

1RP - 1594

GW Sampling Report Tables

Date:
March 30, 2012

TABLES

Table 1
Celero Energy II, LP
Groundwater Gauging Data
Rock Queen Unit Saltwater Injection Plant #1
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	05/24/07	05/24/07	4,421.40	148.00	136.57	4,284.83
	02/05/08				136.08	4,285.32
	11/24/09				136.35	4,285.05
	07/13/10				136.49	4,284.91
	10/11/10				136.57	4,284.83
	01/17/11				136.60	4,284.80
	04/12/11				136.74	4,284.66
	07/28/11				136.82	4,284.58
	10/24/11				136.82	4,284.58
MW-2	11/24/09	11/18/09	4,423.57	150.00	137.84	4,285.73
	07/13/10				138.05	4,285.52
	10/11/10				138.18	4,285.39
	01/17/11				138.14	4,285.43
	04/12/11				138.23	4,285.34
	07/28/11				139.22	4,284.35
	10/24/11				138.45	4,285.12
MW-3	11/24/09	11/18/09	4,421.79	150.00	137.01	4,284.78
	07/13/10				137.07	4,284.72
	10/11/10				137.19	4,284.60
	01/17/11		4,421.49		136.78	4,285.01
	04/12/11				136.75	4,285.04
	07/28/11				137.82	4,283.97
	10/24/11				137.08	4,284.71
MW-4	11/24/09	11/18/09	4,421.26	150.00	137.30	4,283.96
	07/13/10				137.64	4,283.62
	10/11/10				137.72	4,283.54
	01/17/11				137.75	4,283.51
	04/12/11				137.89	4,283.37
	07/28/11				138.68	4,282.58
	10/24/11				137.99	4,283.27

Table 1
Celero Energy II, LP
Groundwater Gauging Data
Rock Queen Unit Saltwater Injection Plant #1
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-5	01/17/11	11/22/10	4,420.25	152.40	138.76	4,281.49
	04/12/11				138.81	4,281.44
	07/28/11				139.75	4,280.50
	10/24/11				138.97	4,281.28
MW-6	01/17/11	11/22/10	4,423.57	149.70	137.62	4,285.95
	04/12/11				137.81	4,285.76
	07/28/11				138.71	4,284.86
	10/24/11				137.97	4,285.60
MW-7	01/17/11	11/19/10	4,423.52	159.02	139.76	4,283.76
	04/12/11				139.79	4,283.73
	07/28/11				140.74	4,282.78
	10/24/11				139.96	4,283.56
RW-1	01/17/11	12/12/10	4,420.69	153.03	134.97	4,285.72
	04/12/11				135.35	4,285.34
	07/28/11				136.25	4,284.44
	10/24/11				135.72	4,284.97

Table 2
Celero Energy II, LP
Groundwater Analytical Results
Rock Queen Unit Saltwater Injection Plant #1
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	05/24/07	3,040	4,620	79,100	1950	<1.00	<1.00	154	154	1,800	154,000	231,100	26,600	6.45
	11/24/09	2,060	3,630	70,000	1840	<1.00	<1.00	127	127	1,600	139,000	220,000	20,100	5.15
	07/13/10	-	-	-	-	-	-	-	-	1,530	155,000	225,000	-	-
	10/11/10	-	-	-	-	-	-	-	-	1,500	130,000	235,000	-	-
	01/18/11	-	-	-	-	-	-	-	-	1,940	132,000	234,000	-	-
	04/14/11	-	-	-	-	-	-	-	-	1,830	174,000	237,000	-	-
	07/29/11	-	-	-	-	-	-	-	-	1,730	137,000	223,000	-	-
	10/28/11	-	-	-	-	-	-	-	-	1,870	143,000	258,000	-	-
MW-2	11/24/09	1,010	633	10,800	270	<1.00	<1.00	127	127	413	19,900	146,000	5,130	6.97
	07/13/10	-	-	-	-	-	-	-	-	652	43,200	72,700	-	-
	10/11/10	-	-	-	-	-	-	-	-	945	51,800	235,000	-	-
	01/18/11	-	-	-	-	-	-	-	-	1,640	66,600	133,000	-	-
	04/14/11	-	-	-	-	-	-	-	-	1,820	99,700	159,000	-	-
	07/29/11	-	-	-	-	-	-	-	-	1,770	90,400	155,000	-	-
	10/28/11	-	-	-	-	-	-	-	-	1,460	80,300	135,000	-	-
MW-3	11/24/09	6,030	2,150	29,900	323	<1.00	<1.00	92	92	908	59,500	108,000	23,900	6.02
	07/13/10	-	-	-	-	-	-	-	-	931	73,200	150,000	-	-
	10/11/10	-	-	-	-	-	-	-	-	934	85,500	167,000	-	-
	01/18/11	-	-	-	-	-	-	-	-	1,230	85,200	154,000	-	-
	04/14/11	-	-	-	-	-	-	-	-	1,250	118,000	188,000	-	-
	07/29/11	-	-	-	-	-	-	-	-	1,100	66,900	103,000	-	-
	10/27/11	-	-	-	-	-	-	-	-	1,160	123,000	184,000	-	-
MW-4	11/24/09	791	253	4,880	76.7	<1.00	<1.00	118	118	286	9,360	22,600	3,020	7.35
	07/13/10	-	-	-	-	-	-	-	-	1,540	85,800	159,000	-	-
	10/11/10	-	-	-	-	-	-	-	-	1,640	93,200	175,000	-	-
	01/18/11	-	-	-	-	-	-	-	-	2,360	93,200	173,000	-	-
	04/14/11	-	-	-	-	-	-	-	-	1,950	102,000	159,000	-	-
	07/29/11	-	-	-	-	-	-	-	-	2,120	107,000	171,000	-	-
	10/28/11	-	-	-	-	-	-	-	-	2,180	124,000	171,000	-	-

