1RP-1554

Groundwater Sampling Report

DATE:
March 29, 2012

1 of 4

TETRA TECH

March 29, 2012

Mr. Glenn von Gonten
New Mexico Energy, Minerals, & Natural Resources
Oil Conservation Division, Environmental Bureau
1220 S. St. Francis Drive
Santa Fe, New Mexico 87504

Re: Comprehensive Groundwater Sampling Report for the Celero Energy II, LP, Rock Queen Unit Tank Battery #1, Located in Unit Letter B, Section 25, Township 13 South, Range 31 East, Chaves County, New Mexico (NMOCD 1RP#1554).

Mr. Von Gonten:

This report details the results of the groundwater sampling events performed at the Celero Energy II, LP (Celero), Rock Queen Unit Tank Battery #1 (Site) from May 2007 through December 2011. The Site is located approximately 21.50 miles north of Maljamar, New Mexico. The Site location is shown on Figures 1 and 2.

FACILITY BACKGROUND

Pit Closure

On August 13, 2007, Highlander (Tetra Tech) submitted an Investigation and Characterization work plan (ICP) for an open pit at the Site. The ICP was approved by the New Mexico Oil Conservation Division (NMOCD). On September 4, 2007, Highlander submitted an additional report entitled *Workplan for Capping and Site Closure* for the Pit at this Site.

The Tract 1 Tank Battery pit was dewatered and the residual sludge, tank bottom materials, and liner were removed in late July and early August 2007. Removed fluids were placed into an existing SWD system or taken for disposal, while the sludge, tank bottom materials, and liner were disposed of at Gandy-Marley, Inc.'s landfill site in Lovington, New Mexico. Upon completion of the removal of the fluids, sludge, and liner, the underlying soils were visually inspected for signs of impact. Approximately 200 cubic yards of soil were

Tetra Tech
1910 North Big Spring, Midland,TX 79705
Tel 432.682.4559 Fax 432.682.3946 www.tetratech.com

excavated and transported to Gandy-Marley, Inc. facility for disposal. The pit was excavated to a point where the subsoil would support a soil boring rig.

On October 12, 2009, a report entitled *Assessment and Closure Report for the Pit located at the Rock Queen Unit Tank Battery #1* was submitted to the NMOCD. The report detailed the closure of the former pit at the facility.

Groundwater Investigation

Between May 2007 and January 2011, Celero installed seven 2-inch monitor wells (MW-1 through MW-7) and one 5-inch recovery well (RW-1) to assess the groundwater quality at the Site. The lithology at the Site was relatively consistent with limestone encountered to approximately 15 to 20 feet below ground surface (bgs), and very fine grain sands extending to approximately 120 to 130 feet bgs. From approximately 130 feet to the terminus of the borings (approximately 135 to 150 feet) the soils consisted of a gray clay. See Appendix A for Boring Logs.

During the investigation, groundwater was encountered at depths of approximately 116 to 121 feet bgs. Monitor Well MW-1 was drilled into the surrounding underlying clay to 150 feet bgs and installed with 40 feet of 0.01 inch slotted screen. The remaining monitor wells were drilled to depths of 130 to 140 feet bgs and installed with 30 feet of 0.02 inch slotted screen. Recovery well RW-1 was drilled to a depth of 130 feet and installed with 20 feet of 0.035 inch slotted screen. From the top of the screens to the surface of the boring, the wells were completed with blank schedule 40 PVC casing. See Appendix B for monitor well installation diagrams.

During the investigation and subsequent sampling, the only constituents of concern which were detected in the groundwater above New Mexico Water Quality Control Commission (NMWQCC) standards was chlorides, TDS, SO4 and benzene (which was found only in recovery well RW-1). No Phase Separated Hydrocarbons (PSH) has been measured in any of the onsite monitor wells. See Figure 3 detailing the monitor well locations.

Gauging and Monitor Well Sampling

On December 28, 2009, initial sampling began at the site. During 2010, additional monitor wells were installed and quarterly sampling initiated. During the sampling events, all monitor wells were gauged and sampled with no PSH measured. Utilizing the water level elevation calculations, groundwater gradient maps were generated for the sampling events. The hydraulic gradient indicates a south to southwesterly direction. Groundwater gradient maps for the sampling events are included as Figures 4 through 10. Gauging data is summarized in Table 1.

During the sampling events, each of the wells was purged utilizing either a submersible pump or by hand bailing and subsequently sampled for BTEX utilizing method SW8021B, chlorides and sulfates utilizing method E 300.0, total dissolved solids (TDS) utilizing method SM2540C and periodically for general chemistry using methods SM2320B, SW6010B, SM4500-H+. The samples were properly preserved and submitted under proper chain-of-custody control to Trace Analysis Inc. of Lubbock, Texas. Of the samples collected, only one sample (RW-1 on April 14, 2011 with a result of 0.0133 milligrams per liter [mg/L]) exceeded the NMWQCC standard of 0.01 milligrams per liter (mg/L) of benzene. The remainder of the samples was below the NMWQCC standards with a majority being at or below detection limits. Chlorides for the sampling period ranged from 40.9 mg/L in up gradient monitor well MW-5 on July 28, 2011 to 168,000 mg/L in monitor well MW-1 on April 13, 2011. With the exception of MW-5 all additional monitor wells exceeded the NMWQCC standard of 250 mg/L chlorides. The general chemistry and BTEX analyses are shown in Tables 2 and 3, respectively. Chloride concentration maps for the sampling events are included as Figures 11 through 17. Copies of the laboratory analyses are enclosed in Appendix C.

It was noted during sampling that all seven monitor wells (MW-1 through MW-7) bail dry, while very little drawdown was noted in Recovery Well RW-1.

CONCLUSIONS

1. On December 28, 2009, initial sampling began at the site. During 2010, additional monitor wells were installed and quarterly sampling initiated. During the sampling events, all monitor wells were gauged, purged and sampled. The samples were preserved, delivered to Trace Analysis, Inc. of Midland, Texas and analyzed for BTEX utilizing method SW8021B, chlorides and sulfates utilizing method E 300.0, total dissolved solids (TDS) utilizing method SM2540C and periodically for general chemistry using methods SM2320B, SW6010B, SM4500-H+.

2. The hydraulic gradient indicates a south to southwesterly direction at the site.

3. Benzene was detected above the NMWQCC standards of 0.01 mg/L in recover well RW-1 on April 14, 2011 with a result of 0.0133 mg/L. All remaining wells were below the NMWQCC standards.

4. Chloride concentrations exceed the NMWQCC standards of 250 mg/L in all monitor/recover wells with the exception of up gradient MW-5. The chloride concentrations at the site range from 40.9 mg/L in MW-5 on

January 24, 2011 to 168,000 mg/L in MW-1 on April 13, 2011, which is near the initial source area.

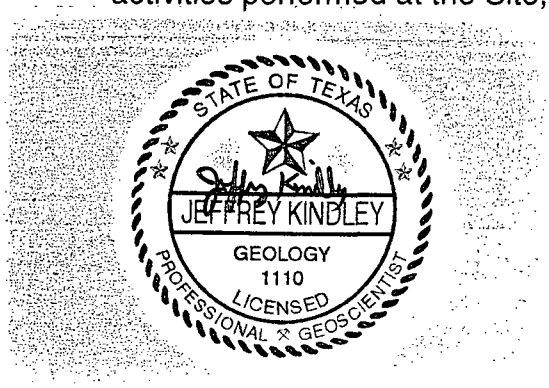
RECOMMENDATIONS

1. Quarterly groundwater monitoring and gauging will be continued throughout the year.

2. Additional monitor wells will be installed in order to further delineate the chloride plume at the site.

3. A remediation system consisting of a windmill system was installed on January 20, 2012 in recovery well RW-1. The recovered fluids are collected in a 3,000 gallon above ground tank and will be utilized for possible water flooding purposes in the surrounding oilfield.

If you have any question or comments concerning the assessment or the activities performed at the Site, please call me at (432) 682-4559.



Respectfully submitted,
Tetra Tech, Inc.

Jeffrey Kindley, P.G.
Senior Environmental Geologist

cc: Bruce Woodard – Celero Energy II, LP

FIGURES

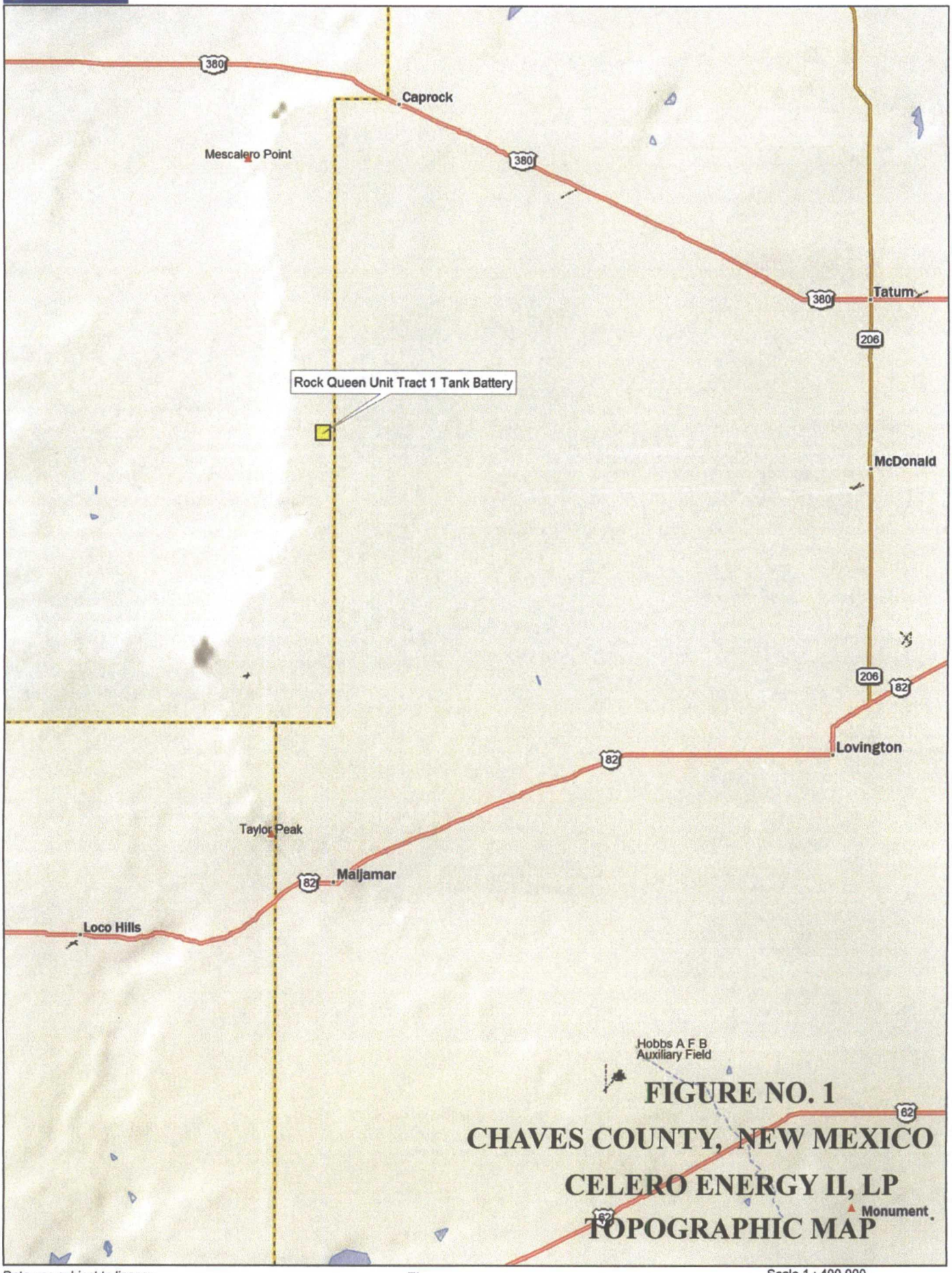


FIGURE NO. 1
CHAVES COUNTY, NEW MEXICO
CELERO ENERGY II, LP
TOPOGRAPHIC MAP

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TN

MN (7.7°E)

Scale 1 : 400,000

1" = 6.31 mi

Data Zoom 8-7

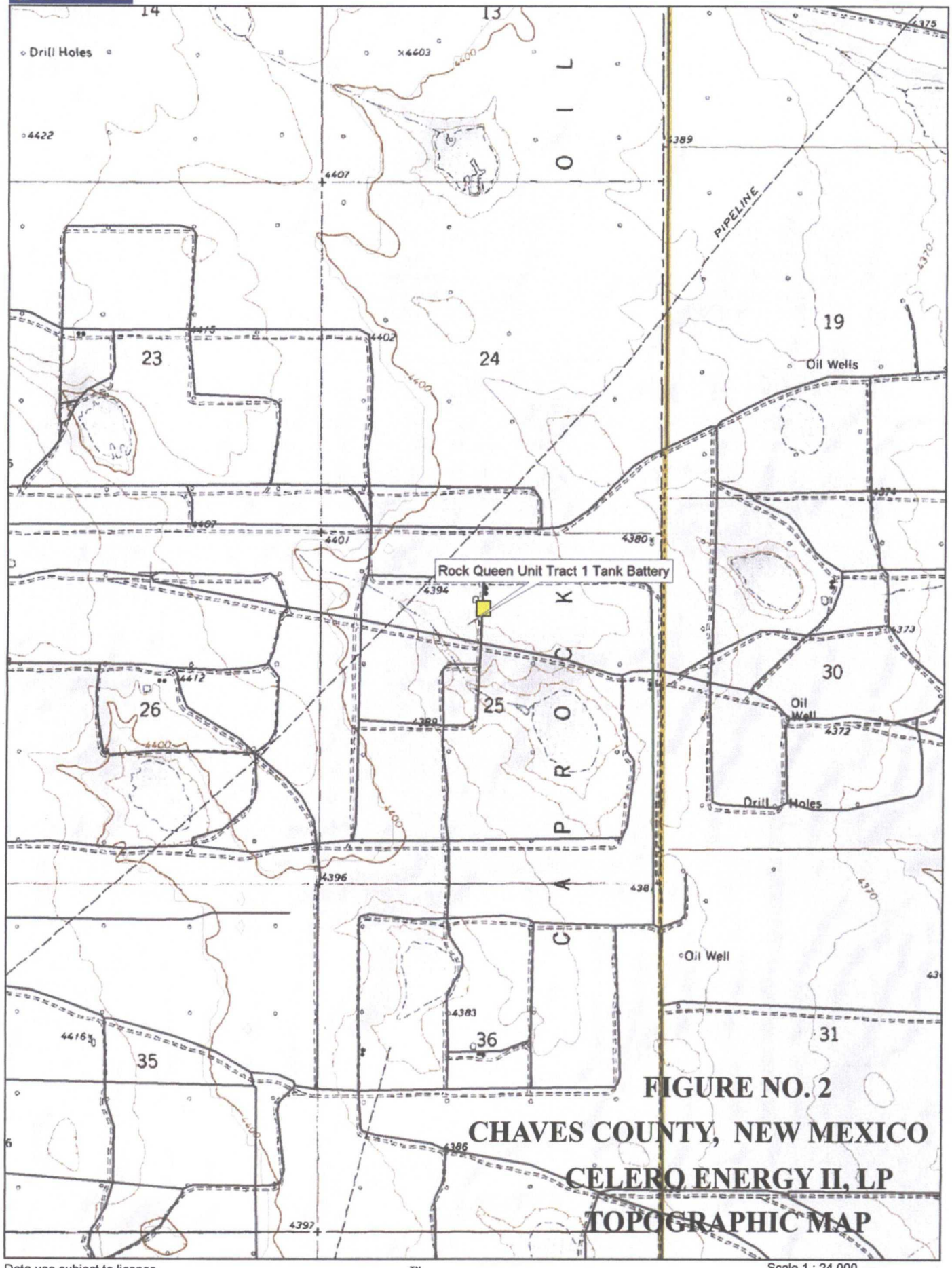

FIGURE NO. 2
CHAVES COUNTY, NEW MEXICO
CELERO ENERGY II, LP
TOPOGRAPHIC MAP

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TN
MN (7.7°E)

