16.0 Well Installation, Maintenance, and Decommissioning

B.J. Howard and L.C. Hall

This chapter describes new groundwater well and characterization borehole installations, well decommissioning, and maintenance activities conducted on the Hanford Site during the calendar year (CY) 2010.

Approximately 10,979 unique well identification numbers have been assigned at the Hanford Site. All wells, characterization boreholes, aquifer tubes, soil tubes, piezometers, and other subsurface excavations are required to receive a unique Hanford well identification number. All wells are also required to have a state well identification number, which is currently tracked by the Washington State Department of Ecology (Ecology). Figure 16-1 presents the categorization of unique well numbers from the Well Information and Document Lookup (WIDL) database and their approximate geographic designations. Figure 16-2 identifies the geographic designations for the Hanford Site.

During CY 2010, a total of 3,762 unique well identification numbers were documented as in use, which includes 2,846 wells; 71 piezometers within host wells; 7 lysimeters within host lysimeters; 522 aquifer tubes; and 316 soil tubes. Section 16.1 discusses the well installations and provides information on 282 new wells. Section 16.2 describes the 96 characterization boreholes and direct-push installations. Well maintenance completed tasks for 930 wells and is discussed in Section 16.3. Section 16.4 discusses the wells that were decommissioned.

16.1 Well Installation

The Soil and Groundwater Remediation Project, working with the U.S. Department of Energy (DOE) and the appropriate regulatory agencies, defines the need for new wells at the Hanford Site. Each year, the groundwater project identifies new wells to meet the requirements of the *Resource Conservation and Recovery Act of 1976* (RCRA) detection and assessment groundwater monitoring requirements; characterization, remediation, and monitoring for the *Comprehensive Environmental Response, Compensation, and Liability Act of 1980* (CERCLA); and long-term monitoring of regional groundwater plumes in accordance with DOE orders, based on requirements of the *Atomic Energy Act of 1954* (AEA). These efforts include ongoing RCRA assessment of groundwater contamination, replacing monitoring wells that go dry due to the declining regional water table, replacing wells that need to be decommissioned, improving spatial coverage for the detection monitoring networks or for plume monitoring, and characterizing subsurface contamination.

New RCRA, CERCLA, and AEA well proposals are reviewed, prioritized, and approved annually as required by the *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) (Ecology et al., 1989) Milestone M-024. All new wells are resource protection wells and are constructed or decommissioned in accordance with the provisions of WAC 173-160, "Minimum Standards for Construction and Maintenance of Wells." Well requirements are integrated and documented through development of the Groundwater Project's budget, discussions with the regulators, and monitoring requirements. Funding from the *American Recovery and Reinvestment Act of 2009* supplemented baseline funding in CY 2010 to plan and install new groundwater and deep vadose zone monitoring wells, borehole

sampling treatability tests, and remediation systems in order to achieve the Tri-Party Agreement milestones.

During CY 2010, a total of 282 wells were installed at the Hanford Site (Table 16-1). These wells were constructed to support activities funded under Tri-Party Agreement Milestone M-024 or other project-specific requirements. The approximate locations of the new wells are shown in Figure 16-3. Information for the 282 wells installed is provided below:

- A total of 171 apatite/barrier injection wells at the 100-NR-2 Operable Unit (OU) (Figure 16-4)
- Six wells at the 100-BC-5 OU to support the 100-BC-5 remedial investigation/ feasibility study (RI/FS) (Figure 16-4)
- Three wells at the 100-FR-3 OU to support the 100-FR-3 RI/FS (Figure 16-3)
- Thirty-four pump-and-treat wells to support the 100-D Area pump-and-treat facility (Figure 16-5)
- Thirty-three pump-and-treat wells to support the 100-H Area pump-and-treat facility (Figure 16-5)
- Five wells to support the RI/FS at the 100-KR-4 OU(Figure 16-4)
- Eight wells in the 200-BP-5 OU to support Tri-Party Agreement Milestone M-024 and the 200-BP-5 OU RI/FS (Figure 16-6)
- Two wells in the 200-UP-1 OU to support Tri-Party Agreement Milestone M-024 and the 200 West Area pump-and-treat system expansion (Figure 16-6)
- Fifteen wells in the 200-ZP-1 OU to support the 200 West Area pump-and-treat system expansion (Figure 16-6)
- Five wells in the 300-FF-5 OU (two wells for 618-10 Burial Ground dust control and three wells to support the Integrated Field-Scale Research Challenge [IFRC]) (Figure 16-3).

