40-8964

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October 7, 2013

UPS

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Administrative Order on Consent (AOC), (Docket No. 3211-00), TFN 3 2/290
Injection Well Casing Leak Investigation,
Quarterly Progress Report – 2nd Quarter, 2013,
Cameco Resources Permit to Mine 603, NRC Source Material License SUA-1548

Dear Sirs:

Power Resources, Inc., d/b/a Cameco Resources (Cameco) is herein submitting the 2nd Quarter, 2013 Injection Well Casing Leak Investigation Progress Report. This report contains a summary of investigative and mitigative activities associated with injection well casing leaks in the C, E, and F-Wellfields at the Highland Uranium Project.

During the report period, Cameco continued investigative and mitigative activities by conducting mechanical integrity testing (MIT), water quality sampling of shallow monitoring wells, further investigating impacted hydrostratigraphic units, and planning for aquifer testing and remediation strategies.

If you have questions or require additional information, please call me at (307) 358-6541, ext. 476 or email to Kenneth_Garoutte@cameco.com if you have any questions.

Respectfully,

Ken Garoutte
Safety, Health, Environment, Quality (SHEQ) Manager

KG/mb

FSME20

Attachments: Injection Well Casing Leak Investigation, 2nd Quarter, 2013 Progress Report

cc: File HUP 4.3.3.2
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POWER RESOURCES, INC. D/B/A/ CAMECO RESOURCES
HIGHLAND URANIUM PROJECT
INJECTION WELL CASING LEAK INVESTIGATION

QUARTERLY PROGRESS REPORT – SECOND QUARTER
APRIL THROUGH JUNE, 2013

1. INTRODUCTION

In accordance with Item No. 2 of the Administrative Order on Consent (AOC), Docket No. 3211-00, Power Resources, Inc. d/b/a/ Cameco Resources (Cameco) is providing the status of injection well casing leak investigative and mitigative activities in the C, E, and F-Wellfields for the quarterly report period.

1.1 List of Suspect and/or Failed Wells

The status of failed and/or suspect wells in the C, E and F-Wellfields are provided in Tables 1 through 3, respectively. During the report period, only one (1) new well was added to the list and is denoted in Table 3 with a ">" symbol. In the C and E-Wellfields (Tables 1 and 2), no new wells were added to the MIT well failure inventory. In the F-Wellfield (Table 3), well FI-0137 was added to the MIT well failure inventory.

The status of the five (5) wells added to list of suspect and/or failed wells on the 1st Quarterly Progress Report, 2013 are as follows. In the C-Wellfield (Table 1), well CI-132 was plugged on 6/17/2013. In the E-Wellfield (Table 2), well EI-316 was plugged on 6/17/2013. In the F-Wellfield (Table 3), wells FI-0176, FI-0890 and FI-1230 were plugged on 5/2/2013, 6/17/2013 and 5/28/2013 respectively.

Any additional wells in the C, E, and F-Wellfields that fail MIT in the future will be added to these lists and either be 1) repaired and re-tested for mechanical integrity, or 2) plugged and abandoned in accordance with the requirements of Wyoming Department of Environmental Quality/Land Quality Division (WDEQ/LQD) Noncoal Rules and Regulations, Chapter 11, Section 8(c).

1.2 Maps Showing Locations of Monitor Wells Relative to Failed/Suspect Wells and Newly Failed Wells Added to the MIT Failure Database During 2013

In accordance with Cameco's proposed revisions to the AOC dated February 21, 2002 and LQD's approval dated March 11, 2002, revised maps for MIT well failures in the C, E and F-Wellfields are submitted annually along with the 4th Quarter Annual Report unless substantial changes occur during any quarterly report period. Updated maps that display additional MIT well failures that occurred throughout the year, and the stratigraphic interval where the failure occurred, will be submitted within the 4th Quarter, 2013 Annual Report.

2. MINE UNIT INVESTIGATIVE AND MITIGATIVE ACTIVITIES

2.1 Recent Activities

Recent Shallow Monitoring Well Installation:

During the report period, Cameco continued geologic and hydrologic investigations in the C, E and F-Wellfields. These investigations were conducted consistent with Cameco's notification to the LQD dated September 14, 2011. Twelve (12) new shallow groundwater monitoring wells were drilled, completed and developed for sampling during the 1st Quarter, 2013. Three (3) new shallow groundwater monitoring wells were drilled, completed and developed in the 120 sand unit of the F-Wellfield. Two (2) new shallow groundwater monitoring wells were drilled, completed and developed in the 110 sand unit of the F-Wellfield. One (1) new shallow groundwater monitoring well was drilled, completed and developed in the 130 sand unit of the C-Wellfield. Two (2) new shallow groundwater monitoring wells were drilled, completed and developed in the 110 sand unit of the C-Wellfield. Two (2) new shallow groundwater monitoring wells were drilled, completed and developed in the 100 sand unit of the C-Wellfield. Two (2) new shallow groundwater monitoring wells were drilled, completed and developed in the 80 sand unit of the C-Wellfield.

The locations of the seven (7) new shallow groundwater monitoring wells in the C-Wellfield were added to the map (Figure 1) and included in the 2nd Quarterly Progress Report, 2013. The locations of the five (5) new shallow groundwater monitoring wells in F-Wellfield were added to the map (Figure 2) and included in the 2nd Quarterly Progress Report, 2013. All of the recently installed shallow groundwater monitoring well construction information is shown in Table 4.

Recent Shallow Monitoring Well Sampling:

In a meeting on June 17, 2013 between LQD and Cameco, LQD was informed by Cameco that every effort would be made to sample all of the recently installed (2012 and 2013) shallow groundwater monitoring wells of the C, E and F-Wellfields, as well as approximately 50% of the older existing shallow groundwater monitoring wells.

Of the current total (139) of new and existing shallow groundwater monitoring wells (Table 5), 60% of the shallow groundwater monitoring wells were sampled for the 2nd Quarter, 2013. The 22 of the 23 shallow groundwater monitoring wells installed in C, E and F-Wellfields for 2012 were sampled for full suite of parameters as outline in the Sampling and Analysis Plan. Twelve (12) new shallow groundwater monitoring wells installed in the C and F-Wellfields during the 1st Quarter, 2013 were sampled for the full suite of parameters as outline in the Sampling and Analysis Plan. An additional 48 shallow groundwater monitoring wells were sampled for a full suite of parameters as outlined in the Sampling and Analysis Plan.

The water quality analysis results for the wells installed in the C, E and F-Wellfields in 2012 and earlier are summarized in Tables 6, 7 and 8. The water quality analysis results for the wells installed in the C and F-Wellfields in 2013 are summarized in Tables 9 and 10.

2.2 Planned Activities

In consultation with the LQD, Cameco will continue with monitoring well installations and groundwater sampling during the 3rd Quarterly Progress Report, 2013 report period. As described in Cameco's September 14, 2011 notification to the LQD, monitoring wells will be used to obtain and define geological/hydrological characteristics and water quality data in support of a comprehensive assessment of the potential impacts to the C, E and F-Wellfields. The continued advancement of shallow groundwater monitoring wells will continue into 2013, as the extent of potential impacts to shallow hydrostratigraphic units begins to take shape.

Planned Shallow Monitoring Well Installation

An additional area in the F-Wellfield has been targeted for casing leak investigations in the vicinity of Header House F-11 and groundwater monitoring well FM-009A. In consultation with the LQD, a cluster of three (3) shallow groundwater monitoring wells will be installed near FM-009A. The well cluster location is shown on the attached map that is labeled Figure 3. This CLI well location has been spotted directly up-gradient (groundwater) from the original FM-009 monitoring well, where potential casing leak impacts may exist. Due to supply issues with the casing manufacturing company, Cameco had to reschedule drilling with the contractor. It is anticipated that well advancement will begin during the first week of October, 2013. Results of investigations will be immediately communicated to the LQD as results are gathered.

Planned Groundwater Quality Sampling and Characterization

A list of 139 shallow groundwater monitoring wells (Table 5) represents the present status of CLI wells available for sampling, characterization and restoration purposes. The shallow groundwater monitoring wells shaded in gray (90) contain an extensive amount of analytical sample data for characterization and will not be sampled for the 3rd Quarterly Progress Report, 2013, but they will remain accessible for future restoration purposes. The remaining 49 shallow groundwater monitoring wells along with any newly installed shallow groundwater monitoring wells will be sampled quarterly as outlined in the Sampling and Analysis Plan for Casing Leak Investigation.

Aquifer Testing

Cameco has requested a proposal for an aquifer test plan from an outside consultant. The focus of the aquifer test will be to investigate the possible interconnectivity of the shallow sand units within the northern portion of the C-Wellfield (C-North). The results of all aquifer testing will be communicated to the LQD in Quarterly CLI Progress Reports. In addition and as agreed upon during the meeting between LQD and Cameco personnel on June 17th, the LQD will be informed before any aquifer testing takes place.

Shallow Groundwater Remediation

During the course of the 2nd Quarter reporting period, Cameco has been working to install and refurbish infrastructure in the E-Wellfield that will allow the commencement of shallow groundwater remediation pump and treat activities, following the final definition of impacted areas requiring remediation. Once impacted areas are better defined and aquifer testing/characterization is complete in the C, E, and F-Wellfields, remediation activities will then begin in those areas that display impacts requiring remediation. Cameco has started work on a plan that will utilize the existing infrastructures of the C, E and F-Wellfields. Plans for groundwater pump and treat methodologies will be incorporated into the Restoration Plans presently active in the C, E and F-Wellfields. Cameco will inform the appropriate regulatory agencies (NRC and LQD) prior to initiating remediation methodologies.

TABLE 1: C Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
1		CI-001	C1	Failed: MIT	140	X		
2		CI-002	C1	Failed: MIT	NS		X	
3		CI-003	C1	Failed: MIT	150, 140, 130	X		
4		CI-005	C1	Failed: Camera	140	X		
5		CI-006	C1	Failed: Camera	140	X		
6		CI-008	C1	Failed: MIT	150, 140, 130	X		
7		CI-009	C1	Failed: MIT	150	X		
8		CI-010	C1	Failed: Testing Procedure	NFI	X		X
9		CI-012	C1	Failed: MIT	80	X		
10		CI-013	C1	Failed: MIT	150	X		
11		CI-016	C1	Failed: MIT	NS		X	
12		CI-017	C2	Failed: MIT	130, 100	X		
13		CI-018	C2	Failed: MIT	UD	X		
14		CI-021	C2	Failed: MIT	NS		X	
15		CI-025	C3	Failed: MIT	150, 140, 50,	X		
16		CI-026	C3	Failed: MIT	140, 130	X		
17		CI-027A	C2	Failed: MIT	140, 130, 60	X		
18		CI-028A	C2	Failed: MIT	150		X	
19		CI-030	C2	Failed: MIT	140	X		
20		CI-030A	C2	Failed: MIT	UD	X		
21		CI-031	C2	Failed: MIT	UDI	X		
22		CI-032	C3	Failed: MIT	140, 130	X		
23		CI-033	C3	Failed: MIT	130	X		
24		CI-034	C2	Failed: MIT	140, 100	X		
25		CI-035	C4	Failed: MIT	150	X		
26		CI-038	C4	Failed: MIT	70	X		
27		CI-039	C3	Failed: MIT	150	X		
28		CI-040A	C3	Failed: MIT	90, 70	X		
29		CI-041	C3	Failed: MIT	UD (Q2 2011)	X		
30		CI-043	C3	Failed: MIT	NS	X		
31		CI-044	C4	Failed: MIT	140	X		
32		CI-045	C3	Failed: MIT	NS	X		
33		CI-046	C3	Failed: MIT	150, 140, 130, 70	X		
34		CI-048	C3	Failed: MIT	140	X		
35		CI-050	C4	Failed: Testing Procedure	NFI			X
36		CI-051	C4	Failed: MIT	140	X		
37		CI-052	C4	Failed: MIT	NS	X		
38		CI-053	C4	Failed: MIT	UD	X		
39		CI-054	C4	Failed: MIT	140, 130	X		
40		CI-056A	C4	Failed: MIT	NS	X		
41		CI-057	C4	Failed: MIT	150, 140	X		
42		CI-059	C4	Failed: MIT	140, 130	X		
43		CI-060	C4	Failed: MIT	140	X		
44		CI-064	C4	Failed: MIT	150; UD (Q2 2011)	X		
45		CI-066	C4	Failed: MIT	150	X		
46		CI-067	C5	Failed: MIT	140, 70	X		
47		CI-068	C5	Failed: MIT	150, 140, 100, 80	X		
48		CI-070	C5	Failed: MIT	140	X		

TABLE 1: C Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
49		CI-071	C5	Failed: MIT	150, 140, 100, 80, 70		X	
50		CI-072A	C3	Geophysical Log Anomaly	80/70		X	
51		CI-075	C5	Failed: MIT	150, 140	X		
52		CI-076	C5	Failed: MIT	140	X		
53		CI-077	C3	Failed: MIT	140	X		
54		CI-078A	C3	Failed: MIT	NS	X		
55		CI-079	C5	Failed: MIT	UDI	X		
56		CI-080	C5	Failed: MIT	150/140, 80	X		
57		CI-081	C5	Failed: MIT	UDI	X		
58		CI-082	C5	Failed: MIT	140	X		
59		CI-083	C6	Failed: MIT	80	X		
60		CI-084	C6	Failed: MIT	150, 140	X		
61		CI-085	C6	Failed: MIT	UD	X		
62		CI-086	C6	Failed: MIT	150, 140, 130	X		
63		CI-090A	C6	Failed: MIT	140, 130, 100, 80, 60	X		
64		CI-095	C6	Failed: MIT	130	X		
65		CI-096	C6	Failed: MIT	60	X		
66		CI-097	C6	Failed: MIT	110,60	X		
67		CI-100	C6	Failed: MIT	150, 130, 100, 80	X		
68		CI-101	C6	Failed: MIT	130	X		
69		CI-102	C6	Failed: MIT	UDI	X		
70		CI-103	C6	Failed: MIT	NS	X		
71		CI-108	C6	Failed: MIT	NS	X		
72		CI-109	C6	Failed: MIT	140	X		
73		CI-110	C9	Failed: MIT	150, 130	X		
74		CI-112	C8	Failed: MIT	UD (Q2 2011)	X		
75		CI-115	C8	Geophysical Log Anomaly	130	X		
76		CI-116	C8	Failed: MIT	150	X		
77		CI-117	C8	Failed: MIT	UD (Q2 2011)	X		
78		CI-120	C8	Failed: MIT	140	X		
79		CI-121	C8	Passed: MIT	NFI			X
80		CI-122	C8	Failed: MIT	NS	X		
81		CI-124	C8	Failed: MIT	140, 130	X		
82		CI-125	C8	Failed: MIT	150, 140	X		
83		CI-128	C8	Failed: MIT	150, 140	X		
84		CI-129	C8	Failed: Camera	60		X	
85		CI-130	C10	Failed: Camera	60	X		
86		CI-130A	C10	Failed: MIT	60	X		
87		CI-132	C10	Failed: MIT		X		
88		CI-134	C10	Failed: MIT	140	X		
89		CI-135	C10	Failed: MIT	NS	X		
90		CI-136	C10	Failed: MIT	150	X		
91		CI-138	C10	Failed: MIT	NS	X		
92		CI-142	C10	Failed: MIT	NS	X		
93		CI-147	C9	Failed: MIT	NS	X		
94		CI-148	C9	Failed: MIT	150		X	
95		CI-152	C9	Failed: MIT	NS	X		
96		CI-154	C9	Failed: MIT	150	X		

TABLE 1: C Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
97		CI-159	C9	Failed: MIT	140, 130	X		
98		CI-160	C9	Failed: MIT	150, 130	X		
99		CI-164	C9	Failed: MIT	150	X		
100		CI-165	C9	Failed: Camera	150, 130, 60	X		
101		CI-170	C12	Failed: MIT	UD	X		
102		CI-171	C12	Failed: MIT	140	X		
103		CI-172	C12	Failed: MIT	UD	X		
104		CI-177	C10	Failed: MIT	NS, UD (Q4 2011)	X		
105		CI-178	C10	Failed: MIT	60	X		
106		CI-179A	C12	Failed: MIT	NS		X	
107		CI-180	C12	Failed: MIT	60	X		
108		CI-182	C12	Failed: MIT	NS	X		
109		CI-183P	C12	Failed: MIT	60	X		
110		CI-184	C12	Failed: MIT	NS	X		
111		CI-185	C12	Failed: MIT	140	X		
112		CI-188	C12	Failed: MIT	80	X		
113		CI-190	C14	Failed: MIT	110, 60	X		
114		CI-191	C14	Failed: MIT	NS	X		
115		CI-192	C14	Failed: MIT	NS	X		
116		CI-194	C14	Failed: MIT	150	X		
117		CI-195	C14	Failed: MIT	NS		X	
118		CI-197	C14	Failed: MIT	NS	X		
119		CI-200	C14	Failed: MIT	150	X		
120		CI-201	C14	Failed: MIT	150	X		
121		CI-202	C14	Failed: MIT	150	X		
122		CI-203	C14	Failed: MIT	60		X	
123		CI-208	C14	Failed: MIT	150	X		
124		CI-210	C14	Failed: MIT	150, 60	X		
125		CI-211	C14	Failed: MIT	60	X		
126		CI-212	C14	Failed: MIT	NS	X		
127		CI-213	C14	Failed: MIT	140	X		
128		CI-214	C14	Failed: MIT	150, 130, 60	X		
129		CI-215	C14	Failed: MIT	130	X		
130		CI-216	C14	Failed: MIT	150	X		
131		CI-218	C11	Failed: MIT	UDI	X		
132		CI-220	C11	Failed: MIT	NS	X		
133		CI-222	C11	Failed: MIT	NS	X		
134		CI-223	C11	Failed: MIT	140	X		
135		CI-224A	C11	Failed: MIT	NS	X		
136		CI-225	C11	Failed: MIT	150	X		
137		CI-227	C11	Failed: MIT	NS	X		
138		CI-228	C11	Failed: MIT	NS	X		
139		CI-229	C11	Failed: MIT	NS		X	
140		CI-236	C13	Failed: MIT	150	X		
141		CI-237	C13	Failed: MIT	150	X		
142		CI-239	C13	Failed: MIT	NS	X		
143		CI-240	C13	Failed: MIT	60	X		
144		CI-241	C13	Failed: MIT	UD	X		
145		CI-243	C18	Failed: MIT	60	X		
146		CI-251	C16	Failed: MIT	NS	X		