Scale 1 : 24,000
1" = 2,000.0 ft
Data Zoom 12-7

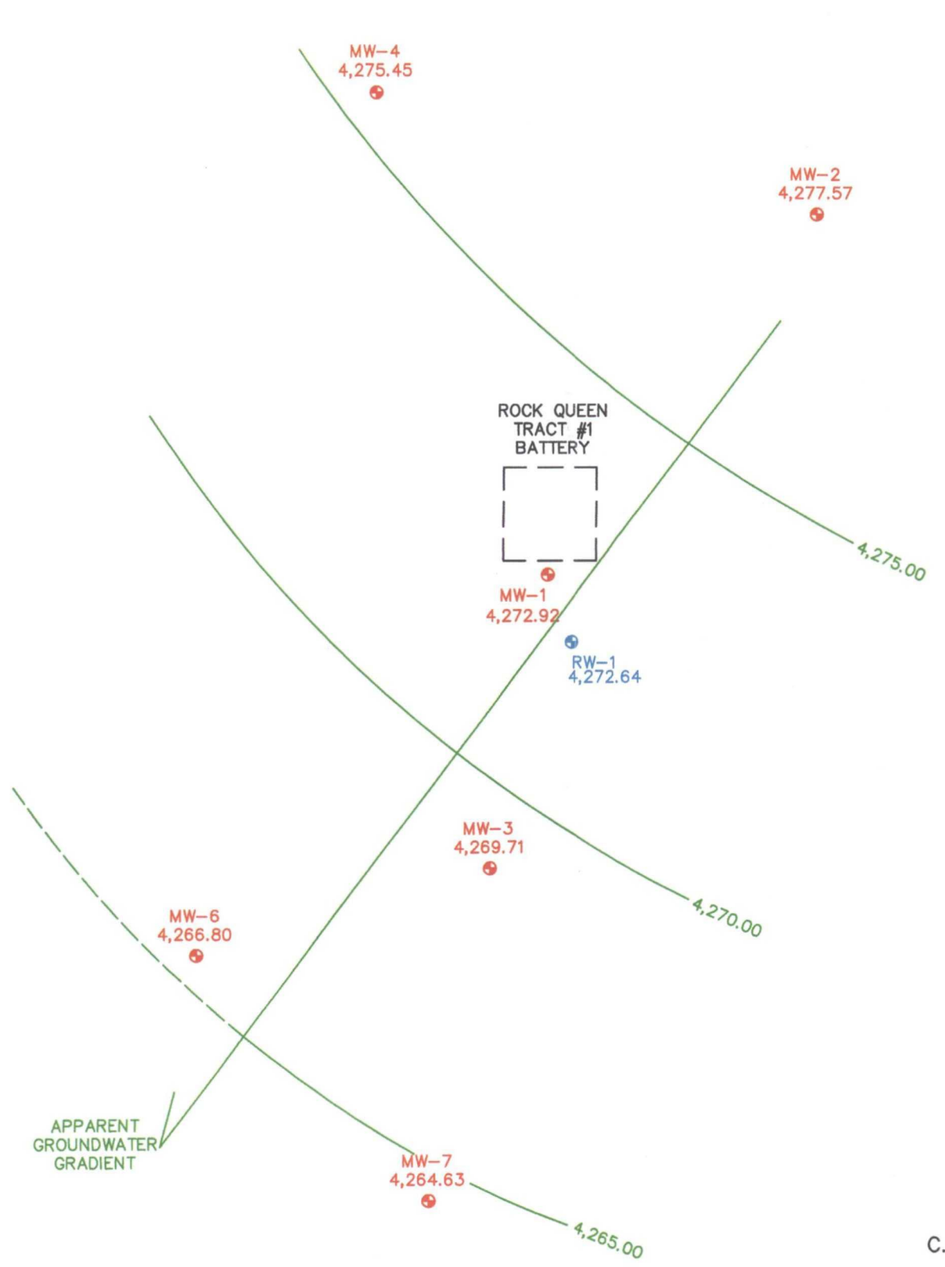


FIGURE NO. 10

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
TRACT 1 TANK BATTERY
GROUNDWATER GRADIENT MAP
GAUGED ON 10/24/2011

DATE: 10/24/2012
DWN. BY: IM
FILE: C:\CELERO\3129\GW GRADIENT 10-24-12

TETRA TECH, INC.
MIDLAND, TEXAS

MW–4
5,070

MW–2
5,480

ROCK QUEEN
TRACT #1
BATTERY

MW–1
164,000

MW–3
22,400

MONITOR WELLS
RECOVERY WELLS

RESULTS IN mg/L

SCALE: 100'
0 100'

DATE: 12/28/2009
DWN. BY: IM
FILE: C:\CELERO\3129\TRACT 1 TB

FIGURE NO. 11

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
TRACT 1 TANK BATTERY
CHLORIDE CONCENTRATION MAP
SAMPLED ON 12/28/2009

TETRA TECH, INC.
MIDLAND, TEXAS

MW-4
1,140

MW-2
5,480

ROCK QUEEN
TRACT #1
BATTERY

MW-1
49,900

MW-3
133,000

MONITOR WELLS
RECOVERY WELLS

RESULTS IN mg/L

SCALE: 100'
0 100'

DATE: 07/12/2010
DWN. BY: IM
FILE: C:\CELERO\3129\TRACT 1 TB

FIGURE NO. 12

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
TRACT 1 TANK BATTERY
CHLORIDE CONCENTRATION MAP
SAMPLED ON 07/12/2010

TETRA TECH, INC.
MIDLAND, TEXAS

MW–4
16,500

MW–2
6,580

ROCK QUEEN
TRACT #1
BATTERY

MW–1
133,080

MW–3
57,300

MONITOR WELLS
RECOVERY WELLS

RESULTS IN mg/L

SCALE: 100'
0 100'

DATE: 10/11/10
DWN. BY: IM
FILE: C:\CELERO\3129\TRACT 1 TB

FIGURE NO. 13

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
TRACT 1 TANK BATTERY
CHLORIDE CONCENTRATION MAP
SAMPLED ON 10/11/2010

TETRA TECH, INC.
MIDLAND, TEXAS

MW-4
6,230

MW-5
121

MW-2
7,310

ROCK QUEEN
TRACT #1
BATTERY

MW-1
144,000

RW-1
NS

MW-3
51,900

MW-6
88,900

MW-7
92,400

MONITOR WELLS
RECOVERY WELLS

NS = NOT SAMPLED
RESULTS IN mg/L

SCALE: 100'
0 100'

DATE: 1/24/2011
DWN. BY: IM
FILE: C:\CELERO\3129\TRACT 1 TB

FIGURE NO. 14

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
TRACT 1 TANK BATTERY
CHLORIDE CONCENTRATION MAP
SAMPLED ON 01/24/2011

TETRA TECH, INC.
MIDLAND, TEXAS

MW-4
7,870

MW-5
62.7

MW-2
8,270

ROCK QUEEN
TRACT #1
BATTERY

MW-1
168,000

RW-1
139,000

MW-3
57,800

MW-6
92,900

MW-7
102,000

MONITOR WELLS
RECOVERY WELLS

RESULTS IN mg/L

SCALE: 100'
0 100'

DATE: 4/13/2011
DWN. BY: IM
FILE: C:\CELERO\3129\TRACT 1 TB

FIGURE NO. 15

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
TRACT 1 TANK BATTERY
CHLORIDE CONCENTRATION MAP
SAMPLED ON 04/13/2011

TETRA TECH, INC.
MIDLAND, TEXAS

MW–4
934

MW–5
305

MW–2
9,870

ROCK QUEEN
TRACT #1
BATTERY

MW–1
141,000

RW–1
N/S

MW–3
67,300

MW–6
101,000

MW–7
99,400

MONITOR WELLS
RECOVERY WELLS

RESULTS IN mg/L

SCALE: 100'
0 100'

DATE: 7/28/2011
DWN. BY: IM
FILE: C:\CELERO\3129\TRACT 1 TB CHLORIDE

FIGURE NO. 16

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
TRACT 1 TANK BATTERY
CHLORIDE CONCENTRATION MAP
SAMPLED ON 7/28/2011

TETRA TECH, INC.
MIDLAND, TEXAS

MW–4
23,700

MW–5
128

MW–2
9,200

ROCK QUEEN
TRACT #1
BATTERY

MW–1
155,000

RW–1

MW–3
60,700

MW–6
111,000

MW–7
99,400

MONITOR WELLS
RECOVERY WELLS

RESULTS IN mg/L

SCALE: 100'
0 100'

DATE: 10/25/2011
DWN. BY: IM
FILE: C:\CELERO\3129\TRACT 1 TB CHLORIDE

FIGURE NO. 17

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
TRACT 1 TANK BATTERY
CHLORIDE CONCENTRATION MAP
SAMPLED ON 10/25/2011

TETRA TECH, INC.
MIDLAND, TEXAS

MW–4

MW–5

MW–2

ROCK QUEEN
TRACT #1
BATTERY

MW–1

RW–1

MW–3

MW–6

MW–7

MONITOR WELLS
RECOVERY WELLS

SCALE: 200'

0 200'

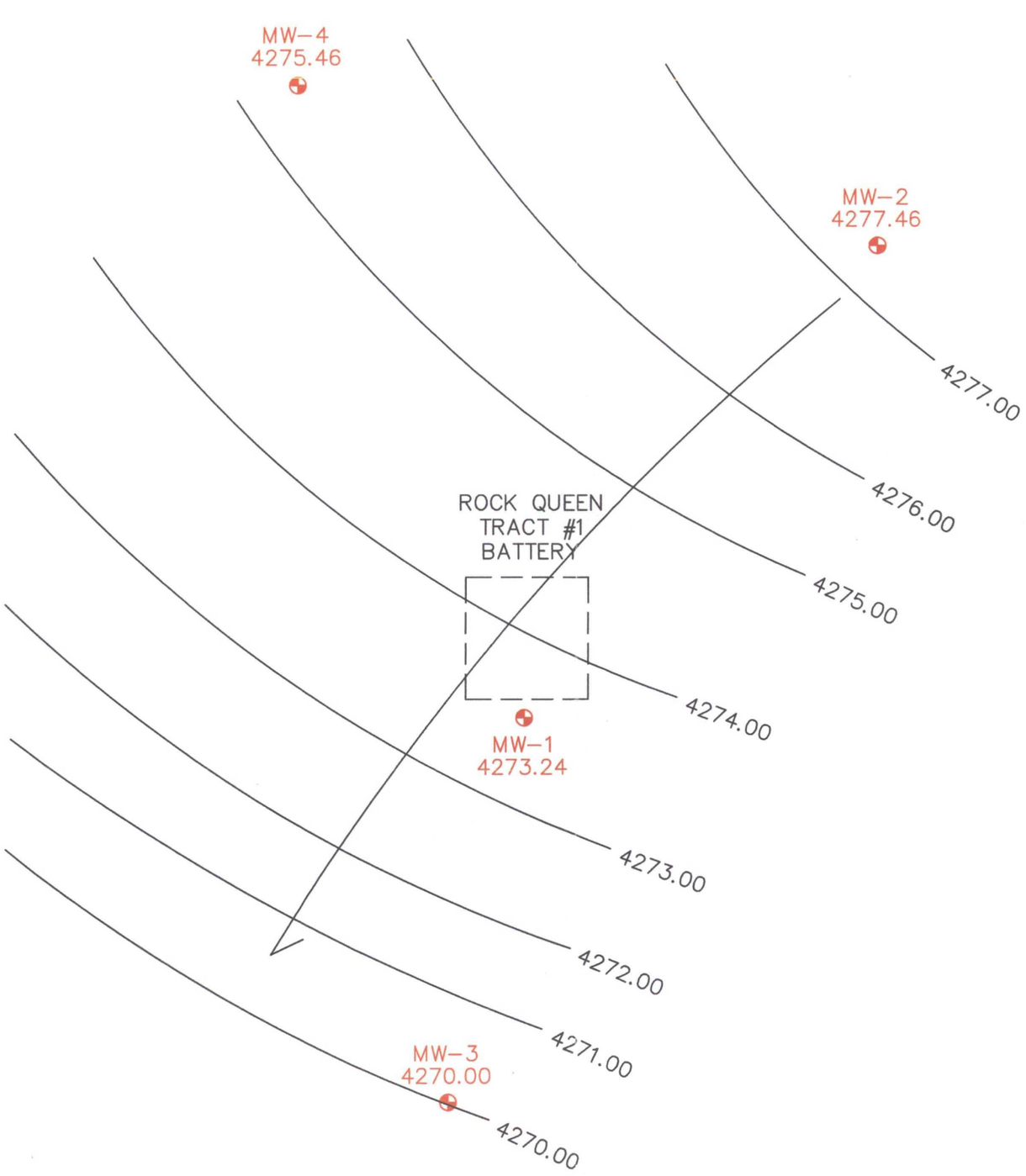
DATE: 9/4/07
DWN. BY: JJ
FILE: C:\CELERO\3129\TRACT 1 TB