Table 2
Celero Energy II, LP
Groundwater Analytical Results
Rock Queen Unit Saltwater Injection Plant #1
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-5	01/18/11	-	-	-	-	-	-	-	-	822	32,400	69,700	-	-
	04/14/11	-	-	-	-	-	-	-	-	1,070	20,000	39,400	-	-
	07/29/11	-	-	-	-	-	-	-	-	854	24,300	46,700	-	-
	10/27/11	-	-	-	-	-	-	-	-	701	49,700	91,900	-	-
MW-6	01/18/11	-	-	-	-	-	-	-	-	<250	3,010	16,500	-	-
	04/14/11	-	-	-	-	-	-	-	-	188	1,320	2,100	-	-
	07/29/11	-	-	-	-	-	-	-	-	146	912	1,860	-	-
	10/27/11	-	-	-	-	-	-	-	-	191	1,110	2,240	-	-
MW-7	01/18/11	-	-	-	-	-	-	-	-	478	35,700	75,700	-	-
	04/14/11	-	-	-	-	-	-	-	-	657	61,500	91,000	-	-
	07/29/11	-	-	-	-	-	-	-	-	172	17,400	29,500	-	-
	10/27/11	-	-	-	-	-	-	-	-	529	49,000	75,700	-	-
RW-1	01/18/11	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	04/14/11	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	07/29/11	-	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/27/11	-	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 Saltwater Injection Plant #1
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	11/24/09	0.0016	<0.001	<0.001	<0.001	0.0016
	07/13/10	0.0031	<0.001	<0.001	<0.001	0.0031
	10/11/10	0.0038	<0.001	<0.001	<0.001	0.0038
	01/18/11	0.0116	0.0059	<0.001	<0.001	0.0175
	04/14/11	0.0088	0.0055	<0.001	<0.001	0.0143
	07/29/11	0.0081	<0.001	<0.001	<0.001	0.0081
	10/28/11	0.00400	<0.00100	<0.00100	0.00630	0.01030
MW-2	11/24/09	<0.001	<0.001	<0.001	<0.001	<0.001
	07/13/10	<0.001	<0.001	<0.001	<0.001	<0.001
	10/11/10	0.0017	<0.001	<0.001	<0.001	<0.001
	01/18/11	<0.001	<0.001	<0.001	<0.001	<0.001
	04/14/11	0.0076	<0.001	<0.001	<0.001	0.0076
	07/29/11	0.0092	<0.001	<0.001	<0.001	0.0092
	10/28/11	0.00390	<0.00100	<0.00100	<0.00100	0.00390
MW-3	11/24/09	<0.001	<0.001	<0.001	<0.001	<0.001
	07/13/10	<0.001	<0.001	<0.001	<0.001	<0.001
	10/11/10	<0.001	<0.001	<0.001	<0.001	<0.001
	01/18/11	<0.001	<0.001	<0.001	<0.001	<0.001
	04/14/11	0.0059	<0.001	<0.001	<0.001	0.0059
	07/29/11	<0.001	<0.001	<0.001	<0.001	<0.001
	10/27/11	0.00120	<0.00100	<0.00100	0.00440	0.00560
MW-4	11/24/09	<0.001	<0.001	<0.001	<0.001	<0.001
	07/13/10	<0.001	<0.001	<0.001	<0.001	<0.001
	10/11/10	0.0015	<0.001	<0.001	<0.001	0.0015
	01/18/11	0.0095	<0.001	<0.001	<0.001	0.0095
	04/14/11	0.0064	<0.001	<0.001	<0.001	0.0064
	07/29/11	0.0084	<0.001	<0.001	<0.001	0.0084
	10/28/11	0.00280	<0.00100	<0.00100	<0.00100	0.00280
MW-5	01/18/11	<0.001	<0.001	<0.001	<0.001	<0.001
	04/14/11	<0.001	<0.001	<0.001	<0.001	<0.001
	07/29/11	<0.001	<0.001	<0.001	<0.001	<0.001
	10/27/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-6	01/18/11	<0.001	<0.001	<0.001	<0.001	<0.001
	04/14/11	<0.001	<0.001	<0.001	<0.001	<0.001
	07/29/11	<0.001	<0.001	<0.001	<0.001	<0.001
	10/27/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
MW-7	01/18/11	<0.001	<0.001	<0.001	<0.001	<0.001
	04/14/11	<0.001	<0.001	<0.001	<0.001	<0.001
	07/29/11	<0.001	<0.001	<0.001	<0.001	<0.001
	10/27/11	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100

Table 3
 Celero Energy II, LP
 Groundwater Analytical Results
 Rock Queen Saltwater Injection Plant #1
 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	01/18/11	NS	NS	NS	NS	NS
	04/14/11	NS	NS	NS	NS	NS
	07/29/11	NS	NS	NS	NS	NS
	10/27/11	NS	NS	NS	NS	NS

NS - Not sampled

APPENDIX A BORING LOGS

SAMPLE LOG

Boring/Well MW-1
GPS N33.166683° W103.798806°
Project Number 115-6403134A
Client Celero Energy II, LP
Site Name Rock Queen SWD Plant #1
Site Location Chaves County, New Mexico
Letter D, Section 26, Township 13 South, Range 31 East
Total Depth 198
Date Installed: 05/24/07

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
0-5	--	Buff limestone with chert intermixed with tan sand
5-10	--	Buff limestone with chert intermixed with tan sand
10-15	--	Buff to tan sandy limestone with chert
15-20	--	Tan calcareous fine grain sand
23-25	--	Tan calcareous fine grain sand
28-30	--	Tan well sorted calcareous sand
33-35	--	Tan well sorted calcareous sand
38-40	--	Tan well sorted calcareous sand
43-45	--	Tan well sorted calcareous sand
48-50	--	Tan well sorted calcareous sand
53-55	--	Tan fine grain sand
58-60	--	Tan fine grain sand
63-65	--	Tan fine grain sand
68-70	--	Tan fine grain sand
73-75	--	Tan fine grain sand
78-80	--	Tan fine grain sand
83-85	--	Tan fine grain sand
88-90	--	Tan fine grain sand
98-100	--	Tan fine grain sand
108-110	--	Tan fine grain sand
118-120	--	Tan fine grain sand
128-130	--	Tan fine grain sand
138-140	--	Tan fine grain sand

SAMPLE LOG

Boring/Well **MW-1**
GPS **N33.166683° W103.798806°**
Project Number **115-6403134A**
Client **Celero Energy II, LP**
Site Name **Rock Queen SWD Plant #1**
Site Location **Chaves County, New Mexico**
Letter D, Section 26, Township 13 South, Range 31 East
Total Depth **198**
Date Installed: **05/24/07**

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
148-150	--	Red fine grain sand
158-160	--	Tan fine grain sand
168-170	--	Dark brown clayey sand
178-180	--	Light red sandy clay
188-190	--	Red clayey sand
198	--	Red sandy clay

Total Depth: 198' Groundwater at 133 feet piping installed to 145 feet

SAMPLE LOG

Boring/Well MW-2
GPS N33.167611° W103.799578°
Project Number 115-6403134A
Client Celero Energy II, LP
Site Name Rock Queen SWD Plant #1
Site Location Chaves County, New Mexico
Letter D, Section 26, Township 13 South, Range 31 East
Total Depth 150
Date Installed: 11/18/09

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
0-5	--	Buff hard limestone with chert intermixed
5-10	--	Buff hard limestone
10-15	--	Buff hard limestone
15-20	--	Buff hard limestone with chert intermixed
23-25	--	Tan well sorted fine grain calcareous sand
28-30	--	Tan well sorted fine grain calcareous sand
33-35	--	Tan well sorted fine grain calcareous sand
38-40	--	Tan well sorted fine grain calcareous sand
43-45	--	Tan well sorted fine grain calcareous sand
48-50	--	Tan well sorted fine grain calcareous sand
53-55	--	Tan well sorted fine grain calcareous sand
58-60	--	Tan well sorted fine grain sand
63-65	--	Tan well sorted fine grain sand
68-70	--	Tan well sorted fine grain sand
73-75	--	Tan well sorted fine grain sand
78-80	--	Tan well sorted fine grain sand (Mud up)
83-85	--	Tan well sorted fine grain sand
88-90	--	Tan well sorted fine grain sand
98-100	--	Tan well sorted fine grain sand
108-110	--	Tan well sorted fine grain sand
118-120	--	Tan well sorted fine grain sand
128-130	--	Tan well sorted fine grain sand
138-140	--	Tan well sorted fine grain sand

SAMPLE LOG

Boring/Well MW-2
GPS N33.167611° W103.799578°
Project Number 115-6403134A
Client Celero Energy II, LP
Site Name Rock Queen SWD Plant #1
Site Location Chaves County, New Mexico
Letter D, Section 26, Township 13 South, Range 31 East
Total Depth 150
Date Installed: 11/18/09

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
148-150	--	Red/brown Clay (Red bed)

Total Depth: 150' Groundwater at 137 feet below ground surface

SAMPLE LOG

Boring/Well MW-3
GPS N33.166881° W103.797775°
Project Number 115-6403134A
Client Celero Energy II, LP
Site Name Rock Queen SWD Plant #1
Site Location Chaves County, New Mexico
Letter D, Section 26, Township 13 South, Range 31 East
Total Depth 150
Date Installed: 11/18/09

