

Monday June 23, 2008

399-2-14

C6191

Site Activities

Well completion activities resumed today. After the sand pack was finished being surged, 10-20 sand was added to a depth of 29.8 ft bgs, 40-140 silica sand was added to a depth of 9.8 ft bgs and granular bentonite was added to the borehole up to 3.0 ft bgs. Well development also took place at this well today. Both the tremmie pipe and pump were removed from the well before work began on the next borehole.

Well Development Summary:

	XD Initial	XD Final	Final Conductivity	Final pH	Starting Turbidity	Final Turbidity	Intake Depth (BGS)	Pump Rate	Total Pumped
Test 1:	1.983	1.966	453	7.52	21.6	1.77	40.0	50-55	1550
Test 2:	1.974	1.971	446	7.71	8.01	1.67	50.0	82-85	1596

	Static Water Level (BGS)	Depth to Bottom (BGS)
Start of Job:	27.9	56.0
End of Job:	28.0	56.0

Current Depths (ft bgs)

Bentonite pellets: 61.7 – 56.0

10-20 silica sand: 56.0 – 29.8

40-140 silica sand: 29.8 – 9.8

Granular bentonite: 9.8 – 3.0

25 ft pvc screen (0.020") and end cap: 56.0 – 30.7

4" ID pvc casing: 30.7 – ~5.5 ft ags

Borehole: 3

~~7 5/8" single wall temporary casing: 0~~

Plan

Monday June 23, 2008

399-3-31

C6214

Site Activities

Attend POD. Resume drilling. The borehole was advanced from 25 to 63 ft bgs and the casing was advanced from 15 to 60 ft bgs. Total depth was reached. Eleven grab samples were collected.

RCT coverage was provided in the AM. The RCT reported readings at or below background. IH daily coverage was provided and the reading was less than detect.

Sampling Performed

A total of 11 grab samples were taken. A sample summary table is attached.

Current Depths (ft bgs)

Borehole 63
7 5/8" single wall temporary casing 60
Expected total depth = ~ 58
Depth to water: 28.1

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-11.5	sandy gravel
11.5-18	gravelly sand
18-20.5	silty gravel
20.5-25	sandy gravel
25-33	silty sandy gravel
33-45	sandy gravel
45-55.5	NO RECOVERY
55.5-63	silt

Plan

Perform geophysical logging and install a well.

Drillers will finish surface completion when well completion and development has been caught up.

Monday June 23, 2008

399-2-17

C6195

Site Activities

Completion activities began this afternoon at this borehole. Coated bentonite pellets were added to the borehole from a depth of 61.6 to 57.5 ft bgs. 10-20 silica sand was added from 57.5 to 28.0 ft bgs. 40-140 silica sand was added from 28.0 to the present depth of 25.7 ft bgs. The permanent 20-slot screen and pvc casing was tripped into the borehole, and the ERTs and thermistors were taped to the outside of the casing from 33.5 ft bgs to surface. Centralizers were placed at the top and the bottom of the screen, and the sandpack was surged in two stages.

Current Depths (ft bgs)

Bentonite pellets: 61.6 – 57.5

10-20 silica sand: 57.5 – 28.0

40-140 silica sand: 28.0 – 25.7 (current)

25 ft pvc screen (0.020") and end cap: 56.5 – 31.2

4" ID pvc casing: 31.2 – ~5.5 ft ags

Borehole: 25.7 (current)

7 5/8" single wall temporary casing: 26

Plan

Well completion will resume tomorrow morning. Well development is expected to take place tomorrow afternoon.

Monday June 23, 2008

399-2-26

C6210

Site Activities

Attend POD. Rig and equipment was set-up on the location following rig maintenance between boreholes. The borehole was advanced from surface to 25 ft bgs and the casing was advanced from surface to 15 ft bgs. Eleven grab samples were collected.

Sampling Performed

A total of 11 grab samples were taken. A sample summary table is attached.

Current Depths (ft bgs)

Borehole 25
7 5/8" single wall temporary casing 15
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-8	sandy gravel
8-9.5	sand
9.5-18	sandy gravel
18-21	silty gravel
21-25	sandy gravel

Plan

Complete drilling.

Monday June 23, 2008

399-2-17

C6195

Site Activities

No work was done at this location due to the completions driller being sick. Surface completion was begun at wells C6201, C6191 and C6196

Current Depths (ft bgs)

Bentonite pellets: 61.6 – 57.5

10-20 silica sand: 57.5 – 28.0

40-140 silica sand: 28.0 – 25.7 (current)

25 ft pvc screen (0.020") and end cap: 56.5 – 31.2

4" ID pvc casing: 31.2 – ~5.5 ft ags

Borehole: 25.7 (current)

7 5/8" single wall temporary casing: 26

Plan

Pending driller health, well completion may continue tomorrow.

Tuesday June 24, 2008

399-2-26

C6210

Site Activities

Attend POD. Resume drilling. The borehole was advanced from 25 to 62 ft bgs and the casing was advanced from 15 to 60 ft bgs. Total depth was reached. Twelve grab samples were collected.

RCT coverage was provided in the AM. The RCT reported readings at or below background. IH daily coverage was provided and the reading was less than detect.

The rig and equipment were mobed from C6210 to C6193.

Sampling Performed

A total of 12 grab samples were taken. A sample summary table is attached.

Current Depths (ft bgs)

Borehole 62
7 5/8" single wall temporary casing 60
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-8	sandy gravel
8-9.5	sand
9.5-18	sandy gravel
18-21	silty gravel
21-29	sandy gravel
29-34	silt
34-40	sandy gravel
40-43	gravelly sand
43-52	No recovery. Poor recovery usually occurs in a sand
52-54	sand
54-57	gravel
57-62	silt

Plan

Perform geophysical logging and install a well.

Tuesday June 24, 2008

399-2-16

C6193

Site Activities

Attend POD. Rig and equipment was set-up on the location. The borehole was advanced from surface to 62 ft bgs and the casing was advanced from surface to 58.7 ft bgs. Total depth was reached. Twenty-two grab samples were collected.

RCT coverage was provided in the PM. The RCT reported readings at or below background. IH daily coverage was provided and the reading was less than detect.

Sampling Performed

A total of 22 grab samples were taken. A sample summary table will follow.

Current Depths (ft bgs)

Borehole 62
7 5/8" single wall temporary casing 58.7
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-3	sand
3-8	sandy gravel
8-10	gravel
10-12	sandy gravel
12-14	silty gravel
14-18	sandy gravel
18-20	silty gravel
20-25	gravel
25-54	sandy gravel
54-62	silt

Plan

Perform geophysical logging and install a well.