FIGURE NO. 3

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
TRACT 1 TANK BATTERY
SITE MAP

TETRA TECH, INC.
MIDLAND, TEXAS



C.I. = 1'

SCALE: 100'
0 100'

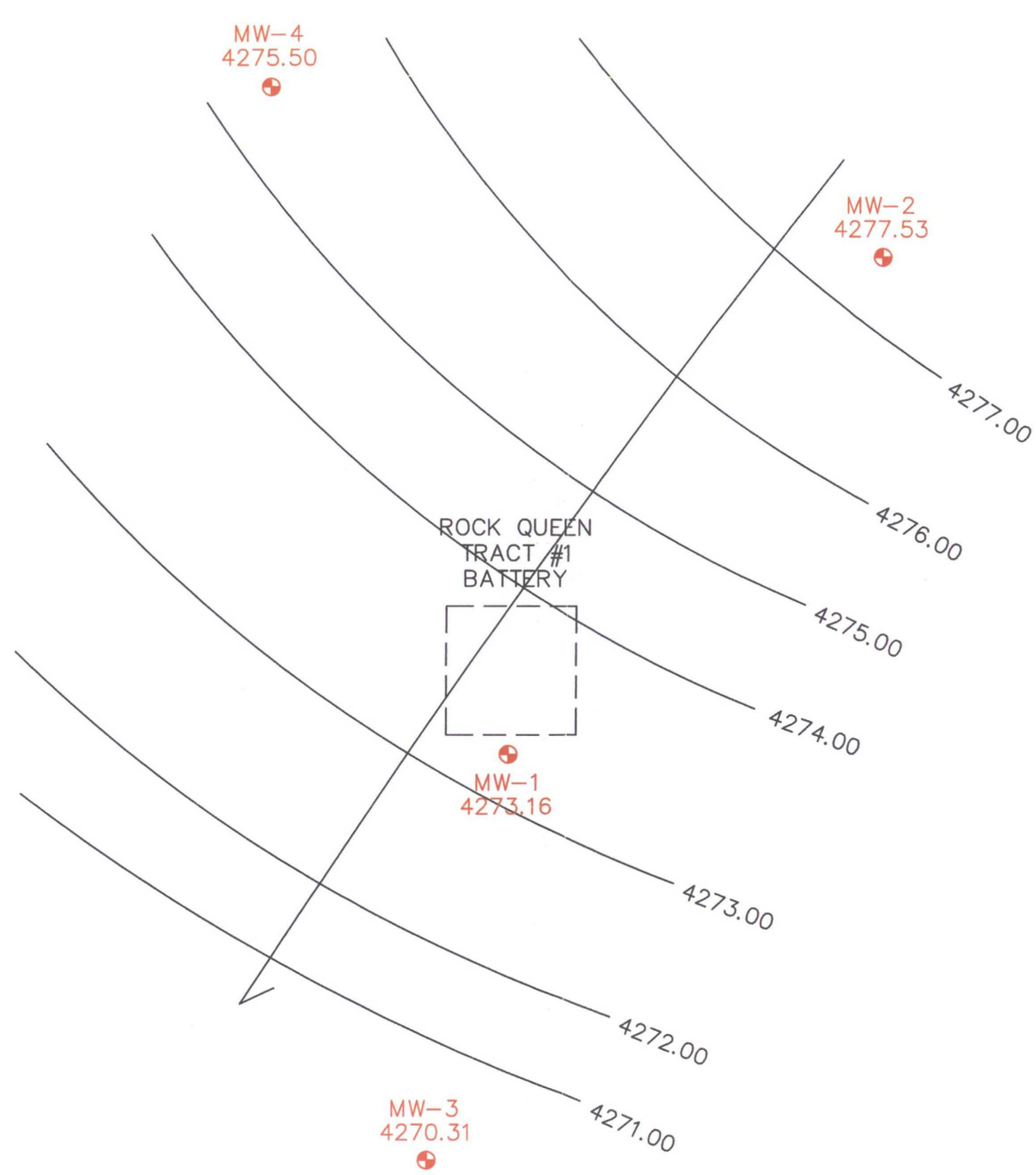
DATE: 12/28/2009
DWN. BY: IM
FILE: C:\CELERO\3129\TRACT 1 TB

FIGURE NO. 4

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
TRACT 1 TANK BATTERY
GROUNDWATER GRADIENT MAP
GAUGED ON 12/28/2009

TETRA TECH, INC.
MIDLAND, TEXAS



C.I. = 1'

SCALE: 100'
0 100'

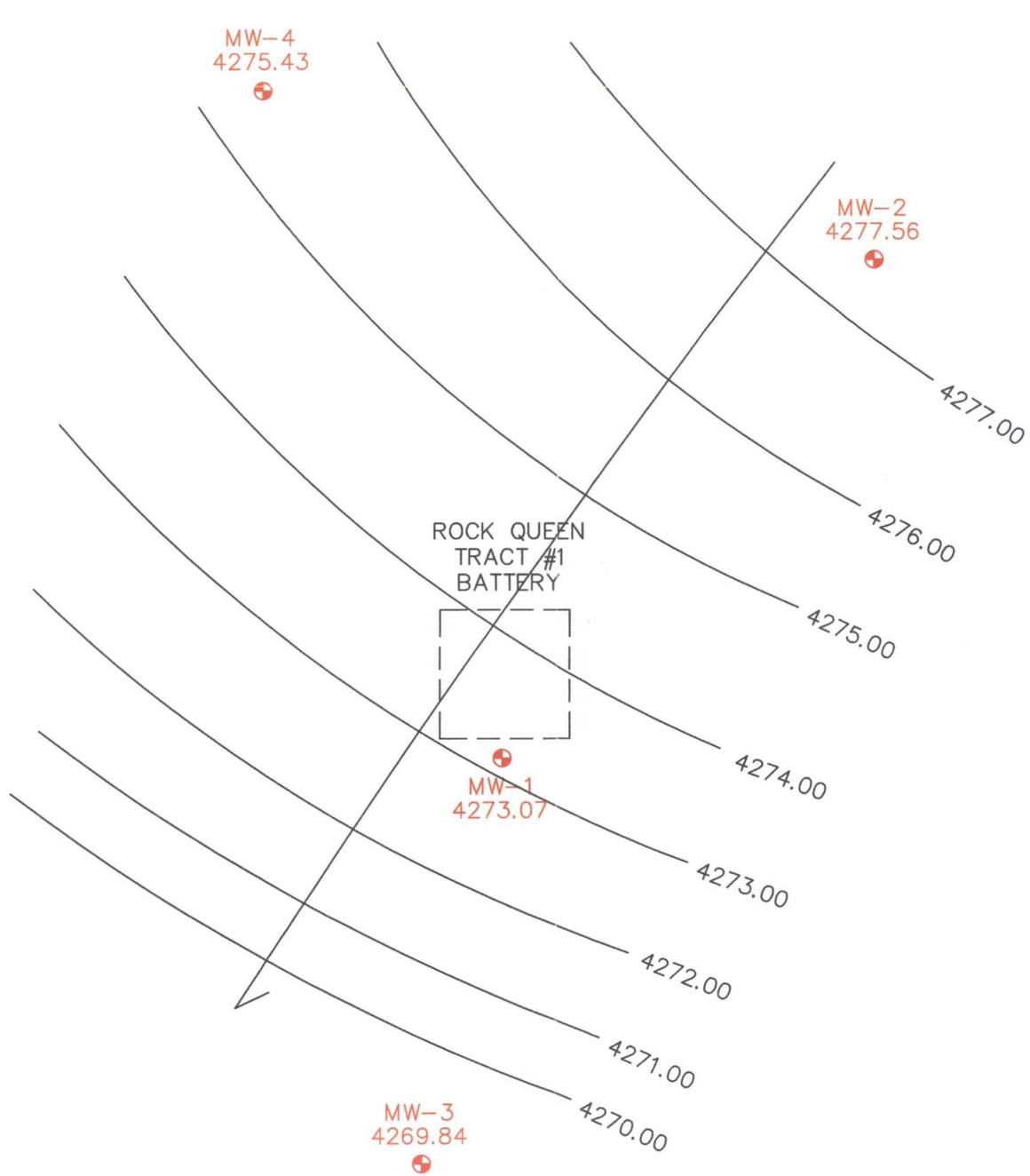
DATE: 07/12/2010
DWN. BY: IM
FILE: C:\CELERO\3129\TRACT 1 TB

FIGURE NO. 5

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
TRACT 1 TANK BATTERY
GROUNDWATER GRADIENT MAP
GAUGED ON 07/12/2010

TETRA TECH, INC.
MIDLAND, TEXAS



C.I. = 1'

SCALE: 100'
0 100'

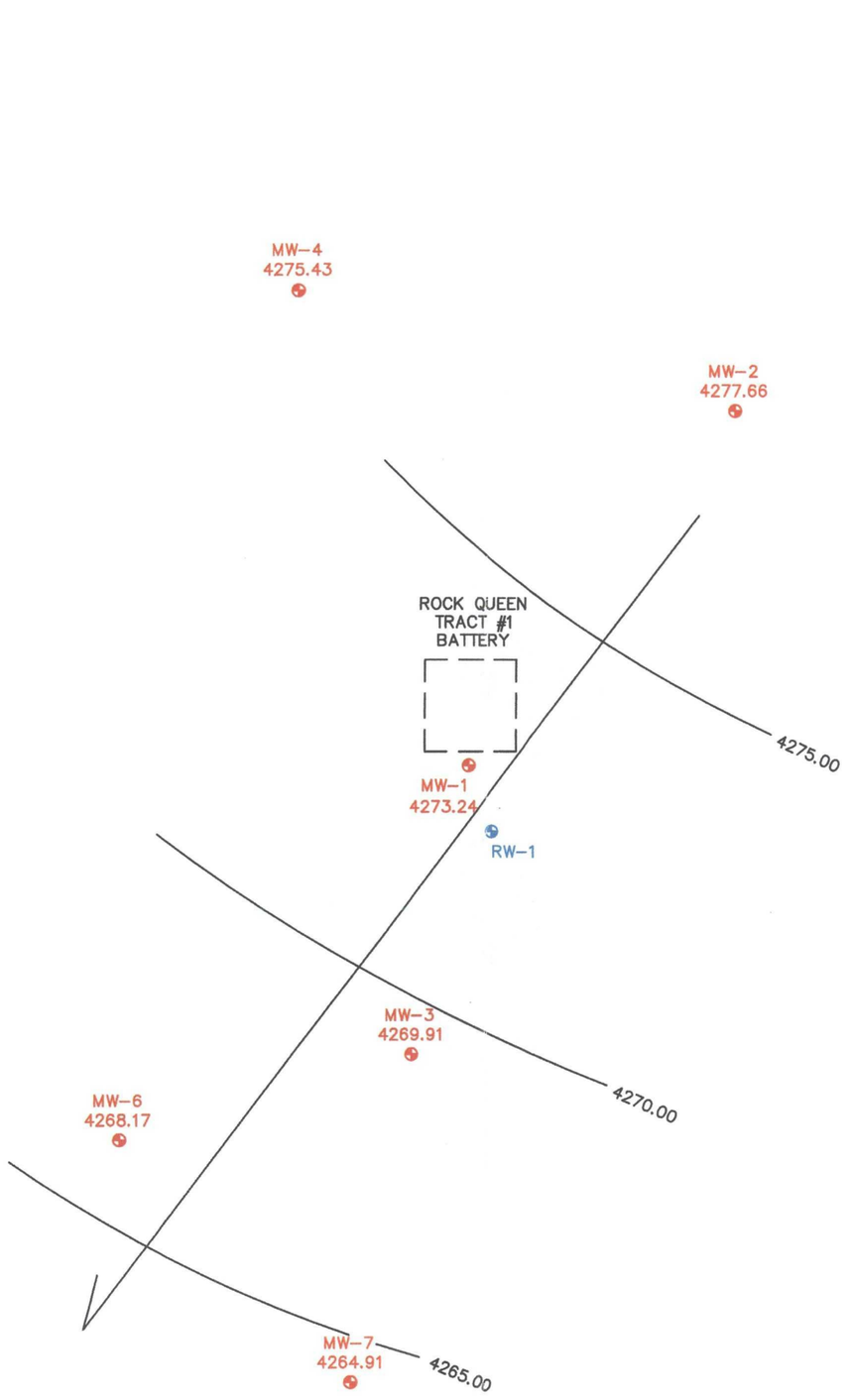
DATE: 10/11/2010
DWN. BY: IM
FILE: C:\CELERO\3129\TRACT 1 TB

FIGURE NO. 6

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
TRACT 1 TANK BATTERY
GROUNDWATER GRADIENT MAP
GAUGED ON 10/11/2010

TETRA TECH, INC.
MIDLAND, TEXAS



MONITOR WELLS
RECOVERY WELLS

C.I. = 5'

SCALE: 100'
0 100'

DATE: 1/17/11
DWN. BY: IM
FILE: C:\CELERO\3129\TRACT 1 TB

FIGURE NO. 7

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
TRACT 1 TANK BATTERY
GROUNDWATER GRADIENT MAP
GAUGED ON 1/17/2011

TETRA TECH, INC.
MIDLAND, TEXAS

MW–4
4275.44

MW–5
4279.76

MW–2
4277.67

ROCK QUEEN
TRACT #1
BATTERY

4275.00

MW–1
4273.19

RW–1

MW–3
4269.87

4270.00

MW–6
4268.11

MW–7
4264.88

4265.00

MONITOR WELLS
RECOVERY WELLS

C.I. = 5'

SCALE: 100'
0 100'