TABLE 1: C Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
147		CI-252	C16	Failed: MIT	150, 120	X		
148		CI-253	C16	Failed: MIT	150	X		
149		CI-254	C16	Failed: MIT	150, 60	X		
150		CI-255	C16	Failed: MIT	UD	X		
151		CI-258	C16	Failed: MIT	NS	X		
152		CI-260	C16	Failed: MIT	150	X		
153		CI-261	C16	Failed: MIT	130, 70	X		
154		CI-272	C18	Failed: MIT	UD	X		
155		CI-273	C18	Failed: MIT	150	X		
156		CI-286	C18	Failed: Testing Procedure	NFI	X		X
157		CI-290	C20	Failed: MIT	150	X		
158		CI-295	C20	Failed: MIT	NS	X		
159		CI-305	C22	Failed: MIT	140, 130	X		
160		CI-306	C22	Failed: MIT	100	X		
161		CI-330	C15	Failed: MIT	UD	X		
162		CI-331	C15	Failed: MIT	150, 80	X		
163		CI-333	C15	Failed: MIT	UDI	X		
164		CI-335	C15	Failed: MIT	UD	X		
165		CI-337	C15	Failed: MIT	UDI	X		
166		CI-362	C17	Failed: MIT	UD	X		
167		CI-363	C17	Failed: MIT	60	X		
168		CI-364	C17	Failed: MIT	UD	X		
169		CI-367	C17	Failed: MIT	70	X		
170		CI-369	C17	Failed: MIT	UDI	X		
171		CI-372	C17	Failed: MIT	NS	X		
172		CI-390	C19	Failed: MIT	120	X		
173		CI-391	C19	Failed: MIT	NS	X		
174		CI-393	C19	Failed: MIT	UDI	X		
175		CI-394	C19	Failed: MIT	UD	X		
176		CI-396P	C19	Failed: MIT	UDI	X		
177		CI-398	C19	Failed: MIT	110, 90	X		
178		CI-400P	C19	Failed: MIT	80	X		
179		CP-002I	C1	Failed: Testing Procedure	NFI	X		X
180		CP-004I	C1	Failed: MIT	NS	X		
181		CP-007I	C1	Failed: MIT	NS	X		
182		CP-009I	C1	Failed: MIT	150	X		
183		CP-012I	C2	Failed: MIT	NS		X	
184		CP-016AI	C2	Failed: Testing Procedure	NFI			X
185		CP-019I	C3	Failed: MIT	UD (Q3 2011)		X	
186		CP-020I	C3	Failed: Testing Procedure	NFI			X
187		CP-024I	C13	Failed: MIT	UD (Q2 2011)	X		
188		CP-028I	C4	Failed: MIT	UD	X		
189		CP-032I	C4	Failed: MIT	80	X		
190		CP-034I	C4	Failed: MIT	150, 140		X	
191		CP-035I	C4	Failed: MIT	150		X	
192		CP-036AI	C4	Failed: MIT	60		X	

TABLE 1: C Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
193		CP-038I	C4	Failed: MIT	130	X		
194		CP-040I	C4	Failed: MIT	NS	X		
195		CP-043I	C5	Failed: MIT	100	X		
196		CP-044I	C5	Failed: MIT	150, 140	X		
197		CP-045I	C5	Failed: MIT	NS	X		
198		CP-047I	C5	Failed: MIT	140, 130	X		
199		CP-048I	C5	Failed: MIT	80	X		
200		CP-052I	C5	Failed: MIT	140, 130	X		
201		CP-056I	C6	Failed: MIT	140	X		
202		CP-059I	C6	Failed: MIT	UD	X		
203		CP-067I	C6	Failed: MIT	NS	X		
204		CP-076I	C8	Passed: MIT	NFI			X
205		CP-078I	C8	Failed: MIT	150	X		
206		CP-080I	C8	Failed: MIT	NS		X	
207		CP-083I	C8	Failed: MIT	60		X	
208		CP-084	C8	Failed: MIT	UDI	X		
209		CP-088I	C10	Failed: MIT	NS		X	
210		CP-089I	C10	Failed: MIT	150	X		
211		CP-094I	C10	Failed: MIT	NS		X	
212		CP-096I	C12	Failed: Testing Procedure	NFI	X		X
213		CP-099I	C9	Failed: MIT	150, 100	X		
214		CP-100I	C9	Failed: MIT	150		X	
215		CP-104I	C9	Failed: MIT	NS	X		
216		CP-107	C14	Failed: MIT	NS		X	
217		CP-109I	C9	Failed: MIT	NS		X	
218		CP-110I	C14	Failed: MIT	NS	X		
219		CP-112	C14	Failed: MIT	UD	X		
220		CP-116I	C14	Failed: MIT	NS	X		
221		CP-121I	C11	Failed: MIT	130	X		
222		CP-122	C11	Failed: MIT	UD	X		
223		CP-123AI	C11	Failed: MIT	150, 140, 130, 70	X		
224		CP-127I	C11	Failed: MIT	150, 130	X		
225		CP-128I	C11	Failed: MIT	NS	X		
226		CP-141I	C16	Failed: MIT	150	X		
227		CP-146I	C16	Failed: MIT	150	X		
228		CP-154I	C12	Failed: MIT	UDI	X		
229		CP-156I	C12	Failed: MIT	NS	X		
230		CP-163I	C20	Failed: MIT	150	X		
231		CP-167IP	C22	Failed: Testing Procedure	NFI	X		X
232		CP-173I	C22	Failed: MIT	150	X		
233		CP-177I	C24	Failed: MIT	NS	X		
234		CP-198I	C17	Failed: MIT	130		X	
235		CP-201I	C17	Failed: MIT	150	X		
236		CP-212I	C18	Failed: MIT	150	X		

* NS=no sand; NFI=no further investigation; ND=no data; UD=not determined; UDI=not determined after investigation

> Indicates new wells added to list and/or updates to wells previously listed

TABLE 2: E Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
1		EI-083	E7	Failed: MIT	150	X		
2		EI-087	E1	Failed: MIT	NS	X		
3		EI-088	E1	Failed: MIT	UD	X		
4		EI-099	E3	Failed: MIT	NS	X		
5		EI-102	E3	Failed: MIT	UD	X		
6		EI-104	E3	Failed: MIT	NS	X		
7		EI-106	E3	Failed: MIT	140	X		
8		EI-107	E3	Failed: MIT	140	X		
9		EI-108P	E3	Failed: MIT	UD	X		
10		EI-109	E3	Failed: MIT	140	X		
11		EI-112	E3	Failed: MIT	140, 120	X		
12		EI-113	E3	Failed: MIT	140	X		
13		EI-114	E3	Failed: MIT	140	X		
14		EI-116	E3	Failed: MIT	UD	X		
15		EI-118	E3	Failed: MIT	150, 140, 120	X		
16		EI-119A	E3	Failed: MIT	140	X		
17		EI-126	E4	Failed: MIT	140	X		
18		EI-130	E4	Failed: MIT	150	X		
19		EI-132	E4	Failed: MIT	150	X		
20		EI-133	E4	Failed: MIT	90	X		
21		EI-134	E4	Failed: MIT	NS	X		
22		EI-135	E4	Failed: MIT	140	X		
23		EI-136	E4	Failed: MIT	150	X		
24		EI-137	E4	Failed: MIT	120	X		
25		EI-138	E4	Failed: MIT	UD	X		
26		EI-139	E4	Failed: MIT	140	X		
27		EI-140	E4	Failed: MIT	140	X		
28		EI-141	E4	Failed: MIT	NS	X		
29		EI-142A	E4	Failed: MIT	UD	X		
30		EI-143	E4	Failed: MIT	140	X		
31		EI-144	E4	Failed: MIT	UD	X		
32		EI-147	E4	Failed: MIT	150, 140	X		
33		EI-150	E5	Failed: MIT	140	X		
34		EI-151	E5	Failed: MIT	NS	X		
35		EI-155	E5	Failed: MIT	NS	X		
36		EI-156	E5	Failed: MIT	140	X		
37		EI-157	E5	Failed: MIT	150, 140	X		
38		EI-158	E5	Failed: MIT	150	X		
39		EI-159	E5	Failed: MIT	110	X		
40		EI-160	E5	Failed: MIT	60, 90	X		
41		EI-161	E5	Failed: MIT	140	X		
42		EI-162	E5	Failed: MIT	140	X		
43		EI-163A	E5	Failed: MIT	140	X		
44		EI-164	E5	Failed: MIT	140	X		
45		EI-165	E5	Failed: MIT	140	X		
46		EI-166A	E5	Failed: MIT	NS	X		
47		EI-167	E5	Failed: MIT	140	X		
48		EI-170	E6	Failed: MIT	NS	X		
49		EI-171	E6	Failed: MIT	140	X		
50		EI-172	E6	Failed: MIT	140	X		

TABLE 2: E Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
51		EI-173	E6	Failed: MIT	140	X		
52		EI-174	E6	Failed: MIT	140, 120	X		
53		EI-175	E6	Failed: MIT	UDI	X		
54		EI-176	E6	Failed: MIT	NS	X		
55		EI-177	E6	Failed: MIT	150	X		
56		EI-178	E6	Failed: MIT	NS	X		
57		EI-179	E6	Failed: MIT	140, 120	X		
58		EI-180	E6	Failed: MIT	120	X		
59		EI-181	E6	Failed: MIT	140, 120	X		
60		EI-182	E6	Failed: MIT	140, 120	X		
61		EI-183	E6	Failed: MIT	140, 120	X		
62		EI-184	E6	Failed: MIT	140, 120	X		
63		EI-185P	E6	Failed: MIT	140	X		
64		EI-186	E6	Failed: MIT	140	X		
65		EI-187	E6	Failed: MIT	NS	X		
66		EI-190	E7	Failed: MIT	140	X		
67		EI-191	E7	Failed: MIT	140	X		
68		EI-193P	E7	Failed: MIT	150, 140	X		
69		EI-194	E7	Failed: MIT	140	X		
70		EI-195P	E7	Failed: MIT	150, 140	X		
71		EI-196	E7	Failed: MIT	140	X		
72		EI-197	E7	Failed: MIT	140	X		
73		EI-198A	E7	Failed: MIT	150, 140, 70	X		
74		EI-199	E7	Failed: MIT	140, 120, 70	X		
75		EI-200	E7	Failed: MIT	140, 70	X		
76		EI-201	E7	Failed: MIT	NS	X		
77		EI-202	E7	Failed: MIT	140	X		
78		EI-203	E7	Failed: MIT	150	X	X	
79		EI-204	E7	Failed: MIT	150, 140, 120, 70	X		
80		EI-205	E7	Failed: MIT	140	X		
81		EI-206	E7	Failed: MIT	140	X		
82		EI-207	E7	Failed: MIT	150, 140, 120, 70	X		
83		EI-208	E7	Failed: MIT	140	X		
84		EI-210	E7	Failed: MIT	140, 120, 70	X		
85		EI-211	E8	Failed: MIT	150	X		
86		EI-212	E8	Failed: MIT	140	X		
87		EI-215A	E8	Failed: MIT	NS	X		
88		EI-217	E8	Failed: MIT	140, 120	X		
89		EI-218	E8	Failed: MIT	120	X		
90		EI-219	E8	Failed: MIT	140, 120	X		
91		EI-220P	E8	Failed: MIT	150	X		
92		EI-221	E8	Failed: MIT	140	X		
93		EI-222	E8	Failed: MIT	NS	X		
94		EI-224	E8	Failed: MIT	150, 140	X		
95		EI-225P	E8	Failed: MIT	140, 120	X		
96		EI-226	E8	Failed: MIT	NS	X		
97		EI-228	E8	Failed: MIT	NS	X		
98		EI-229A	E8	Failed: MIT	150, 140, 70	X		
99		EI-230	E8	Failed: MIT	NS	X		

TABLE 2: E Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
100		EI-231	E8	Failed: MIT	110	X		
101		EI-232	E8	Failed: MIT	150	X		
102		EI-233	E8	Failed: MIT	150	X		
103		EI-235	E9	Failed: MIT	UD	X		
104		EI-236	E9	Failed: MIT	UD	X		
105		EI-237	E9	Failed: MIT	NS	X		
106		EI-238	E9	Failed: MIT	NS	X		
107		EI-239	E9	Failed: MIT	140		X	
108		EI-240	E9	Failed: MIT	150, 140	X		
109		EI-241A	E9	Failed: MIT	140	X		
110		EI-242	E9	Failed: MIT	100, 150	X		
111		EI-243	E9	Failed: MIT	NS	X		
112		EI-244	E9	Failed: MIT	150	X		
113		EI-245	E9	Failed: MIT	UDI	X		
114		EI-246	E9	Failed: MIT	NS	X		
115		EI-247	E9	Failed: MIT	NS	X		
116		EI-248	E9	Failed: MIT	NS	X		
117		EI-249	E9	Failed: MIT	140	X		
118		EI-250	E9	Failed: MIT	140	X		
119		EI-251	E9	Failed: MIT	140	X		
120		EI-252	E9	Failed: MIT	NS	X		
121		EI-253	E9	Failed: MIT	140	X		
122		EI-257	E9	Failed: MIT	NS	X		
123		EI-258P	E9	Failed: MIT	NS	X		
124		EI-259	E9	Failed: MIT	50	X		
125		EI-260	E10	Failed: MIT	UD	X		
126		EI-261	E10	Failed: MIT	140	X		
127		EI-262	E10	Failed: MIT	140	X		
128		EI-265	E10	Failed: MIT	UDI	X		
129		EI-267	E10	Failed: MIT	150	X		
130		EI-268	E10	Failed: MIT	150, 140, 120	X		
131		EI-269	E10	Failed: MIT	140	X		
132		EI-271	E10	Failed: MIT	NS	X		
133		EI-273	E10	Failed: MIT	140, 110	X		
134		EI-274	E10	Failed: MIT	NS	X		
135		EI-275	E10	Failed: MIT	140, 110	X		
136		EI-276	E10	Failed: MIT	110	X		
137		EI-277	E10	Failed: MIT	150, 140	X		
138		EI-278	E10	Failed: MIT	140	X		
139		EI-279	E10	Failed: MIT	UDI	X		
140		EI-280	E10	Failed: MIT	140, 120, 110, 100	X		
141		EI-283	E10	Failed: MIT	140, 70	X		
142		EI-287	E12	Failed: MIT	140	X		
143		EI-290	E12	Failed: MIT	UDI	X		
144		EI-310	E14	Failed: MIT	120	X		
145		EI-311	E14	Failed: MIT	UD	X		
146		EI-314	E14	Failed: MIT	130	X		
147		EI-315	E14	Failed: MIT	150	X		
148		EI-316	E14	Failed: MIT		X		

TABLE 2: E Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
149		EI-317	E14	Failed: MIT	UD		X	
150		EI-319	E14	Failed: MIT	UD	X		
151		EI-320	E14	Failed: Testing Procedure	NFI		X	X
152		EI-321	E14	Failed: MIT	140	X		
153		EI-323	E14	Failed: MIT	130	X		
154		EI-325	E14	Failed: MIT	NS	X		
155		EI-327	E14	Failed: MIT	NS	X		
156		EI-331	E14	Failed: MIT	150	X		
157		EI-333	E14	Failed: MIT	NS	X		
158		EI-334	E14	Failed: MIT	140	X		
159		EI-337	E16	Failed: MIT	NS	X		
160		EI-338	E16	Failed: MIT	140	X		
161		EI-339	E16	Failed: MIT	140	X		
162		EI-340	E16	Failed: MIT	150, 140	X		
163		EI-341	E16	Failed: MIT	140	X		
164		EI-342	E16	Failed: MIT	UD	X		
165		EI-343	E16	Failed: MIT	NS	X		
166		EI-344	E16	Failed: MIT	140	X		
167		EI-345	E16	Failed: MIT	NS	X		
168		EI-346	E16	Failed: MIT	UDI	X		
169		EI-348	E16	Failed: MIT	140	X		
170		EI-350	E16	Failed: MIT	100, 110, 150	X		
171		EI-351	E16	Failed: MIT	140	X		
172		EI-352	E16	Passed:MIT	NFI			X
173		EI-353A	E16	Failed: MIT	150	X		
174		EI-354	E16	Failed: MIT	NS	X		
175		EI-355	E16	Failed: MIT	140	X		
176		EI-356	E16	Failed: MIT	140	X		
177		EI-357	E18	Failed: MIT	150	X		
178		EI-358	E18	Failed: MIT	140	X		
179		EI-361	E18	Failed: MIT	150	X		
180		EI-362	E18	Failed: MIT	150	X		
181		EI-363	E18	Failed: MIT	150	X		
182		EI-364	E18	Failed: MIT	140	X		
183		EI-365	E18	Failed: MIT	140	X		
184		EI-367	E18	Failed: MIT	150	X		
185		EI-368	E18	Failed: MIT	140	X		
186		EI-369	E18	Failed: MIT	NS	X		
187		EI-370	E18	Failed: MIT	NS	X		
188		EI-371	E18	Failed: MIT	UD	X		
189		EI-372	E17	Failed: MIT	140	X		
190		EI-373	E18	Failed: MIT	100, 140	X		
191		EI-374	E18	Failed: MIT	NS	X		
192		EI-375	E18	Failed: MIT	UDI	X		
193		EI-376	E18	Failed: MIT	NS	X		
194		EI-379	E18	Failed: MIT	130	X		
195		EI-381	E18	Failed: MIT	NS	X		
196		EI-385	E15	Failed: MIT	NS,UD	X		
197		EI-386	E15	Failed: MIT	120	X		