Wednesday June 25, 2008

399-2-20

C6198

Site Activities

Attend POD. Rig and equipment was set-up on the location. The borehole was advanced from surface to 62 ft bgs and the casing was advanced from surface to 59.7 ft bgs. Total depth was reached. Twenty-two grab samples were collected.

RCT coverage was provided in the AM. The RCT reported readings at or below background. IH daily coverage was provided and the reading was less than detect.

Sampling Performed

A total of 22 grab samples were taken. A sample summary table will follow.

Current Depths (ft bgs)

Borehole 62
7 5/8" single wall temporary casing 59.7
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-7	gravelly sand
7-20	silty gravel
20-24	gravel
24-54	sandy gravel
54-56	gravel
55-62	silt

Plan

Perform geophysical logging and install a well.

Wednesday June 25, 2008

399-2-15

C6192

Site Activities

Attend POD. Rig and equipment was set-up on the location. The borehole was advanced from surface to 61 ft bgs and the casing was advanced from surface to 59 ft bgs. Total depth was reached. Twenty-two grab samples were collected.

RCT coverage was provided in the PM. The RCT reported readings at or below background. IH daily coverage was provided and the reading was less than detect.

Sampling Performed

A total of 22 grab samples were taken. A sample summary table will follow.

Current Depths (ft bgs)

Borehole 61
7 5/8" single wall temporary casing 59
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-6	sandy gravel
6-10	silty sandy gravel
10-19	sandy gravel
19-21	silty gravel
21-25	silty sandy gravel
25-30	sandy gravel
30-35	silty sandy gravel
35-46	sandy gravel
46-50	gravelly sand
50-52	silt
52-55	gravelly sand
55-61	silt

Plan

Perform geophysical logging and install a well.

Wednesday June 25, 2008

399-2-12

C6189

Site Activities

Well completion was initiated today. The casing was backpulled above the depth of the coated bentonite, and the bentonite pellets were added to the borehole to a depth of 58.0 ft bgs. The ERTs for this well could not be obtained, so work was halted and the drill crew worked on surface completion at another borehole.

Current Depths (ft bgs)

Bentonite pellets: 61.0 – 58.0 (current)

Borehole: 58.0 (current)

7 5/8" single wall temporary casing: 55

Plan

Completion activities will resume first thing in the morning tomorrow.

Wednesday June 25, 2008

399-3-25

C6200

Site Activities

Completion activities were initiated and finished at this borehole today. The casing was backpulled above the level of the bentonite pellets. The pellets were added to the borehole to a depth of 57.3 ft bgs. The permanent casing and screen were tripped-into the borehole, with the bottom of the casing set at 56.9 ft bgs. This placed the ERTs and thermistors at a depth of 33.1 ft bgs. Casing was not set exactly at 57.3 due to swelling of the bentonite while the casing was being lowered. 10-20 silica sand was added to the borehole from a depth of 56.9 ft bgs to 27.1 ft bgs. 40-140 silica sand was added to the hole from 27.1 to 10.0 ft bgs. Granular bentonite was added to the borehole from 10.0 to 3.0 ft bgs.

Centralizers were placed at the top and bottom of the screen, and the sandpack was surged at two separate intervals. All temporary casing was removed from this borehole.

Current Depths (ft bgs)

Bentonite pellets: 60.4 – 56.9

10-20 silica sand: 56.9 – 27.1

40-140 silica sand: 27.1 – 10.0

Granular bentonite: 10.0 – 3.0

25 ft pvc screen (0.020") and end cap: 56.9 – 31.6

4" ID pvc casing: 31.6 – ~5.5 ft ags

Borehole: 3.0 (current)

~~7 5/8" single wall temporary casing:~~

Plan

Surface completion will take place on this borehole when the completion crew has caught up to the geophysical logging.

Wednesday June 25, 2008

399-2-17

C6195

Site Activities

Well completion activities resumed and were finished at this borehole today. 40-140 silica sand was added from 25.7 to 10.0 ft bgs. Granular bentonite was added from 10.0 to 2.7 ft bgs. All temporary casing was removed from the borehole.

Current Depths (ft bgs)

Bentonite pellets: 61.6 – 57.5

10-20 silica sand: 57.5 – 28.0

40-140 silica sand: 28.0 – 10.0

Granular bentonite: 10.0 – 2.7

25 ft pvc screen (0.020") and end cap: 56.5 – 31.2

4" ID pvc casing: 31.2 – ~5.5 ft ags

Borehole: 2.7 (current)

~~7 5/8" single wall temporary casing: 0~~

Plan

Surface completion will take place when the completions crew has caught up to the geophysical logging.

Thursday June 26, 2008

399-2-12

C6189

Site Activities

Thursday June 26, 2008

399-3-30

C6213

Site Activities

Attend POD. Rig and equipment was set-up on the location. The borehole and casing was advanced from surface to 45 ft bgs. Nineteen grab samples were collected.

RCT coverage was provided in the PM. The RCT reported readings at or below background. IH daily coverage was provided and the reading was less than detect.

Sampling Performed

A total of 19 grab samples were taken. A sample summary table will follow.

Current Depths (ft bgs)

Borehole 45
7 5/8" single wall temporary casing 45
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-19	sandy gravel
19-26	silty gravel
26-35	silty sandy gravel
35-45	sandy gravel

Plan

Complete the borehole.

Thursday June 26, 2008

399-2-29

C6216

Site Activities

Attend POD. Rig and equipment was set-up on the location. The borehole was advanced from surface to 61.5 ft bgs and the casing was advanced from surface to 59.7 ft bgs. Total depth was reached. Twenty-one grab samples were collected.

RCT coverage was provided in the AM. The RCT reported readings at or below background.

Sampling Performed

A total of 21 grab samples were taken. A sample summary table will follow.

Current Depths (ft bgs)

Borehole 61.5
7 5/8" single wall temporary casing 59.7
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-3	sandy gravel
3-6	gravelly sand
6-16	silty gravel
16-45	sandy gravel
45-55.5	gravelly sand
55.5-61.5	silt

Plan

Perform geophysical logging and install a well.

Friday June 27, 2008

399-3-30

C6213

Site Activities

Attend POD. Resume drilling. The borehole was advanced from 45 to 61.5 ft bgs and the casing was advanced from 45 to 59.5 ft bgs. The borehole reached total depth. Four grab samples were collected.

RCT coverage was provided in the AM. The RCT reported readings at or below background.

Sampling Performed

A total of 4 grab samples were taken. A sample summary table will follow.