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
0-5	--	Buff hard limestone with chert intermixed
5-10	--	Buff hard chert with some limestone intermixed
10-15	--	Buff hard limestone with chert intermixed
15-20	--	Hard buff limestone
23-25	--	Tan well sorted fine grain calcareous sand
28-30	--	Tan well sorted fine grain calcareous sand
33-35	--	Tan well sorted fine grain calcareous sand
38-40	--	Tan well sorted fine grain calcareous sand
43-45	--	Tan well sorted fine grain calcareous sand
48-50	--	Tan well sorted fine grain calcareous sand
53-55	--	Tan well sorted fine grain calcareous sand
58-60	--	Tan well sorted fine grain sand
63-65	--	Tan well sorted fine grain sand
68-70	--	Tan well sorted fine grain sand
73-75	--	Tan well sorted fine grain sand
78-80	--	Tan well sorted fine grain sand (Mud up)
83-85	--	Tan well sorted fine grain sand
88-90	--	Tan well sorted fine grain sand
98-100	--	Tan well sorted fine grain sand
108-110	--	Tan well sorted fine grain sand
118-120	--	Tan well sorted fine grain sand
128-130	--	Tan well sorted fine grain sand
138-140	--	Tan well sorted fine grain sand

SAMPLE LOG

Boring/Well MW-3
GPS N33.166881° W103.797775°
Project Number 115-6403134A
Client Celero Energy II, LP
Site Name Rock Queen SWD Plant #1
Site Location Chaves County, New Mexico
Letter D, Section 26, Township 13 South, Range 31 East
Total Depth 150
Date Installed: 11/18/09

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
143-145	--	Red/brown Clay (Red bed)
148-150	--	Red/brown Clay (Red bed)

Total Depth: 150' Groundwater at 137 feet below ground surface

SAMPLE LOG

Boring/Well: MW-4
GPS N33.166061° W103.798919°
Project Number 115-6403134A
Client Celero Energy II, LP
Site Name Rock Queen SWD Plant #1
Site Location Chaves County, New Mexico
Letter D, Section 26, Township 13 South, Range 31 East
Total Depth 150
Date Installed: 11/19/09

DEPTH (Ft)	OVM	SAMPLE DESCRIPTION
0-5	--	Buff hard limestone with chert intermixed
5-10	--	Buff hard limestone with chert intermixed
10-15	--	Buff hard limestone with chert intermixed
15-20	--	Hard buff limestone
23-25	--	Tan well sorted fine grain calcareous sand
28-30	--	Tan well sorted fine grain calcareous sand
33-35	--	Tan well sorted fine grain calcareous sand
38-40	--	Tan well sorted fine grain calcareous sand
43-45	--	Tan well sorted fine grain calcareous sand
48-50	--	Tan well sorted fine grain calcareous sand
53-55	--	Tan well sorted fine grain calcareous sand
58-60	--	Tan well sorted fine grain sand
63-65	--	Tan well sorted fine grain sand
68-70	--	Tan well sorted fine grain sand
73-75	--	Tan well sorted fine grain sand
78-80	--	Tan well sorted fine grain sand (Mud up)
83-85	--	Tan well sorted fine grain sand
88-90	--	Tan well sorted fine grain sand
98-100	--	Tan well sorted fine grain sand
108-110	--	Tan well sorted fine grain sand
118-120	--	Tan well sorted fine grain sand
128-130	--	Tan well sorted fine grain sand
138-140	--	Tan well sorted fine grain sand
143-145	--	Red/brown Clay (Red bed)
148-150	--	Red/brown Clay (Red bed)

Total Depth: 150' Groundwater at 137 feet below ground surface

SAMPLE LOG

Boring/Well MW-5
GPS N33.16536° W103.79881°
Project Number 115-6403134A
Client Celero Energy II, LP
Site Name Rock Queen Unit SWD Plant #1
Site Location Chaves, New Mexico
Letter D, Section 26, Township 13 South, Range 31 East
Total Depth 150'
Date Installed 11/22/10

Depth (Ft)	OVM	Sample Description
5-6'	--	Caliche and 10% Chert
10-11'	--	Caliche and 10% Chert
15-16'	--	Caliche and 25% Chert
20-21'	--	Buff Fine Grain Sand with 45% Caliche
25-26'	--	Buff Fine Grain Sand with 30% Caliche
30-31'	--	Buff Fine Grain Sand with 15% Caliche
35-36'	--	Buff Fine Grain Sand with 10% Caliche
40-41'	--	Buff Fine Grain Sand with 5% Caliche
45-46'	--	Tan Fine Grain Well Sorted Sand
50-51'	--	Tan Fine Grain Well Sorted Sand
55-56'	--	Tan Fine Grain Well Sorted Sand
60-61'	--	Tan 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
100-101'	--	Light Brown Fine Grain Well Sorted Sand
105-106'	--	Light Brown Fine Grain Well Sorted Sand
110-111'	--	Light Brown Fine Grain Well Sorted Sand
115-116'	--	Light Brown Fine Grain Well Sorted Sand
120-121'	--	Light Brown Fine Grain Well Sorted Sand with 45% Subangular Gravel
125-126'	--	Light Brown Fine Grain Well Sorted Sand with 40% Subangular Gravel
130-131'	--	Light Brown Fine Grain Well Sorted Sand with 20% Subangular Gravel
135-136'	--	Light Brown Fine Grain Well Sorted Sand with 10% Subangular Gravel

SAMPLE LOG

Boring/Well **MW-5**
GPS **N33.16536° W103.79881°**
Project Number **115-6403134A**
Client **Celero Energy II, LP**
Site Name **Rock Queen Unit SWD Plant #1**
Site Location **Chaves, New Mexico**
Letter D, Section 26, Township 13 South, Range 31 East
Total Depth **150'**
Date Installed **11/22/10**

140-141'	--	Light Brown Sand with Light Brown Buff Clay
145-146'	--	Light Brown Grey Sandy Clay
150'	--	Grey Buff Clay with Red Bed

Total Depth: 150' Ground water depth not encountered while drilling.

SAMPLE LOG

Boring/Well MW-6
GPS N33.16840° W103.80038°
Project Number 115-6403134A
Client Celero Energy II, LP
Site Name Rock Queen Unit SWD Plant #1
Site Location Chaves, New Mexico
Letter D, Section 26, Township 13 South, Range 31 East
Total Depth 150'
Date Installed 11/22/10

Depth (Ft)	OVM	Sample Description
5-6'	--	Caliche
10-11'	--	Caliche and 10% Chert
15-16'	--	Caliche and 10% Chert
20-21'	--	Buff Fine Grain Sand with Caliche
25-26'	--	Buff Fine Grain Sand with 401% Caliche
30-31'	--	Buff Fine Grain Sand with 30% Caliche
35-36'	--	Buff Fine Grain Sand with 15% Caliche
40-41'	--	Buff Fine Grain Sand with 10% Caliche
45-46'	--	Light Brown Fine Grain Well Sorted Sand
50-51'	--	Light Brown Fine Grain Well Sorted Sand
55-56'	--	Light Brown Fine Grain 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
100-101'	--	Light Brown Fine Grain Well Sorted Sand
105-106'	--	Light Brown Fine Grain Well Sorted Sand
110-111'	--	Light Brown Fine Grain Well Sorted Sand
115-116'	--	Light Brown Fine Grain Well Sorted Sand
120-121'	--	Light Brown Fine Grain Well Sorted Sand
125-126'	--	Light Brown Fine Grain Well Sorted Sand with 5% Subangular Gravel

SAMPLE LOG

Boring/Well **MW-6**
GPS **N33.16840° W103.80038°**
Project Number **115-6403134A**
Client **Celero Energy II, LP**
Site Name **Rock Queen Unit SWD Plant #1**
Site Location **Chaves, New Mexico**
Letter D, Section 26, Township 13 South, Range 31 East
Total Depth **150'**
Date Installed **11/22/10**

Depth (Ft)	OVM	Sample Description
130-131'	--	Light Brown Fine Grain Well Sorted Sand with 5% Subangular Gravel
135-136'	--	Light Brown Fine Grain Well Sorted Sand with 10% Grey Buff Clay
140-141'	--	Light Brown Fine Grain Well Sorted Sand with 25% Grey Buff Clay
145-146'	--	Grey Buff Clay with 10% Red Bed
150'	--	Grey Buff Clay with 20% Red Bed

Total Depth: 150' Ground water depth not encountered while drilling.