TABLE 2: E Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
198		EI-390	E15	Failed: MIT	NS	X		
199		EI-391A	E15	Failed: MIT	150	X		
200		EI-393	E17	Failed: MIT	NS	X		
201		EI-394	E17	Failed: MIT	100	X		
202		EI-395	E17	Failed: MIT	140	X		
203		EI-396	E17	Failed: MIT	150	X		
204		EI-397A	E17	Failed: MIT	130	X		
205		EI-398	E17	Failed: MIT	UD	X		
206		EI-399	E17	Failed: Camera	180	X		
207		EI-401	E17	Failed: MIT	UDI	X		
208		EI-411	E13	Failed: MIT	NS	X		
209		EI-412	E13	Failed: MIT	NS	X		
210		EI-414P	E13	Failed: MIT	NS		X	
211		EI-417	E13	Failed: MIT	UDI	X		
212		EI-418	E13	Failed: MIT	UDI	X		
213		EI-419	E13	Failed: MIT	130, 60	X		
214		EI-420	E13	Failed: MIT	NS	X		
215		EI-421	E13	Failed: MIT	150	X		
216		EI-422	E13	Failed: MIT	NS	X		
217		EI-423	E13	Failed: MIT	UDI	X		
218		EI-424	E13	Failed: MIT	60	X		
219		EI-426	E13	Failed: MIT	UDI	X		
220		EI-427	E13	Failed: MIT	140, 160	X		
221		EI-428	E13	Failed: MIT	UD	X		
222		EI-438A	E10	Failed: MIT	NS	X		
223		EI-439	E10	Failed: MIT	UDI	X		
224		EI-440	E10	Failed: MIT	140	X		
225		EI-441	E10	Failed: MIT	UDI	X		
226		EI-442	E10	Failed: MIT	UD	X		
227		EP-009I	E1	Passed:MIT	UD	X		
228		EP-011I	E1	Failed: MIT	120, 130	X		
229		EP-015I	E1	Failed: MIT	UD	X		
230		EP-019I	E3	Failed: MIT	80	X		
231		EP-022I	E3	Failed: MIT	NS	X		
232		EP-024I	E3	Failed: MIT	150, 140	X		
233		EP-027I	E3	Failed: MIT	UDI	X		
234		EP-029I	E3	Failed: MIT	NS	X		
235		EP-037I	E4	Failed: MIT	140	X		
236		EP-039I	E4	Failed: MIT	150, 140	X		
237		EP-041I	E4	Failed: MIT	NS	X		
238		EP-043I	E4	Failed: MIT	140	X		
239		EP-044I	E4	Failed: MIT	140	X		
240		EP-050I	E5	Failed: MIT	UDI	X		
241		EP-053I	E5	Failed: MIT	NS	X		
242		EP-054I	E5	Failed: MIT	140	X		
243		EP-056I	E5	Failed: MIT	150	X		
244		EP-058I	E5	Failed: MIT	NS	X		
245		EP-066I	E6	Failed: MIT	NS	X		
246		EP-067I	E6	Failed: MIT	150	X		

TABLE 2: E Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
247		EP-068I	E6	Failed: MIT	NS	X		
248		EP-070I	E6	Failed: MIT	140	X		
249		EP-072I	E6	Failed: MIT	150, 140	X		
250		EP-073I	E6	Failed: MIT	60	X		
251		EP-075I	E6	Failed: MIT	150, 140, 120	X		
252		EP-081I	E7	Failed: MIT	150, 140 120	X		
253		EP-082I	E7	Failed: MIT	150, 140	X		
254		EP-085I	E7	Failed: MIT	140	X		
255		EP-086I	E7	Failed: MIT	150, 140	X		
256		EP-087I	E7	Failed: MIT	UD		X	
257		EP-093I	E8	Failed: Wet Ground Surface	UD	X		
258		EP-094I	E8	Failed: MIT	NS	X		
259		EP-097I	E8	Failed: MIT	140, 120	X		
260		EP-099I	E8	Failed: MIT	NS	X		
261		EP-100I	E8	Failed: MIT	150, 140, 120, 70	X		
262		EP-103I	E8	Failed: MIT	NS	X		
263		EP-105I	E9	Failed: MIT	NS	X		
264		EP-107I	E9	Failed: MIT	140	X		
265		EP-109I	E9	Failed: MIT	140, 70	X		
266		EP-110I	E9	Failed: MIT	140	X		
267		EP-114I	E9	Failed: MIT	UD	X		
268		EP-120I	E10	Failed: MIT	140	X		
269		EP-121I	E10	Failed: MIT	UDI	X		
270		EP-124I	E10	Failed: MIT	UD	X		
271		EP-125I	E10	Failed: MIT	120	X		
272		EP-149I	E14	Failed: Wet Ground Surface	150	X		
273		EP-152I	E16	Failed: MIT	150	X		
274		EP-155I	E16	Failed: MIT	UD	X		
275		EP-158I	E16	Failed:MIT	NS	X		
276		EP-166I	E18	Failed: MIT	NS	X		
277		EP-169I	E18	Failed: MIT	50, 100, 130, 140, 150	X		
278		EP-178I	E15	Failed: MIT	150	X		
279		EP-181I	E17	Failed: MIT	UDI	X		
280		EP-182I	E17	Failed: MIT	UDI	X		
281		EP-183I	E17	Failed: MIT	140	X		
282		EP-191I	E13	Failed: MIT	NS	X		

* NS=no sand; NFI=no further investigation; ND=no data; UD=not determined; UDI=not determined after investigation

> Indicates new wells added to list and/or updates to wells previously listed

TABLE 3: F Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
1		FI-0015	F1	Failed: MIT	140, 130, 110	X		
2		FI-0016	F1	Failed: MIT	NS		X	
3		FI-0017	F1	Failed: MIT	140	X		
4		FI-0024	F1	Failed: Testing Procedure	NFI			X
5		FI-0027	F1	Failed: MIT	140, 130	X		
6		FI-0030	F1	Failed: MIT	NS	X		
7		FI-0032	F2	Failed: MIT	NS	X		
8		FI-0033	F2	Passed:MIT	NFI			X
9		FI-0034	F2	Failed: MIT	NS	X		
10		FI-0035	F2	Failed: MIT	130	X		
11		FI-0036	F2	Failed: MIT	NS	X		
12		FI-0038	F2	Failed: MIT	140	X		
13		FI-0040A	F2	Failed: MIT	NS	X		
14		FI-0041	F2	Failed: MIT	NS	X		
15		FI-0043	F2	Failed: MIT	140, 130	X		
16		FI-0045A	F2	Failed: MIT	140, 80	X		
17		FI-0046	F2	Passed:MIT	NS		X	
18		FI-0047	F1	Failed: MIT	80, 70, 60, 50	X		
19		FI-0048	F2	Failed: MIT	140	X		
20		FI-0055	F3	Failed: MIT	UDI	X		
21		FI-0058	F3	Failed: MIT	UDI	X		
22		FI-0063	F3	Failed: MIT	140, 130	X		
23		FI-0065	F3	Failed: Geophysical Log Anomaly	140, 130	X		
24		FI-0066	F3	Failed: MIT	NS	X		
25		FI-0067	F3	Failed: Geophysical Log Anomaly	140	X		
26		FI-0070	F3	Failed: MIT	NS	X		
27		FI-0072	F3	Failed: MIT	80	X		
28		FI-0074	F3	Failed: MIT	UD	X		
29		FI-0081	F4	Failed: MIT	UD	X		
30		FI-0082	F4	Failed: MIT	150	X		
31		FI-0086	F4	Failed: MIT	150	X		
32		FI-0087P	F4	Failed: MIT	UD	X		
33		FI-0090	F4	Failed: MIT	150	X		
34		FI-0091P	F4	Failed: MIT	150, 140	X		
35		FI-0093A	F4	Failed: MIT	150	X		
36		FI-0094	F4	Failed: MIT	NS	X		
37		FI-0095	F4	Failed: MIT	140	X		
38		FI-0105	F5	Failed: Testing Procedure	NFI			X
39		FI-0113A	F5	Failed: MIT	UD	X		
40		FI-0115	F5	Failed: Camera	NS		X	
41		FI-0116A	F5	Failed: MIT	UDI	X		
42		FI-0126	F5	Failed: MIT	UDI	X		
43		FI-0128	F5	Failed: MIT	140	X		
44		FI-0131	F6	Failed: MIT	140, 130	X		
45		FI-0132A	F6	Failed: MIT	160, 140	X		
46		FI-0134	F6	Failed: MIT	140, 130	X		

TABLE 3: F Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
47		FI-0135	F6	Failed: MIT	UDI	X		
48	>	FI-0137	F6	Failed: MIT		X		
49		FI-0138	F6	Failed: MIT	90	X		
50		FI-0150	F6	Failed: MIT	90	X		
51		FI-0155	F6	Failed: MIT	UDI	X		
52		FI-0156	F6	Failed: MIT	NS	X		
53		FI-0157	F6	Failed: MIT	60	X		
54		FI-0158	F6	Failed: MIT	NS	X		
55		FI-0159	F6	Failed: MIT	UD	X		
56		FI-0163	F6	Failed: MIT	140	X		
57		FI-0170	F7	Failed: MIT	90, 60	X		
58		FI-0171	F7	Failed: MIT	140	X		
59		FI-0172	F7	Failed: MIT	140, 90	X		
60		FI-0173	F7	Failed: MIT	UDI	X		
61		FI-0175	F7	Failed: MIT	140/130	X		
62		FI-0176	F7	Failed: MIT		X		
63		FI-0182	F7	Failed: MIT	UD	X		
64		FI-0183	F7	Failed: MIT	160, 140, 90, 60	X		
65		FI-0184	F7	Failed: MIT	UD	X		
66		FI-0185	F7	Failed: MIT	UD	X		
67		FI-0186	F7	Failed: MIT	NS; UD	X		
68		FI-0191	F7	Failed: MIT	UD	X		
69		FI-0194	F7	Failed: MIT	NS	X		
70		FI-0195	F7	Failed: MIT	UD	X		
71		FI-0208	F8	Failed: MIT	70	X		
72		FI-0210	F8	Failed: MIT	NS	X		
73		FI-0219	F8	Failed: MIT	UD	X		
74		FI-0228	F8	Failed: MIT	160	X		
75		FI-0237	F8	Failed: MIT	UD	X		
76		FI-0246	F9	Failed: MIT	NS	X		
77		FI-0257	F9	Failed: MIT	UD	X		
78		FI-0262	F9	Passed:MIT	NFI			X
79		FI-0346	F12	Failed: MIT	NS	X		
80		FI-0350	F12	Failed: MIT	140, 130	X		
81		FI-0351P	F12	Failed: MIT	70	X		
82		FI-0352	F12	Failed: MIT	NS	X		
83		FI-0353	F12	Failed: MIT	NS; UD	X		
84		FI-0355	F12	Failed: MIT	110	X		
85		FI-0356	F12	Failed: MIT	NS	X		
86		FI-0359P	F12	Failed: MIT	UDI	X		
87		FI-0360	F12	Failed: MIT	140, 130	X		
88		FI-0361	F12	Failed: MIT	140, 130	X		
89		FI-0362	F12	Failed: MIT	140	X		
90		FI-0363	F12	Failed: Camera	100		X	
91		FI-0366	F12	Failed: MIT	UDI	X		
92		FI-0368	F12	Failed: MIT	140	X		
93		FI-0369	F12	Failed: MIT	70	X		
94		FI-0372P	F12	Failed: MIT	NS	X		
95		FI-0373P	F12	Failed: MIT	140	X		
96		FI-0374	F12	Failed: MIT	140, 120	X		

TABLE 3: F Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
97		FI-0394P	F13	Failed: MIT	160	X		
98		FI-0397	F13	Passed:MIT	NFI			X
99		FI-0400	F13	Failed: MIT	160	X		
100		FI-0403	F13	Failed: MIT	UD		X	
101		FI-0408	F13	Failed: MIT	NS	X		
102		FI-0421	F14	Failed: MIT	NS	X		
103		FI-0427	F14	Failed: MIT	NS		X	
104		FI-0429	F14	Failed: MIT	140, 130	X		
105		FI-0431P	F14	Failed: MIT	NS		X	
106		FI-0435	F14	Failed: MIT	UD	X		
107		FI-0438	F14	Failed: MIT	NS	X		
108		FI-0447	F15	Failed: MIT	NS		X	
109		FI-0483	F16	Failed: MIT	160, 150	X		
110		FI-0484P	F16	Failed: MIT	NS	X		
111		FI-0526P	F18	Failed: MIT	130	X		
112		FI-0544P	F18	Failed: Testing Procedure	NS	X		
113		FI-0545	F18	Failed: MIT	UDI	X		
114		FI-0547	F18	Failed: MIT	NS	X		
115		FI-0565	F19	Failed: MIT	160	X		
116		FI-0566	F19	Failed: MIT	UD	X		
117		FI-0568	F19	Failed: MIT	160	X		
118		FI-0573P	F19	Failed: MIT	60	X		
119		FI-0576	F19	Passed:MIT	NFI			X
120		FI-0578	F19	Failed: MIT	160	X		
121		FI-0579P	F19	Failed: MIT	UD	X		
122		FI-0582P	F19	Failed: MIT	UD	X		
123		FI-0584	F19	Failed: MIT	160	X		
124		FI-0585AP	F19	Failed: MIT	160	X		
125		FI-0587P	F19	Failed: MIT	160	X		
126		FI-0589	F19	Failed: MIT	UD	X		
127		FI-0591	F20	Failed: MIT	160, 70	X		
128		FI-0601	F20	Failed: MIT	UD	X		
129		FI-0604P	F20	Failed: MIT	160	X		
130		FI-0607A	F20	Failed: MIT	NS	X		
131		FI-0608	F20	Failed: MIT	160, 130, 140	X		
132		FI-0609	F20	Failed: MIT	UD	X		
133		FI-0610	F20	Failed: MIT	160	X		
134		FI-0611	F20	Failed: MIT	UDI	X		
135		FI-0612	F20	Failed: MIT	160	X		
136		FI-0613	F20	Failed: MIT	160	X		
137		FI-0614	F20	Failed: MIT	160	X		
138		FI-0620P	F21	Failed: MIT	NS	X		
139		FI-0621	F21	Failed: MIT	160	X		
140		FI-0622	F21	Failed: MIT	UD	X		
141		FI-0625	F21	Failed: MIT	NS	X		
142		FI-0627A	F21	Failed: MIT	NS	X		
143		FI-0628	F21	Failed: MIT	NS	X		
144		FI-0629	F21	Failed: MIT	NS	X		
145		FI-0630	F21	Failed: MIT	160	X		

TABLE 3: F Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
146		FI-0632	F21	Failed: MIT	90	X		
147		FI-0633	F21	Failed: MIT	NS	X		
148		FI-0635P	F21	Failed: MIT	NS	X		
149		FI-0637	F21	Failed: MIT	160	X		
150		FI-0638	F21	Failed: MIT	NS	X		
151		FI-0639	F21	Failed: MIT	NS	X		
152		FI-0654	F23	Failed: Testing Procedure	NFI			X
153		FI-0666	F22	Failed: Testing Procedure	NFI		X	X
154		FI-0667	F22	Failed: Testing Procedure	NFI			X
155		FI-0671	F22	Failed: MIT	UDI			
156		FI-0672	F22	Failed: MIT	UD	X		
157		FI-0674	F23	Failed: MIT	UDI	X		
158		FI-0676	F25	Failed: MIT	UDI	X		
159		FI-0677	F25	Failed: MIT	NS	X		
160		FI-0678	F25	Failed: MIT	140/130	X		
161		FI-0679	F25	Failed: MIT	UDI	X		
162		FI-0680P	F25	Failed: MIT	160, 140/130	X		
163		FI-0681	F25	Failed: MIT	NS	X		
164		FI-0687	F25	Failed: MIT	90	X		
165		FI-0688	F25	Failed: MIT	160	X		
166		FI-0689	F25	Failed: MIT	50	X		
167		FI-0690	F24	Failed: MIT	50, 120	X		
168		FI-0692	F25	Failed: MIT	UD	X		
169		FI-0693	F25	Failed: MIT	NS	X		
170		FI-0694A	F25	Failed: Camera	NS	X		
171		FI-0695	F25	Failed: MIT	UDI	X		
172		FI-0700	F25	Failed: MIT	UDI	X		
173		FI-0701	F24	Failed: MIT	UDI	X		
174		FI-0702	F24	Failed: MIT	NS	X		
175		FI-0703	F25	Failed: MIT	90	X		
176		FI-0704	F24	Failed: MIT	NS	X		
177		FI-0704A	F24	Failed: MIT	70	X		
178		FI-0705	F24	Failed: MIT	NS	X		
179		FI-0707	F24	Failed: MIT	UDI	X		
180		FI-0715	F24	Failed: MIT	UD	X		
181		FI-0761	F26	Failed: MIT	90	X		
182		FI-0762	F26	Failed: MIT	UD	X		
183		FI-0763A	F26	Failed: MIT	NS	X		
184		FI-0765P	F26	Failed: MIT	UD	X		
185		FI-0766	F26	Failed: MIT	160, 90	X		
186		FI-0767	F26	Failed: MIT	160, 140/130	X		
187		FI-0768	F26	Failed: MIT	NS	X		
188		FI-0769P	F26	Failed: MIT	140/130	X		
189		FI-0771A	F27	Failed: MIT	NS	X		
190		FI-0772	F26	Failed: MIT	NS	X		
191		FI-0773	F26	Failed: MIT	UDI	X		
192		FI-0774	F26	Failed: MIT	UDI	X		