Current Depths (ft bgs)

Borehole 61.5
7 5/8" single wall temporary casing 59.5
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-19	sandy gravel
19-26	silty gravel
26-35	silty sandy gravel
35-49	sandy gravel
49-55.5	gravel
55.5-61.5	silt

Plan

Install a well.

Friday June 27, 2008

399-3-25

C6200

Site Activities

Well development was performed at this well today. The pump and tremmie were removed from the borehole before the rig was moved from the well. See well development summary table for more information. Drawdown and recovery tests were recorded using transducer 5217.

Well Development Summary:

	XD Initial	XD Final	Final Conductivity	Final pH	Starting Turbidity	Final Turbidity	Intake Depth (BGS)	Pump Rate	Total Pumped
Test 1:	3.187	3.216	393	7.58	15.2	2.85	40.0	50	1724
Test 2:	3.249	3.288	417	7.69	17.4	3.95	50.0	85	1228

	Static Water Level (BGS)	Depth to Bottom (BGS)
Start of Job:	26.7	56.9
End of Job:	26.35	56.9

Current Depths (ft bgs)

Bentonite pellets: 60.4 – 56.9
10-20 silica sand: 56.9 – 27.1
40-140 silica sand: 27.1 – 10.0
Granular bentonite: 10.0 – 3.0

25 ft pvc screen (0.020") and end cap: 56.9 – 31.6
4" ID pvc casing: 31.6 – ~5.5 ft ags

Borehole: 3.0 (current)
~~7 5/8" single wall temporary casing: 0~~

Plan

No work is scheduled until surface completion activities are performed at this well.

Friday June 27, 2008

399-2-29

C6216

Site Activities

Well completion took place at this well today. Bentonite pellets were added to the borehole from 61.0 to 55.3 ft bgs. The 20.3 ft blank casing and cap, plus the 5 ft screen and 40 ft of casing were added to the borehole. 10-20 silica sand was added from 55.3 to a depth of 39.2 ft bgs. Coated bentonite pellets were tremmied past the screen from 39.2 to 36.85 ft bgs. 10-20 silica sand was added from 36.85 to 27.2 ft bgs. Bentonite pellets were added from 27.2 to 25 ft bgs. Bentonite was added from 25 ft to 1 ft bgs to prevent cave-in. The bentonite will be dug to a depth of 3 ft bgs before cement grout will be added to the borehole. All temporary casing was removed from the borehole.

The 5 ft screen was surged in one interval, and centralizers were placed at the bottom of the blank casing and the top of the screen. The bottom of the well was tagged at 55.0 ft bgs, a result of swelling of the bentonite as it hydrated.

Current Depths (ft bgs)

Bentonite pellets: 61.0 – 55.3

10-20 silica sand: 55.3 – 39.2

Bentonite pellets: 39.2 – 36.85

10-20 silica sand: 36.85 – 27.2

Bentonite pellets: 27.2 – 25

Bentonite chips: 25.0 – 1.0

20 ft 4" ID pvc blank casing and end cap: 55.0 – 34.7

5 ft pvc screen (0.020"): 34.7 – 29.7

4" ID pvc casing: 29.7 – ~5.5 ft ags

Borehole: 1

~~7 5/8" single wall temporary casing: 0~~

Plan

No work is currently scheduled to take place at this well. Well development could possibly take place at this location Monday (06/30) if a well design is not available for one of the other logged wells.

Friday June 27, 2008

399-2-27

C6184

Site Activities

Attend POD. Rig and equipment was set-up on the location. The borehole was advanced from surface to 62 ft bgs and the casing was advanced from surface to 59 ft bgs. Total depth was reached. Nineteen grab samples were collected.

RCT coverage was provided. The RCT reported readings at or below background. IH daily coverage was provided and the reading was less than detect.

Sampling Performed

A total of 19 grab samples were taken. A sample summary table will follow.

Current Depths (ft bgs)

Borehole 62
7 5/8" single wall temporary casing 59
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-11	sandy gravel
11-12	sand
12-25	silty sandy gravel
25-36	sandy gravel
36-55.5	gravel
55.5-62	silt

Plan

Install a well.

Friday June 27, 2008

399-2-28

C6212

Site Activities

Attend POD. Rig and equipment was set-up on the location. The borehole was advanced from the surface to 35 ft bgs and the casing was advanced from the surface to 15 ft bgs. Fifteen grab samples were collected.

RCT coverage was provided in the PM. The RCT reported readings at or below background. IH daily coverage was provided and the reading was less than detect.

Sampling Performed

A total of 15 grab samples were taken. A sample summary table will follow.

Current Depths (ft bgs)

Borehole 35
7 5/8" single wall temporary casing 15
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-7	sandy gravel
7-8	sand
8-19	sandy gravel
19-31	silty sandy gravel
31-32	silt
32-35	sandy gravel

Plan

Complete the borehole.

Monday June 30, 2008

399-2-31

C6218

Site Activities

Well completion began at this borehole today. Bentonite pellets were added to a depth of 56 ft bgs. The permanent casing screen was tripped into the borehole with centralizers at the bottom of the sump and below the screen. No ERTs or thermistors were set with the permanent casing. 10-20 silica sand was added from 56.0 to 49.5 ft bgs. Coated bentonite pellets were tremmied-in past the screen from 49.5 to 48.1 ft bgs. 10-20 silica sand was added from 48.1 to 40.8 ft bgs. The screen was surged. Bentonite pellets were added from 40.8 to 30.6, followed by bentonite chips from 30.6 to 18.2 ft bgs. When backpulling casing, it was discovered that the second bentonite pellet seal (from 40.8 to 39) bridged in the casing and pulled the permanent casing up with it. The permanent casing and the temporary casing was all removed from the borehole, and the borehole will need to be re-drilled.

Current Depths (ft bgs)

Bentonite pellets: 63.0 – 56.0
10-20 silica sand: 56.0 – 49.5
Bentonite pellets: 49.5 – 48.1
10-20 silica sand: 48.1 – 40.8
Bentonite pellets: 40.8 – 30.6
Bentonite chips: 30.6 – 18.2

(depths may no longer be accurate due to removal of casing)

Borehole: ~6

~~7 5/8" single wall temporary casing: 0~~

Plan

The well will be re-drilled tomorrow morning. When drilling is finished, completion will again take place.

Monday June 30, 2008

399-3-29

C6206

Site Activities

Review POD. Rig and equipment was set-up on the location. The borehole and casing was advanced from the surface to 55 ft bgs. Twenty grab samples were collected.

RCT coverage was provided in the PM. The RCT reported readings at or below background. IH daily coverage was provided and the reading was less than detect.

