal extents of impact. The information gathered will be evaluated to determine what, if any additional remediation/isolation techniques will be required at the Site. A copy of the NMOCD C-144 Pit Registration Form is attached.

### Task 3 – Additional Groundwater Delineation

Once the pit closures are underway and the source areas eliminated, additional groundwater delineation will be performed and Corrective Action Plans will be presented for remediation of the groundwater in this area.

Should you have any questions, please contact me at (432) 682-4559. Your prompt review of this submission is appreciated. Thank you for your attention to this matter.



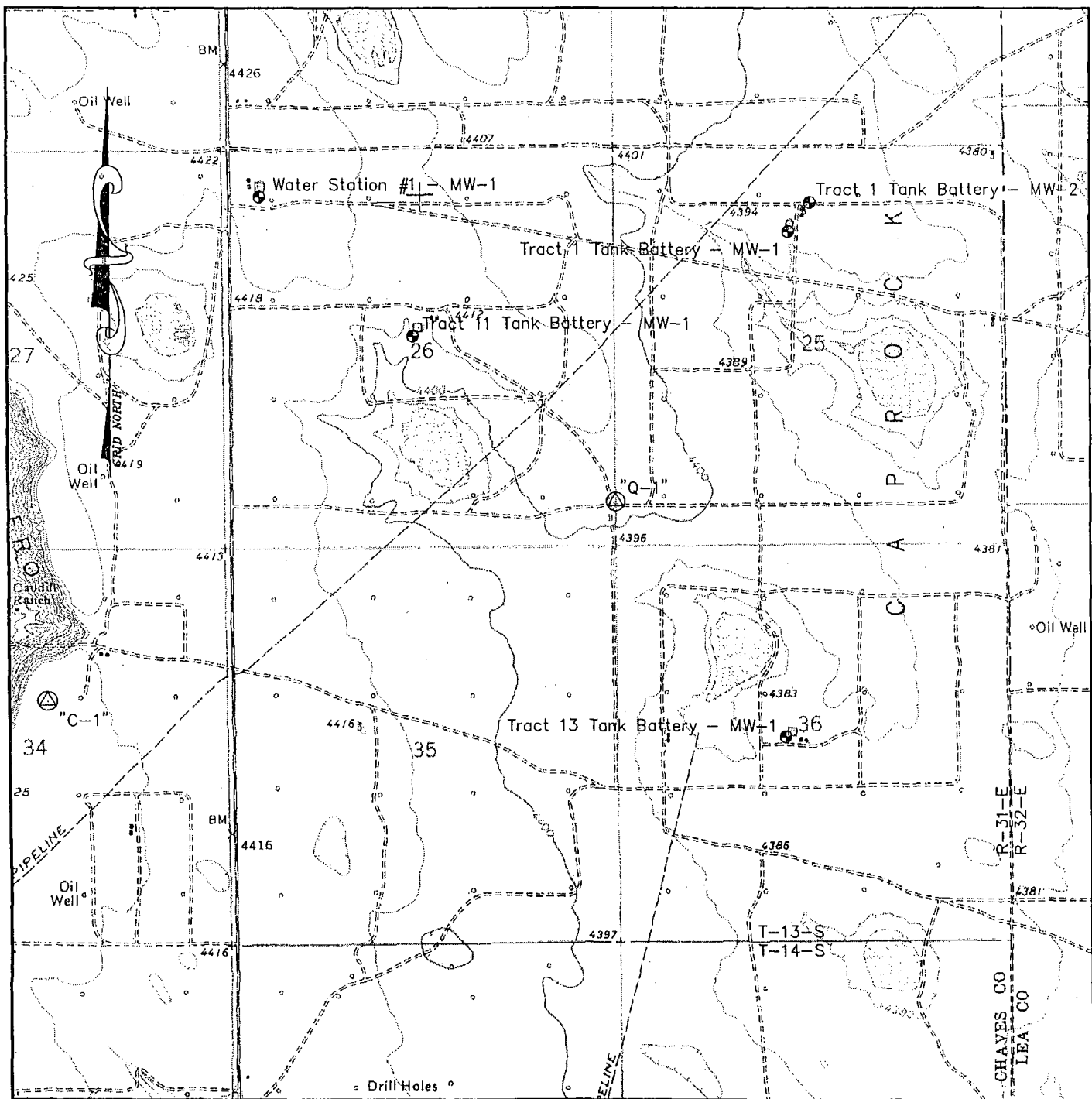
Highlander Environmental Corp.

A handwritten signature in cursive script that reads "Tim Reed".

Timothy M. Reed, P.G.  
Vice President

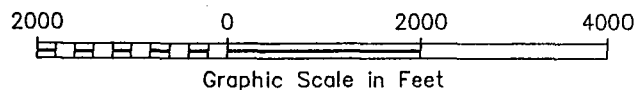
cc: Wayne Price – NMOCD, Santa Fe





## LEGEND

- - Denotes Monitor Well
- ⊙ - Denotes Static GPS Control Station



## CELERO ENERGY II, L.P.

Proximity Sketch of  
**CAPROCK QUEEN UNIT  
 MONITOR WELLS**

Located in Sections 25, 26 and 36  
 Township 13 South, Range 31 East, N.M.P.M.  
 Chaves County, New Mexico