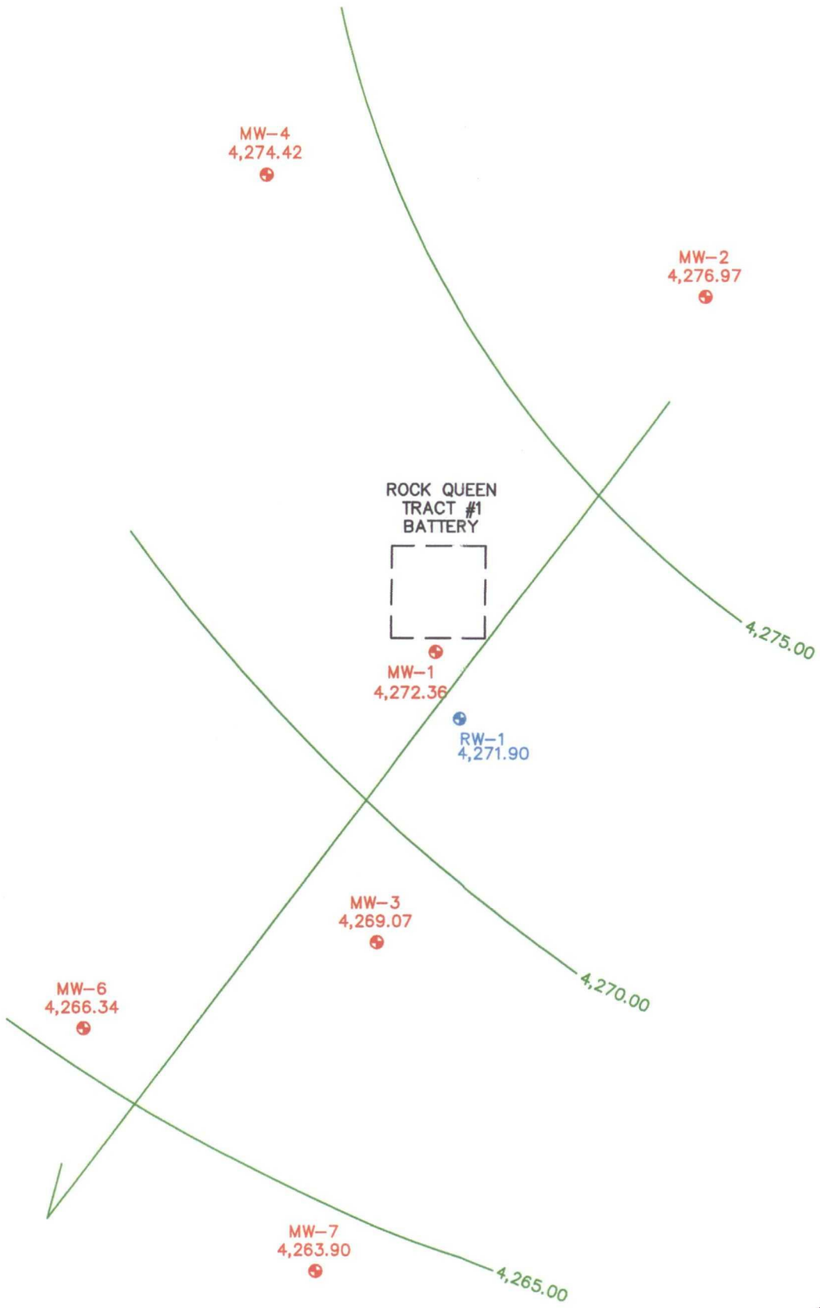
DATE: 4/11/2011
DWN. BY: IM
FILE: C:\CELERO\3129\TRACT 1 TB

FIGURE NO. 8

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
TRACT 1 TANK BATTERY
GROUNDWATER GRADIENT MAP
GAUGED ON 04/11/2011

TETRA TECH, INC.
MIDLAND, TEXAS



MONITOR WELLS
RECOVERY WELLS

C.I. = 5'

SCALE: 100'
0 100'

DATE: 7/27/2011
DWN. BY: IM
FILE: C:\CELERO\3129\GW GRADIENT 7–27–11

FIGURE NO. 9

CHAVES COUNTY, NEW MEXICO

CELERO ENERGY
TRACT 1 TANK BATTERY
GROUNDWATER GRADIENT MAP
GAUGED ON 7/27/2011

TETRA TECH, INC.
MIDLAND, TEXAS

TABLES

Table 1
Celero Energy II, LP
Groundwater Gauging Data
Rock Queen Unit Tract 1 Tank Battery
Chaves County, New Mexico

Monitor Well	Date Gauged	Date Well Installation	TOC Elevation (ft)	Depth of Well (bgs in ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)
MW-1	05/25/07	05/24/07	4,393.50	152.80	102.80	4,290.70
	02/05/08				119.51	4,273.99
	12/28/09				120.26	4,273.24
	07/12/10				120.34	4,273.16
	10/11/10				120.43	4,273.07
	01/17/11				120.26	4,273.24
	04/11/11				120.31	4,273.19
	07/27/11				121.14	4,272.36
	10/24/11				120.58	4,272.92
MW-2	06/01/07	05/30/07	4,397.33	139.50	94.78	4,302.55
	02/05/08				119.89	4,277.44
	12/28/09				119.87	4,277.46
	07/12/10				119.80	4,277.53
	10/11/10				119.77	4,277.56
	01/17/11				119.67	4,277.66
	04/11/11				119.66	4,277.67
	07/27/11				120.36	4,276.97
	10/24/11				119.76	4,277.57
MW-3	12/28/09	12/09/09	4,390.65	137.28	120.65	4,270.00
	07/12/10				120.34	4,270.31
	10/11/10				120.81	4,269.84
	01/17/11				120.74	4,269.91
	04/11/11				120.78	4,269.87
	07/27/11				121.58	4,269.07
	10/24/11				120.94	4,269.71
MW-4	12/28/09	12/10/09	4,396.96	139.40	121.50	4,275.46
	07/12/10				121.46	4,275.50
	10/11/10				121.53	4,275.43
	01/17/11				121.53	4,275.43
	04/11/11				121.52	4,275.44
	07/27/11				122.54	4,274.42

Table 1
Celero Energy II, LP
Groundwater Gauging Data
Rock Queen Unit Tract 1 Tank Battery
Chaves County, New Mexico

Monitor Well	Date Gauged	Date Well Installation	TOC Elevation (ft)	Depth of Well (bgs in ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)
MW-4	10/24/11				121.51	4,275.45
MW-5	01/17/11	11/23/10	4,395.87	133.35	116.10	4,279.77
	04/11/11				116.11	4,279.76
	07/27/11				116.93	4,278.94
	10/24/11				116.21	4,279.66
MW-6	01/17/11	11/29/10	4,390.58	142.55	122.41	4,268.17
	04/11/11				122.47	4,268.11
	07/27/11				124.24	4,266.34
	10/24/11				123.78	4,266.80
MW-7	01/17/11	11/23/10	4,388.41	139.00	123.50	4,264.91
	04/11/11				123.53	4,264.88
	07/27/11				124.51	4,263.90
	10/24/11				123.78	4,264.63
RW-1	01/17/11	12/13/10	4,392.97	131.40	120.05	4,272.92
	04/11/11				120.07	4,272.90
	07/27/11				121.07	4,271.90
	10/24/11				120.33	4,272.64

Table 2
Celero Energy II, LP
Groundwater Analytical Results
Rock Queen Unit Tract 1 Tank Battery
Chaves County, New Mexico

Monitor Well	Date Sampled	Dissolved Calcium (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Sodium (mg/L)	Dissolved Potassium (mg/L)	Hydroxide Alkalinity (mg/L)	Carbonate Alkalinity (mg/L)	Bicarbonate Alkalinity (mg/L)	Total Alkalinity (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	TDS (mg/L)	Hardness (mg/L)	pH
MW-1	05/29/07	2,170	3,320	75,500	1380.0	<1.00	<1.00	154	154	2,290	146,000	188,300	17,400	6.61
	12/28/09	2,520	4,370	64,600	2490.0	<1.00	<1.00	<4.00	<4.00	2,230	164,000	244,000	24,300	5.27
	07/12/10	-	-	-	-	-	-	-	-	1,720	49,900	98,000	-	-
	10/11/10	-	-	-	-	-	-	-	-	1,870	133,000	260,000	-	-
	01/24/11	-	-	-	-	-	-	-	-	2,560	144,000	258,000	-	-
	04/13/11	-	-	-	-	-	-	-	-	2,210	168,000	250,000	-	-
	07/28/11	-	-	-	-	-	-	-	-	2,210	141,000	231,000	-	-
	10/25/11	-	-	-	-	-	-	-	-	2,270	155,000	239,000	-	-
MW-2	08/05/08	-	-	-	-	-	-	-	-	-	5,510	-	-	-
	12/28/09	1,630	379	1,360	18.0	<1.00	<1.00	138	138	4.43	5,480	14,000	5,630	7.30
	07/12/10	-	-	-	-	-	-	-	-	47.80	5,930	14,100	-	-
	10/11/10	-	-	-	-	-	-	-	-	88.90	6,580	11,700	-	-
	01/24/11	-	-	-	-	-	-	-	-	108	7,310	26,800	-	-
	04/13/11	-	-	-	-	-	-	-	-	125	8,270	29,800	-	-
	07/28/11	-	-	-	-	-	-	-	-	135	9,870	25,300	-	-
	10/25/11	-	-	-	-	-	-	-	-	189	9,200	14,800	-	-
MW-3	12/28/09	2,120	804	12,000	146.0	<1.00	<1.00	106	106	661	22,400	40,700	8,600	6.77
	07/12/10	-	-	-	-	-	-	-	-	1,970	133,000	237,000	-	-
	10/11/10	-	-	-	-	-	-	-	-	1,630	57,300	110,000	-	-
	01/24/11	-	-	-	-	-	-	-	-	2,280	51,900	95,300	-	-
	04/13/11	-	-	-	-	-	-	-	-	1,990	57,800	103,000	-	-
	07/28/11	-	-	-	-	-	-	-	-	2,070	67,300	93,400	-	-
	10/25/11	-	-	-	-	-	-	-	-	2,000	60,700	110,000	-	-
MW-4	12/28/09	1,660	349	1,020	14.1	<1.00	<1.00	99	99	148	5,070	9,900	5,580	7.51
	07/12/10	-	-	-	-	-	-	-	-	71.1	1,140	1,880	-	-
	10/11/10	-	-	-	-	-	-	-	-	238.0	16,500	43,800	-	-
	01/24/11	-	-	-	-	-	-	-	-	180.0	6,230	12,400	-	-

Table 2
Celero Energy II, LP
Groundwater Analytical Results
Rock Queen Unit Tract 1 Tank Battery
Chaves County, New Mexico

Monitor Well	Date Sampled	Dissolved Calcium (mg/L)	Dissolved Magnesium (mg/L)	Dissolved Sodium (mg/L)	Dissolved Potassium (mg/L)	Hydroxide Alkalinity (mg/L)	Carbonate Alkalinity (mg/L)	Bicarbonate Alkalinity (mg/L)	Total Alkalinity (mg/L)	Sulfate (mg/L)	Chloride (mg/L)	TDS (mg/L)	Hardness (mg/L)	pH
MW-4	04/13/11	-	-	-	-	-	-	-	-	193.0	7,870	18,500	-	-
	07/28/11	-	-	-	-	-	-	-	-	90.5	934	1,720	-	-
	10/25/11	-	-	-	-	-	-	-	-	442	23,700	48,300	-	-
MW-5	01/24/11	-	-	-	-	-	-	-	-	58.4	121	518	-	-
	04/13/11	-	-	-	-	-	-	-	-	62.7	126	458	-	-
	07/28/11	-	-	-	-	-	-	-	-	138	40.9	414	-	-
	10/25/11	-	-	-	-	-	-	-	-	136	128	896	-	-
MW-6	01/24/11	-	-	-	-	-	-	-	-	2,850	88,900	161,000	-	-
	04/13/11	-	-	-	-	-	-	-	-	2,310	92,900	146,000	-	-
	07/28/11	-	-	-	-	-	-	-	-	2,680	101,000	160,000	-	-
	10/25/11	-	-	-	-	-	-	-	-	2,660	111,000	160,000	-	-
MW-7	01/24/11	-	-	-	-	-	-	-	-	2,580	92,400	179,000	-	-
	04/13/11	-	-	-	-	-	-	-	-	2,330	102,000	177,000	-	-
	07/28/11	-	-	-	-	-	-	-	-	2,300	99,400	194,000	-	-
	10/25/11	-	-	-	-	-	-	-	-	2,370	99,400	170,000	-	-
RW-1	01/24/11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	04/13/11	-	-	-	-	-	-	-	-	2,680	139,000	222,000	-	-
	07/28/11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/25/11	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

NS - Not sampled

(-) Not Analyzed

Table 3

Celero Energy II, LP

Groundwater Analytical Results

Rock Queen Unit Tract 1 Tank Battery

Chaves County, New Mexico

Monitor Well	Date Sampled	Benzene in (mg/L)	Toluene in (mg/L)	Ethyl-Benzene (mg/L)	Xylene in (mg/L)	Total BTEX (mg/L)
MW-1	12/28/09	<0.001	<0.001	<0.001	<0.001	<0.001
	07/12/10	<0.001	<0.001	<0.001	<0.001	<0.001
	10/11/10	<0.001	<0.001	<0.001	<0.001	<0.001
	01/24/11	<0.001	<0.001	<0.001	<0.001	<0.001
	04/14/11	0.006	<0.001	<0.001	<0.001	0.006
	07/28/11	<0.001	<0.001	<0.001	<0.001	<0.001
	10/25/11	<0.001	<0.001	<0.001	0.0205	0.0205
MW-2	12/28/09	<0.001	<0.001	<0.001	<0.001	<0.001
	07/12/10	<0.001	<0.001	<0.001	<0.001	<0.001
	10/11/10	<0.001	<0.001	<0.001	<0.001	<0.001
	01/24/11	<0.001	<0.001	<0.001	<0.001	<0.001
	04/14/11	<0.001	<0.001	<0.001	<0.001	<0.001
	07/28/11	<0.001	<0.001	<0.001	<0.001	<0.001
	10/25/11	<0.001	<0.001	<0.001	<0.001	<0.001
MW-3	12/28/09	<0.001	<0.001	<0.001	<0.001	<0.001
	07/12/10	<0.001	<0.001	<0.001	<0.001	<0.001
	10/11/10	<0.001	<0.001	<0.001	<0.001	<0.001
	01/24/11	<0.001	<0.001	<0.001	<0.001	<0.001
	04/14/11	<0.001	<0.001	<0.001	<0.001	<0.001
	07/28/11	<0.001	<0.001	<0.001	<0.001	<0.001
	10/25/11	<0.001	<0.001	<0.001	<0.001	<0.001
MW-4	12/28/09	<0.001	<0.001	<0.001	<0.001	<0.001
	07/12/10	<0.001	<0.001	<0.001	<0.001	<0.001
	10/11/10	<0.001	<0.001	<0.001	<0.001	<0.001
	01/24/11	<0.001	<0.001	<0.001	<0.001	<0.001
	04/14/11	<0.001	<0.001	<0.001	<0.001	<0.001
	07/28/11	<0.001	<0.001	<0.001	<0.001	<0.001
	10/25/11	<0.001	<0.001	<0.001	<0.001	<0.001
MW-5	01/24/11	<0.001	<0.001	<0.001	<0.001	<0.001
	04/14/11	<0.001	<0.001	<0.001	<0.001	<0.001
	07/28/11	<0.001	<0.001	<0.001	<0.001	<0.001
	10/25/11	<0.001	<0.001	<0.001	<0.001	<0.001
MW-6	01/24/11	<0.001	<0.001	<0.001	<0.001	<0.001
	04/14/11	0.0063	0.0062	<0.001	<0.001	0.0125
	07/28/11	<0.001	<0.001	<0.001	<0.001	<0.001
	10/25/11	<0.001	<0.001	<0.001	<0.001	<0.001
MW-7	01/24/11	<0.001	<0.001	<0.001	<0.001	<0.001
	04/14/11	<0.001	<0.001	<0.001	<0.001	<0.001
	07/28/11	<0.001	<0.001	<0.001	<0.001	<0.001
	10/25/11	<0.001	<0.001	<0.001	<0.001	<0.001
RW-1	01/24/11	NS	NS	NS	NS	NS