SAMPLE LOG

Boring/Well MW-7
GPS N33.16710° W103.79710°
Project Number 115-6403134A
Client Celero Energy II, LP
Site Name Rock Queen Unit SWD Plant #1
Site Location Chaves, New Mexico
Letter D, Section 26, Township 13 South, Range 31 East
Total Depth 155'
Date Installed 11/19/10

Depth (Ft)	OVM	Sample Description
5-6'	--	Caliche
10-11'	--	Caliche and 20% Chert
15-16'	--	Buff Sand with Caliche and 20% Chert
20-21'	--	Buff Sand with 30% Caliche
25-26'	--	Buff Sand with 30% Caliche
30-31'	--	Buff Sand with 10% Caliche
35-36'	--	Buff Sand with 20% Caliche
40-41'	--	Buff Sand with 20% Caliche
45-46'	--	Light Brown Fine Grain Well Sorted Sand
50-51'	--	Light Brown Fine Grain Well Sorted Sand
55-56'	--	Light Brown Fine Grain 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
100-101'	--	Light Brown Fine Grain Well Sorted Sand with 10% Blue Grey Clay
105-106'	--	Light Brown Fine Grain Well Sorted Sand with 5% Blue Grey Clay
110-111'	--	Light Brown Fine Grain Well Sorted Sand
115-116'	--	Light Brown Fine Grain Well Sorted Sand
120-121'	--	Light Brown Fine Grain Well Sorted Sand
125-126'	--	Light Brown Fine Grain Well Sorted Sand

SAMPLE LOG

Boring/Well **MW-7**
GPS **N33.16710° W103.79710°**
Project Number **115-6403134A**
Client **Celero Energy II, LP**
Site Name **Rock Queen Unit SWD Plant #1**
Site Location **Chaves, New Mexico**
Letter D, Section 26, Township 13 South, Range 31 East
Total Depth **155'**
Date Installed **11/19/10**

Depth (Ft)	OVM	Sample Description
130-131'	--	Light Brown Fine Grain Well Sorted Sand
135-136'	--	Light Brown Fine Grain Well Sorted Sand
140-141'	--	Light Brown Fine Grain Well Sorted Sand
145-146'	--	Light Brown Sandy Clay with Subangular Gravel
150-151'	--	Light Brown Sandy Clay with Reddish Brown Clay
155'	--	Light Brown Sandy Clay with Reddish Brown Clay

Total Depth: 155' Ground water depth not encountered while drilling.

SAMPLE LOG

Boring/Well RW-1
GPS N33.166708° W103.798764°
Project Number 115-6403134A
Client Celero Energy II, LP
Site Name Rock Queen Unit SWD Plant #1
Site Location Chaves, New Mexico
Letter D, Section 26, Township 13 South, Range 31 East
Total Depth 150'
Date Installed 12/12/10

Depth (Ft)	OVM	Sample Description
5-6'	--	Buff hard limestone with chert to 8 feet
10-11'	--	Hard buff limestone
15-16'	--	Hard buff limestone to 19 feet
20-21'	--	Tan well sorted fine grain calcareous sand
25-26'	--	Tan well sorted fine grain calcareous sand
30-31'	--	Tan well sorted fine grain calcareous sand
35-36'	--	Tan well sorted fine grain calcareous sand
40-41'	--	Tan well sorted fine grain calcareous sand
45-46'	--	Tan well sorted fine grain calcareous sand
50-51'	--	Tan well sorted fine grain calcareous sand
55-56'	--	Tan well sorted fine grain sand
60-61'	--	Tan well sorted fine grain sand
65-66'	--	Tan well sorted fine grain sand
70-71'	--	Tan well sorted fine grain sand
75-76'	--	Tan well sorted fine grain sand
80-81'	--	Tan well sorted fine grain sand
85-86'	--	Tan well sorted fine grain sand
90-91'	--	Tan well sorted fine grain sand
95-96'	--	Tan well sorted fine grain sand
100-101'	--	Tan well sorted fine grain sand
105-106'	--	Tan well sorted fine grain sand
110-111'	--	Tan well sorted fine grain sand
115-116'	--	Tan well sorted fine grain sand
120-121'	--	Tan well sorted fine grain sand
125-126'	--	Tan well sorted fine grain sand
130-131'	--	Tan well sorted fine grain sand
135-136'	--	Tan well sorted fine grain sand

SAMPLE LOG

Boring/Well **RW-1**
GPS **N33.166708° W103.798764°**
Project Number **115-6403134A**
Client **Celero Energy II, LP**
Site Name **Rock Queen Unit SWD Plant #1**
Site Location **Chaves, New Mexico**
Letter D, Section 26, Township 13 South, Range 31 East
Total Depth **150'**
Date Installed **12/12/10**

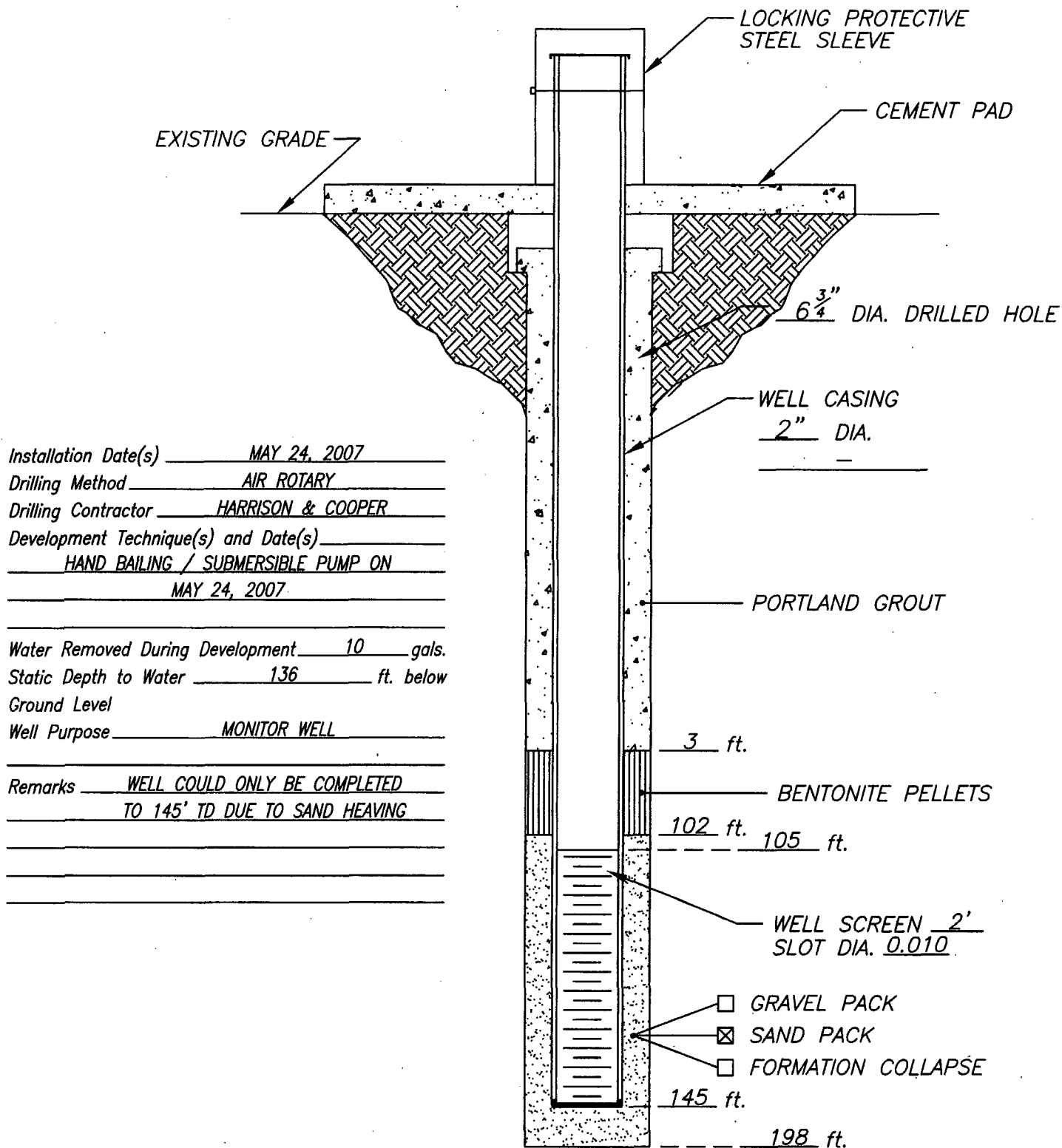
Depth (Ft)	OVM	Sample Description
140-141'	--	Tan well sorted fine grain sand
145-146'	--	Tan clay
150'	--	Tan clay

Total Depth: 150' Ground water depth not encountered while drilling.