**WEST  
 COMPANY**  
 of Midland, Inc.

110 W. LOUISIANA, STE. 110  
 MIDLAND TEXAS, 79701  
 (432) 687-0865 - (432) 687-0868 FAX

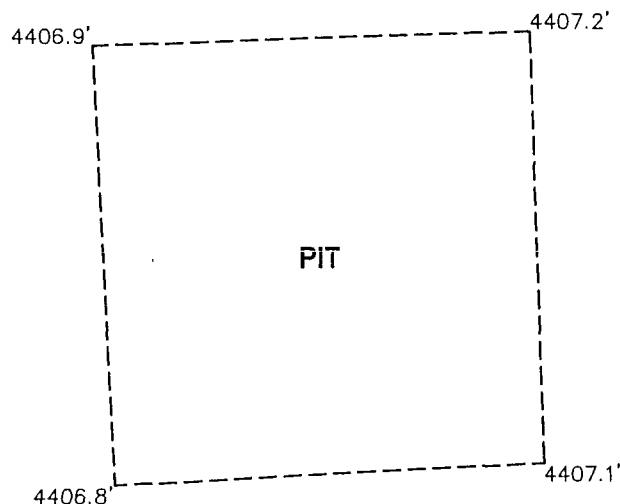
Date: June 21, 2007

## SECTION 26, TOWNSHIP 13 SOUTH, RANGE 31 EAST, N.M.P.M.

CHAVES COUNTY

NEW MEXICO

L-2007-0643-C



● TRACT 11 TANK BATTERY - MW-1

TANK BATTERY 11 - MW-1						
NORTHING (Y)	EASTING (X)	LATITUDE	LONGITUDE	ELEVATION TOP OF CASING	ELEVATION CONCRETE PAD	ELEVATION NATURAL GROUND
786,730.7	665,646.0	33°09'41.73" N	103°47'31.38" W	4,407.42	4,404.28	4,404.0

Date Surveyed: June 11, 2007  
Weather: Warm & Clear

## NOTE:

- 1) Plane Coordinates shown hereon are Transverse Mercator Grid and Conform to the "New Mexico Coordinate System", New Mexico East Zone, North American Datum of 1927.
- 2) Elevations reference the National Geodetic Vertical Datum of 1929.
- 3) Geodetic Coordinates shown hereon references the North American Datum of 1927, (Clarke Spheroid of 1866). Reference Stations - "ODESSA RRP2" - CORS (DF5393), "LUBBOCK RRP2" - CORS (DF5391) and "PORTALESAP NM 2005" - CORS (DF5391).

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED  
FROM NOTES TAKEN IN THE FIELD IN A BONA FIDE  
SURVEY MADE UNDER MY SUPERVISION

MACON McDONALD N.M. P.S.

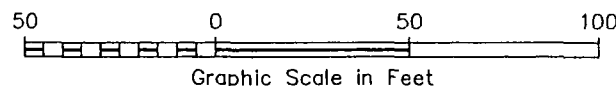
No. 12185

**WEST**  
**COMPANY**  
of Midland, Inc.

110 W. LOUISIANA, STE. 110  
MIDLAND TEXAS, 79701  
(432) 687-0865 - (432) 687-0868 FAX

## LEGEND

● - Denotes Monitor Well



CELERO ENERGY II, L.P.

Topographic Survey of  
**MONITOR WELL**  
**AT TRACT 11 TANK BATTERY**  
Located in Section 26  
Township 13 South, Range 31 East, N.M.P.M.  
Chaves County, New Mexico

Drawn By: LVA	Date: June 19, 2007
Scale: 1" = 50'	Field Book: 365 / 40-42
Revision Date: 6-21-2007	Quadrangle: Caudill Ranch
W.O. No: 2007-0643	Dwg. No.: L-2007-0643-C

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

Form C-144  
June 1, 2004

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

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 Celero Energy II, LP Telephone: (432) 686-1883 e-mail address: bwoodard@celeroenergy.com  
Address: 400 West Illinois, Suite 1601, Midland, Texas 79701  
Facility or well name: Rock Queen Unit Tract 11 Tank Battery API #: U/L or Qtr/Qtr G Sec 26 T-13-S R-31-E  
County: Chaves Latitude 33.16250 N Longitude 103.78889 W NAD: 1927 ☒ 1983 ☐  
Surface Owner: Federal ☐ State ☐ Private ☒ Indian ☐

Pit	Below-grade tank
Type: Drilling <input type="checkbox"/> Production <input type="checkbox"/> Disposal <input type="checkbox"/> Workover <input type="checkbox"/> Emergency <input checked="" type="checkbox"/> Lined <input checked="" type="checkbox"/> Unlined <input type="checkbox"/> Liner type: Fiberglass <input checked="" type="checkbox"/> Thickness <b>Unknown</b> mil Clay <input type="checkbox"/> Pit Volume 14,000 bbl	Volume: ____ bbl Type of fluid: ____ Construction material: ____ Double-walled, with leak detection? Yes <input type="checkbox"/> If not, explain why not.
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) 100 feet or more (0 points) <b>0</b>
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) <b>0</b>
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) 1000 feet or more (0 points) <b>0</b>
Ranking Score (Total Points) <b>0</b>	

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: This registration is for information purposes only. This pit was constructed in the 1960's and were inventoried, but never registered in 1997.  
This pit is out of service and a work plan for closure is being prepared.

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 ☐. See above ☒

Date: 6-15-2007

Printed Name/Title Bruce Woodard, Engineer

Signature 

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:

Printed Name/Title \_\_\_\_\_

Signature \_\_\_\_\_

Date: \_\_\_\_\_