Sampling Performed

A total of 20 grab samples were taken. A sample summary table is attached.

Current Depths (ft bgs)

Borehole 55
7 5/8" single wall temporary casing 55
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-4	gravelly sand
4-17.5	sandy gravel
17.5-24	silty sandy gravel
24-52	sandy gravel
52-53	gravel
53-55	silt

Plan

Complete the borehole.

Monday June 30, 2008

399-3-30

C6213

Site Activities

Well completion activities were initiated at this borehole today. Bentonite pellets were added from 60.5 to 56 ft bgs. The permanent casing and screen was tripped into the borehole and the bottom of the sump was set at 55.3. No ERTs or thermistors were added to the hole with this well. 10-20 silica sand was added from 56 to 39.2 ft bgs. The rig was then moved from the hole and the drillers left the site.

Current Depths (ft bgs)

Bentonite pellets: 60.5 – 55.3

10-20 silica sand: 55.3 – 39.2

20 ft 4" ID pvc blank casing and end cap: 55.3 – 35

5 ft pvc screen (0.020"): 35.0 – 30

4" ID pvc casing: 30.0 – ~5.0 ft ags

Borehole: 39

7 5/8" single wall temporary casing: 46

Plan

Well completion will continue in tomorrow morning following the POD.

Monday June 30, 2008

399-2-28

C6212

Site Activities

Attend POD. Resume drilling. The borehole was advanced from 35 to 65 ft bgs and the casing was advanced from 15 to 63.2 ft bgs. [Total depth was reached for this borehole.](#) Twelve grab samples were collected.

RCT coverage was provided in the AM. The RCT reported readings at or below background. IH daily coverage was provided and the reading was less than detect.

Sampling Performed

A total of 12 grab samples were taken. A sample summary table is attached.

Current Depths (ft bgs)

Borehole 65
7 5/8" single wall temporary casing 63.2
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-7	sandy gravel
7-8	sand
8-19	sandy gravel
19-31	silty sandy gravel
31-32	silt
32-56.5	sandy gravel
56.5-65	silt

Plan

Install a well.

Tuesday July 1, 2008

399-3-29

C6206

Site Activities

Attend POD. Resume drilling. The borehole was advanced from 55 to 64 ft bgs and the casing was advanced from 55 to 58.2. Total depth was reached at this borehole. Three grab samples were collected.

RCT coverage was provided in the AM. The RCT reported readings at or below background. IH daily coverage was provided and the reading was less than detect.

Sampling Performed

A total of 3 grab samples were taken. A sample summary table is attached.

Current Depths (ft bgs)

Borehole 64
7 5/8" single wall temporary casing 58.2
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-4	gravelly sand
4-17.5	sandy gravel
17.5-24	silty sandy gravel
24-52	sandy gravel
52-53	gravel
53-64	silt

Plan

Perform geophysical logging and install a well.

Tuesday July 01, 2008

399-3-30

C6213

Site Activities

Well completion activities resumed this morning from 39.2 ft bgs. Coated bentonite pellets were tremmied past the 5 ft screen to a depth of 37.2 ft bgs. 10-20 silica sand was added to the borehole from 37.2 ft to 28 ft bgs. While backpulling the casing to set the shoe at the proper depth for the next bentonite interval, open hole was created and natural backfill filled the space from ~26-28 ft bgs. Approval was given from PNNL to proceed with the completion as the slough material was not at the screen interval. Bentonite pellets were added from 26.7 to 25.8 ft bgs, followed by bentonite chips from 25.8 ft to 3 ft bgs. All temporary casing was removed from the borehole. Centralizers were placed at the bottom of the sump and the top of the screen, and the screen was surged at one interval.

Current Depths (ft bgs)

Bentonite pellets: 60.5 – 55.3
10-20 silica sand: 55.3 – 39.2
Bentonite pellets: 39.2 – 37.2
10-20 silica sand: 37.2 – 28.0
Slough material: 28.0 – 26.7
Bentonite pellets: 26.7 – 25.8
Bentonite chips: 25.8 – 3.0 ft bgs

20 ft 4" ID pvc blank casing and end cap: 55.3 – 35
5 ft pvc screen (0.020"): 35.0 – 30
4" ID pvc casing: 30.0 – ~5.0 ft bgs

Borehole: 3
~~7 5/8" single wall temporary casing: 0~~

Plan

No work is scheduled at this well until development activities can take place.

Tuesday July 1, 2008

399-2-31

C6218

Site Activities

Attend POD. The PVC well and drill casing had previously removed from this borehole due to difficulties with the well installation. Cleaned out the well materials (to 56.8 ft bgs) that had been installed. Casing advanced to 55 ft bgs. Lower the well, begin placing sand, and the bentonite seal. A tagging error resulted in a poor placement of the bentonite seal. Removed the well string, and cleaned out to 55 ft bgs, casing to 55 ft bgs.

Plan

Complete clean-out, install a well and materials.

Tuesday July 01, 2008

399-2-15

C6192

Site Activities

Well completion activities began and were completed at this borehole today. Bentonite pellets were added from 61.5 to 57.5 ft bgs. The 4" ID permanent screen and casing was tripped into the hole with the bottom of the sump at 56.3 ft bgs. ERTs and thermistors were attached to the outside of the permanent casing from 33.5 ft bgs to surface. 10-20 silica sand was added to the borehole from 57.5 ft to 27.6 ft bgs. 40-140 silica sand was added from 27.6 ft to 10.1 ft bgs, with bentonite chips placed in the hole from 10.1 to 2.8 ft bgs. A temporary fill of 10-20 silica sand was placed in the hole from 2.8 ft to surface to prevent cave-in. This material will be removed before the cement grout is added to the borehole. All temporary casing was removed from the borehole, and the screen was surged at two separate intervals.

Current Depths (ft bgs)

Bentonite pellets: 61.5 – 57.5

10-20 silica sand: 57.5 – 27.6

40-140 silica sand: 27.6 – 10.1

Bentonite chips: 10.1 – 2.8

Temporary 10-20 sand: 2.8 - 0

25 ft pvc screen (0.020") and end cap: 56.3 – 31.0

4" ID pvc casing: 31.0 – ~5.0 ft ags

Borehole: 0

~~7 5/8" single wall temporary casing: 0~~

Plan

No work is currently scheduled for this well until development activities take place.

Wednesday July 2, 2008

399-2-31

C6218

Site Activities

The well and all materials were installed. The depths of installation are listed below. All temporary casing was removed from the borehole. Centralizers were placed at the bottom of the sump and the top of the screen, and the screen was surged at one interval.