Table 3

Celero Energy II, LP

Groundwater Analytical Results

Rock Queen Unit Tract 1 Tank Battery

Chaves County, New Mexico

Monitor Well	Date Sampled	Benzene in (mg/L)	Toluene in (mg/L)	Ethyl-Benzene (mg/L)	Xylene in (mg/L)	Total BTEX (mg/L)
RW-1	04/14/11	0.0133	<0.001	<0.001	<0.001	0.0133
	07/28/11	NS	NS	NS	NS	NS
	10/25/11	NS	NS	NS	NS	NS
	01/05/12	NS	NS	NS	NS	NS

NS - Not sampled

APPENDIX A
BORING LOGS

SAMPLE LOG

Boring/Well MW-1
GPS N33.165308° W103.775339°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract 1 Tank Battery
Site Location Chaves County, New Mexico
Letter C, Section 25, Township 13 South, Range 31 East
Total Depth 150
Date Installed 05/24/07

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
3-5	NA	Buff/tan limestone
8-10	NA	Buff/tan calcareous fine grain sand
13-15	NA	Tan/buff calcareous fine grain sand
18-20	NA	Tan/buff calcareous fine grain sand
23-25	NA	Buff/tan calcareous sand
28-30	NA	Buff/tan calcareous sand
33-35	NA	Buff/tan calcareous sand
38-40	NA	Buff/tan calcareous sand
43-45	NA	Tan fine grain well sorted sand ("sugar" sand)
48-50	NA	Tan fine grain well sorted sand ("sugar" sand)
53-55	NA	Tan fine grain well sorted sand ("sugar" sand)
58-60	NA	Tan fine grain well sorted sand ("sugar" sand)
63-65	NA	Tan fine grain well sorted sand ("sugar" sand)
68-70	NA	Tan fine grain well sorted sand ("sugar" sand)
73-75	NA	Tan fine grain well sorted sand ("sugar" sand)
78-80	NA	Tan fine grain well sorted sand ("sugar" sand)
83-85	NA	Tan fine grain well sorted sand ("sugar" sand)
88-90	NA	Tan fine grain well sorted sand ("sugar" sand)
93-95	NA	Tan fine grain well sorted sand ("sugar" sand)
98-100	NA	Tan fine grain well sorted sand ("sugar" sand)
103-105	NA	Tan fine grain well sorted sand ("sugar" sand)
108-110	NA	Tan fine grain well sorted sand ("sugar" sand)
113-115	NA	Tan fine grain well sorted sand ("sugar" sand)
118-120	NA	Tan fine grain well sorted sand ("sugar" sand)
123-125	NA	Dark brown well sorted sand

SAMPLE LOG

Boring/Well MW-1
GPS N33.165308° W103.775339°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract 1 Tank Battery
Site Location Chaves County, New Mexico
Letter C, Section 25, Township 13 South, Range 31 East
Total Depth 150
Date Installed 05/24/07

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
128-130	NA	Dark brown well sorted sand
133-135	NA	Red clayey sand
138-140	NA	Red clayey sand
143-145	NA	Red clayey sand
148-150	NA	Red/tan clayey sand
Total Depth:	150'	Groundwater encountered at approximately 119 feet

SAMPLE LOG

Boring/Well MW-2
GPS N33.166367° W103.774397°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract 1 Tank Battery
Site Location Chaves County, New Mexico
Letter B, Section 25, Township 13 South, Range 31 East
Total Depth 140
Date Installed 06/01/07

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
0-5	NA	Buff limestone
5-10	NA	Tan/buff calcareous fine grain sand
10-15	NA	Tan/buff calcareous fine grain sand
15-20	NA	Tan/buff calcareous fine grain sand
20-25	NA	Tan/buff calcareous fine grain sand
25-30	NA	Tan/buff calcareous fine grain sand
30-35	NA	Tan/buff calcareous fine grain sand
35-38	NA	Tan/buff calcareous fine grain sand
38-45	NA	Tan fine to very fine grain sand
45-50	NA	Tan fine to very fine grain sand
50-55	NA	Tan fine to very fine grain sand
55-60	NA	Tan fine to very fine grain sand
63-65	NA	Tan fine to very fine grain sand
68-70	NA	Tan fine to very fine grain sand
73-75	NA	Tan fine to very fine grain sand
78-80	NA	Tan fine to very fine grain sand
83-85	NA	Tan fine to very fine grain sand
88-90	NA	Tan fine to very fine grain sand
93-95	NA	Tan fine to very fine grain sand
98-100	NA	Tan fine to very fine grain sand
100-106	NA	Tan fine to very fine grain sand
106-124	NA	Tan fine grain sand with light brown clay intermixed
124-130	NA	Tan sand with shale
130-131	NA	Gray to red clay
130-140	NA	Red clay
Total Depth:	140'	Groundwater encountered at approximately 119 feet

SAMPLE LOG

Boring/Well MW-3
GPS N33.166367° W103.774397°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract 1 Tank Battery
Site Location Chaves, New Mexico
Letter F, Section 25, Township 13 South, Range 31 East
Total Depth 135
Date Installed 12/09/09

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
5-6	--	Hard limestone with chert
10-11	--	Hard limestone with chert
15-16	--	Hard limestone with chert
20-21	--	Hard limestone with chert
25-26	--	Calcareous sand - very fine grain
30-31	--	Calcareous sand - very fine grain
35-36	--	Calcareous sand - very fine grain
40-41	--	Calcareous sand - very fine grain
45-46	--	Calcareous sand - very fine grain
50-51	--	Calcareous sand - very fine grain
55-56	--	Tan fine grain sand
60-61	--	Tan fine grain sand
65-66	--	Tan fine grain sand
70-71	--	Tan fine grain sand
75-76	--	Tan fine grain sand
80-81	--	Tan fine grain sand
85-86	--	Tan fine grain sand
90-91	--	Tan fine grain sand
95-96	--	Tan fine grain sand
100-101	--	Tan fine grain sand
105-106	--	Tan fine grain sand
110-111	--	Tan fine grain sand
115-116	--	Tan fine grain sand
120-121	--	Tan fine grain sand
125-126	--	Grey and Red/Brown clay

SAMPLE LOG

Boring/Well MW-3
GPS N33.166367° W103.774397°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract 1 Tank Battery
Site Location Chaves, New Mexico
Letter F, Section 25, Township 13 South, Range 31 East
Total Depth 135
Date Installed 12/09/09

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
130-131	--	Grey and Red/Brown clay
135-136	--	Red/Brown clay

Total Depth: 135'

SAMPLE LOG

Boring/Well MW-4
GPS N33.166367° W103.774397°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract 1 Tank Battery
Site Location Chaves, New Mexico
Letter C, Section 25, Township 13 South, Range 31 East
Total Depth 135
Date Installed 12/10/09

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
5-6	--	Hard limestone with chert
10-11	--	Hard limestone with chert
15-16	--	Hard limestone with chert
20-21	--	Hard limestone with chert
25-26	--	Calcareous sand - very fine grain
30-31	--	Calcareous sand - very fine grain
35-36	--	Calcareous sand - very fine grain
40-41	--	Calcareous sand - very fine grain
45-46	--	Calcareous sand - very fine grain
50-51	--	Calcareous sand - very fine grain
55-56	--	Calcareous sand - very fine grain
60-61	--	Calcareous sand - very fine grain
65-66	--	Tan fine grain sand
70-71	--	Tan fine grain sand
75-76	--	Tan fine grain sand
80-81	--	Tan fine grain sand
85-86	--	Tan fine grain sand
90-91	--	Tan fine grain sand
95-96	--	Tan fine grain sand
100-101	--	Tan fine grain sand
105-106	--	Tan fine grain sand
110-111	--	Tan fine grain sand
115-116	--	Tan fine grain sand
120-121	--	Sandy grey clay <10% clay
125-126	--	Grey hard pack clay

SAMPLE LOG

Boring/Well MW-4
GPS N33.166367° W103.774397°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract 1 Tank Battery
Site Location Chaves, New Mexico
Letter C, Section 25, Township 13 South, Range 31 East
Total Depth 135
Date Installed 12/10/09

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
130-131	--	Grey hard pack clay
135-136	--	Grey hard pack clay (with some red clay)

Total Depth: 135'

SAMPLE LOG

Boring/ Well MW-5
GPS N33.1669° W103.77383°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract #1Tank Battery
Site Location Chaves, New Mexico
Letter B, Section 25, Township 13 South, Range 31 East
Total Depth 130'
Date Installed 11/23/10

Depth (Ft)	OVM	Sample Description
5-6'	--	Caliche and 60% Chert
10-11'	--	Caliche and 50% Chert
15-16'	--	Caliche and 30% Chert
20-21'	--	Light Buff Fine Grained Well Sorted Sand
25-26'	--	Light Buff Fine Grained Well Sorted Sand
30-31'	--	Light Buff Fine Grained Well Sorted Sand
35-36'	--	Light Buff Fine Grained Well Sorted Sand
40-41'	--	Light Buff Fine Grained Well Sorted Sand
45-46'	--	Light Buff Fine Grained Well Sorted Sand
50-51'	--	Light Buff Fine Grained Well Sorted Sand
55-56'	--	Light Buff Fine Grained Well Sorted Sand
60-61'	--	Light Brown Fine Grain Well Sorted Sand
65-66'	--	Light Brown Fine Grain Well Sorted Sand
70-71'	--	Light Brown Fine Grain Well Sorted Sand
75-76'	--	Light Brown Fine Grain Well Sorted Sand
80-81'	--	Light Brown Fine Grain Well Sorted Sand
85-86'	--	Light Brown Fine Grain Well Sorted Sand
90-91'	--	Light Brown Fine Grain Well Sorted Sand
95-96'	--	Light Brown Fine Grain Well Sorted Sand with 5% Subangular Gravel
100-101'	--	Light Brown Fine Grain Well Sorted Sand with 5% Subangular Gravel
105-106'	--	Light Brown Fine Grain Well Sorted Sand with 10% Subangular Gravel
110-111'	--	Light Brown Fine Grain Well Sorted Sand with 50% Subangular Gravel
115-116'	--	Grey Blue Buff Clay and Light Brown Clay
120-121'	--	Grey Blue Buff Clay and 10% Light Brown Clay
125-126'	--	Grey Blue Buff Clay and 60% Light Brown Clay

SAMPLE LOG

Boring/ Well MW-5
GPS N33.1669° W103.77383°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract #1Tank Battery
Site Location Chaves, New Mexico
Letter B, Section 25, Township 13 South, Range 31 East
Total Depth 130'
Date Installed 11/23/10

130'	--	Grey Blue Clay with 25% Red Bed and 5% Light Brown Clay
Total Depth:	130'	Ground water depth not encountered while drilling.

SAMPLE LOG

Boring/ Well MW-6
GPS N33.16423° W103.77711°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract #1 Tank Battery
Site Location Chaves, New Mexico
Letter F, Section 25, Township 13 South, Range 31 East
Total Depth 140'
Date Installed 11/29/10

Depth (Ft)	OVM	Sample Description
5-6'	--	Caliche and 20% Chert
10-11'	--	Caliche and 40% Chert
15-16'	--	Caliche and 10% Chert
20-21'	--	Buff Tan Fine Grained Well Sorted Sand
25-26'	--	Buff Tan Fine Grained Well Sorted Sand
30-31'	--	Buff Tan Fine Grained Well Sorted Sand
35-36'	--	Buff Tan Fine Grained Well Sorted Sand
40-41'	--	Buff Tan Fine Grained Well Sorted Sand
45-46'	--	Tan Fine Grained Well Sorted Sand
50-51'	--	Tan Fine Grained Well Sorted Sand
55-56'	--	Tan Fine Grained Well Sorted Sand
60-61'	--	Light Brown Fine Grained Well Sorted Sand
65-66'	--	Light Brown Fine Grained Well Sorted Sand
70-71'	--	Light Brown Fine Grained Well Sorted Sand
75-76'	--	Light Brown Fine Grained Well Sorted Sand
80-81'	--	Light Brown Fine Grained Well Sorted Sand
85-86'	--	Light Brown Fine Grained Well Sorted Sand
90-91'	--	Light Brown Fine Grained Well Sorted Sand
95-96'	--	Light Brown Fine Grained Well Sorted Sand
100-101'	--	Light Brown Fine Grained Well Sorted Sand
105-106'	--	Light Brown Fine Grained Well Sorted Sand
110-111'	--	Light Brown Fine Grained Well Sorted Sand with 10% Subangular Gravel
115-116'	--	Light Brown Fine Grained Well Sorted Sand with 30% Subangular Gravel
120-121'	--	Light Brown Fine Grained Well Sorted Sand with 20% Subangular Gravel
125-126'	--	Light Brown Fine Grained Well Sorted Sand with 40% Subangular Gravel

SAMPLE LOG

Boring/ Well MW-6
GPS N33.16423° W103.77711°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract #1 Tank Battery
Site Location Chaves, New Mexico
Letter F, Section 25, Township 13 South, Range 31 East
Total Depth 140'
Date Installed 11/29/10

130-131'	--	Light Brown Sand with 30% Buff Grey Clay
135-136'	--	Grey Blue Clay with 50% Red Bed
140'	--	Red Bed

Total Depth: 140' Ground water depth not encountered while drilling.