APPENDIX B

MONITOR WELL INSTALLATION DIAGRAMS

WELL CONSTRUCTION LOG



DATE: 5/24/07

TETRA TECH, INC.
MIDLAND, TEXAS

CLIENT: CELERO ENERGY II, LP

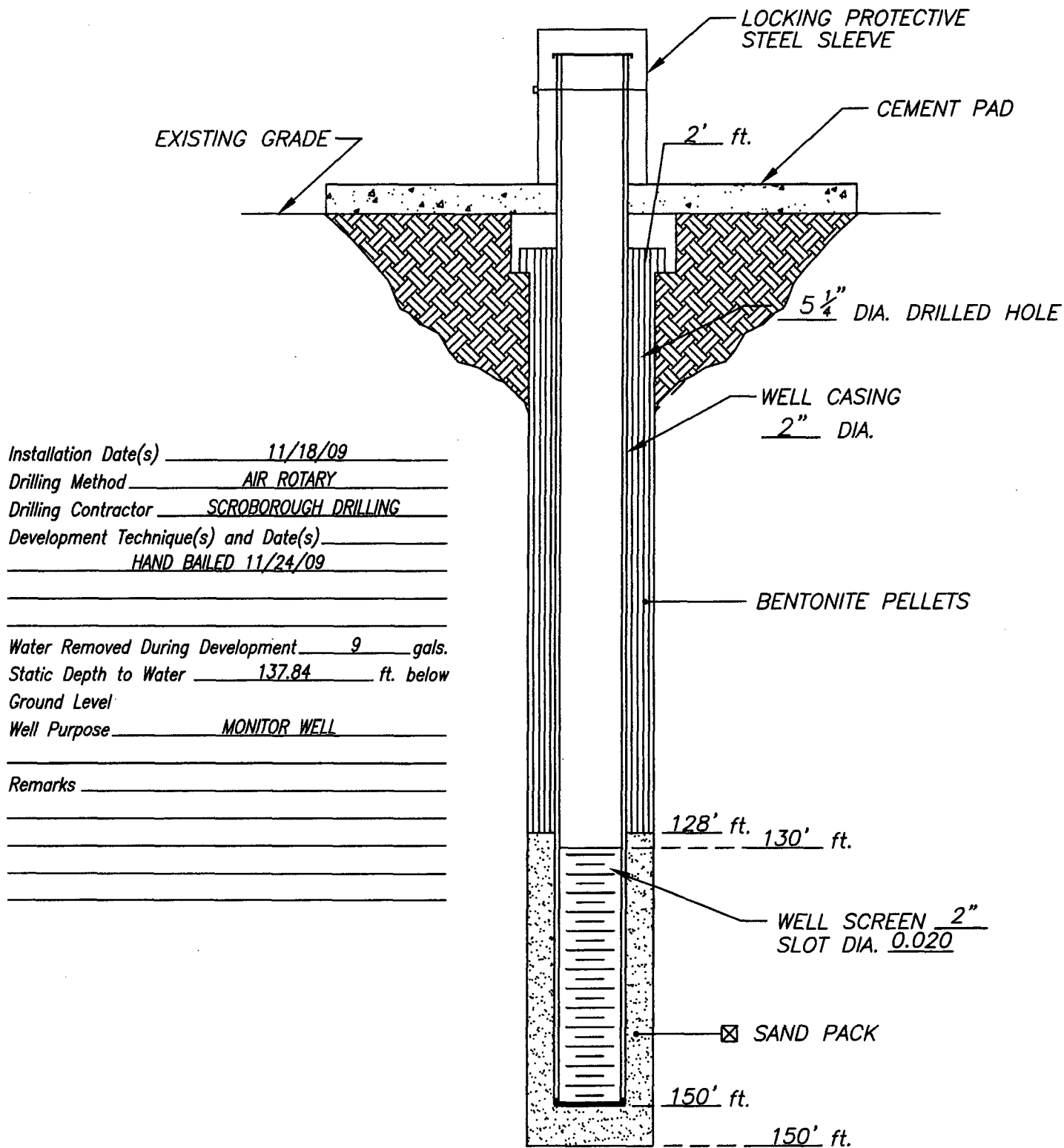
PROJECT: ROCK QUEEN INJ. PLANT #1 (115-6403134)

LOCATION: CHAVES COUNTY, NM

WELL NO.

MW-1

WELL CONSTRUCTION LOG



DATE: 11/20/09

TETRA TECH, INC.
MIDLAND, TEXAS

CLIENT: CELERO ENERGY

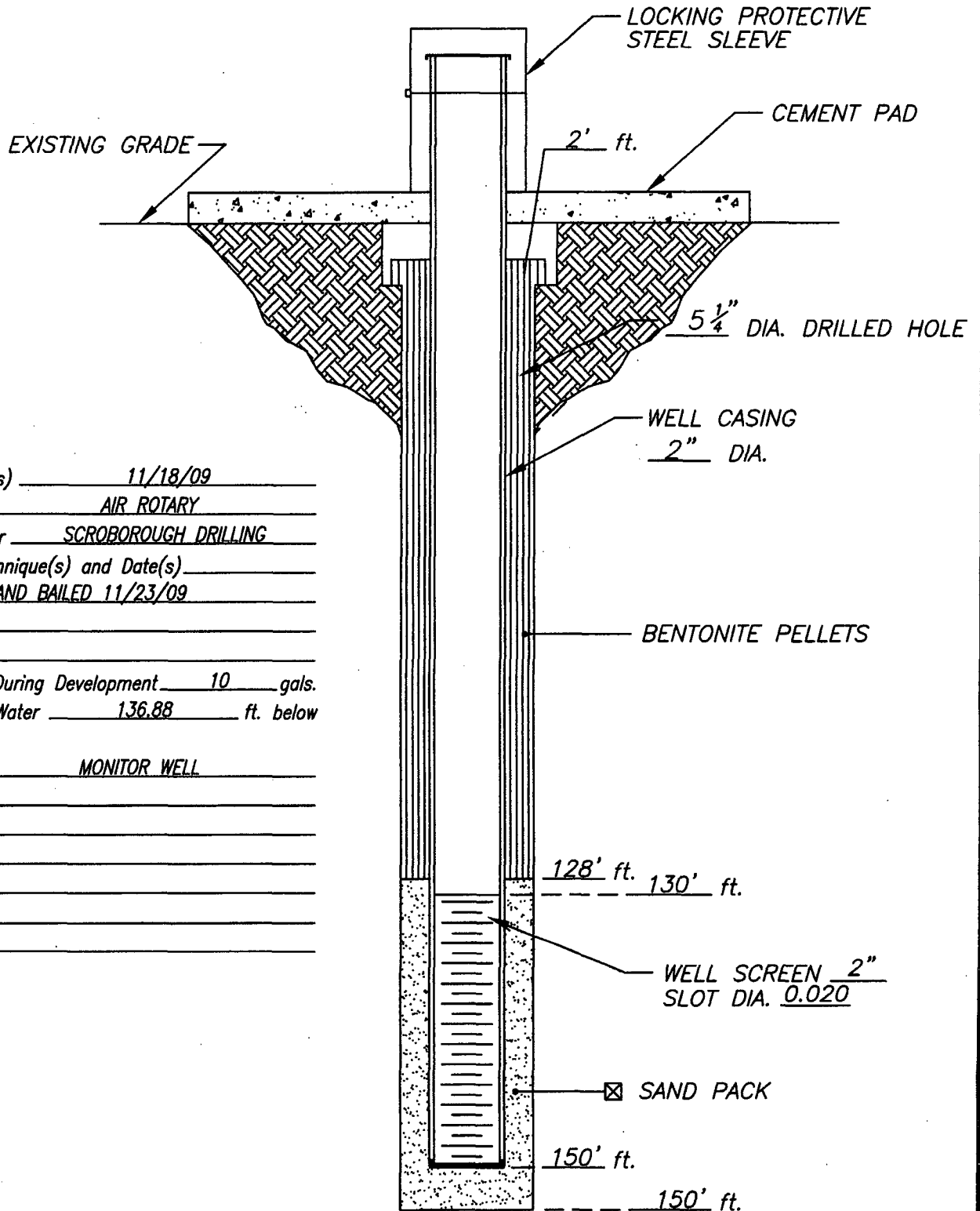
PROJECT: ROCK QUEEN INJ. PLANT #1 (115-6403134)