TABLE 3: F Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
193		FI-0775	F27	Failed: MIT	NS	X		
194		FI-0776	F26	Failed: MIT	NS	X		
195		FI-0778	F26	Failed: MIT	120	X		
196		FI-0779	F26	Failed: MIT	160	X		
197		FI-0780	F26	Failed: MIT	140/130	X		
198		FI-0790	F29	Failed: MIT	UDI	X		
199		FI-0791	F29	Failed: MIT	140	X		
200		FI-0792	F29	Failed: MIT	NS	X		
201		FI-0793	F28	Failed: MIT	UD	X		
202		FI-0794	F28	Failed: MIT	170, 140/130	X		
203		FI-0795	F27	Failed: MIT	140/130, 120, 90	X		
204		FI-0797A	F27	Failed: MIT	NS	X		
205		FI-0799	F29	Failed: MIT	UDI	X		
206		FI-0800A	F28	Failed: MIT	140/130	X		
207		FI-0801	F28	Failed: MIT	80	X		
208		FI-0802	F27	Failed: MIT	170	X		
209		FI-0803A	F27	Failed: MIT	UD	X		
210		FI-0804	F27	Failed: MIT	UD	X		
211		FI-0805	F27	Failed: MIT	NS	X		
212		FI-0806	F29	Failed: MIT	160, 130	X		
213		FI-0807	F29	Failed: MIT	UDI	X		
214		FI-0808	F28	Failed: MIT	70	X		
215		FI-0809	F28	Failed: MIT	NS	X		
216		FI-0810	F27	Failed: MIT	140/130	X		
217		FI-0811A	F27	Failed: MIT	170	X		
218		FI-0813	F27	Failed: MIT	140/130	X		
219		FI-0814	F27	Failed: MIT	NS	X		
220		FI-0815	F29	Failed: MIT	NS	X		
221		FI-0816	F28	Failed: MIT	140/130, 110	X		
222		FI-0817	F28	Failed: MIT	UD	X		
223		FI-0818A	F27	Failed: MIT	NS	X		
224		FI-0819	F27	Failed: MIT	140/130	X		
225		FI-0820	F27	Failed: MIT	UDI	X		
226		FI-0821	F27	Failed: MIT	140/130, 120, 100	X		
227		FI-0822	F27	Failed: MIT	NS	X		
228		FI-0823	F29	Failed: MIT	160, 140/130	X		
229		FI-0824	F28	Failed: MIT	160, 140/130, 120	X		
230		FI-0827	F27	Failed: MIT	120	X		
231		FI-0828	F27	Failed: MIT	160	X		
232		FI-0829	F29	Failed: MIT	NS	X		
233		FI-0830	F28	Failed: MIT	140/130	X		
234		FI-0831	F28	Failed: MIT	NS	X		
235		FI-0832	F28	Failed: MIT	140/130	X		
236		FI-0833	F27	Failed: MIT	UDI	X		
237		FI-0851P	F30	Failed: MIT	UDI	X		
238		FI-0858A	F30	Failed: MIT	UD	X		
239		FI-0859	F30	Failed: MIT	NS	X		
240		FI-0860	F34	Failed: MIT	NS	X		
241		FI-0864	F34	Failed: MIT	UD	X		
242		FI-0869	F34	Failed: MIT	NS	X		

TABLE 3: F Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
243		FI-0883	F31	Failed: MIT	UDI	X		
244		FI-0884	F31	Failed: MIT	170		X	
245		FI-0887	F31	Failed: MIT	UD	X		
246		FI-0888	F31	Failed: MIT	UDI	X		
247		FI-0889	F31	Failed: MIT	NS	X		
248		FI-0890	F31	Failed: MIT				
249		FI-0894	F29	Failed: MIT	NS	X		
250		FI-0895	F29	Failed: MIT	NS	X		
251		FI-0896	F31	Failed: MIT	120, 100	X		
252		FI-0898	F31	Failed: MIT	NS	X		
253		FI-0900	F29	Failed: MIT	140/130, 90	X		
254		FI-0901	F29	Failed: MIT	100, 70	X		
255		FI-0902	F29	Failed: MIT	70	X		
256		FI-0903	F29	Failed: MIT	NS	X		
257		FI-0906	F32	Failed: MIT	NS	X		
258		FI-0914	F33	Failed: MIT	50		X	
259		FI-0915	F33	Failed: MIT	UD			
260		FI-0928A	F32	Failed: MIT	180, 120	X		
261		FI-0935	F32	Passed:MIT	NFI			X
262		FI-0936	F32	Failed: MIT	UDI	X		
263		FI-0951	F30	Failed: MIT	NS	X		
264		FI-0953	F34	Failed: MIT	UD	X		
265		FI-0986	F35	Failed: MIT	140	X		
266		FI-0991	F35	Failed: MIT	130	X		
267		FI-0992	F35	Failed: MIT	90	X		
268		FI-0993	F35	Failed: MIT	UD	X		
269		FI-0996	F35	Failed: MIT	UDI	X		
270		FI-1008	F36	Failed: MIT	NS	X		
271		FI-1017	F36	Failed: MIT	UD	X		
272		FI-1023A	F36	Failed: MIT	UDI	X		
273		FI-1057	F39	Failed: MIT	UDI	X		
274		FI-1059	F38	Passed:MIT	NFI			X
275		FI-1061	F39	Failed: MIT	NS	X		
276		FI-1062	F39	Failed: MIT	UDI	X		
277		FI-1071	F39	Failed: MIT	UDI	X		
278		FI-1090	F38	Failed: MIT	150	X		
279		FI-1115	F38	Failed: MIT	UDI	X		
280		FI-1126P	F42	Failed: MIT	50	X		
281		FI-1127	F42	Failed: MIT	UD	X		
282		FI-1128P	F42	Failed: MIT	UD	X		
283		FI-1131	F42	Failed: MIT	UD	X		
284		FI-1134	F42	Failed: MIT	NS	X		
285		FI-1135P	F42	Failed: MIT	UD	X		
286		FI-1139	F42	Failed: MIT	NS	X		
287		FI-1141A	F42	Failed: MIT	150	X		
288		FI-1152	F43	Failed: MIT	UD	X		
289		FI-1154	F43	Failed: MIT	UD	X		
290		FI-1156	F43	Failed: MIT	UD	X		
291		FI-1160	F43	Failed: MIT	UD	X		
292		FI-1161	F43	Failed: MIT	UD	X		

TABLE 3: F Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
293		FI-1162	F43	Failed: MIT	UD	X		
294		FI-1164	F43	Failed: MIT	UD	X		
295		FI-1165	F43	Failed: MIT	UD	X		
296		FI-1166	F43	Failed: MIT	UD	X		
297		FI-1168	F43	Failed: MIT	UD	X		
298		FI-1172	F43	Failed: MIT	UD	X		
299		FI-1185	F40	Failed: MIT	UD	X		
300		FI-1186	F40	Failed: MIT	UD		X	
301		FI-1208P	F41	Failed: MIT	UD	X		
302		FI-1211	F41	Failed: MIT	UDI	X		
303		FI-1215	F40	Failed: MIT	50	X		
304		FI-1217	F40/41	Failed: MIT	UD	X		
305		FI-1230	F41	Failed: MIT		X		
306		FI-1236	F41	Failed: MIT	100, 50	X		
307		FI-1239	F41	Failed: MIT	140, 120, 80, 50	X		
308		FI-1241	F41	Failed: MIT	NS	X		
309		FI-1266	F44	Failed: MIT	UD	X		
310		FI-1270	F44	Failed: MIT	UD	X		
311		FI-1286	F44	Failed: MIT	UD	X		
312		FI-1288	F44	Failed: MIT	UD	X		
313		FI-1295	F44	Failed: MIT	UD	X		
314		FI-1354A	F46	Failed: MIT	UD	X		
315		FI-1358	F46	Failed: MIT	UD	X		
316		FI-1360	F46	Failed: MIT	UD	X		
317		FI-1363	F46	Failed: MIT	UD	X		
318		FI-1364A	F46	Failed: MIT	UD	X		
319		FI-1368	F46	Failed: MIT	UD	X		
320		FI-1369	F46	Failed: MIT	UD	X		
321		FI-1372	F46	Failed: MIT	UD	X		
322		FP-0013I	F1	Failed: MIT	130	X		
323		FP-0020I	F1	Failed: MIT	NS	X		
324		FP-0031I	F2	Failed: MIT	NS	X		
325		FP-0034I	F2	Failed: MIT	140	X		
326		FP-0040I	F3	Failed: MIT	NS	X		
327		FP-0041I	F3	Failed: MIT	UD	X		
328		FP-0042AI	F3	Failed: MIT	UD	X		
329		FP-0047I	F3	Failed: MIT	UD	X		
330		FP-0058I	F4	Failed: MIT	UD	X		
331		FP-0066I	F4	Failed: MIT	150, 140	X		
332		FP-0067I	F4	Failed: MIT	NS	X		
333		FP-0175I	F11	Failed: MIT	NS		X	
334		FP-0200I	F12	Failed: MIT	160	X		
335		FP-0202I	F12	Failed: MIT	UD	X		
336		FP-0208I	F12	Failed: MIT	NS		X	
337		FP-0220AI	F13	Failed: MIT	NS	X		
338		FP-0233I	F14	Failed: MIT	UD	X		
339		FP-0237I	F14	Failed: MIT	NS		X	
340		FP-0238I	F14	Failed: MIT	NS		X	
341		FP-0264I	F16	Failed: MIT	NS	X		

TABLE 3: F Wellfield Wells Repaired or Abandoned

		Well	HH	Comments	Sand Association*	Abandoned	Repaired	No Further Investigation
342		FP-0276I	F16	Failed: MIT	NS	X		
343		FP-0308I	F19	Failed: MIT	UD	X		
344		FP-0311I	F19	Failed: MIT	160, 140, 130	X		
345		FP-0320I	F20	Failed: MIT	UD	X		
346		FP-0321I	F20	Failed: MIT	UD	X		
347		FP-0323I	F20	Failed: MIT	160	X		
348		FP-0325I	F20	Failed: MIT	UD	X		
349		FP-0370I	F25	Failed: MIT	UD	X		
350		FP-0374I	F25	Failed: MIT	NS	X		
351		FP-0379I	F25	Failed: MIT	UD	X		
352		FP-0410I	F26	Failed: MIT	170, 160		X	
353		FP-0413AI	F26	Failed: MIT	NS		X	
354		FP-0414I	F26	Failed: MIT	NS	X		
355		FP-0415I	F26	Failed: MIT	NS	X		
356		FP-0418I	F26	Failed: MIT	UD	X		
357		FP-0421I	F26	Failed: MIT	NS	X		
358		FP-0422I	F26	Failed: MIT	UD	X		
359		FP-0428I	F28	Failed: MIT	UDI	X		
360		FP-0430I	F27	Failed: MIT	160	X		
361		FP-0434	F29	Failed: MIT	NS	X		
362		FP-0436I	F28	Failed: MIT	UD	X		
363		FP-0438I	F27	Failed: MIT	UDI	X		
364		FP-0440I	F28	Failed: MIT	70	X		
365		FP-0442I	F27	Failed: MIT	UD	X		
366		FP-0444I	F27	Failed: MIT	150	X		
367		FP-0448I	F28	Failed: MIT	170	X		
368		FP-0450I	F27	Failed: MIT	UD	X		
369		FP-0451	F29	Failed: MIT	NS	X		
370		FP-0452I	F28	Failed: MIT	UDI	X		
371		FP-0455I	F28	Failed: MIT	UD	X		
372		FP-0502	F31	Failed: MIT	NS	X		
373		FP-0503I	F31	Failed: MIT	80, 70	X		
374		FP-0504	F29	Failed: MIT	NS	X		
375		FP-0505	F29	Failed: MIT	NS	X		
376		FP-0506	F29	Failed: MIT	NS	X		
377		FP-0544I	F30	Passed:MIT	NFI			X
378		FP-0631I	F42	Failed: MIT	UDI	X		
379		FP-0633I	F42	Failed: MIT	UDI	X		
380		FP-0634I	F42	Failed: MIT	UD	X		
381		FP-0642I	F42	Failed: MIT	UD	X		

* NS=no sand; NFI=no further investigation; ND=no data; UD=not determined; UDI=not determined after investigation

> Indicates new wells added to list and/or updates to wells previously listed

Table 4: CLI Shallow Monitoring Wells

Well	TD From TOC	Surface Elev.	Stick Up	Elev. of TOC	Date Drilled	Depth Drilled	Screen Top	Screen Bottom	Approximate Elev. Of Screened Interval		Sand Unit
F20-1	252.8	5541.9	2.5	5539.4	11/14/12	255	242.4	252.4	5297.0	5287.0	120
F26-2	318.0	5550.6	2.5	5548.1	11/29/12	320	307.7	317.7	5240.4	5230.4	110
F26-3	246.5	5549.9	2.1	5547.9	11/30/12	253	226.2	246.2	5321.7	5301.7	120
F29-2	326.2	5562.7	2.7	5560.0	12/13/12	330	315.9	325.9	5244.1	5234.1	110
F29-3	257.8	5563.0	2.7	5560.3	12/19/12	260	237.5	257.5	5322.8	5302.8	120
C3-6	224.5	5409.1	2.99	5412.1	2/21/13	220	214.1	224.1	5198.0	5188.0	110
C4-6	342.6	5411.0	2.09	5413.1	3/1/13	345	327.4	342.4	5085.7	5070.7	80
C4-7	278.4	5410.8	2.5	5413.3	2/28/13	275	268.0	278.0	5145.3	5135.3	100
C4-8	217.7	5410.7	2.6	5413.3	02/22/13	215	207.4	217.4	5205.9	5195.9	110
C5-7	344.8	5418.6	2.6	5421.2	02/13/13	348	334.4	344.4	5086.8	5076.8	80
C5-8	277.6	5418.8	2.6	5421.3	02/15/13	275.0	267.2	277.2	5154.1	5144.1	100
C10-1	150.1	5420.1	2.8	5422.9	03/11/13	147	139.7	149.7	5283.2	5273.2	130

*TBD = Pending survey results

Table 5
2nd Qrt, 2013 Sampling

Well Database	Newly Installed	Old Wells Sampled-2nd Qrt, 2013	New Wells Sampled-2nd Qrt, 2013	Well Characterized (> 4 Samples)	Dry Well	Samples before 2012	Samples for 2012	Samples for 2013	
C1-1				x		32	4	1	
C1-2		x		x		25	4	2	
C1-3				x		18	4	1	
C1-4		x		x		10	2	2	
C1-5		x		x		9	2	2	
C1-6		x		x		10	2	2	
C2-1		x				21	2	2	
C2-2A				x		10	4	1	
C3-1				x		27	4	1	
C3-2A		x		x		9	4	2	
C3-3		x				12	2	2	
C3-4		x				16	2	2	
C3-5						2	2	1	
	C3-6		x			0	0	1	
C4-1					x	12	0	0	DRY
C4-2A		x		x		7	4	2	
C4-3		x				10	2	2	
C4-5						6	2	1	
	C4-6		x			0	0	1	
	C4-7		x			0	0	1	
	C4-8		x			0	0	1	
C5-1		x				13	2	2	
C5-2						3	2	1	
C5-3		x				18	2	2	
C5-4					x	0	0	0	DRY
C5-5						9	2	1	
C5-6		x				6	2	2	
	C5-7		x			0	0	1	
	C5-8		x			0	0	1	
C6-1						8	2	1	
C6-2						28	2	1	
C6-3						21	2	1	
C6-4		x				11	2	2	
C8-1					x	13	0	0	DRY
C8-2					x	0	0	0	DRY
C8-3		x				19	2	2	
C9-1					x	0	0	0	DRY
C9-2		x				35	2	2	
	C10-1		x			0	0	1	
C11-1		x				22	2	2	
C11-2		x				18	2	2	
C11-4		x				10	2	2	
C11-5		x				10	2	2	
C11-6						5	2	1	
C12-1		x				24	2	1	
C14-3		x				6	2	1	
C16-1					x	0	0	0	DRY
C17-1						5	2	1	
C18-1					x	1	0	0	DRY
C20-1						5	2	1	
C22-1		x		x		8	2	2	
	C22-2		x	x		0	3	2	
	C22-3		x	x		0	3	2	
	C22-4			x		0	2	1	
	CBG-01		x	x		0	3	2	
	CBG-02		x	x		0	3	2	
	CBG-03		x	x		0	3	2	
	CBG-04		x	x		0	2	2	
E4-1					x	0	0	0	DRY
E4-3		x				14	2	2	
E4-5		x				11	2	2	
E4-6		x				11	2	2	
E4-7		x		x		24	3	2	
E5-1		x				49	2	2	
E5-2		x				80	2	2	
E5-3				x		13	3	1	
E5-4		x				11	2	2	
E6-1		x				50	2	2	
E6-2		x				69	2	2	
E6-4		x				41	2	2	
E6-5						31	2	1	
E6-6						14	2	1	
E6-7		x				11	2	2	
E6-8		x				4	3	2	
E7-1		x				80	2	2	
E7-2						45	2	1	
E7-3					x	0	0	0	DRY
E7-5					x	23	0	0	DRY
E7-6						14	2	1	
E8-1						36	2	1	
E8-2		x				24	2	2	
E9-2						72	2	1	
E9-3		x				33	2	2	
E9-4		x				33	2	2	
E9-5		x				37	2	2	
E9-6						13	2	1	
	E9-7		x	x		0	3	2	
	E9-8		x	x		0	3	2	
	E9-9		x	x		0	3	2	
E10-1						76	2	1	
E10-2						49	2	1	
E10-3						34	2	1	
E10-4						33	2	1	
E10-5		x				13	2	2	
E10-6						11	2	1	
E10-7		x				11	2	2	
E14-2						3	2	1	
E14-3					x	0	0	0	DRY
E16-2		x				9	2	2	
E17-1		x				9	2	2	
E18-1					x	0	0	0	DRY
E18-2					x	0	0	0	DRY
E18-7					x	0	0	0	DRY
E18-9					x	0	0	0	DRY
F1-2				x		30	2	1	
F2-1		x		x		43	2	2	