Water well reports for all newly constructed wells, as required by WAC 173-160, were submitted to Ecology and added to the Ecology well log database. Detailed well information such as geologic and geophysical descriptions, a list of characterization activities (i.e., sediment and groundwater sampling, aquifer testing, and geophysical logging), and construction records for the new wells is stored in the Integrated Data Management System (IDMS) database. Select drilling and well construction information (e.g., drill depth and screen interval) is entered into the Well Maintenance Application database, which is accessible to the WIDL database (contained within the Hanford Environmental Information System [HEIS] database), and this information is accessible through the Environmental Dashboard Application.

16.2 Characterization Boreholes and Direct-Push Technology Installation

During CY 2010, 96 direct-push and characterization boreholes were completed. The boreholes were installed for subsurface characterization of radiological constituents, volatile organics (e.g., carbon tetrachloride), or hydrologic property determination (e.g., moisture or grain-size distribution). While typically installed to characterize the vadose zone, borings can be drilled to groundwater to obtain a one-time sample at the general location of these boreholes. Table 16-2 provides a summary of the number and general location of the direct-push and characterization

boreholes. The approximate locations of the new borings are shown in Figure 16-3, and the area locations are shown in Figures 16-4 through 16-6. The characterization and direct-push boreholes are summarized below:

- Two characterization boreholes for Washington Closure Hanford at the 100-C-7 dump site to support confirmatory sampling
- Six characterization boreholes at the HR-3 pump-and-treat system (100-D and 100-H Areas) to support supplemental 100-HR-3 OU RI/FS sampling
- Twelve direct-push boreholes at the 216-E-127 pipeline to support confirmatory sampling
- Forty-two direct-push boreholes in the 600 Area waste site for confirmatory sampling
- Nine direct-push boreholes for confirmatory sampling in UPR-600-12
- Two direct-push boreholes for confirmatory sampling of the 216-A-25 Pond
- One direct-push borehole for confirmatory sampling of the 216-B-3 Pond
- Twelve direct-push boreholes for confirmatory sampling of the 216-U-10 Pond
- Three direct-push borehole for confirmatory sampling of the 216-T-4B Pond
- One direct-push borehole for confirmatory sampling of the 216-S-16 Pond
- Two direct-push borehole for confirmatory sampling of the 216-S-17 Pond
- Four direct-push borehole for confirmatory sampling in the 216-S-26 Crib.

16.3 Well Maintenance

During CY 2010, well maintenance tasks were completed on 930 wells on the Hanford Site (Table 16-3). The maintenance tasks, which include surface and subsurface aspects, are varied and depend on the specific problems or issues encountered at each well. Several wells required multiple visits to correct new or recurring problems. Other maintenance issues included replacement of locking well caps, casing repairs, diagnosis and repair of surface electrical wiring, and pump-discharge fittings. Subsurface tasks typically include repairing and replacing sampling pumps, performing camera surveys, pump and equipment retrieval, and replacing discharge tubing. Well maintenance actions are entered in the Well Maintenance Application database, which is accessible to the WIDL database (contained within the HEIS database), and this information is accessible through the Environmental Dashboard Application.