SAMPLE LOG

Boring/ Well MW-7
GPS N33.16362° W103.77646°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract #1 Tank Battery
Site Location Chaves, New Mexico
Letter F, Section 25, Township 13 South, Range 31 East
Total Depth 135'
Date Installed 11/23/10

Depth (Ft)	OVM	Sample Description
5-6'	--	Caliche and 15% Chert
10-11'	--	Caliche and 15% Chert
15-16'	--	Buff Fine Grained Sand with 50% Caliche
20-21'	--	Buff Fine Grained Sand with 20% Caliche
25-26'	--	Tan Light Brown Fine Grained Sand with 5% Caliche
30-31'	--	Buff Tan Fine Grained Sand with 5% Caliche
35-36'	--	Buff Tan Fine Grained Sand with 5% Caliche
40-41'	--	Buff Tan Fine Grained Sand
45-46'	--	Buff Tan Fine Grained Sand
50-51'	--	Light Brown Fine Grained Sand
55-56'	--	Light Brown Fine Grained Sand
60-61'	--	Light Brown Fine Grained Sand
65-66'	--	Light Brown Fine Grained Sand
70-71'	--	Light Brown Fine Grained Sand
75-76'	--	Light Brown Fine Grained Sand
80-81'	--	Light Brown Fine Grained Sand
85-86'	--	Light Brown Fine Grained Sand
90-91'	--	Light Brown Fine Grained Sand
95-96'	--	Light Brown Fine Grained Sand
100-101'	--	Light Brown Fine Grained Sand
105-106'	--	Light Brown Fine Grained Sand
110-111'	--	Light Brown Fine Grained Sand
115-116'	--	Light Brown Fine Grained Sand with 15% Subangular Gravel
120-121'	--	Light Brown Fine Grained Sand with 15% Subangular Gravel
125-126'	--	Grey Buff Light Brown Clay

SAMPLE LOG

Boring/ Well MW-7
GPS N33.16362° W103.77646°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract #1 Tank Battery
Site Location Chaves, New Mexico
Letter F, Section 25, Township 13 South, Range 31 East
Total Depth 135'
Date Installed 11/23/10

130-131'	--	Grey Blue Clay with 15% Red Bed
135'	--	Red Bed with Grey Blue Clay
Total Depth:	135'	Ground water depth not encountered while drilling.

SAMPLE LOG

Boring/ Well MW-7
GPS N33.16362° W103.77646°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract #1 Tank Battery
Site Location Chaves, New Mexico
Letter F, Section 25, Township 13 South, Range 31 East
Total Depth 135'
Date Installed 11/23/10

Depth (Ft)	OVM	Sample Description
5-6'	--	Caliche and 15% Chert
10-11'	--	Caliche and 15% Chert
15-16'	--	Buff Fine Grained Sand with 50% Caliche
20-21'	--	Buff Fine Grained Sand with 20% Caliche
25-26'	--	Tan Light Brown Fine Grained Sand with 5% Caliche
30-31'	--	Buff Tan Fine Grained Sand with 5% Caliche
35-36'	--	Buff Tan Fine Grained Sand with 5% Caliche
40-41'	--	Buff Tan Fine Grained Sand
45-46'	--	Buff Tan Fine Grained Sand
50-51'	--	Light Brown Fine Grained Sand
55-56'	--	Light Brown Fine Grained Sand
60-61'	--	Light Brown Fine Grained Sand
65-66'	--	Light Brown Fine Grained Sand
70-71'	--	Light Brown Fine Grained Sand
75-76'	--	Light Brown Fine Grained Sand
80-81'	--	Light Brown Fine Grained Sand
85-86'	--	Light Brown Fine Grained Sand
90-91'	--	Light Brown Fine Grained Sand
95-96'	--	Light Brown Fine Grained Sand
100-101'	--	Light Brown Fine Grained Sand
105-106'	--	Light Brown Fine Grained Sand
110-111'	--	Light Brown Fine Grained Sand
115-116'	--	Light Brown Fine Grained Sand with 15% Subangular Gravel
120-121'	--	Light Brown Fine Grained Sand with 15% Subangular Gravel
125-126'	--	Grey Buff Light Brown Clay

SAMPLE LOG

Boring/ Well MW-7
GPS N33.16362° W103.77646°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract #1 Tank Battery
Site Location Chaves, New Mexico
Letter F, Section 25, Township 13 South, Range 31 East
Total Depth 135'
Date Installed 11/23/10

130-131'	--	Grey Blue Clay with 15% Red Bed
135'	--	Red Bed with Grey Blue Clay
Total Depth:	135'	Ground water depth not encountered while drilling.

SAMPLE LOG

Boring/ Well RW-1
GPS N33.16539° W103.77579°
Project Number 115-6403129A
Client Celero Energy II, LP
Site Name Rock Queen Unit Tract #1 Tank Battery
Site Location Chaves, New Mexico
Letter C, Section 25, Township 13 South, Range 31 East
Total Depth 130'
Date Installed 12/13/10

Depth (Ft)	OVM	Sample Description
5-6'	--	Caliche and Chert
10-11'	--	Caliche and Chert
15-16'	--	Caliche and Chert
20-21'	--	Caliche and Chert
25-26'	--	Buff Tan Fine Grained Well Sorted Sand
30-31'	--	Buff Tan Fine Grained Well Sorted Sand
35-36'	--	Buff Tan Fine Grained Well Sorted Sand
40-41'	--	Buff Tan Fine Grained Well Sorted Sand
45-46'	--	Buff Tan Fine Grained Well Sorted Sand
50-51'	--	Buff Tan Fine Grained Well Sorted Sand
55-56'	--	Brown Fine Grained Well Sorted Sand
60-61'	--	Brown Fine Grained Well Sorted Sand
65-66'	--	Brown Fine Grained Well Sorted Sand
70-71'	--	Brown Fine Grained Well Sorted Sand
75-76'	--	Brown Fine Grained Well Sorted Sand
80-81'	--	Brown Fine Grained Well Sorted Sand
85-86'	--	Brown Fine Grained Well Sorted Sand
90-91'	--	Brown Fine Grained Well Sorted Sand
95-96'	--	Brown Fine Grained Well Sorted Sand
100-101'	--	Brown Fine Grained Well Sorted Sand
105-106'	--	Brown Fine Grained Well Sorted Sand
110-111'	--	Brown Fine Grained Well Sorted Sand
115-116'	--	Brown Fine Grained Well Sorted Sand
120-121'	--	Grey Blue Buff Clay with Light Brown Clay
125-126'	--	Grey Blue Clay with Light Brown Clay

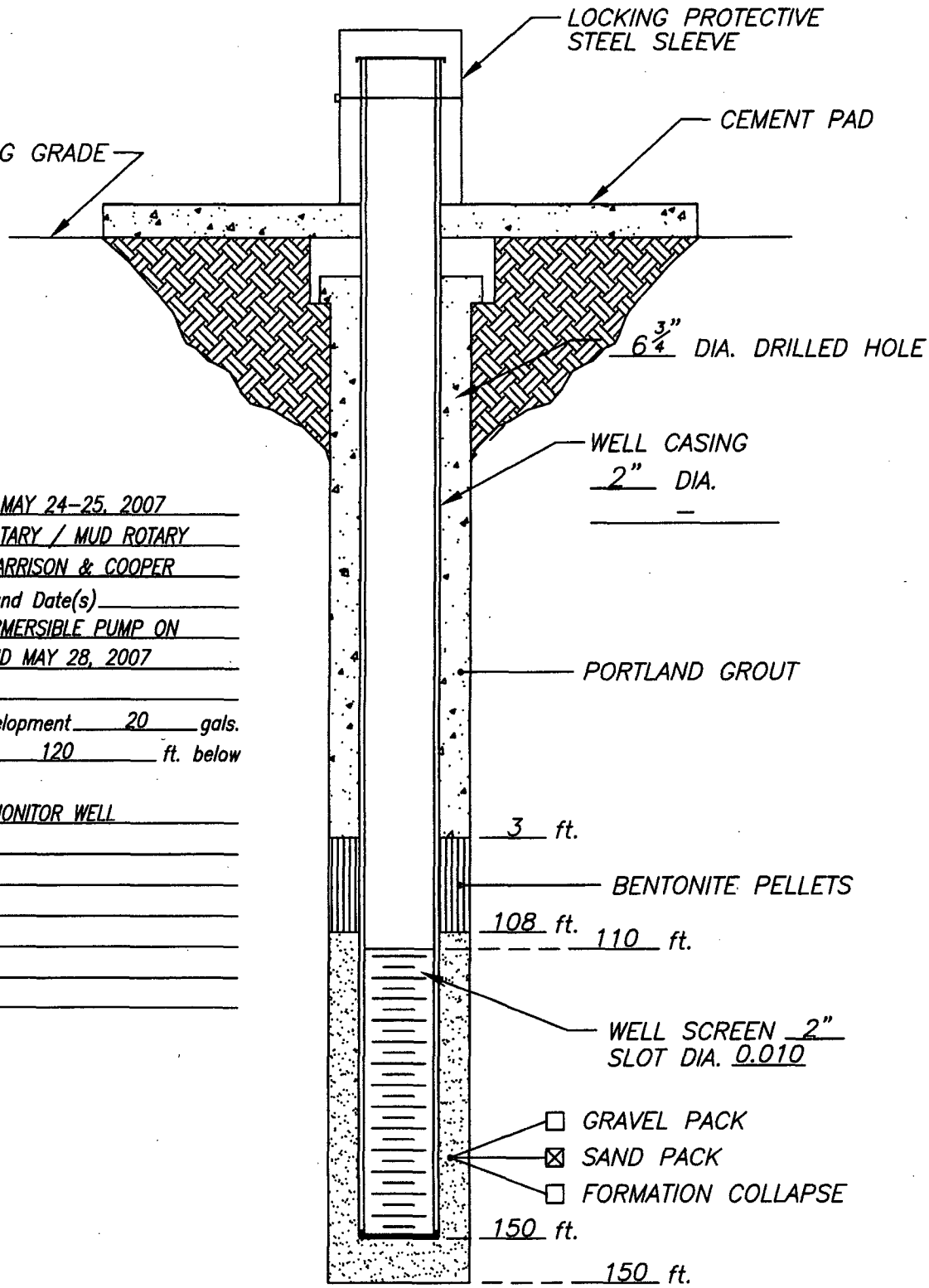
SAMPLE LOG

Boring/ Well	**RW-1**
GPS	**N33.16539° W103.77579°**
Project Number	**115-6403129A**
Client	**Celero Energy II, LP**
Site Name	**Rock Queen Unit Tract #1 Tank Battery**
Site Location	***Chaves, New Mexico***
Letter C, Section 25, Township 13 South, Range 31 East	
Total Depth	**130'**
Date Installed	**12/13/10**

130'	--	Grey Blue Clay with Light Brown Clay and Red Bed
Total Depth:	130'	Ground water depth not encountered while drilling.

APPENDIX B
MONITOR WELL INSTALLATION DIAGRAMS

WELL CONSTRUCTION LOG



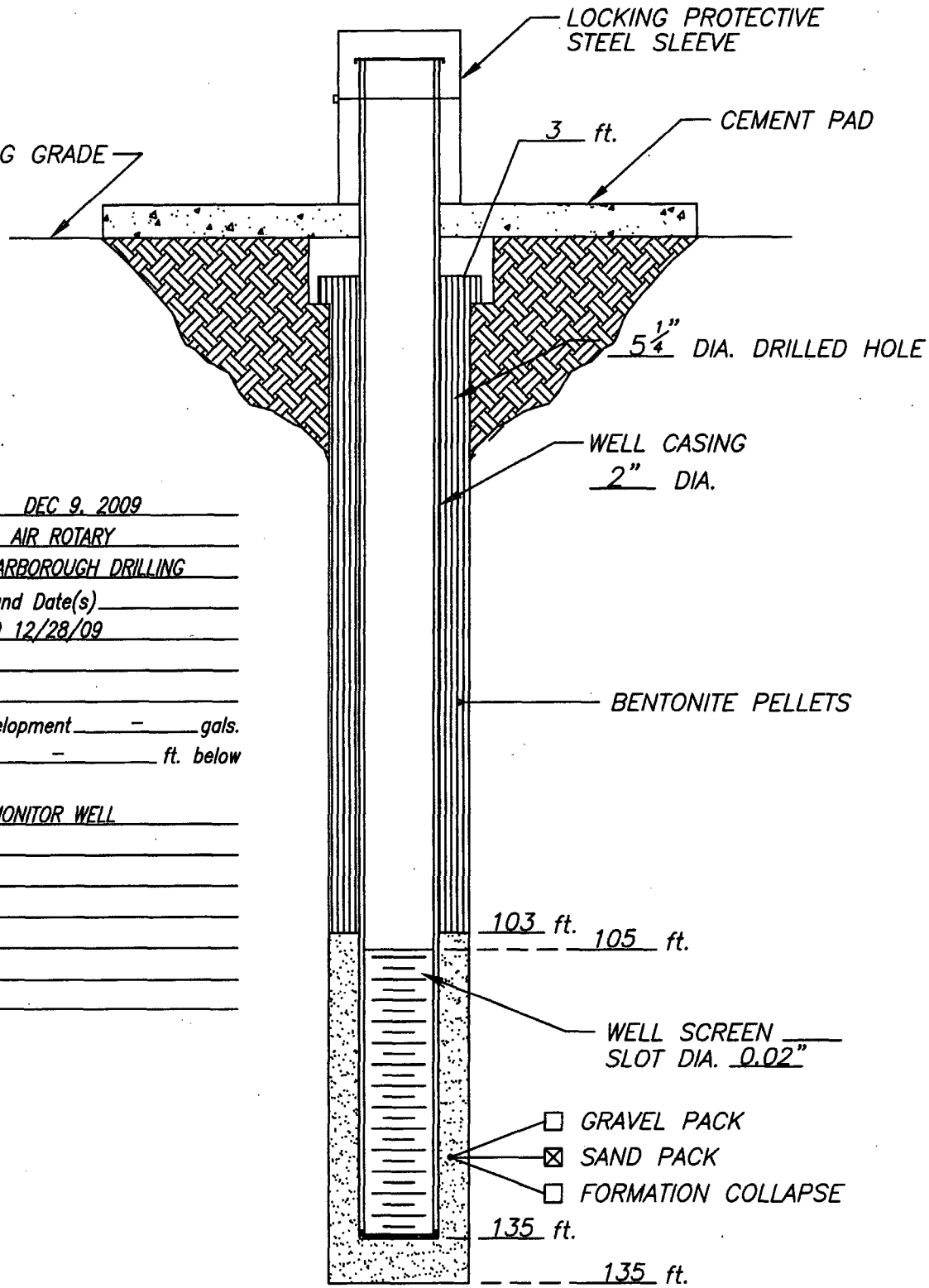
Installation Date(s) MAY 24-25, 2007
Drilling Method AIR ROTARY / MUD ROTARY
Drilling Contractor HARRISON & COOPER
Development Technique(s) and Date(s)
HAND BAILING / SUBMERSIBLE PUMP ON
MAY 25, 2007 AND MAY 28, 2007