Current Depths (ft bgs)

Bentonite chips: 1-37.2

Bentonite pellets: 37.2-39.5

10-20 silica sand: 39.5-48

Bentonite pellets: 48-50

10-20 silica sand: 50-56.4

Bentonite pellets: 56.4 – 63

4" Sch40 pvc blank casing: ~3 ft ags-42

2 ft pvc screen (0.020"): 42 – 44

4 " Sch40 pvc blank casing and end cap: 44 – 56.4

Plan

Develop the well and install the well pad.

Wednesday July 02, 2008

399-2-15

C6192

Site Activities

Well development was performed at this well today. The pump and tremmie were removed from the borehole before the rig was moved from the well. See well development summary table for more information. Drawdown and recovery tests were recorded using transducer 5217.

Well Development Summary:

	XD Initial (feet below water)	XD Final (feet below water)	Final Conductivity (μS)	Final pH	Starting Turbidity (NTU)	Final Turbidity (NTU)	Intake Depth (BGS)	Pump Rate (gpm)	Total Pumped (gal)
Test 1:	3.292	3.333	407	7.55	38.1	3.42	40.0	50-55	1523
Test 2:	3.342	3.352	389	7.68	51.9	3.49	50.0	86	1723

	Static Water Level (BGS)	Depth to Bottom (BGS)
Start of Job:	25.9	56.4
End of Job:	26.2	56.4

Current Depths (ft bgs)

Bentonite pellets: 61.5 – 57.5

10-20 silica sand: 57.5 – 27.6

40-140 silica sand: 27.6 – 10.1

Bentonite chips: 10.1 – 2.8

Temporary 10-20 sand: 2.8 - 0

25 ft pvc screen (0.020") and end cap: 56.3 – 31.0

4" ID pvc casing: 31.0 – ~5.0 ft ags

Borehole: 0

~~7 5/8" single wall temporary casing: 0~~

Plan

No work is currently scheduled at this well until surface completion activities take place.

Wednesday July 02, 2008

399-2-17

C6195

Site Activities

Well development was performed at this well today. The pump and tremmie were removed from the borehole before the rig was moved from the well. See well development summary table for more information. Drawdown and recovery tests were recorded using transducer 5217.

Well Development Summary:

	XD Initial (feet below water)	XD Final (feet below water)	Final Conductivity (μS)	Final pH	Starting Turbidity (NTU)	Final Turbidity (NTU)	Intake Depth (BGS)	Pump Rate (gpm)	Total Pumped (gal)
Test 1:	3.195	3.214	444	7.57	123	1.96	40.0	50-55	1511
Test 2:	3.193	3.189	417	7.66	28.8	2.41	50.0	86	1635

	Static Water Level (BGS)	Depth to Bottom (BGS)
Start of Job:	26.61	56.75
End of Job:	26.61	56.75

Current Depths (ft bgs)

Bentonite pellets: 61.6 – 57.5

10-20 silica sand: 57.5 – 28.0

40-140 silica sand: 28.0 – 10.0

Granular bentonite: 10.0 – 2.7

Cement grout: 2.7 - 0

25 ft pvc screen (0.020") and end cap: 56.5 – 31.2

4" ID pvc casing: 31.2 – ~5.5 ft ags

Borehole: 0

~~7 5/8" single wall temporary casing: 0~~

Plan

Surface completion has been completed at this well site. No further work is scheduled.

Monday July 7, 2008

399-2-8

C6185

Site Activities

Attend POD. Rig and equipment was set-up on the location. The borehole and casing was advanced from the surface to 35 ft bgs. Twelve grab samples were collected.

RCT coverage was provided. The RCT reported readings at or below background. IH daily coverage was provided and the reading was less than detect.

Sampling Performed

A total of 12 grab samples were taken. A sample summary table is attached.

Current Depths (ft bgs)

Borehole 35
7 5/8" single wall temporary casing 35
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-8	sandy gravel
8-9	sand
9-21.5	sandy gravel
21.5-24.5	silt
24.5-35	sandy gravel

Plan

Complete the borehole.

Tuesday July 8, 2008

399-2-8

C6185

Site Activities

Attend POD. Resume drilling. The borehole was advanced from 35 to 60 ft bgs and the casing was advanced from 35 to 56 ft bgs. Total depth was reached for this borehole. Seven samples were collected.

Sampling Performed

A total of 7 grab samples were taken. A sample summary table is attached.

Current Depths (ft bgs)

Borehole 60
7 5/8" single wall temporary casing 56
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-8	sandy gravel
8-9	sand
9-21.5	sandy gravel
21.5-24.5	silt
24.5-38	sandy gravel
38-41	silt
41-48.5	sand
48.5-50.5	gravel
50.5-60	silt

Plan

Complete the borehole.

Tuesday July 8, 2008

399-2-23

C6207

Site Activities

Attend POD. Initiate and complete drilling. The borehole was advanced from ground surface to 60 ft bgs and the casing was advanced from 0.0 to 58 ft bgs. Total depth was reached for this borehole. Seventeen samples were collected.

Sampling Performed

A total of 17 grab samples were taken. A sample summary table will follow.

Current Depths (ft bgs)

Borehole = 60

7 5/8" single wall temporary casing = 58

Expected total depth = ~ 60

Depth to water: ~ 25 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-4	gravelly sand
4-15	sandy gravel
15-22.5	sandy gravel
22.5-28	sandy gravel
28-40	sandy gravel
40-55	sandy gravel
55-59	silt
59-60	silt

Plan

Move to C6205.

Tuesday July 8, 2008

399-3-28

C6205

Site Activities

Attend POD. Initiate drilling. The borehole was advanced from ground surface to 20.0 ft bgs and the casing was advanced from 0.0 to 15.0 ft bgs. Nine samples were collected.

Sampling Performed

A total of 9 grab samples were taken. A sample summary table will follow.

Current Depths (ft bgs)

Borehole = 20.0

7 5/8" single wall temporary casing = 15.0

Expected total depth = ~ 60

Depth to water: ~ 25 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-5	gravelly sand
5-12	gravelly sand
12-20	sandy gravel

Plan

Complete drilling.

Tuesday July 08, 2008

399-2-7

C6184

Site Activities

Well completion activities commenced at this borehole today. The bentonite pellets were added from 62.0 ft bgs to 57.0 ft bgs. The casing was backpulled above the bentonite pellets.

Current Depths (ft bgs)

Bentonite pellets: 62 – 57

Borehole: 57

7 5/8" single wall temporary casing: 56.5

Plan

Completion activities will resume following the morning POD.