Table 5
2nd Qrt, 2013 Sampling

Well Database	Newly Installed	Old Wells Sampled-2nd Qrt, 2013	New Wells Sampled-2nd Qrt, 2013	Well Characterized (> 4 Samples)	Dry Well	Samples before 2012	Samples for 2012	Samples for 2013	
F2-2				x		54	2	1	
F2-3				x		41	2	1	
F3-1		x		x		41	2	2	
F3-2						27	2	1	
F4-1					x	2	0	0	DRY
F12-2		x				22	2	2	
F13-1						12	2	1	
F14-1						15	2	1	
F14-2					x	11	0	0	unsamplable
F14-3					x	10	1	0	unsamplable
F15-1						12	2	1	
F16-1		x				11	2	2	
	F23-1		x			0	3	2	
	F23-2		x			0	3	2	
	F23-3		x			0	2	2	
	F23-4		x			0	2	2	
	F25-1		x		x	0	0	0	DRY
	F25-2		x	x		0	3	2	
	F25-3		x	x		0	3	2	
F26-1					x	0	0	0	DRY
F28-1		x				6	1	2	
	F28-2		x			0	2	2	
	F28-3		x			0	2	2	
F29-1		x				6	1	2	
	F31-1		x	x		0	3	2	
	F31-2		x	x		0	3	2	
	FBG-1		x	x		0	3	2	
	FBG-2		x	x		0	3	2	
	F20-1		x			0	0	2	
	F26-2		x			0	0	2	
	F26-3		x			0	0	2	
	F29-2		x			0	0	2	
	F29-3		x			0	0	2	
104	35	50	33		20				

Wells to discontinue quarterly sampling, but left open for periodical aquifer evaluation

C-Wellfield
Table 6

Well ID		WYDEQ	C1-2	C1-4	C1-5	C1-6	C2-1
Job Number		Class III	C13040913-003	C13050322-001	C13050322-002	C13050521-004	C13050521-002
Sample Date/Time		Livestock	4/29/13 11:05 AM	5/7/13 11:23 AM	5/7/13 1:53 PM	5/13/13 11:49 AM	5/13/13 11:32 AM
HSU		Standard	140	140	140	140	140
Alkalinity, Total as CaCO3	mg/L	–	236	249	251	255	274
Carbonate as CO3	mg/L	–	<5	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	288	303	306	312	334
Calcium	mg/L	–	477	473	445	342	366
Chloride	mg/L	2000	251	362	315	212	246
Fluoride	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Magnesium	mg/L	–	106	142	101	69	73
Nitrogen, Ammonia as N	mg/L	–	<0.05	0.07	<0.05	<0.05	<0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	100	<0.1	0.2	1.8	0.6	1.5
Potassium	mg/L	–	12	12	11	11	11
Silica	mg/L	–	15.4	11.9	9.6	13.0	14.8
Sodium	mg/L	–	252	259	182	216	186
Sulfate	mg/L	3000	1590	1550	1280	984	924
Conductivity @ 25 C	umhos/cm	–	3560	3710	3220	2730	2750
pH	s.u.	6.5-8.5	7.22	7.14	7.26	7.27	7.17
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	2900	3250	2710	2150	2140
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	1.9
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	0.001	0.002	0.001	<0.001	<0.001
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	1.36	<0.03	<0.03	0.63	<0.03
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	0.18	0.70	0.18	0.19	<0.01
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	<0.001	0.018	0.383	0.068	0.146
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	0.0628	0.190	0.432	0.144	0.189
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	0.01	<0.01	<0.01	<0.01	<0.01
Iron-T	mg/L	–	2.21	<0.03	0.04	0.88	<0.03
Manganese-T	mg/L	–	0.19	0.82	0.20	0.19	<0.01
Gross Alpha - minus U - Calculated	pCi/L						
Gross Alpha - Unadjusted	pCi/L	–					
Gross Alpha precision (±)	pCi/L	–					
Gross Alpha MDC	pCi/L	–	14.4	16.3	15.0	10.1	13.2
Gross Beta	pCi/L	–	22.4	24.1	77.4	38.4	19.2
Gross Beta precision (±)	pCi/L	–					
Gross Beta MDC	pCi/L	–	22.7	23.9	20.5	29.8	22.3
Radium 226	pCi/L	–	18	2.9	1.2	1.3	0.57
Radium 226 precision (±)	pCi/L	–					
Radium 226 MDC	pCi/L	–	0.15	0.17	0.17	0.15	0.16
Radium 228	pCi/L	–	3.9	0.7	1.1	3.2	3.5
Radium 228 precision (±)	pCi/L	–					
Radium 228 MDC	pCi/L	–	1.5	2.5	2.5	1.7	1.7
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5					

* Duplicate sample

C-Wellfield
Table 6

Well ID		WYDEQ	C3-2A	C3-3	C3-4	C4-2A	C4-3
Job Number		Class III	C13040913-004	C13050521-005	C13050521-003	C13040913-005	C13050737-008
Sample Date/Time		Livestock	4/29/13 11:48 AM	5/13/13 2:59 PM	5/13/13 2:52 PM	4/29/13 12:46 PM	5/19/13 3:16 PM
HSU		Standard	130	140	130	130	140
Alkalinity, Total as CaCO3	mg/L	–	292	262	254	249	303
Carbonate as CO3	mg/L	–	<5	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	357	320	310	303	370
Calcium	mg/L	–	411	360	315	313	376
Chloride	mg/L	2000	235	249	219	178	265
Fluoride	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Magnesium	mg/L	–	73	74	56	58	73
Nitrogen, Ammonia as N	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	100	0.2	6.4	0.1	4.0	3.9
Potassium	mg/L	–	11	11	10	10	11
Silica	mg/L	–	13.6	13.4	13.8	12.8	13.5
Sodium	mg/L	–	209	254	232	211	249
Sulfate	mg/L	3000	1240	1010	896	1010	998
Conductivity @ 25 C	umhos/cm	–	3140	2950	2630	2680	2910
pH	s.u.	6.5-8.5	7.22	7.20	7.45	7.20	7.17
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	2490	2280	1970	2070	2340
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	<0.001	<0.001	<0.001	<0.001	<0.001
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	0.22	<0.03	0.57	0.20	<0.03
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	<0.01	<0.01	0.12	<0.01	<0.01
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	0.039	0.496	<0.001	0.372	0.404
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	0.284	0.309	0.0152	0.0885	0.415
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-T	mg/L	–	3.26	0.68	0.53	8.56	0.50
Manganese-T	mg/L	–	0.06	0.02	0.12	0.12	<0.01
Gross Alpha - minus U - Calculated	pCi/L						
Gross Alpha - Unadjusted	pCi/L	–					
Gross Alpha precision (±)	pCi/L	–					
Gross Alpha MDC	pCi/L	–	13.2	13.5	14.3	10.4	16.3
Gross Beta	pCi/L	–	30.1	44.6	7.6	12.8	58.8
Gross Beta precision (±)	pCi/L	–					
Gross Beta MDC	pCi/L	–	19.2	24.7	19.5	17.9	22.6
Radium 226	pCi/L	–	1.6	0.49	0.43	1.1	0.68
Radium 226 precision (±)	pCi/L	–					
Radium 226 MDC	pCi/L	–	0.16	0.15	0.15	0.16	0.15
Radium 228	pCi/L	–	1.9	-0.1	2.3	0.4	1.3
Radium 228 precision (±)	pCi/L	–					
Radium 228 MDC	pCi/L	–	1.6	1.7	1.7	1.6	1.5
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5					

* Duplicate sample

C-Wellfield
Table 6

Well ID		WYDEQ	C5-1	C5-3	C5-6	C6-4	C8-3
Job Number		Class III	C13060845-004	C13050779-003	C13040913-002	C13050779-001	C13050779-004
Sample Date/Time		Livestock	6/24/13 1:54 PM	5/20/13 2:44 PM	4/29/13 10:24 AM	5/20/13 11:39 AM	5/20/13 3:24 PM
HSU		Standard	140	130	100	130	130
Alkalinity, Total as CaCO3	mg/L	–	291	290	206	247	354
Carbonate as CO3	mg/L	–	<5	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	355	354	251	301	432
Calcium	mg/L	–	310	334	162	273	168
Chloride	mg/L	2000	271	198	93	136	57
Fluoride	mg/L	–	<0.1	<0.1	0.2	<0.1	0.1
Magnesium	mg/L	–	61	65	29	50	30
Nitrogen, Ammonia as N	mg/L	–	<0.05	<0.05	<0.05	<0.05	0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	100	0.2	<0.1	<0.1	<0.1	<0.1
Potassium	mg/L	–	10	11	6	9	8
Silica	mg/L	–	12.9	13.4	12.8	14.5	16.2
Sodium	mg/L	–	159	245	187	225	160
Sulfate	mg/L	3000	710	977	575	851	396
Conductivity @ 25 C	umhos/cm	–	2480	2730	1720	2370	1530
pH	s.u.	6.5-8.5	7.20	7.32	7.61	7.41	7.33
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	1840	2120	1200	1850	1080
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	0.002	<0.001	0.003	<0.001	<0.001
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	0.01	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	<0.03	0.85	0.59	0.42	0.18
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	<0.01	0.22	0.18	0.20	0.45
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	0.027	<0.001	0.002	<0.001	0.002
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	0.188	0.153	<0.0005	0.0154	0.110
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	0.02	<0.01	0.01	<0.01	<0.01
Iron-T	mg/L	–	0.09	0.80	0.39	0.46	0.18
Manganese-T	mg/L	–	<0.01	0.23	0.20	0.20	0.48
Gross Alpha - minus U - Calculated	pCi/L						
Gross Alpha - Unadjusted	pCi/L	–					
Gross Alpha precision (±)	pCi/L	–					
Gross Alpha MDC	pCi/L	–	11.5	12.7	8.4	12.2	4.6
Gross Beta	pCi/L	–	32.5	24.7	6.1	-10	21.7
Gross Beta precision (±)	pCi/L	–					
Gross Beta MDC	pCi/L	–	23.7	19.2	11.4	22.7	5.0
Radium 226	pCi/L	–	1.2	1.3	0.85	1.3	0.32
Radium 226 precision (±)	pCi/L	–					
Radium 226 MDC	pCi/L	–	0.14	0.17	0.16	0.18	0.19
Radium 228	pCi/L	–	2.3	2.8	0.7	2.7	3.0
Radium 228 precision (±)	pCi/L	–					
Radium 228 MDC	pCi/L	–	1.3	1.6	1.6	1.4	1.7
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5					

* Duplicate sample

C-Wellfield
Table 6

Well ID		WYDEQ	C9-2	C11-1	C11-2	C11-4	C11-5
Job Number		Class III	C13060098-004	C13060098-002	C13060098-001	C13060816-002	C13060098-003
Sample Date/Time		Livestock	6/3/13 3:47 PM	6/3/13 11:22 AM	6/3/13 11:07 AM	6/21/13 11:48 AM	6/3/13 2:55 PM
HSU		Standard	130	130	130	130	130
Alkalinity, Total as CaCO3	mg/L	--	236	299	198	232	278
Carbonate as CO3	mg/L	--	<5	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	--	288	365	242	283	339
Calcium	mg/L	--	77	119	59	71	133
Chloride	mg/L	2000	15	48	17	35	23
Fluoride	mg/L	--	0.1	0.1	0.2	0.1	0.2
Magnesium	mg/L	--	15	25	11	13	34
Nitrogen, Ammonia as N	mg/L	--	<0.05	1.78	<0.05	<0.05	0.14
Nitrogen, Nitrate+Nitrite as N	mg/L	100	<0.1	<0.1	<0.1	<0.1	<0.1
Potassium	mg/L	--	5	9	4	5	7
Silica	mg/L	--	12.5	18.0	11.7	13.4	16.6
Sodium	mg/L	--	98	77	124	124	80
Sulfate	mg/L	3000	207	232	237	230	331
Conductivity @ 25 C	umhos/cm	--	857	1090	883	1020	1120
pH	s.u.	6.5-8.5	7.50	6.93	7.78	7.74	7.08
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	589	754	608	655	830
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	<0.001	0.004	<0.001	<0.001	0.002
Barium-D	mg/L	--	<0.1	0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	--	<0.03	4.62	0.04	0.03	1.47
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	--	0.01	0.73	0.08	0.16	0.32
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	--	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	--	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	0.030	0.157	0.005	0.023	0.002
Thallium-D	mg/L	--	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	--	0.0662	0.160	0.0222	0.0570	0.0074
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-T	mg/L	--	<0.03	6.69	0.06	0.06	3.02
Manganese-T	mg/L	--	0.01	0.81	0.08	0.17	0.32
Gross Alpha - minus U - Calculated	pCi/L						
Gross Alpha - Unadjusted	pCi/L	--					
Gross Alpha precision (±)	pCi/L	--					
Gross Alpha MDC	pCi/L	--	2.0	3.0	1.9	2.4	2.4
Gross Beta	pCi/L	--	12.9	30.5	6.6	10.0	9.9
Gross Beta precision (±)	pCi/L	--					
Gross Beta MDC	pCi/L	--	2.7	4.3	2.4	3.7	4.0
Radium 226	pCi/L	--	0.53	1.2	0.22	0.24	0.71
Radium 226 precision (±)	pCi/L	--					
Radium 226 MDC	pCi/L	--	0.18	0.17	0.18	0.17	0.17
Radium 228	pCi/L	--	0.8	3.3	3.5	0.7	2.8
Radium 228 precision (±)	pCi/L	--					
Radium 228 MDC	pCi/L	--	1.7	1.6	1.7	1.6	1.6
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5					

* Duplicate sample

C-Wellfield
Table 6

Well ID		WYDEQ	C11-5*	C12-1	C14-3	C22-1	C22-2
Job Number		Class III	C13060098-005	C13040547-001	C13060816-001	C13040303-006	C13040091-003
Sample Date/Time		Livestock	6/3/13 3:00 PM	4/15/13 2:47 PM	6/21/13 3:55 PM	4/8/13 11:55 AM	4/1/13 2:09 PM
HSU		Standard	130	60	130	100	110
Alkalinity, Total as CaCO3	mg/L	–	279	127	142	127	140
Carbonate as CO3	mg/L	–	<5	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	341	154	174	155	171
Calcium	mg/L	–	135	32	117	31	41
Chloride	mg/L	2000	23	8	44	7	7
Fluoride	mg/L	–	0.2	0.3	0.2	0.3	0.2
Magnesium	mg/L	–	33	6	21	5	7
Nitrogen, Ammonia as N	mg/L	–	0.15	0.18	<0.05	0.12	<0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	100	<0.1	<0.1	<0.1	<0.1	0.3
Potassium	mg/L	–	7	4	6	3	4
Silica	mg/L	–	16.7	13.0	6.4	11.1	12.3
Sodium	mg/L	–	80	66	193	105	120
Sulfate	mg/L	3000	329	104	556	194	228
Conductivity @ 25 C	umhos/cm	–	1120	501	1490	681	787
pH	s.u.	6.5-8.5	7.06	8.17	8.28	8.12	8.21
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	829	298	1050	446	514
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	0.002	<0.001	<0.001	<0.001	<0.001
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	1.40	<0.03	<0.03	0.04	<0.03
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	0.32	0.02	0.16	0.03	0.05
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	0.001	<0.001	0.001	<0.001	<0.001
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	0.0084	<0.0003	0.0016	<0.0003	<0.0003
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-T	mg/L	–	4.26	0.09	3.83	0.07	0.06
Manganese-T	mg/L	–	0.32	0.02	0.27	0.03	0.05
Gross Alpha - minus U - Calculated	pCi/L						
Gross Alpha - Unadjusted	pCi/L	–					
Gross Alpha precision (±)	pCi/L	–					
Gross Alpha MDC	pCi/L	–	2.7	2.0	3.8	2.1	1.9
Gross Beta	pCi/L	–	7.5	2.3	4.7	1.2	2.4
Gross Beta precision (±)	pCi/L	–					
Gross Beta MDC	pCi/L	–	3.9	2.7	4.9	2.6	2.8
Radium 226	pCi/L	–	0.57	0.27	0.43	0.31	0.18
Radium 226 precision (±)	pCi/L	–					
Radium 226 MDC	pCi/L	–	0.17	0.17	0.17	0.16	0.19
Radium 228	pCi/L	–	1.1	1.4	1.1	-0.1	0.4
Radium 228 precision (±)	pCi/L	–					
Radium 228 MDC	pCi/L	–	1.6	1.6	1.5	1.8	1.9
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5					