LOCATION: CHAVEZ COUNTY, NEW MEXICO

WELL NO.

MW-2

WELL CONSTRUCTION LOG



Installation Date(s) 11/18/09
 Drilling Method AIR ROTARY
 Drilling Contractor SCROBOROUGH DRILLING
 Development Technique(s) and Date(s) HAND BAILED 11/23/09

Water Removed During Development 10 gals.
 Static Depth to Water 136.88 ft. below
 Ground Level
 Well Purpose MONITOR WELL

Remarks _____

DATE: 11/20/09

TETRA TECH, INC.
MIDLAND, TEXAS

CLIENT: CELERO ENERGY

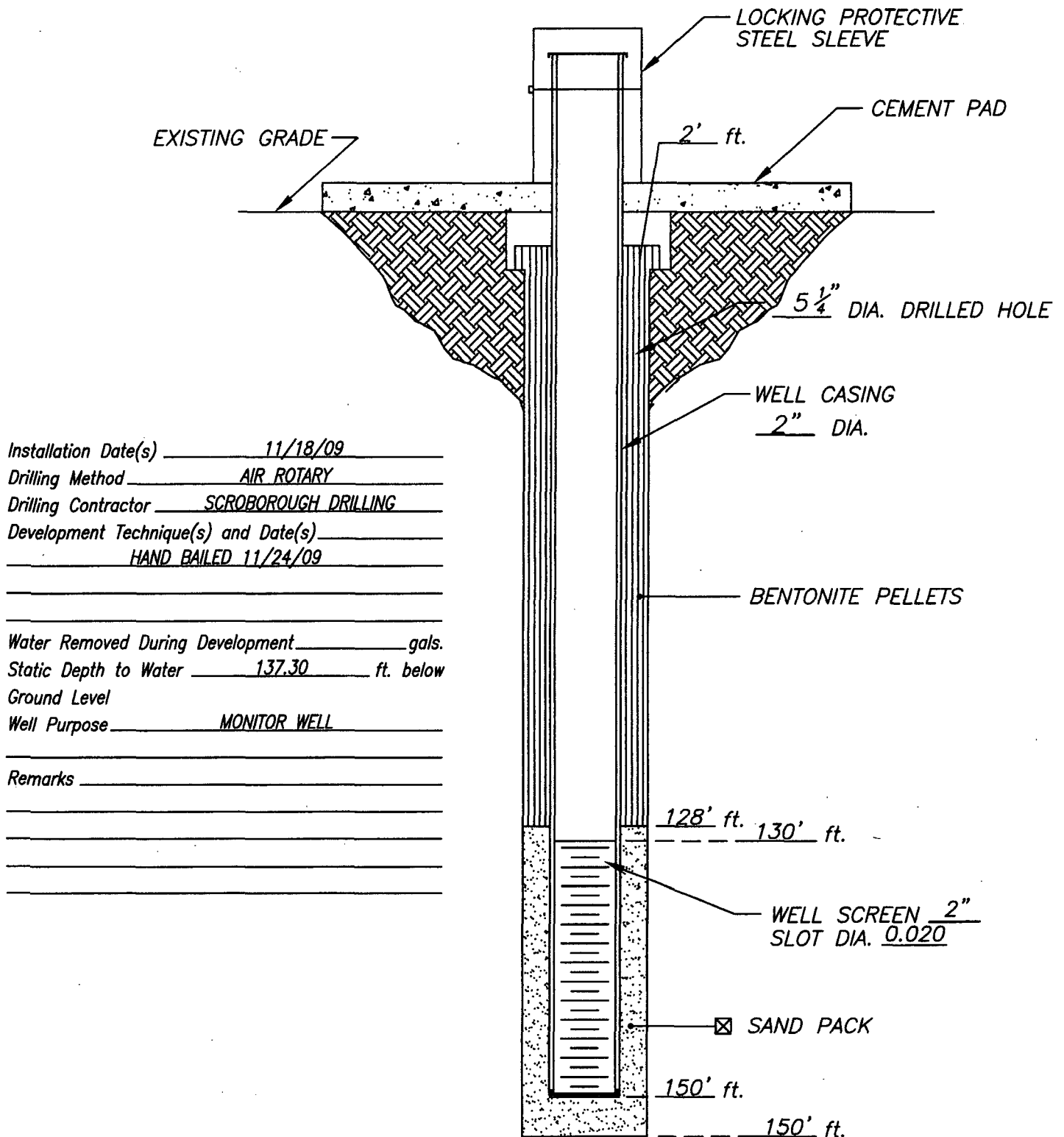
PROJECT: ROCK QUEEN INJ. PLANT #1 (115-6403134)

LOCATION: CHAVEZ COUNTY, NEW MEXICO

WELL NO.