Water Removed During Development 20 gals.
Static Depth to Water 120 ft. below Ground Level
Well Purpose MONITOR WELL

Remarks

DATE: 5/24-25/07	CLIENT: CELERO ENERGY II, LP	WELL NO.
TETRA TECH, INC. MIDLAND, TEXAS	PROJECT: ROCK QUEEN UNIT TRACT 1 TB	MW-1
	LOCATION: CHAVES COUNTY, NM	

WELL CONSTRUCTION LOG



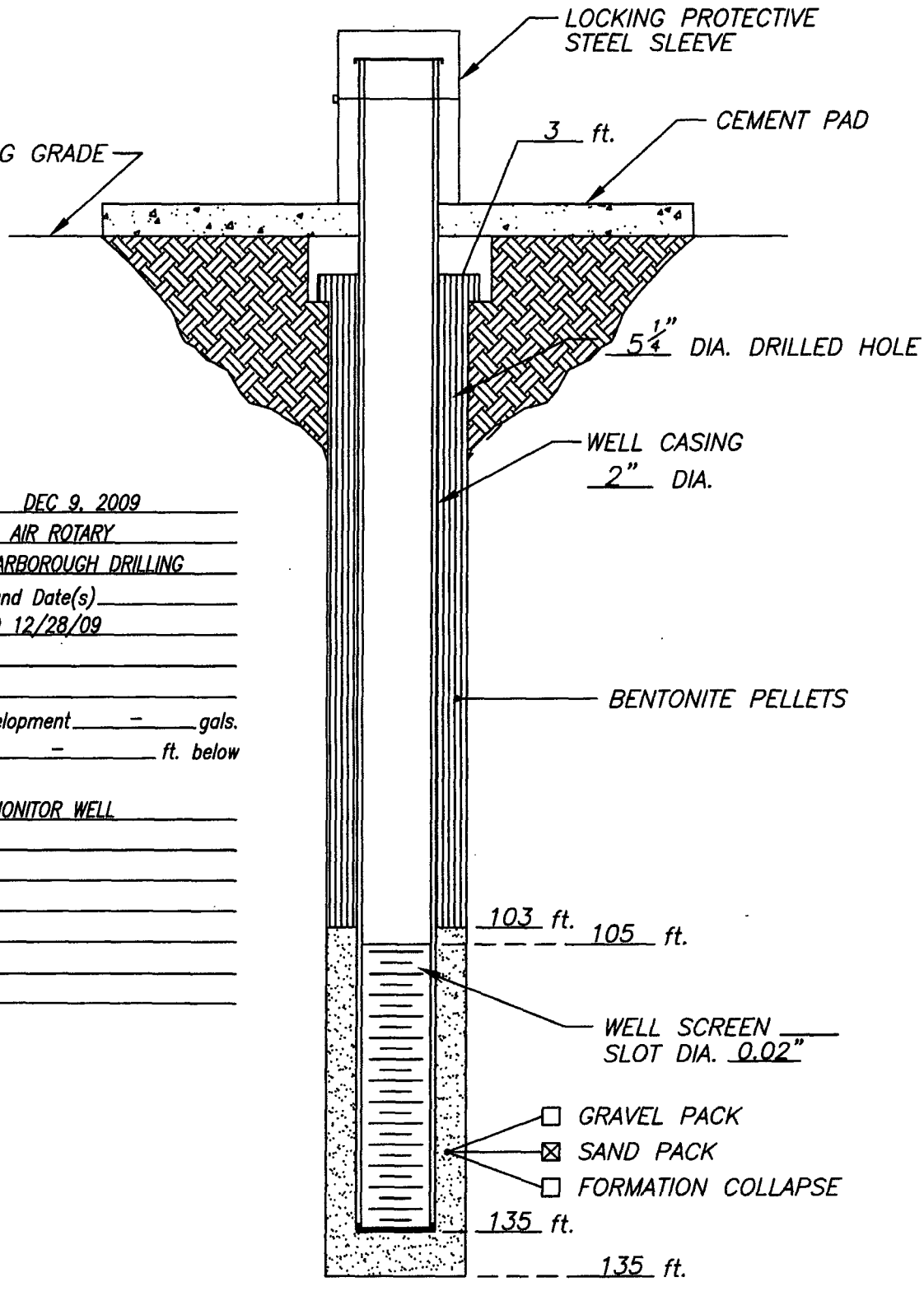
Installation Date(s) DEC 9, 2009
Drilling Method AIR ROTARY
Drilling Contractor SCARBOROUGH DRILLING
Development Technique(s) and Date(s)
HAND BAILED 12/28/09

Water Removed During Development – gals.
Static Depth to Water – ft. below Ground Level
Well Purpose MONITOR WELL

Remarks

DATE: DEC. 9, 2009	CLIENT: CELERO ENERGY II LLC	WELL NO.
TETRA TECH, INC. MIDLAND, TEXAS	PROJECT: ROCK QUEEN UNIT TRACT #1	MW-2
	LOCATION: CHAVES COUNTY, NM	

WELL CONSTRUCTION LOG



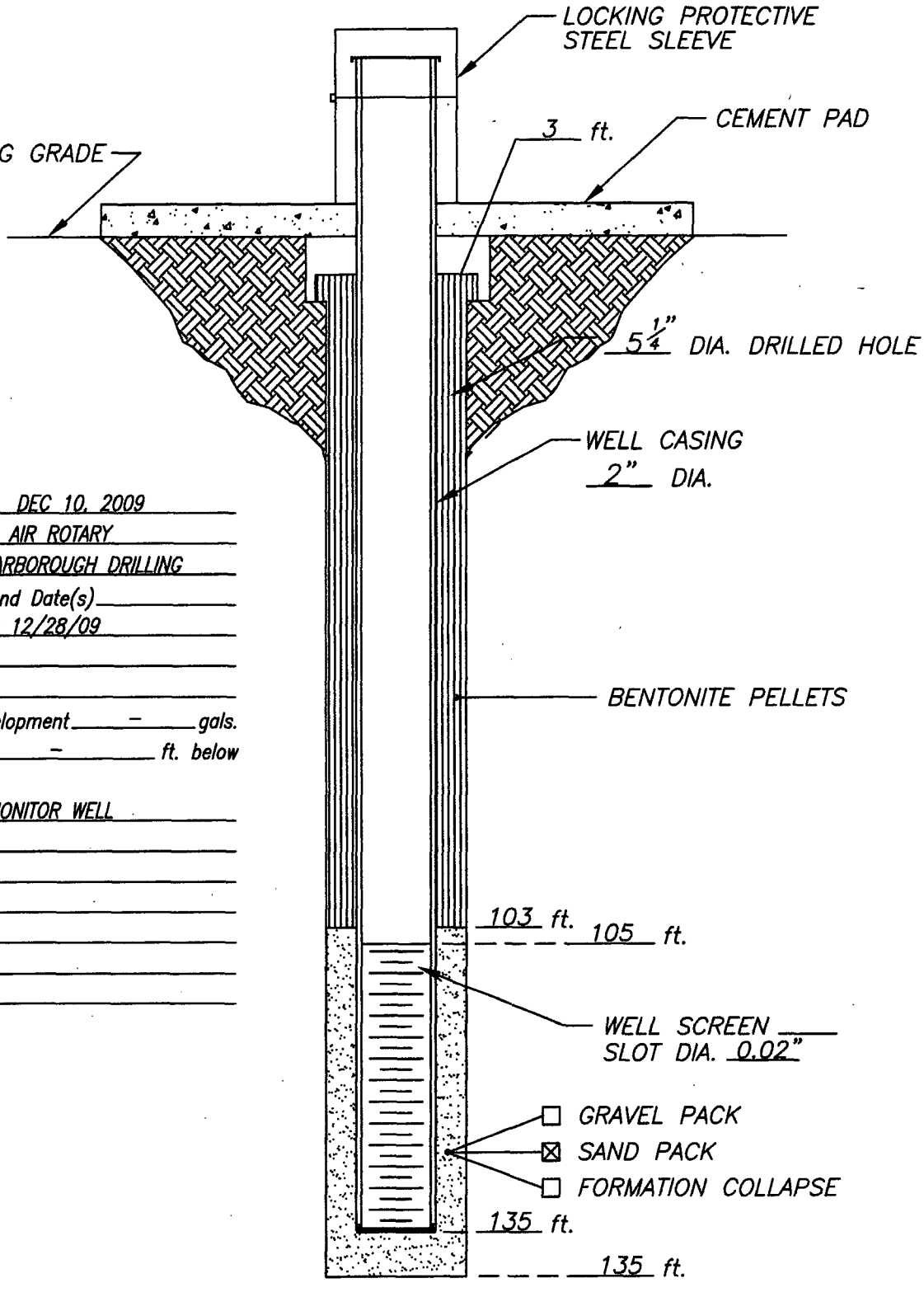
Installation Date(s) DEC 9, 2009
Drilling Method AIR ROTARY
Drilling Contractor SCARBOROUGH DRILLING
Development Technique(s) and Date(s)
HAND BAILED 12/28/09

Water Removed During Development – gals.
Static Depth to Water – ft. below Ground Level
Well Purpose MONITOR WELL

Remarks

DATE: DEC. 23, 2009	CLIENT: CELERO ENERGY II LLC	WELL NO.
TETRA TECH, INC. MIDLAND, TEXAS	PROJECT: ROCK QUEEN UNIT TRACT #1	MW-3
	LOCATION: CHAVES COUNTY, NM	

WELL CONSTRUCTION LOG



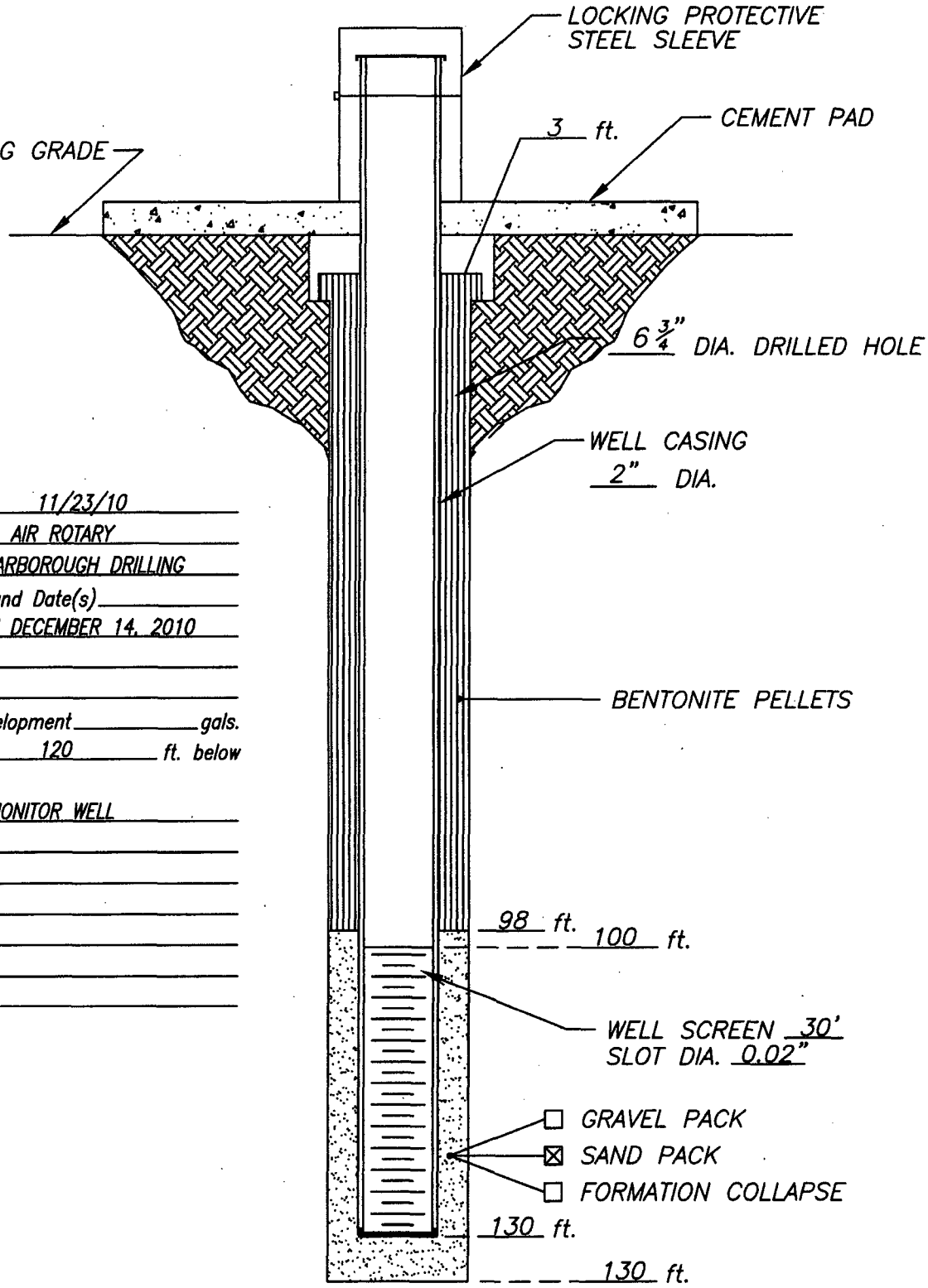
Installation Date(s) DEC 10, 2009
Drilling Method AIR ROTARY
Drilling Contractor SCARBOROUGH DRILLING
Development Technique(s) and Date(s) HAND BAILED 12/28/09

Water Removed During Development – gals.
Static Depth to Water – ft. below Ground Level
Well Purpose MONITOR WELL