* Duplicate sample

C-Wellfield
Table 6

Well ID		WYDEQ	C22-3	CBG-1	CBG-2	CBG-3	CBG-4
Job Number		Class III	C13040091-001	C13040913-001	C13040039-003	C13040039-002	C13040039-001
Sample Date/Time		Livestock	4/1/13 12:59 PM	4/29/13 8:06 AM	4/1/13 9:44 AM	4/1/13 9:15 AM	4/1/13 8:50 AM
HSU		Standard	120	100	110	130	140
Alkalinity, Total as CaCO3	mg/L	–	137	163	145	204	233
Carbonate as CO3	mg/L	–	<5	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	163	199	177	239	284
Calcium	mg/L	–	32	59	39	35	59
Chloride	mg/L	2000	9	5	4	4	4
Fluoride	mg/L	–	0.2	0.2	0.3	0.4	0.3
Magnesium	mg/L	–	4	10	6	5	11
Nitrogen, Ammonia as N	mg/L	–	<0.05	<0.05			
Nitrogen, Nitrate+Nitrite as N	mg/L	100	<0.1	<0.1	<0.1	<0.1	1.7
Potassium	mg/L	–	3	6	5	4	5
Silica	mg/L	–	10.0	14.4	12.2	9.6	15.5
Sodium	mg/L	–	107	100	83	90	51
Sulfate	mg/L	3000	183	228	173	106	82
Conductivity @ 25 C	umhos/cm	–	686	820	633	604	598
pH	s.u.	6.5-8.5	8.61	7.91	8.01	8.52	7.53
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	440	518	404	378	376
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	<0.001	<0.001	<0.001	0.001	<0.001
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	<0.03	0.06	0.03	<0.03	<0.03
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	0.03	0.02	0.03	0.01	<0.01
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	<0.001	<0.001	0.001	0.002	0.025
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	<0.0003	0.0123	0.0009	0.0013	0.0389
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-T	mg/L	–	1.85	0.08	0.04	1.05	0.09
Manganese-T	mg/L	–	0.05	0.03	0.04	0.04	<0.01
Gross Alpha - minus U - Calculated	pCi/L						
Gross Alpha - Unadjusted	pCi/L	–					
Gross Alpha precision (±)	pCi/L	–					
Gross Alpha MDC	pCi/L	–	2.4	3.1	1.8	1.6	1.7
Gross Beta	pCi/L	–	2.5	23.5	4.5	4.5	11.9
Gross Beta precision (±)	pCi/L	–					
Gross Beta MDC	pCi/L	–	2.7	5.5	2.7	3.0	2.5
Radium 226	pCi/L	–	0.04	22	0.48	0.001	0.35
Radium 226 precision (±)	pCi/L	–					
Radium 226 MDC	pCi/L	–	0.22	0.17	0.26	0.23	0.23
Radium 228	pCi/L	–	1.1	-0.4	4.8	0.7	2.5
Radium 228 precision (±)	pCi/L	–			2.3	2.0	2.0
Radium 228 MDC	pCi/L	–	2.1	1.7			
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5					

* Duplicate sample

Well ID		WYDEQ	C3-6	C4-6	C4-7	C4-8
Job Number		Class III	C13060382-005	C13060382-002	C13060647-004	C13060382-001
Sample Date/Time		Livestock	6/10/13 5:59 PM	6/10/2013	6/17/2013	6/10/2013
HSU		Standard	110	80	100	110
Alkalinity, Total as CaCO3	mg/L	–	186	140	128	203
Carbonate as CO3	mg/L	–	<5	<5	10	<5
Bicarbonate as HCO3	mg/L	–	227	171	135	247
Calcium	mg/L	–	173	99	69	233
Chloride	mg/L	2000	95	37	46	121
Fluoride	mg/L	–	<0.1	0.2	0.3	<0.1
Magnesium	mg/L	–	30	17	12	44
Nitrogen, Ammonia as N	mg/L	–	<0.05	0.07	<0.05	<0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	100	<0.1	0.3	0.7	<0.1
Potassium	mg/L	–	6	5	6	13
Silica	mg/L	–	14.5	11.9	12.2	10.4
Sodium	mg/L	–	206	201	209	223
Sulfate	mg/L	3000	654	524	465	839
Conductivity @ 25 C	umhos/cm	–	1760	1380	1290	2110
pH	s.u.	6.5-8.5	7.74	8.09	8.94	7.65
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	1330	1000	911	1660
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	0.001	0.001	0.006	0.001
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	0.01	<0.01	<0.01
Iron-D	mg/L	–	0.10	<0.03	<0.03	0.14
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	0.18	0.07	0.02	0.23
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	<0.001	0.001	0.002	<0.001
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	<0.0003	<0.0003	0.0041	0.0520
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	<0.01	0.01	0.01	0.01
Iron-T	mg/L	–	0.15	0.32	0.06	0.15
Manganese-T	mg/L	–	0.18	0.07	0.01	0.22
Gross Alpha - minus U - Calculated	pCi/L	15				
Gross Alpha - Unadjusted	pCi/L	–				
Gross Alpha precision (±)	pCi/L	–				
Gross Alpha MDC	pCi/L	–	12.2	3.3	3.3	10.5
Gross Beta	pCi/L	–	2.1	3.6	6.5	2.5
Gross Beta precision (±)	pCi/L	–				
Gross Beta MDC	pCi/L	–	18.1	4.3	4.2	19.0
Radium 226	pCi/L	–	0.60	0.52	0.45	0.38
Radium 226 precision (±)	pCi/L	–				
Radium 226 MDC	pCi/L	–	0.17	0.16	0.21	0.16
Radium 228	pCi/L	–	1.1	0.3	0.3	0.3
Radium 228 precision (±)	pCi/L	–				
Radium 228 MDC	pCi/L	–	1.1	1.1	1.6	1.1
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5				

* Duplicate sample

Well ID		WYDEQ	C5-7	C5-7*	C5-8	C10-1
Job Number		Class III	C13060382-004	C13060382-007	C13060382-003	C13060382-006
Sample Date/Time		Livestock	6/10/13 5:32 PM	6/10/13 12:00 AM	6/10/13 2:49 PM	6/10/13 7:10 PM
HSU		Standard	80	80	100	130
Alkalinity, Total as CaCO3	mg/L	–	79	79	242	162
Carbonate as CO3	mg/L	–	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	93	94	295	195
Calcium	mg/L	–	23	23	182	36
Chloride	mg/L	2000	11	11	116	9
Fluoride	mg/L	–	0.3	0.3	<0.1	0.2
Magnesium	mg/L	–	3	3	33	7
Nitrogen, Ammonia as N	mg/L	–	<0.05	0.06	<0.05	<0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	100	<0.1	<0.1	<0.1	<0.1
Potassium	mg/L	–	4	3	7	3
Silica	mg/L	–	9.3	9.2	13.7	13.8
Sodium	mg/L	–	124	123	199	127
Sulfate	mg/L	3000	227	226	598	220
Conductivity @ 25 C	umhos/cm	–	688	695	1800	792
pH	s.u.	6.5-8.5	8.63	8.95	7.81	8.35
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	446	443	1350	577
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	0.001	<0.001	<0.001	0.003
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	<0.03	<0.03	0.20	<0.03
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	<0.01	<0.01	0.17	0.01
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	<0.001	<0.001	<0.001	<0.001
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	<0.0003	<0.0003	<0.0003	0.0164
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	0.01	0.01	0.01	<0.01
Iron-T	mg/L	–	2.78	2.94	0.23	6.40
Manganese-T	mg/L	–	0.03	0.03	0.17	0.08
Gross Alpha - minus U - Calculated	pCi/L	15				
Gross Alpha - Unadjusted	pCi/L	–				
Gross Alpha precision (±)	pCi/L	–				
Gross Alpha MDC	pCi/L	–	2.0	1.6	9.8	2.0
Gross Beta	pCi/L	–	0.7	1.9	4.8	2.0
Gross Beta precision (±)	pCi/L	–				
Gross Beta MDC	pCi/L	–	2.7	2.7	18.8	2.8
Radium 226	pCi/L	–	0.17	0.10	0.75	0.05
Radium 226 precision (±)	pCi/L	–				
Radium 226 MDC	pCi/L	–	0.17	0.16	0.17	0.16
Radium 228	pCi/L	–	1	0.05	1.3	-0.03
Radium 228 precision (±)	pCi/L	–				
Radium 228 MDC	pCi/L	–	1.1	1.1	1.1	1.1
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5				

* Duplicate sample

E-Wellfield
Table 7

Well ID		WYDEQ	E-4-3	E4-5	E4-6	E4-7	E5-1
Job Number		Class III	C13040303-008	C13050737-007	C13050737-005	C13050002-003	C13060816-005
Sample Date/Time		Livestock	4/8/13 12:32 PM	5/19/13 7:54 AM	5/19/13 8:13 AM	4/29/13 4:32 PM	6/21/13 3:51 PM
HSU		Standard	140	140	140	140	140
Alkalinity, Total as CaCO3	mg/L	–	254	254	237	278	329
Carbonate as CO3	mg/L	–	<5	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	309	310	289	339	402
Calcium	mg/L	–	67	74	66	94	135
Chloride	mg/L	2000	7	23	8	12	59
Fluoride	mg/L	–	0.3	0.3	0.3	0.3	0.2
Magnesium	mg/L	–	13	15	13	19	26
Nitrogen, Ammonia as N	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	100	1.8	1.9	1.6	2.0	1.9
Potassium	mg/L	–	5	6	6	7	8
Silica	mg/L	–	16.6	16.3	16.4	17.1	16.9
Sodium	mg/L	–	53	69	64	58	71
Sulfate	mg/L	3000	87	96	95	122	213
Conductivity @ 25 C	umhos/cm	–	649	725	650	779	1180
pH	s.u.	6.5-8.5	7.44	7.47	7.50	7.24	7.25
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	405	474	425	492	782
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	<0.001	<0.001	<0.001	<0.001	<0.001
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	<0.03	<0.03	<0.03	<0.03	<0.03
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	0.02	<0.01	<0.01	0.07	0.02
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	0.063	0.170	0.072	0.085	0.984
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	0.0636	0.141	0.0538	1.98	0.395
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-T	mg/L	–	0.08	0.35	<0.03	1.80	<0.03
Manganese-T	mg/L	–	0.02	<0.01	<0.01	0.08	<0.01
Gross Alpha - minus U - Calculated	pCi/L						
Gross Alpha - Unadjusted	pCi/L	–					
Gross Alpha precision (±)	pCi/L	–					
Gross Alpha MDC	pCi/L	–	1.8	2.2	1.7	2.5	8.6
Gross Beta	pCi/L	–	11.8	24.4	14.6	198	47.6
Gross Beta precision (±)	pCi/L	–					
Gross Beta MDC	pCi/L	–	2.7	3.0	3.0	2.7	14.5
Radium 226	pCi/L	–	0.41	0.45	0.45	34	7.4
Radium 226 precision (±)	pCi/L	–					
Radium 226 MDC	pCi/L	–	0.16	0.15	0.15	0.19	0.16
Radium 228	pCi/L	–	0.2	0.7	-0.1	2.2	1.3
Radium 228 precision (±)	pCi/L	–					
Radium 228 MDC	pCi/L	–	1.8	1.3	1.5	2.0	1.5
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5					

* Duplicate sample

Well ID		WYDEQ	E5-2	E5-4	E6-1	E6-2	E6-4
Job Number		Class III	C13060816-004	C13050779-002	C13060816-003	C13040039-005	C13040039-006
Sample Date/Time		Livestock	6/21/13 1:19 PM	5/20/13 10:12 AM	6/21/13 2:55 PM	4/1/13 11:02 AM	4/1/13 11:48 AM
HSU		Standard	140	140	140	140	140
Alkalinity, Total as CaCO3	mg/L	–	292	211	248	424	355
Carbonate as CO3	mg/L	–	<5	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	356	258	303	517	433
Calcium	mg/L	–	144	55	125	234	178
Chloride	mg/L	2000	50	10	34	97	72
Fluoride	mg/L	–	0.2	0.3	0.2	0.2	0.2
Magnesium	mg/L	–	27	9	23	42	30
Nitrogen, Ammonia as N	mg/L	–	<0.05	<0.05	<0.05		
Nitrogen, Nitrate+Nitrite as N	mg/L	100	2.1	1.7	2.1	1.8	2.4
Potassium	mg/L	–	8	6	8	10	9
Silica	mg/L	–	18.0	15.9	16.7	20.2	19.2
Sodium	mg/L	–	72	55	67	72	76
Sulfate	mg/L	3000	261	61	232	360	299
Conductivity @ 25 C	umhos/cm	–	1160	551	1010	1590	1360
pH	s.u.	6.5-8.5	7.30	7.69	7.46	7.31	7.30
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	778	342	682	1140	935
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	<0.001	<0.001	<0.001	<0.001	<0.001
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	0.03	0.03	<0.03	0.04	0.06
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	0.002
Manganese-D	mg/L	–	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	1.05	0.048	0.338	3.13	0.816
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	0.337	0.0346	0.165	1.13	0.345
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	<0.01	<0.01	<0.01	<0.01	0.09
Iron-T	mg/L	–	1.34	3.30	<0.03	0.37	0.47
Manganese-T	mg/L	–	0.01	0.05	0.01	<0.01	<0.01
Gross Alpha - minus U - Calculated	pCi/L						
Gross Alpha - Unadjusted	pCi/L	–					
Gross Alpha precision (±)	pCi/L	–					
Gross Alpha MDC	pCi/L	–	8.4	1.9	3.2	4.3	3.5
Gross Beta	pCi/L	–	36.4	9.6	25.5	237	67.1
Gross Beta precision (±)	pCi/L	–					
Gross Beta MDC	pCi/L	–	16.4	2.7	4.3	6.7	5.1
Radium 226	pCi/L	–	1.8	1.1	0.70	2.0	2.0
Radium 226 precision (±)	pCi/L	–					
Radium 226 MDC	pCi/L	–	0.17	0.17	0.16	0.20	0.22
Radium 228	pCi/L	–	2.0	0.7	2.1	4.3	1.3
Radium 228 precision (±)	pCi/L	–					
Radium 228 MDC	pCi/L	–	1.5	1.3	1.5	1.7	1.9
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5					

* Duplicate sample

Well ID		WYDEQ	E6-7	E6-8	E7-1	E8-2	E9-3
Job Number		Class III	C13050737-001	C13040303-007	C13040091-002	C13040739-002	C13060845-003
Sample Date/Time		Livestock	5/19/13 1:56 PM	4/8/13 12:28 PM	4/1/2013	4/22/2013	6/24/2013
HSU		Standard	140	120	140	140	140
Alkalinity, Total as CaCO3	mg/L	–	199	187	309	226	205
Carbonate as CO3	mg/L	–	<5	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	243	228	377	275	251
Calcium	mg/L	–	59	58	116	56	64
Chloride	mg/L	2000	3	33	13	3	3
Fluoride	mg/L	–	0.3	0.3	0.2	0.3	0.3
Magnesium	mg/L	–	10	9	20	10	11
Nitrogen, Ammonia as N	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	100	1.7	<0.1	2.3	1.1	1.4
Potassium	mg/L	–	6	5	8	6	6
Silica	mg/L	–	14.9	10.6	19.1	17.3	15.5
Sodium	mg/L	–	39	90	64	31	27
Sulfate	mg/L	3000	63	174	189	38	56
Conductivity @ 25 C	umhos/cm	–	515	773	936	491	507
pH	s.u.	6.5-8.5	7.56	7.95	7.34	7.58	7.74
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	331	498	621	293	310
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	<0.001	<0.001	<0.001	<0.001	<0.001
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01	0.01
Iron-D	mg/L	–	<0.03	0.19	0.11	0.12	<0.03
Lead-D	mg/L	0.1	<0.001	<0.001	0.001	<0.001	<0.001
Manganese-D	mg/L	–	<0.01	0.06	0.03	0.16	<0.01
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	0.010	<0.001	0.389	0.015	0.006
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	0.0292	0.0013	0.130	0.0316	0.0276
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-T	mg/L	–	0.10	1.57	<0.03	26.8	<0.03
Manganese-T	mg/L	–	<0.01	0.07	0.02	0.43	<0.01
Gross Alpha - minus U - Calculated	pCi/L						
Gross Alpha - Unadjusted	pCi/L	–					
Gross Alpha precision (±)	pCi/L	–					
Gross Alpha MDC	pCi/L	–	1.8	2.6	2.2	1.9	1.9
Gross Beta	pCi/L	–	6.4	5.6	37.0	6.6	9.1
Gross Beta precision (±)	pCi/L	–					
Gross Beta MDC	pCi/L	–	2.8	4.1	5.2	2.7	2.7
Radium 226	pCi/L	–	0.56	0.75	1.6	2.8	0.65
Radium 226 precision (±)	pCi/L	–					
Radium 226 MDC	pCi/L	–	0.15	0.16	0.16	0.23	0.15
Radium 228	pCi/L	–	-0.8	0.1	1.4	0.6	7.0
Radium 228 precision (±)	pCi/L	–					
Radium 228 MDC	pCi/L	–	1.6	1.8	1.5	1.6	1.4
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5					