MW-3

WELL CONSTRUCTION LOG



DATE: 11/20/09

TETRA TECH, INC.
MIDLAND, TEXAS

CLIENT: CELERO ENERGY

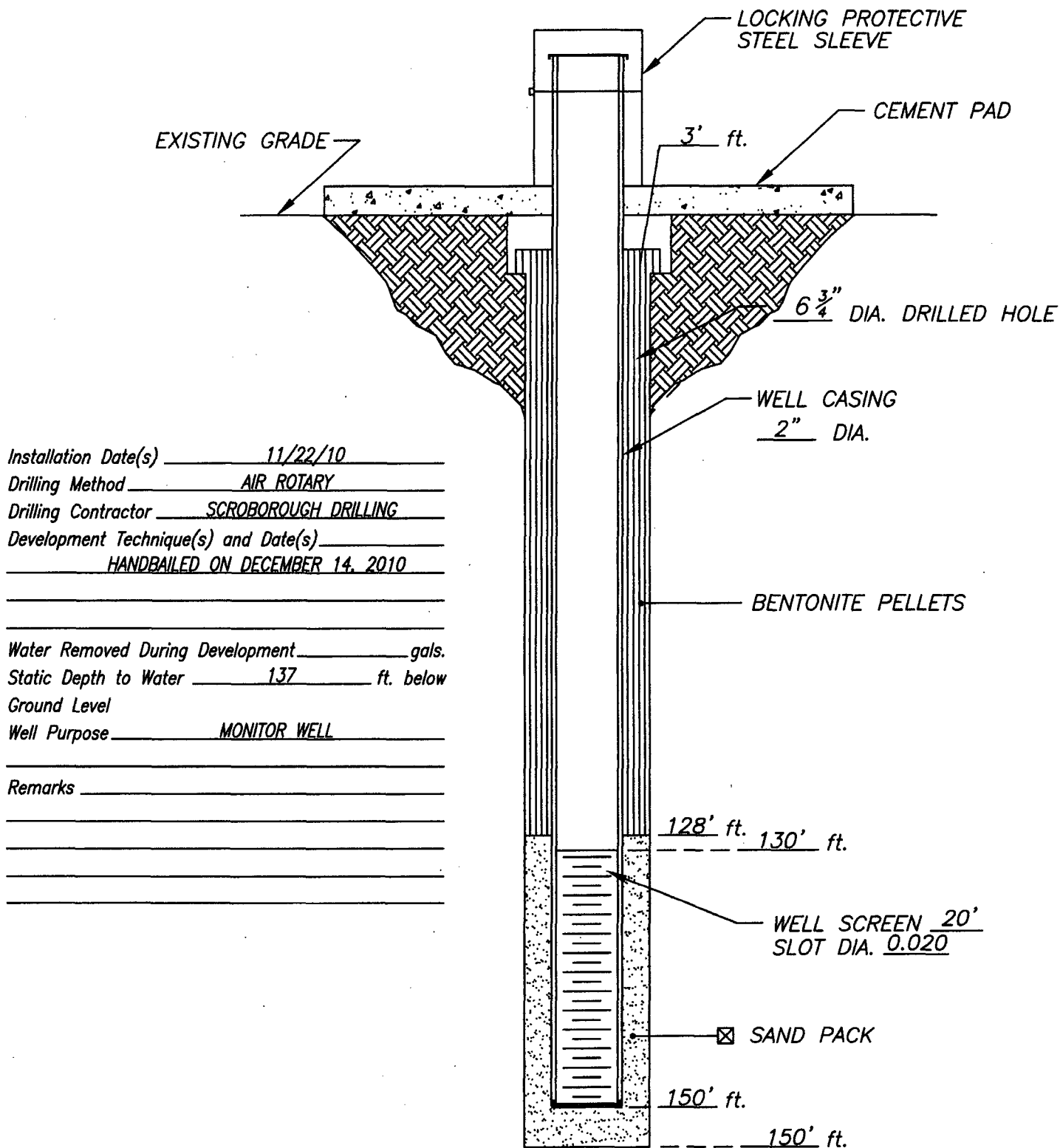
PROJECT: ROCK QUEEN INJ. PLANT #1 (115-6403134)

LOCATION: CHAVEZ COUNTY, NEW MEXICO

WELL NO.

MW-4

WELL CONSTRUCTION LOG



DATE: 11/18/10

TETRA TECH, INC.
MIDLAND, TEXAS

CLIENT: CELERO ENERGY II, LLC

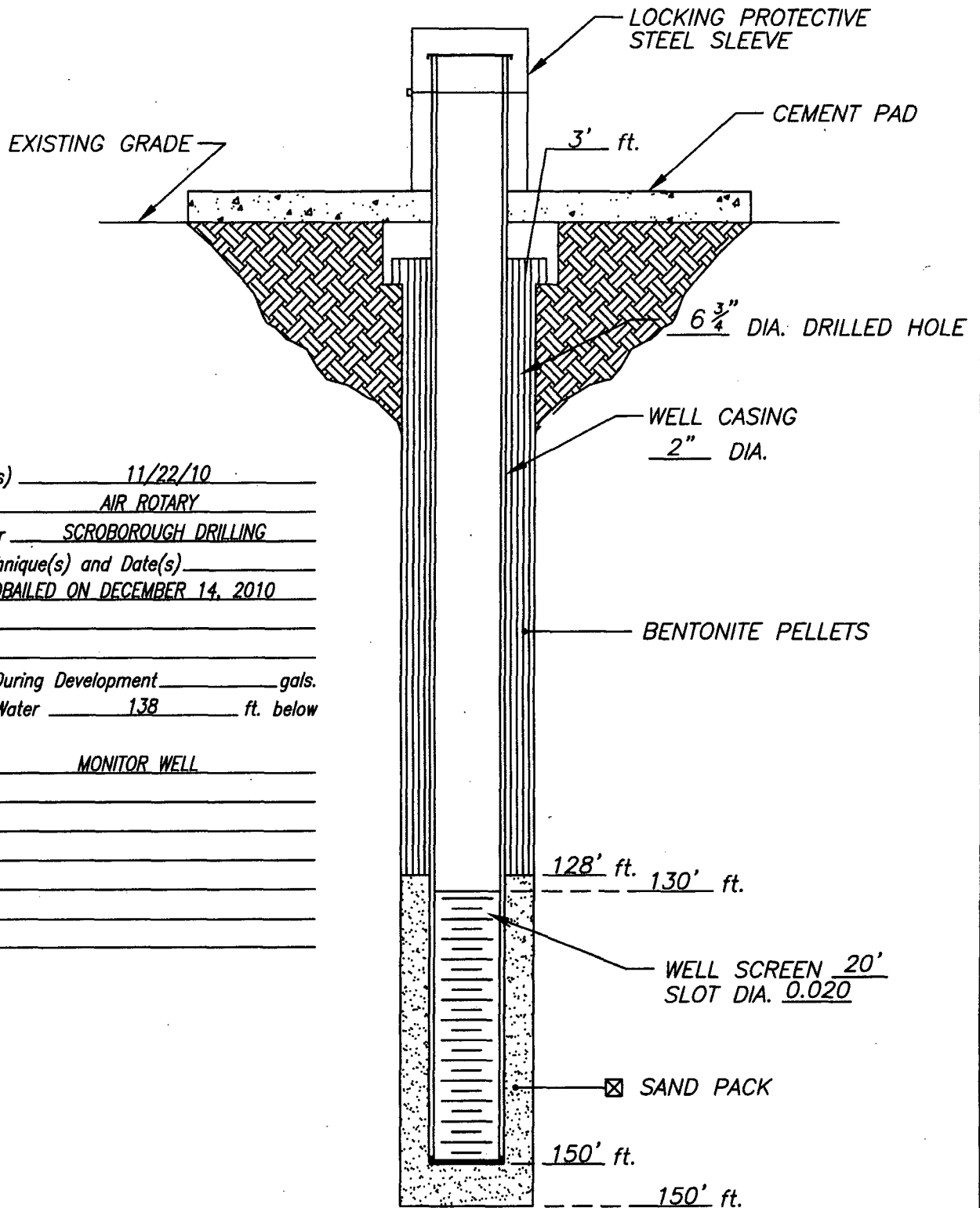
PROJECT: ROCK QUEEN INJ. PLANT #1

LOCATION: CHAVES COUNTY, NEW MEXICO

WELL NO.

MW-5

WELL CONSTRUCTION LOG



Installation Date(s) 11/22/10
 Drilling Method AIR ROTARY
 Drilling Contractor SCROBOROUGH DRILLING
 Development Technique(s) and Date(s) HANDBAILED ON DECEMBER 14, 2010

Water Removed During Development _____ gals.
 Static Depth to Water 138 ft. below
 Ground Level
 Well Purpose MONITOR WELL