Tuesday July 08, 2008

399-2-20

C6198

Site Activities

Well completion activities commenced and were completed at this borehole. Bentonite pellets were added from 59.6 to 56.7 ft bgs. The permanent casing and screen were tripped into the borehole, with the ERTs and thermistors placed at 33.5 ft bgs. ERT string # 14 was used for this well. 10-20 silica sand was added from 56.7 to 28.8 ft bgs, followed by 40-140 silica sand from 28.8 to 9.3 ft bgs. Bentonite chips were added from 9.3 to 3.0 ft bgs. 10-20 silica sand was added from 3.0 to 0 ft bgs to prevent collapse of the hole at the surface. This material will be removed prior to surface completion.

Centralizers were placed at the top and bottom of the screened interval and the screen was surged at two separate intervals.

Current Depths (ft bgs)

Bentonite pellets: 59.6 – 56.7

10-20 silica sand: 56.7 – 28.8

40-140 silica sand: 28.8 – 9.3

Bentonite chips: 9.3 – 3.0

Temporary 10-20 sand: 3.0 - 0

25 ft pvc screen (0.020") and end cap: 56.3 – 31.0

4" ID pvc casing: 31.0 – ~5.0 ft ags

Borehole: 0

~~7 5/8" single wall temporary casing: 0~~

Plan

No work is currently scheduled for this well until development activities take place.

Tuesday July 08, 2008

399-2-16

C6193

Site Activities

Well completion activities were initiated and finished at the borehole today. Bentonite pellets were placed from 61.7 to 57.2 ft bgs. The 4" permanent screen and casing was tripped into the borehole with the bottom of the sump placed at 56.3 ft bgs. ERT string #13 was used at this well, with the ERTs and thermistors being placed at 33.5 ft bgs. 10-20 silica sand was added from 57.2 to 27.8 ft bgs, followed by 40-140 silica sand from 27.8 to 10.0 ft bgs. Bentonite chips were placed from 10.0 to 2.7 ft bgs. 10-20 silica sand was added from 2.7 to 0 ft bgs to prevent collapse of the borehole. All temporary casing was removed.

Centralizers were placed at the top and bottom of the screened interval, and the screen was surged at two separate depths.

Current Depths (ft bgs)

Bentonite pellets: 61.7 – 57.2

10-20 silica sand: 57.2 – 27.8

40-140 silica sand: 27.8 – 10.0

Bentonite chips: 10.0 – 2.7

Temporary 10-20 sand: 2.7 - 0

25 ft pvc screen (0.020") and end cap: 56.3 – 31.0

4" ID pvc casing: 31.0 – ~5.0 ft ags

Borehole: 0

~~7 5/8" single wall temporary casing: 0~~

Plan

No work is currently scheduled for this well until development activities take place.

Wednesday July 9, 2008

399-3-24

C6199

Site Activities

Attend POD. Rig and equipment was set-up on the location. The borehole was advanced from the surface to 15 ft bgs and the casing was advanced from the surface to 5 ft bgs. Six grab samples were collected.

Sampling Performed

A total of 6 grab samples were taken. A sample summary table is attached.

Current Depths (ft bgs)

Borehole 15
7 5/8" single wall temporary casing 5
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-12	gravelly sand
12-12.5	sand
12.5-15	sandy gravel

Plan

Complete the borehole.

Wednesday July 9, 2008

399-3-7

C6204

Site Activities

Attend POD. The borehole was advanced from the surface to 62 ft bgs and the casing was advanced from the surface to 57 ft bgs. Total depth was reached for this borehole. Eighteen samples were collected. RCT coverage was provided. The RCT reported readings at or below background.

Sampling Performed

A total of 18 grab samples were taken. A sample summary table is attached.

Current Depths (ft bgs)

Borehole 62
7 5/8" single wall temporary casing 57
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-8	gravelly sand
8-17	sandy gravel
17-24	silty gravel
24-27.5	sandy gravel
27.5-29	sand
29-48	sandy gravel (minimal recovery 35-45 ft)
48-50.5	gravel
50.5-62	silt

Plan

Install a well.

Wednesday July 09, 2008

399-3-29

C6206

Site Activities

Well completion activities were initiated and finished at this borehole today. Bentonite pellets were placed from 63.6 to 57.0 ft bgs. The 4" permanent casing and screen was tripped into the borehole with the bottom of the sump placed at 56.3 ft bgs. ERT string #17 was used for this well, and the ERTs and thermistors were placed from 33.5 ft bgs to surface. 10-20 silica sand was added from 57.0 to 29.0 ft bgs, and 40-140 silica sand was placed from 29.0 to 10.0 ft bgs. Bentonite chips were added to the borehole from 10.0 ft to 2.0 ft bgs. 10-20 silica sand was added from 2.0 to 0 ft bgs to prevent collapse of the borehole. This sand will be removed prior to surface completion. All temporary casing was removed from the borehole.

Centralizers were placed at the top and bottom of the screened interval, and the screen was surged at two separate depths.

Current Depths (ft bgs)

Bentonite pellets: 63.6 – 57.0

10-20 silica sand: 57.0 – 29.0

40-140 silica sand: 29.0 – 10.0

Bentonite chips: 10.0 – 2.0

Temporary 10-20 sand: 2.0 - 0

25 ft pvc screen (0.020") and end cap: 56.3 – 31.0

4" ID pvc casing: 31.0 – ~5.0 ft ags

Borehole: 0

~~7 5/8" single wall temporary casing: 0~~

Plan

No work is currently scheduled for this well until development activities take place.

Wednesday July 9, 2008

399-3-27

C6204

Site Activities

Attend POD. The borehole was advanced from the surface to 62 ft bgs and the casing was advanced from the surface to 57 ft bgs. Total depth was reached for this borehole. Eighteen samples were collected. RCT coverage was provided. The RCT reported readings at or below background.

Sampling Performed

A total of 18 grab samples were taken. A sample summary table is attached.

Current Depths (ft bgs)

Borehole 62
7 5/8" single wall temporary casing 57
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-8	gravelly sand
8-17	sandy gravel
17-24	silty gravel
24-27.5	sandy gravel
27.5-29	sand
29-48	sandy gravel (minimal recovery 35-45 ft)
48-50.5	gravel
50.5-62	silt

Plan

Install a well.