* Duplicate sample

Well ID		WYDEQ	E9-4	E9-5	E9-7	E9-8	E9-9
Job Number		Class III	C13050002-001	C13040739-001	C13040091-009	C13040039-004	C13050002-002
Sample Date/Time		Livestock	4/29/2013	4/22/2013	4/1/2013	4/1/2013	4/29/2013
HSU		Standard	140	140	110	120	140
Alkalinity, Total as CaCO3	mg/L	–	181	251	133	132	211
Carbonate as CO3	mg/L	–	<5	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	221	306	162	161	258
Calcium	mg/L	–	55	109	26	24	90
Chloride	mg/L	2000	3	13	5	5	5
Fluoride	mg/L	–	0.3	0.2	0.3	0.3	0.3
Magnesium	mg/L	–	9	18	4	4	15
Nitrogen, Ammonia as N	mg/L	–	<0.05	0.05	<0.05		<0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	100	1.4	1.2	<0.1	<0.1	1.5
Potassium	mg/L	–	6	8	3	4	7
Silica	mg/L	–	16.7	16.6	12.2	10.7	16.9
Sodium	mg/L	–	33	32	80	75	30
Sulfate	mg/L	3000	67	140	139	118	118
Conductivity @ 25 C	umhos/cm	–	470	772	542	522	640
pH	s.u.	6.5-8.5	7.6	7.37	8.25	8.08	7.52
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	303	493	351	323	420
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	0.002	0.004	<0.001	<0.001	<0.001
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	<0.03	<0.03	<0.03	<0.03	<0.03
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	<0.01	0.05	0.02	0.02	0.01
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	0.007	0.456	<0.001	<0.001	0.011
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	0.0182	0.620	<0.0003	<0.0003	0.0336
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	<0.01	0.01	<0.01	<0.01	<0.01
Iron-T	mg/L	–	<0.03	17.0	<0.03	<0.03	5.57
Manganese-T	mg/L	–	<0.01	0.12	0.02	0.02	0.07
Gross Alpha - minus U - Calculated	pCi/L						
Gross Alpha - Unadjusted	pCi/L	–					
Gross Alpha precision (±)	pCi/L	–					
Gross Alpha MDC	pCi/L	–	2.0	2.2	1.8	1.8	2.5
Gross Beta	pCi/L	–	5.9	106	2.8	1.7	9.4
Gross Beta precision (±)	pCi/L	–					
Gross Beta MDC	pCi/L	–	2.6	2.7	2.5	2.7	2.7
Radium 226	pCi/L	–	0.87	175	0.07	0.12	1.1
Radium 226 precision (±)	pCi/L	–					
Radium 226 MDC	pCi/L	–	0.20	0.23	0.18	0.22	0.19
Radium 228	pCi/L	–	0.2	2.2	-0.2	1	0.9
Radium 228 precision (±)	pCi/L	–					
Radium 228 MDC	pCi/L	–	2.1	1.6	2.1	1.9	2.0
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5					

* Duplicate sample

Well ID		WYDEQ	E10-5	E10-7	E16-2	E16-2*	E17-1
Job Number		Class III	C13040333-002	C13060845-002	C13050737-006	C13050737-009	C13050737-004
Sample Date/Time		Livestock	4/8/13 1:24 PM	6/24/13 10:08 AM	5/19/13 9:54 AM	5/19/13 12:00 AM	5/19/2013
HSU		Standard	140	140	140	140	140
Alkalinity, Total as CaCO3	mg/L	–	466	234	199	198	168
Carbonate as CO3	mg/L	–	<5	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	568	285	243	242	205
Calcium	mg/L	–	220	82	67	69	55
Chloride	mg/L	2000	102	4	7	7	5
Fluoride	mg/L	–	0.2	0.2	0.3	0.3	0.4
Magnesium	mg/L	–	35	16	14	14	10
Nitrogen, Ammonia as N	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	100	1.0	1.2	1.3	1.2	0.7
Potassium	mg/L	–	11	6	5	6	5
Silica	mg/L	–	20.3	12.0	15.0	15.4	14.1
Sodium	mg/L	–	72	32	61	63	48
Sulfate	mg/L	3000	288	102	129	133	97
Conductivity @ 25 C	umhos/cm	–	1540	640	656	658	528
pH	s.u.	6.5-8.5	6.97	7.51	7.56	7.57	7.66
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	1060	404	443	439	349
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	<0.001	<0.001	<0.001	<0.001	<0.001
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	<0.03	<0.03	<0.03	<0.03	<0.03
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	<0.01	<0.01	<0.01	<0.01	<0.01
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	1.21	0.011	0.059	0.057	0.027
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	0.222	0.0379	0.0755	0.0745	0.0544
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	<0.01	0.01	<0.01	<0.01	<0.01
Iron-T	mg/L	–	0.04	0.28	<0.03	<0.03	<0.03
Manganese-T	mg/L	–	<0.01	<0.01	<0.01	<0.01	<0.01
Gross Alpha - minus U - Calculated	pCi/L						
Gross Alpha - Unadjusted	pCi/L	–					
Gross Alpha precision (±)	pCi/L	–					
Gross Alpha MDC	pCi/L	–	6.5	2.2	1.8	1.6	1.6
Gross Beta	pCi/L	–	23.8	11.1	17.0	25.7	10.4
Gross Beta precision (±)	pCi/L	–					
Gross Beta MDC	pCi/L	–	15.8	2.8	2.7	4.0	2.6
Radium 226	pCi/L	–	0.70	2.4	0.41	0.39	0.44
Radium 226 precision (±)	pCi/L	–					
Radium 226 MDC	pCi/L	–	0.17	0.16	0.15	0.15	0.15
Radium 228	pCi/L	–	1.1	2.4	0.06	0.6	0.4
Radium 228 precision (±)	pCi/L	–					
Radium 228 MDC	pCi/L	–	2.3	1.5	1.5	1.6	1.5
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5					

* Duplicate sample

Well ID		WYDEQ	F2-1	F3-1	F3-1*	F12-2	F16-1
Job Number		Class III	C13060845-001	C13040333-001	C13040333-003	C13040547-002	C13040547-003
Sample Date/Time		Livestock	6/24/13 7:57 AM	4/8/13 2:33 PM	4/8/13 12:00 AM	4/15/13 11:37 AM	4/15/13 10:05 AM
HSU		Standard	140	130	130	140	160
Alkalinity, Total as CaCO3	mg/L	–	203	230	230	516	459
Carbonate as CO3	mg/L	–	<5	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	247	281	280	630	560
Calcium	mg/L	–	54	88	87	259	366
Chloride	mg/L	2000	4	6	6	124	185
Fluoride	mg/L	–	0.2	0.2	0.2	0.1	0.2
Magnesium	mg/L	–	9	13	13	42	89
Nitrogen, Ammonia as N	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	100	1.4	1.1	1.2	0.2	<0.1
Potassium	mg/L	–	6	7	8	13	17
Silica	mg/L	–	15.2	17.0	16.6	14.4	12.9
Sodium	mg/L	–	53	85	84	156	47
Sulfate	mg/L	3000	77	222	220	507	772
Conductivity @ 25 C	umhos/cm	–	554	869	872	2080	2370
pH	s.u.	6.5-8.5	7.58	7.56	7.55	7.37	7.41
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	347	595	598	1440	1800
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	<0.001	<0.001	<0.001	<0.001	<0.001
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	0.01	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	<0.03	<0.03	<0.03	0.08	0.11
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	<0.01	<0.01	<0.01	0.09	0.02
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	0.025	0.056	0.060	0.396	0.197
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	0.0800	0.0436	0.0432	0.156	1.77
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	0.02	<0.01	<0.01	0.01	0.03
Iron-T	mg/L	–	0.23	<0.03	<0.03	16.7	16.4
Manganese-T	mg/L	–	<0.01	<0.01	<0.01	0.20	0.12
Gross Alpha - minus U - Calculated	pCi/L						
Gross Alpha - Unadjusted	pCi/L	–					
Gross Alpha precision (±)	pCi/L	–					
Gross Alpha MDC	pCi/L	–	2.4	2.0	2.5	8.3	9.2
Gross Beta	pCi/L	–	15.5	11.3	10.1	35.2	260
Gross Beta precision (±)	pCi/L	–					
Gross Beta MDC	pCi/L	–	2.6	3.1	3.0	14.8	17.9
Radium 226	pCi/L	–	0.70	0.39	0.33	2.6	51
Radium 226 precision (±)	pCi/L	–					
Radium 226 MDC	pCi/L	–	0.17	0.16	0.16	0.17	0.16
Radium 228	pCi/L	–	0.6	0.3	0.01	1.7	2.5
Radium 228 precision (±)	pCi/L	–					
Radium 228 MDC	pCi/L	–	1.5	2.2	2.2	1.5	1.5
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5					

* Duplicate sample

F-Wellfield
Table 8

Well ID		WYDEQ	F23-1	F23-2	F23-3	F23-4	F25-2
Job Number		Class III	C13061019-001	C13050521-001	C13040091-007	C13040303-003	C13040091-005
Sample Date/Time		Livestock	6/27/13 8:13 AM	5/13/13 8:31 AM	4/1/13 5:07 AM	4/8/13 8:45 AM	4/1/13 4:04 AM
HSU		Standard	110	120	120	120	120
Alkalinity, Total as CaCO3	mg/L	–	134	278	202	217	253
Carbonate as CO3	mg/L	–	<5	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	163	340	247	265	308
Calcium	mg/L	–	55	432	332	182	287
Chloride	mg/L	2000	11	50	21	7	6
Fluoride	mg/L	–	0.4	0.2	0.2	0.2	0.2
Magnesium	mg/L	–	9	90	55	30	49
Nitrogen, Ammonia as N	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	100	<0.1	0.2	0.1	0.3	0.2
Potassium	mg/L	–	6	15	13	11	12
Silica	mg/L	–	10.2	16.2	17.7	17.7	17.9
Sodium	mg/L	–	103	80	101	88	84
Sulfate	mg/L	3000	236	1220	1100	553	883
Conductivity @ 25 C	umhos/cm	–	778	2500	2130	1340	1890
pH	s.u.	6.5-8.5	7.87	7.15	7.31	7.46	7.44
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	504	2220	1850	1040	1600
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	<0.001	<0.001	0.003	0.002	0.001
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	<0.03	0.05	0.07	<0.03	0.05
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	0.02	1.22	0.57	0.24	0.26
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	<0.001	0.002	0.003	0.011	<0.001
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	<0.0003	0.221	0.0679	0.0363	0.0365
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-T	mg/L	–	0.40	0.44	0.37	0.47	1.63
Manganese-T	mg/L	–	0.02	1.28	0.61	0.26	0.30
Gross Alpha - minus U - Calculated	pCi/L						
Gross Alpha - Unadjusted	pCi/L	–					
Gross Alpha precision (±)	pCi/L	–					
Gross Alpha MDC	pCi/L	–	1.7	10.3	4.7	3.5	3.8
Gross Beta	pCi/L	–	2.3	44.6	38.7	13.9	30.1
Gross Beta precision (±)	pCi/L	–					
Gross Beta MDC	pCi/L	–	2.7	17.6	6.9	4.7	6.2
Radium 226	pCi/L	–	0.18	1.1	1.9	1.1	1.4
Radium 226 precision (±)	pCi/L	–					
Radium 226 MDC	pCi/L	–	0.15	0.16	0.17	0.16	0.18
Radium 228	pCi/L	–	1.0	7.4	7.6	3.2	5.7
Radium 228 precision (±)	pCi/L	–					
Radium 228 MDC	pCi/L	–	1.6	1.8	1.9	1.8	1.8
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5					

* Duplicate sample

F-Wellfield
Table 8

Well ID		WYDEQ	F25-3	F28-1	F28-2	F28-3	F29-1
Job Number		Class III	C13040091-008	C13040303-009	C13040303-002	C13040303-001	C13040547-004
Sample Date/Time		Livestock	4/1/13 6:24 AM	4/8/13 2:05 PM	4/8/13 7:47 AM	4/8/13 7:34 AM	4/15/13 1:32 PM
HSU		Standard	110	130	110	120	130
Alkalinity, Total as CaCO3	mg/L	–	127	235	132	242	246
Carbonate as CO3	mg/L	–	<5	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	155	287	161	295	301
Calcium	mg/L	–	87	212	98	209	203
Chloride	mg/L	2000	5	14	7	7	8
Fluoride	mg/L	–	0.2	0.2	0.2	0.2	0.2
Magnesium	mg/L	–	15	38	16	37	36
Nitrogen, Ammonia as N	mg/L	–	<0.05	<0.05	<0.05	<0.05	0.36
Nitrogen, Nitrate+Nitrite as N	mg/L	100	<0.1	0.3	<0.1	<0.1	<0.1
Potassium	mg/L	–	7	11	8	11	12
Silica	mg/L	–	12.6	17.1	14.9	19.8	19.9
Sodium	mg/L	–	89	79	80	80	68
Sulfate	mg/L	3000	342	627	333	602	539
Conductivity @ 25 C	umhos/cm	–	938	1500	919	1440	1380
pH	s.u.	6.5-8.5	7.80	7.43	7.93	7.41	7.36
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	660	1190	658	1140	1020
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	0.008	<0.001	0.002	0.004	0.004
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	0.11	0.36	<0.03	<0.03	0.23
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	0.08	0.21	0.03	0.15	0.20
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	<0.001	0.144	<0.001	0.001	0.009
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	0.0142	0.0729	0.0328	0.0465	0.0402
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-T	mg/L	–	0.21	0.87	1.55	2.42	0.70
Manganese-T	mg/L	–	0.08	0.22	0.07	0.22	0.22
Gross Alpha - minus U - Calculated	pCi/L						
Gross Alpha - Unadjusted	pCi/L	–					
Gross Alpha precision (±)	pCi/L	–					
Gross Alpha MDC	pCi/L	–	3.0	4.5	2.4	4.4	3.5
Gross Beta	pCi/L	–	6.1	23.3	6.3	18.5	15.9
Gross Beta precision (±)	pCi/L	–					
Gross Beta MDC	pCi/L	–	3.1	5.4	2.9	6.1	5.0
Radium 226	pCi/L	–	0.30	1.7	0.62	1.9	1.9
Radium 226 precision (±)	pCi/L	–					
Radium 226 MDC	pCi/L	–	0.20	0.16	0.17	0.16	0.16
Radium 228	pCi/L	–	1.4	4.1	0.01	4.6	5.1
Radium 228 precision (±)	pCi/L	–					
Radium 228 MDC	pCi/L	–	2.3	1.8	1.8	1.8	1.5
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5					

* Duplicate sample

Well ID		WYDEQ	F31-1	F31-2	FBG-1	FBG-2
Job Number		Class III	C13040091-004	C13040091-006	C13040303-004	C13040303-005
Sample Date/Time		Livestock	4/1/13 3:12 AM	4/1/13 4:19 AM	4/8/13 9:58 AM	4/8/13 10:03 AM
HSU		Standard	120	110	120	110
Alkalinity, Total as CaCO3	mg/L	–	209	141	234	96
Carbonate as CO3	mg/L	–	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	254	172	285	118
Calcium	mg/L	–	205	110	43	42
Chloride	mg/L	2000	14	7	3	5
Fluoride	mg/L	–	0.2	0.3	0.3	0.3
Magnesium	mg/L	–	37	18	7	6
Nitrogen, Ammonia as N	mg/L	–	<0.05	<0.05	<0.05	<0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	100	<0.1	<0.1	1.7	<0.1
Potassium	mg/L	–	12	9	5	5
Silica	mg/L	–	19.1	13.8	16.4	11.3
Sodium	mg/L	–	95	72	120	63
Sulfate	mg/L	3000	630	349	148	167
Conductivity @ 25 C	umhos/cm	–	1510	944	744	558
pH	s.u.	6.5-8.5	7.49	7.84	7.87	8.14
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	1180	672	492	375
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	0.001	<0.001	0.009	<0.001
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	0.03	<0.03	<0.03	0.05
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	0.24	0.04	<0.01	0.12
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	0.030	<0.001	0.023	<0.001
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	0.0419	0.0357	0.0542	0.0006
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	<0.01	<0.01	<0.01	<0.01
Iron-T	mg/L	–	0.04	0.04	0.29	0.07
Manganese-T	mg/L	–	0.25	0.04	<0.01	0.14
Gross Alpha - minus U - Calculated	pCi/L					
Gross Alpha - Unadjusted	pCi/L	–				
Gross Alpha precision (±)	pCi/L	–				
Gross Alpha MDC	pCi/L	–	3.3	1.9	2.0	1.7
Gross Beta	pCi/L	–	27.0	16.7	9.5	4.9
Gross Beta precision (±)	pCi/L	–				
Gross Beta MDC	pCi/L	–	4.4	2.7	2.6	2.6
Radium 226	pCi/L	–	1.1	0.47	0.39	0.64
Radium 226 precision (±)	pCi/L	–				
Radium 226 MDC	pCi/L	–	0.16	0.17	0.17	0.17
Radium 228	pCi/L	–	5.4	1.5	0.5	0.9
Radium 228 precision (±)	pCi/L	–				
Radium 228 MDC	pCi/L	–	1.6	1.7	1.9	1.8
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5				