Remarks

DATE: DEC. 23, 2009	CLIENT: CELERO ENERGY II LLC	WELL NO.
TETRA TECH, INC. MIDLAND, TEXAS	PROJECT: ROCK QUEEN UNIT TRACT #1	MW-4
	LOCATION: CHAVES COUNTY, NM	

WELL CONSTRUCTION LOG



Installation Date(s) 11/23/10
Drilling Method AIR ROTARY
Drilling Contractor SCARBOROUGH DRILLING
Development Technique(s) and Date(s)
HANDBAILED ON DECEMBER 14, 2010

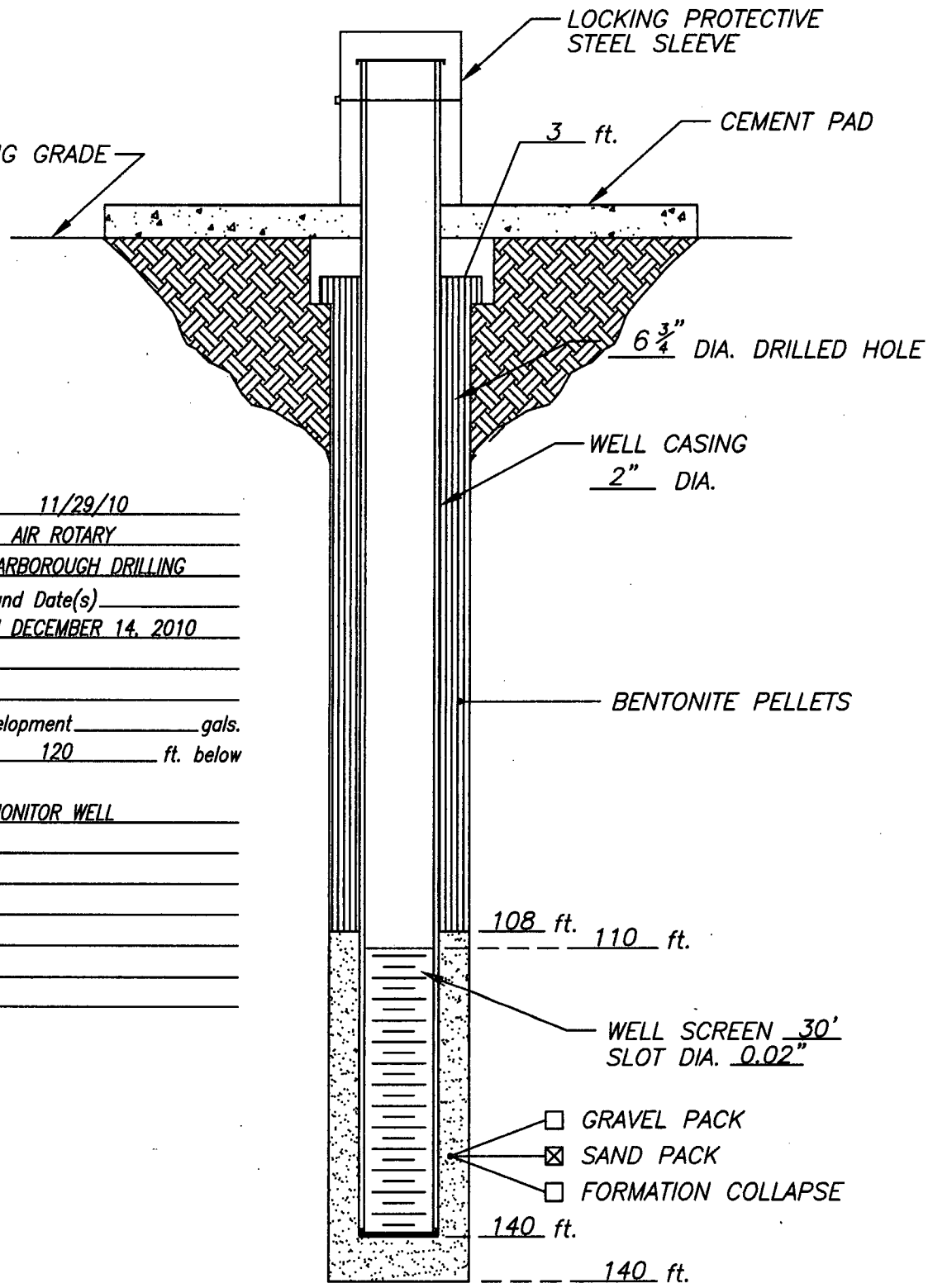
Water Removed During Development _____ gals.
Static Depth to Water 120 ft. below Ground Level
Well Purpose MONITOR WELL

Remarks

DATE: 11/23/10	CLIENT: CELERO ENERGY II, LLC	WELL NO.
TETRA TECH, INC. MIDLAND, TEXAS	PROJECT: ROCK QUEEN UNIT TRACT #1	MW-5
	LOCATION: CHAVES COUNTY, NM	

115-6403129A

WELL CONSTRUCTION LOG



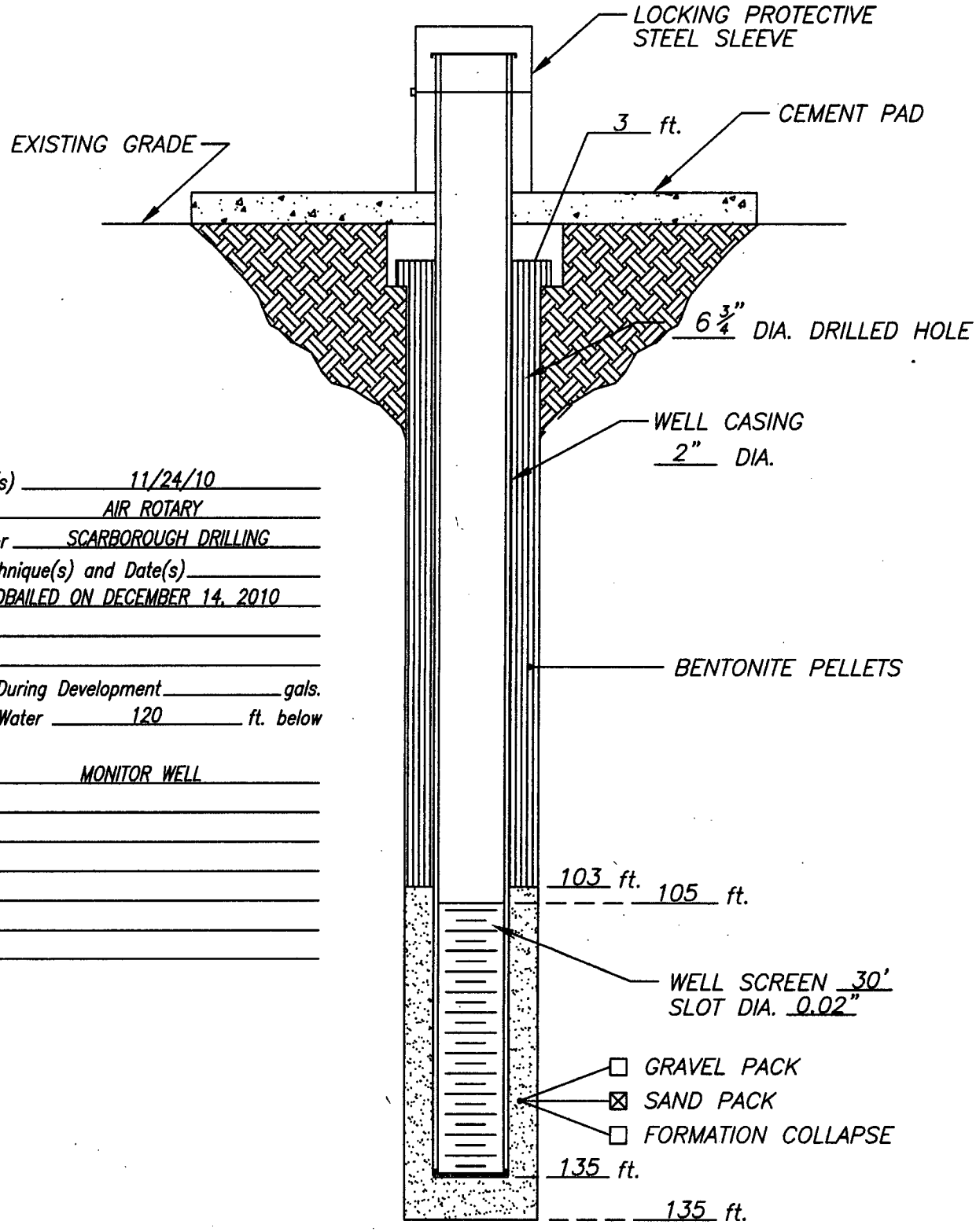
Installation Date(s) 11/29/10
Drilling Method AIR ROTARY
Drilling Contractor SCARBOROUGH DRILLING
Development Technique(s) and Date(s)
HANDBAILED ON DECEMBER 14, 2010

Water Removed During Development _____ gals.
Static Depth to Water 120 ft. below Ground Level
Well Purpose MONITOR WELL

Remarks

DATE: 11/23/10	CLIENT: CELERO ENERGY II, LLC	WELL NO.
TETRA TECH, INC. MIDLAND, TEXAS	PROJECT: ROCK QUEEN UNIT TRACT #1	MW-6
	LOCATION: CHAVES COUNTY, NM	
	115-6403129A	

WELL CONSTRUCTION LOG



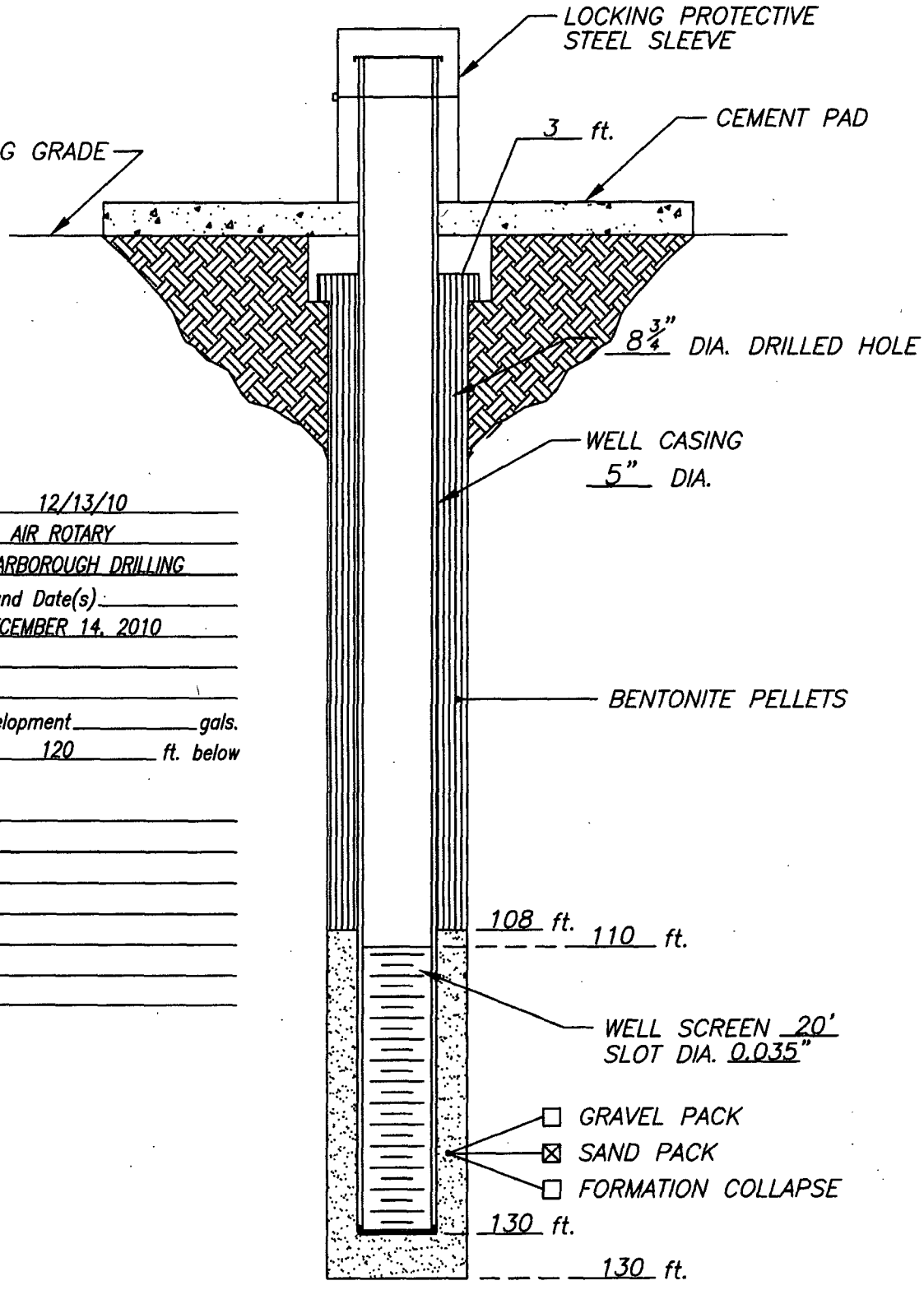
Installation Date(s) 11/24/10
Drilling Method AIR ROTARY
Drilling Contractor SCARBOROUGH DRILLING
Development Technique(s) and Date(s)
HANDBAILED ON DECEMBER 14, 2010

Water Removed During Development _____ gals.
Static Depth to Water 120 ft. below Ground Level
Well Purpose MONITOR WELL

Remarks

DATE: 11/24/10	CLIENT: CELERO ENERGY II, LLC	WELL NO.
TETRA TECH, INC. MIDLAND, TEXAS	PROJECT: ROCK QUEEN UNIT TRACT #1	MW-7
	LOCATION: CHAVES COUNTY, NM	
	115-6403129A	

WELL CONSTRUCTION LOG



Installation Date(s) 12/13/10
Drilling Method AIR ROTARY
Drilling Contractor SCARBOROUGH DRILLING
Development Technique(s) and Date(s)
HANDBAILED ON DECEMBER 14, 2010

Water Removed During Development _____ gals.
Static Depth to Water 120 ft. below *Ground Level*
Well Purpose _____

Remarks _____

DATE: 12/13/10	CLIENT: *CELERO ENERGY II, LLC*	WELL NO.
TETRA TECH, INC.	PROJECT: *ROCK QUEEN UNIT TRACT #1*	RW-1
MIDLAND, TEXAS	LOCATION: *CHAVES COUNTY, NM*	

115-6403129A