Wednesday July 09, 2008

399-3-27

C6184

Site Activities

Well completion continued at this borehole today. The 4" permanent casing and screen was tripped into the borehole with the bottom of the well being set at 56.3 ft bgs. ERT string #15 was used, with the ERTs and thermistors being placed at 33.5 ft bgs. 10-20 silica sand was added from a depth of 56.7 ft to 28.0 ft bgs. 40-140 silica sand was added from 28.0 ft to 9.7 ft bgs, and bentonite chips were placed in the borehole from 9.7 ft to 2.6 ft bgs. 10-20 silica sand was added to the borehole from 2.6 ft to surface to prevent collapse. This material will be removed prior to surface completion. All temporary casing was removed from the borehole.

Centralizers were placed at the top and bottom of the screened interval, and the screen was surged at two separate depths.

Current Depths (ft bgs)

Bentonite pellets: 62.0 – 56.7

10-20 silica sand: 56.7 – 28.0

40-140 silica sand: 28.0 – 9.7

Bentonite chips: 9.7 – 2.6

Temporary 10-20 sand: 2.6 - 0

25 ft pvc screen (0.020") and end cap: 56.3 – 31.0

4" ID pvc casing: 31.0 – ~5.0 ft ags

Borehole: 0

~~7 5/8" single wall temporary casing: 0~~

Plan

No work is currently scheduled for this well until development activities take place.

Wednesday July 9, 2008

399-3-28

C6205

Site Activities

Attend POD. Resume drilling. The borehole was advanced from 20 to 64.5 ft bgs and the casing was advanced from 15 to 59 ft bgs. Total depth was reached for this borehole. Thirteen samples were collected. RCT coverage was provided. The RCT reported readings at or below background. IH daily coverage was provided and the reading was less than detect.

Sampling Performed

A total of 13 grab samples were taken. A sample summary table will follow.

Current Depths (ft bgs)

Borehole 64.5
7 5/8" single wall temporary casing 59
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-12	gravelly sand
12-20	sandy gravel
20-30	silty sandy gravel
30-52	sandy gravel
52-55.5	gravel
55.5-64.5	silt

Plan

Install a well.

Thursday July 10, 2008

399-2-28

C6212

Site Activities

Well completion activities were initiated and completed at this borehole today. Bentonite pellets were placed from 64.7 to 57.3 ft bgs. The permanent screen and casing was set at 56.3 ft bgs. 10-20 silica sand was added to the hole from 57.3 to 47.4 ft bgs, and bentonite pellets were added from 47.4 to 46.1 ft bgs. 10-20 sand was added from 46.1 to 40.0 ft bgs. Bentonite pellets were again added from 40.0 to 26.3 ft bgs. Bentonite chips were then added to the borehole from 26.3 to surface. All temporary casing was removed from the borehole.

Centralizers were placed at the top of the screen and the bottom of the sump, and the screen was surged at one interval.

Current Depths (ft bgs)

Bentonite pellets: 64.7 – 57.3

10-20 silica sand: 57.3 – 47.4

Bentonite pellets: 47.4 – 46.1

10-20 silica sand: 46.1 – 40.0

Bentonite pellets: 40.0 – 26.3

Bentonite chips: 26.3 - 0

12 ft pvc sump and end cap: 56.3 - 44

2 ft pvc screen (0.020"): 44-42

4" ID pvc casing: 42 - ~5 ft ags

Borehole: 0

~~7 5/8" single wall temporary casing: 0~~

Plan

No work is currently scheduled for this well until development activities take place.

Thursday July 10, 2008

399-2-8

C6185

Site Activities

Well completion began and completed at this borehole location. Bentonite pellets were placed from 61.7 to 57.0 ft bgs. The permanent pvc screen and casing were tripped into the borehole with the bottom of the sump placed at 56.3 ft bgs. ERT string #18 was used, and the ERTs and thermistors were placed at 33.5 ft bgs. 10-20 silica sand was added from 57.0 to 28.6 ft bgs, with 40-140 silica sand added above this from 28.6 to 10.2 ft bgs. Bentonite chips were added from 10.2 to 3.0 ft bgs. 10-20 silica sand was added to the borehole from 3.0 ft bgs to surface to prevent collapse of the borehole. This material will be removed prior to surface completion. All temporary casing was removed from the borehole.

Centralizers were placed at the top and bottom of the screened interval and the screen was surged at two separate intervals.

Current Depths (ft bgs)

Bentonite pellets: 61.7 – 57.0

10-20 silica sand: 57.0 – 28.6

40-140 silica sand: 28.6 – 10.2

Bentonite chips: 10.2 – 3.0

Temporary 10-20 sand: 3.0 - 0

25 ft pvc screen (0.020") and end cap: 56.3 – 31.0

4" ID pvc casing: 31.0 – ~5.0 ft ags

Borehole: 0

~~7 5/8" single wall temporary casing: 0~~

Plan

No work is currently scheduled for this well until development activities take place.

Thursday July 10, 2008

399-3-23

C6194

Site Activities

Attend POD. The borehole was advanced from the surface to 65 ft bgs and the casing was advanced from the surface to 57.7 ft bgs. Total depth was reached for this borehole. Twenty-two samples were collected. RCT coverage was provided. The RCT reported readings at or below background. IH daily coverage was provided and the reading was less than detect.

Sampling Performed

A total of 22 grab samples were taken. A sample summary table will follow.

Current Depths (ft bgs)

Borehole 65
7 5/8" single wall temporary casing 57.7
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-10.5	gravelly sand
10.5-12	sand
12-35	sandy gravel
35-50.5	gravelly sand
50.5-52.5	gravel
52.5-65	silt

Plan

Install a well.

Thursday July 10, 2008

399-3-24

C6199

Site Activities

Attend POD. Resumed drilling. The borehole was advanced from 15 to 65 ft bgs and the casing was advanced from 5 to 58 ft bgs. Total depth was reached for this borehole. Twelve grab samples were collected. RCT coverage was provided. The RCT reported readings at or below background.

Sampling Performed

A total of 12 grab samples were taken. A sample summary table is attached.

Current Depths (ft bgs)

Borehole 65
7 5/8" single wall temporary casing 58
Expected total depth = ~ 58
Depth to water: ~ 26 ft

Borehole Log Summary (ft bgs)

0-0.5	gravel drill pad
0.5-12	gravelly sand
12-12.5	sand
12.5-35	sandy gravel
35-52.5	gravelly sand
52.5-65	silt

Plan

Install a well.

Friday July 11, 2008

399-2-31

C6218

Site Activities

Well development was performed at this well today. The pump and tremmie were removed from the borehole before the rig was moved from the well. See well development summary table for more information. Drawdown and recovery tests were recorded using transducer 5217. XD measurements were taken before pump was turned on and after recovery tests were performed.