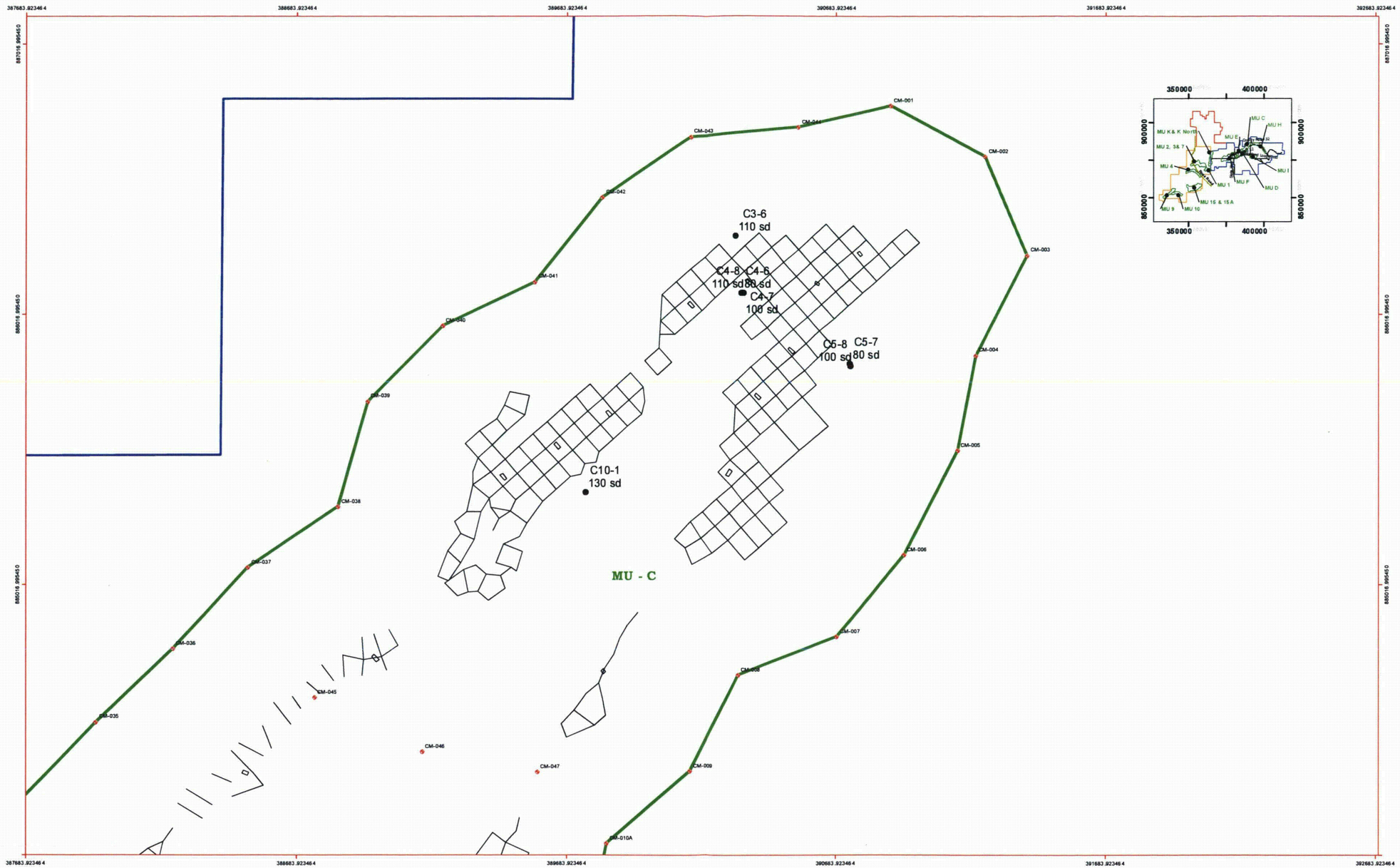
* Duplicate sample

Well ID		WYDEQ	F20-1	F26-2	F26-3	F29-2	F29-3
Job Number		Class III	C13060647-002	C13060647-006	C13060647-005	C13060647-003	C13060647-001
Sample Date/Time		Livestock	6/17/13 11:59 AM	6/17/13 4:08 PM	6/17/13 2:27 PM	6/17/13 12:38 PM	6/17/13 10:57 AM
HSU		Standard	120	110	120	110	120
Alkalinity, Total as CaCO3	mg/L	–	230	152	278	158	263
Carbonate as CO3	mg/L	–	<5	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	281	186	339	193	321
Calcium	mg/L	–	99	113	346	112	214
Chloride	mg/L	2000	21	10	11	7	7
Fluoride	mg/L	–	0.3	0.2	0.2	0.2	0.2
Magnesium	mg/L	–	16	21	58	16	37
Nitrogen, Ammonia as N	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	100	0.7	0.3	0.2	<0.1	<0.1
Potassium	mg/L	–	8	9	15	9	10
Silica	mg/L	–	16.1	14.8	20.2	15.4	21.3
Sodium	mg/L	–	119	78	99	87	82
Sulfate	mg/L	3000	293	361	974	401	564
Conductivity @ 25 C	umhos/cm	–	1040	953	1990	1020	1460
pH	s.u.	6.5-8.5	7.66	7.76	7.28	7.68	7.54
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	728	696	1770	769	1160
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	0.002	0.002	0.003	0.002	0.006
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	<0.03	<0.03	<0.03	<0.03	<0.03
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	0.14	0.04	0.33	0.03	0.07
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	0.044	<0.001	0.032	0.002	0.016
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	0.0980	0.0300	0.0631	0.0357	0.0502
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	<0.01	<0.01	<0.01	0.01	<0.01
Iron-T	mg/L	–	0.05	0.16	<0.03	<0.03	109
Manganese-T	mg/L	–	0.14	0.04	0.34	0.03	2.32
Gross Alpha - minus U - Calculated	pCi/L						
Gross Alpha - Unadjusted	pCi/L	–					
Gross Alpha precision (±)	pCi/L	–					
Gross Alpha MDC	pCi/L	–	3.2	2.7	5.7	2.7	4.7
Gross Beta	pCi/L	–	20.8	10.1	26.7	13.4	12.7
Gross Beta precision (±)	pCi/L	–					
Gross Beta MDC	pCi/L	–	3.5	3.1	8.5	3.3	5.6
Radium 226	pCi/L	–	0.68	0.63	1.5	0.27	0.23
Radium 226 precision (±)	pCi/L	–					
Radium 226 MDC	pCi/L	–	0.20	0.18	0.19	0.19	0.18
Radium 228	pCi/L	–	1.4	0.9	6.1	0.8	0.6
Radium 228 precision (±)	pCi/L	–					
Radium 228 MDC	pCi/L	–	1.5	1.2	1.5	1.4	1.3
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5					

* Duplicate sample

Well ID		WYDEQ	Duplicate F3-1	Duplicate C11-5	Duplicate C5-7	Duplicate E16-2
Job Number		Class III	C13040333-003	C13060098-005	C13060382-007	C13050737-009
Sample Date/Time		Livestock	4/8/13 12:00 AM	6/3/13 3:00 PM	6/10/13 12:00 AM	5/19/13 12:00 AM
HSU		Standard	130	130	80	140
Alkalinity, Total as CaCO3	mg/L	–	230	279	79	198
Carbonate as CO3	mg/L	–	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	–	280	341	94	242
Calcium	mg/L	–	87	135	23	69
Chloride	mg/L	2000	6	23	11	7
Fluoride	mg/L	–	0.2	0.2	0.3	0.3
Magnesium	mg/L	–	13	33	3	14
Nitrogen, Ammonia as N	mg/L	–	<0.05	0.15	0.06	<0.05
Nitrogen, Nitrate+Nitrite as N	mg/L	100	1.2	<0.1	<0.1	1.2
Potassium	mg/L	–	8	7	3	6
Silica	mg/L	–	16.6	16.7	9.2	15.4
Sodium	mg/L	–	84	80	123	63
Sulfate	mg/L	3000	220	329	226	133
Conductivity @ 25 C	umhos/cm	–	872	1120	695	658
pH	s.u.	6.5-8.5	7.55	7.06	8.95	7.57
Solids, Total Dissolved TDS @ 180 C	mg/L	5000	598	829	443	439
Aluminum-D	mg/L	5	<0.1	<0.1	<0.1	<0.1
Antimony-D	mg/L	–	<0.001	<0.001	<0.001	<0.001
Arsenic-D	mg/L	0.2	<0.001	0.002	<0.001	<0.001
Barium-D	mg/L	–	<0.1	<0.1	<0.1	<0.1
Beryllium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001
Boron-D	mg/L	5	<0.1	<0.1	<0.1	<0.1
Cadmium-D	mg/L	0.05	<0.005	<0.005	<0.005	<0.005
Chromium-D	mg/L	0.05	<0.05	<0.05	<0.05	<0.05
Copper-D	mg/L	0.5	<0.01	<0.01	<0.01	<0.01
Iron-D	mg/L	–	<0.03	1.40	<0.03	<0.03
Lead-D	mg/L	0.1	<0.001	<0.001	<0.001	<0.001
Manganese-D	mg/L	–	<0.01	0.32	<0.01	<0.01
Mercury-D	mg/L	0.00005	<0.001	<0.001	<0.001	<0.001
Molybdenum-D	mg/L	–	<0.1	<0.1	<0.1	<0.1
Nickel-D	mg/L	–	<0.05	<0.05	<0.05	<0.05
Selenium-D	mg/L	0.05	0.060	0.001	<0.001	0.057
Thallium-D	mg/L	–	<0.001	<0.001	<0.001	<0.001
Uranium-D	mg/L	–	0.0432	0.0084	<0.0003	0.0745
Vanadium-D	mg/L	0.1	<0.1	<0.1	<0.1	<0.1
Zinc-D	mg/L	25	<0.01	<0.01	0.01	<0.01
Iron-T	mg/L	–	<0.03	4.26	2.94	<0.03
Manganese-T	mg/L	–	<0.01	0.32	0.03	<0.01
Gross Alpha - minus U - Calculated	pCi/L					
Gross Alpha - Unadjusted	pCi/L	–				
Gross Alpha precision (±)	pCi/L	–				
Gross Alpha MDC	pCi/L	–	2.5	2.7	1.6	1.6
Gross Beta	pCi/L	–	10.1	7.5	1.9	25.7
Gross Beta precision (±)	pCi/L	–				
Gross Beta MDC	pCi/L	–	3.0	3.9	2.7	4.0
Radium 226	pCi/L	–	0.33	0.57	0.10	0.39
Radium 226 precision (±)	pCi/L	–				
Radium 226 MDC	pCi/L	–	0.16	0.17	0.16	0.15
Radium 228	pCi/L	–	0.01	1.1	0.05	0.6
Radium 228 precision (±)	pCi/L	–				
Radium 228 MDC	pCi/L	–	2.2	1.6	1.1	1.6
Combined Total Radium 226 and Radium 228 (Calculated)	pCi/L	5				

* Duplicate sample



Legend

- Header_Houses
- MU_C_Patterns
- Exterior Monitor Wells
- QrtrQrt
- Sections
- Twn,Rng
- Shallow Groundwater Monitor Well
- Monitor Ring
- Paved Roads
- Ross Road
- Gravel Roads
- Trails
- Permit 603
- Permit 633
- Reynolds

0 500 1,000 Feet

Coordinate System: NAD 1927 StatePlane Wyoming East FIPS 4901
Projection: Transverse Mercator
Datum: North American 1927
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -106.1667
Scale Factor: 0.9999
Latitude Of Origin: 40.6667
Units: Feet US

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NO.	DATE	BY

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Smith Ranch-Highland Operation

Figure 1
C-Wellfield
Shallow Groundwater Monitor Wells 2013

N W E S

1 inch = 250 feet

Date: 10/10/2013

Path: I:\CASING LEAK INVESTIGATION\CLI Report 2nd Qrt 2013\Figure 1 C-Wells 2013.mxd

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878845.808890

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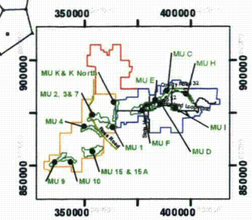
110 sd 120 sd

F29-2 F29-3
110 sd 120 sd

F20-1
120 sd



MU - F

FM-028 FM-027 FM-025 FM-022 FM-021

372225.416894 373225.416894 374225.416894 375225.416894 376225.416894 377225.416894

Legend

- Header_Houses
- MU_F_Patterns
- Exterior Monitor Wells
- Grt,Qrt
- Sections
- Twn,Rng
- Shallow Groundwater Monitor Well
- Monitor Ring
- Paved Roads
- Rose Road
- Gravel Roads
- Trails
- Permit 603
- Permit 633
- Reynolds

0 500 1,000 Feet

Coordinate System: NAD 1927 StatePlane Wyoming East FIPS 4901
Projection: Transverse Mercator
Datum: North American 1927
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.1667
Scale Factor: 0.9999
Latitude Of Origin: 40.6667
Units: Foot US

REVISIONS		
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Figure 2
F-Wellfield
Shallow Groundwater Monitor Wells 2013

N W E S
1 inch = 250 feet

Date: 10/10/2013

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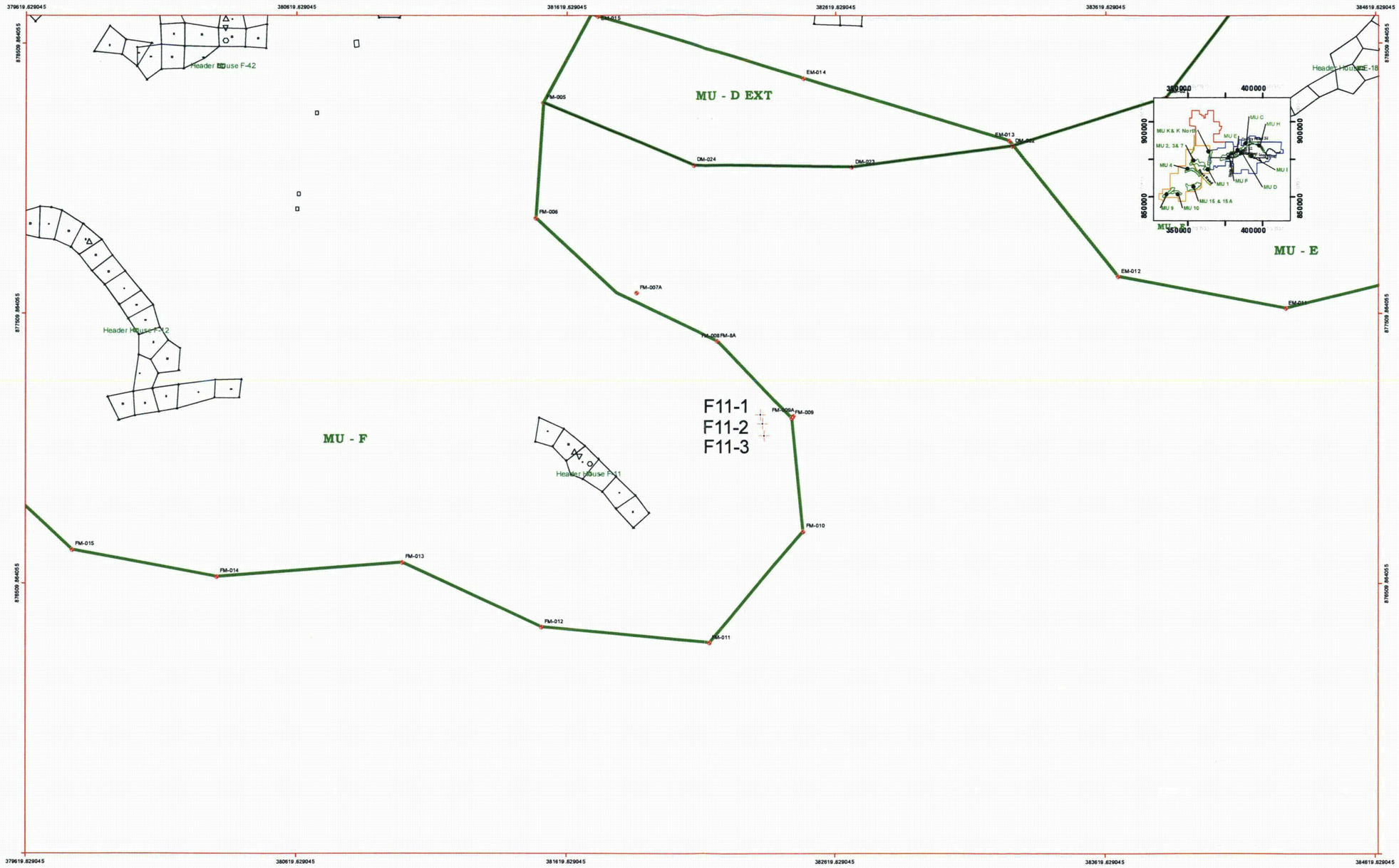

Legend

- Header_Houses
- MU_F_Patterns
- CLI F11 wells
- Exterior Monitor Wells
- QrtQrt
- Sections
- Twn,Rng
- Monitor Ring
- Paved Roads
- Ross Road
- Gravel Roads
- Trails
- Permit 603
- Permit 633
- Reynolds

0 500 1,000 Feet

Coordinate System: NAD 1927 StatePlane Wyoming East FIPS 4901
Projection: Transverse Mercator
Datum: North American 1927
False Easting: 500,000.0000
False Northing: 0.0000
Central Meridian: -105.1667
Scale Factor: 0.9999
Latitude Of Origin: 40.6667
Units: Foot US

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Figure 3
F11 Header House
Planned Shallow Groundwater Monitor Wells

N W E S
1 inch = 250 feet

Date: 9/12/2013

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