Remarks _____

DATE: 11/18/10

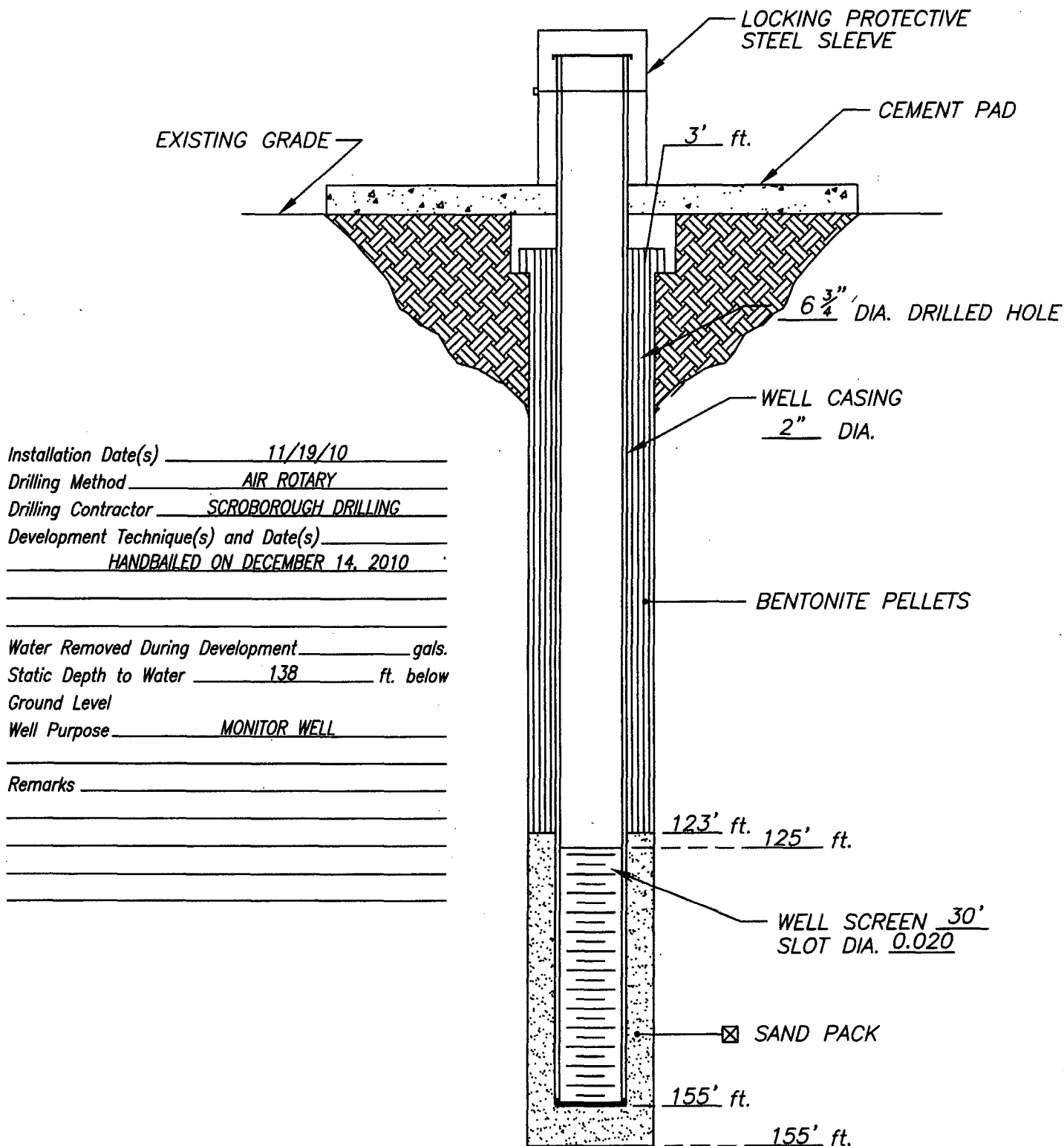
TETRA TECH, INC.
MIDLAND, TEXAS

CLIENT: CELERO ENERGY II, LLC
 PROJECT: ROCK QUEEN INJ. PLANT #1
 LOCATION: CHAVES COUNTY, NEW MEXICO

WELL NO.

MW-6

WELL CONSTRUCTION LOG



DATE: 11/19/10

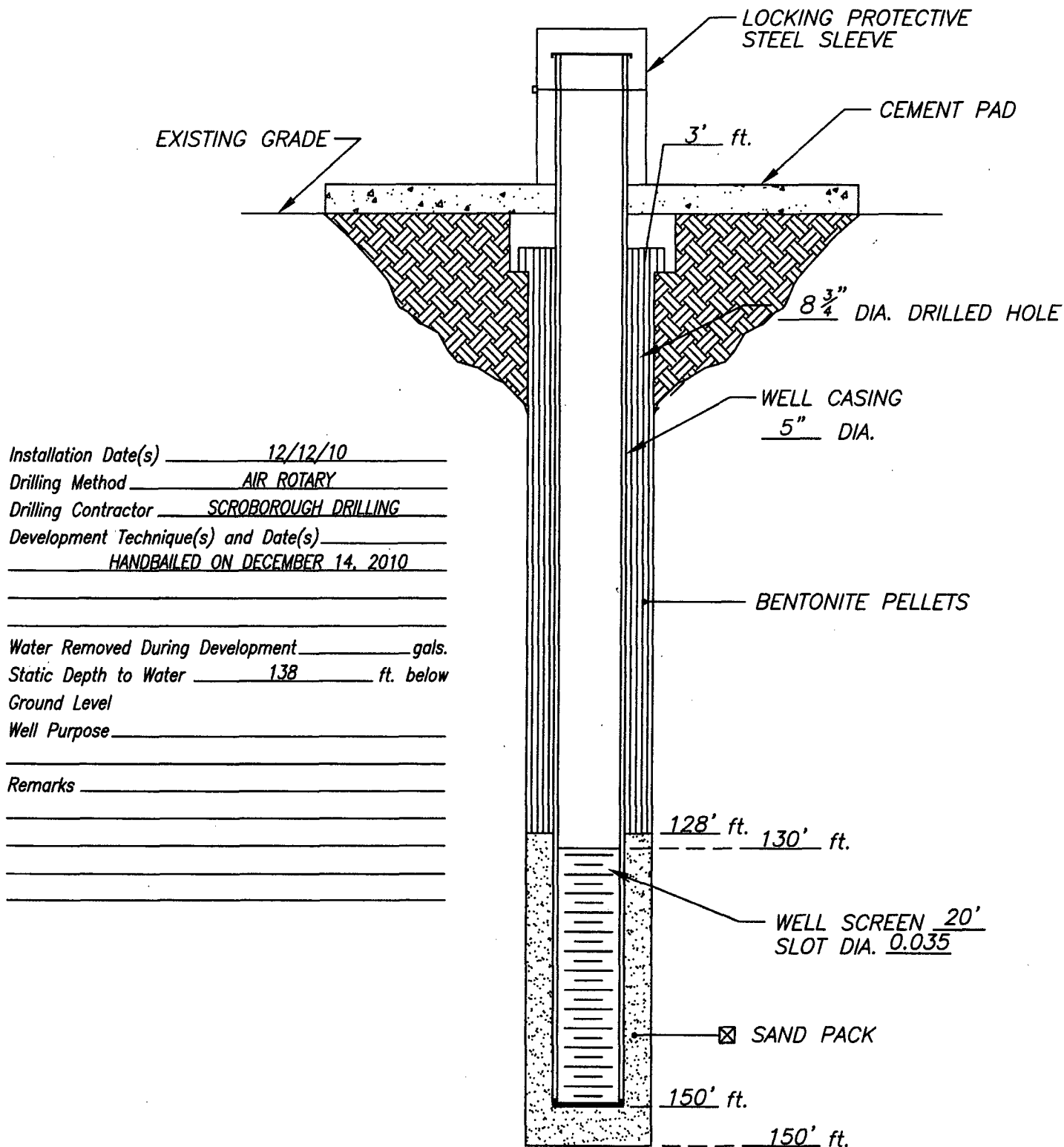
TETRA TECH, INC.
MIDLAND, TEXAS

CLIENT: CELERO ENERGY II, LLC
PROJECT: ROCK QUEEN INJ. PLANT #1
LOCATION: CHAVES COUNTY, NEW MEXICO

WELL NO.

MW-7

WELL CONSTRUCTION LOG



DATE: 12/13/10

TETRA TECH, INC.
MIDLAND, TEXAS

CLIENT: CELERO ENERGY II, LLC

PROJECT: ROCK QUEEN INJ. PLANT #1

LOCATION: CHAVES COUNTY, NEW MEXICO

WELL NO.

RW-1