Well Development Summary:

	XD Initial (feet below water)	XD Final (feet below water)	Final Conductivity (μS)	Final pH	Starting Turbidity (NTU)	Final Turbidity (NTU)	Intake Depth (BGS)	Pump Rate (gpm)	Total Pumped (gal)
Test 1:	8.159	8.214	400	7.73	25.4	5.02	40.0	20.0	768
Test 2:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

	Static Water Level (BGS)	Depth to Bottom (BGS)
Start of Job:	28.8	56.3
End of Job:	28.8	56.3

Current Depths (ft bgs)

Bentonite chips: 1-37.2

Bentonite pellets: 37.2-39.5

10-20 silica sand: 39.5-48

Bentonite pellets: 48-50

10-20 silica sand: 50-56.4

Bentonite pellets: 56.4 – 63

4" Sch40 pvc blank casing: ~3 ft ags-42

2 ft pvc screen (0.020"): 42 – 44

4 " Sch40 pvc blank casing and end cap: 44 – 56.4

Plan

No work is scheduled until surface completion activities take place.

Friday July 11, 2008

399-2-29

C6216

Site Activities

Well development was performed at this well today. The pump and tremmie were removed from the borehole before the rig was moved from the well. See well development summary table for more information. Drawdown and recovery tests were recorded using transducer 5217. XD measurements were taken before pump was turned on and after recovery tests were performed.

Well Development Summary:

	XD Initial (feet below water)	XD Final (feet below water)	Final Conductivity (μS)	Final pH	Starting Turbidity (NTU)	Final Turbidity (NTU)	Intake Depth (BGS)	Pump Rate (gpm)	Total Pumped (gal)
Test 1:	8.261	8.225	448	7.56	11.0	0.71	41.0	50	1877
Test 2:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

	Static Water Level (BGS)	Depth to Bottom (BGS)
Start of Job:	29.0	55.3
End of Job:	29.0	55.3

Current Depths (ft bgs)

Bentonite pellets: 61.0 – 55.3

10-20 silica sand: 55.3 – 39.2

Bentonite pellets: 39.2 – 36.85

10-20 silica sand: 36.85 – 27.2

Bentonite pellets: 27.2 – 25

Bentonite chips: 25.0 – 1.0

20 ft 4" ID pvc blank casing and end cap: 55.0 – 34.7

5 ft pvc screen (0.020"): 34.7 – 29.7

4" ID pvc casing: 29.7 – ~5.5 ft ags

Plan

No work is scheduled until surface completion activities take place.

Friday July 11, 2008

399-2-28

C6212

Site Activities

Well development was performed at this well today. The pump and tremmie were removed from the borehole before the rig was moved from the well. See well development summary table for more information. Drawdown and recovery tests were recorded using transducer 5217. XD measurements were taken before pump was turned on and after recovery tests were performed.

Well Development Summary:

	XD Initial (feet below water)	XD Final (feet below water)	Final Conductivity (μS)	Final pH	Starting Turbidity (NTU)	Final Turbidity (NTU)	Intake Depth (BGS)	Pump Rate (gpm)	Total Pumped (gal)
Test 1:	11.053	11.051	458	7.58	563	12.3	43.0	20	627
Test 2:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

	Static Water Level (BGS)	Depth to Bottom (BGS)
Start of Job:	28.8	56.5
End of Job:	28.8	56.5

Current Depths (ft bgs)

Bentonite pellets: 64.7 – 57.3

10-20 silica sand: 57.3 – 47.4

Bentonite pellets: 47.4 – 46.1

10-20 silica sand: 46.1 – 40.0

Bentonite pellets: 40.0 – 26.3

Bentonite chips: 26.3 - 0

12 ft pvc sump and end cap: 56.3 - 44

2 ft pvc screen (0.020"): 44-42

4" ID pvc casing: 42 - ~5 ft ags

Plan

No work is scheduled until surface completion activities take place.

Friday July 11, 2008

399-3-30

C6213

Site Activities

Well development was performed at this well today. The pump and tremmie were removed from the borehole before the rig was moved from the well. See well development summary table for more information. Drawdown and recovery tests were recorded using transducer 5217. XD measurements were taken before pump was turned on and after recovery tests were performed.

Well Development Summary:

	XD Initial (feet below water)	XD Final (feet below water)	Final Conductivity (μS)	Final pH	Starting Turbidity (NTU)	Final Turbidity (NTU)	Intake Depth (BGS)	Pump Rate (gpm)	Total Pumped (gal)
Test 1:	7.671	7.639	477	7.61	208	3.78	40.0	20.0	656
Test 2:	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

	Static Water Level (BGS)	Depth to Bottom (BGS)
Start of Job:	28.9	55.5
End of Job:	28.9	55.5

Current Depths (ft bgs)

Bentonite pellets: 60.5 – 55.3

10-20 silica sand: 55.3 – 39.2

Bentonite pellets: 39.2 – 37.2

10-20 silica sand: 37.2 – 28.0

Slough material: 28.0 – 26.7

Bentonite pellets: 26.7 – 25.8

Bentonite chips: 25.8 – 3.0 ft bgs

20 ft 4" ID pvc blank casing and end cap: 55.3 – 35

5 ft pvc screen (0.020"): 35.0 – 30

4" ID pvc casing: 30.0 – ~5.0 ft ags

Plan

No work is scheduled until surface completion activities take place.

Friday July 11, 2008

399-3-29

C6206

Site Activities

Well development was performed at this well today. The pump and tremmie were removed from the borehole before the rig was moved from the well. See well development summary table for more information. Drawdown and recovery tests were recorded using transducer 5217. XD measurements were taken before pump was turned on and after recovery tests were performed.

Well Development Summary:

	XD Initial (feet below water)	XD Final (feet below water)	Final Conductivity (μS)	Final pH	Starting Turbidity (NTU)	Final Turbidity (NTU)	Intake Depth (BGS)	Pump Rate (gpm)	Total Pumped (gal)
Test 1:	0.411	0.413	429	7.38	104	1.79	40.0	50	1345
Test 2:	19.318	19.288	440	7.44	39.7	2.79	50.0	84	845

	Static Water Level (BGS)	Depth to Bottom (BGS)
Start of Job:	28.9	56.3
End of Job:	28.9	56.3

Current Depths (ft bgs)

Bentonite pellets: 63.6 – 57.0
10-20 silica sand: 57.0 – 29.0
40-140 silica sand: 29.0 – 10.0
Bentonite chips: 10.0 – 2.0
Temporary 10-20 sand: 2.0 - 0

25 ft pvc screen (0.020") and end cap: 56.3 – 31.0
4" ID pvc casing: 31.0 – ~5.0 ft ags

Plan

No work is scheduled until surface completion activities take place.