For CY 2010, well maintenance activities also included surging, swabbing, screen brushing, chemical treatment, and over-pumping to improve well performance. Two projects tested an advanced airburst technology that is new to the Hanford Site, and it was used in addition to the above methods to increase the specific capacity of extraction or injection wells. Airburst technology applies repeated high-energy pulses or bursts of gas (air) to break up scale, incrustation, and biological fouling, and it dislodges fine-grained sediments in the near-well pore space. The objective of the treatment is to increase the specific capacity of the extraction or injection wells. Airburst technology was applied at extraction/injection wells 199-D5-20, 199-D5-42, 299-W15-35, 299-W15-47, 299-W19-36, and 299-W19-43. The specific capacity in these wells was not significantly improved.

16.4 Well Decommissioning

A well becomes a candidate for decommissioning under one of the following conditions:

- The well use has been permanently discontinued (i.e., the well has gone dry).
- The well condition is so poor that its continued use is impractical.
- The well is in the path of intended remediation, excavation, and/or construction activities.
- The well poses an environmental, safety, or public health hazard (e.g., casing corroded).

Well decommissioning is driven by the *Hanford Site Well Decommissioning Plan* (DOE/RL-2005-70), available funding for the fiscal year, and the requirements and provisions of WAC 173-160. A well is identified in the WIDL as a candidate for decommissioning when the well has no further use. All candidate wells for decommissioning must be reviewed and approved by the contractors, DOE, Ecology, U.S. Environmental Protection Agency, and other potential well users (e.g., Pacific Northwest National Laboratory) prior to actual decommissioning. During review of wells available as candidates for decommissioning, a thorough records review and physical inspection of each well is conducted to confirm the well's location and its attributes.

A very limited number of unknown wells are also discovered during the conduct of field activities. These wells are assigned a unique well identification number, assigned an appropriate well status, and added to the Hanford Site well database. A total of 186 wells were physically decommissioned in CY 2010 (Table 16-4). Decommissioning typically involves backfilling a well with impermeable material to prevent vertical movement of water and/or contaminants both in the well and along the annular space. For wells that are *Washington Administrative Code* compliant, decommissioning is typically performed by placing sand across the screen interval and filling the casing with an impermeable material (e.g., bentonite or cement grout). For older, noncompliant wells, the casing is perforated and pressure grouted to create an external seal or the casing is removed. A brass survey marker identifying the well is typically set in grout at the surface and over the well location. Decommissioning activities result in the permanent removal of a well, borehole, or piezometer from service and from the Hanford Site active well inventory. Decommissioning is performed in accordance with WAC 173-160-460, applicable well variances, and conditions defined in the Hanford Facility RCRA Permit (WA78900008967).

A completed water well report form is required to be transmitted (by the driller) to Ecology when a well is decommissioned. The report provides the details on the well's construction and the steps taken to decommission (plug) the well. During CY 2010, three 200-ZP-1 OU soil tubes were administratively decommissioned by the Well Management Program, as field walkdowns confirmed that the soil tubes did not exist.

Table 16-1. Well Installations for the Reporting Period

Operable Unit	Well Name	Well ID	Well Purpose	Construction (ft bgs)	Drilled Depth (ft bgs)	Acceptance Date
100-BC-5	199-B5-5	C7505	Support RI/FS	189.15	214.8	2/25/10
100-BC-5	199-B3-50	C7506	Support RI/FS	91.25	183.3	2/25/10
100-BC-5	199-B5-6	C7507	Support RI/FS	195.2	195.5	2/25/10
100-BC-5	199-B8-9	C7508	Support RI/FS	112.09	219.5	12/30/10
100-BC-5	199-B2-14	C7665	Support RI/FS	71.91	152.3	2/25/10
100-BC-5	199-B4-14	C7786	Support RI/FS	94.67	95.8	12/30/10
100-FR-3	199-F5-52	C7790	Support RI/FS	62.92	73.8	12/28/10
100-FR-3	199-F5-53	C7791	Support RI/FS	110.06	116	12/30/10
100-FR-3	199-F5-54	C7792	Support RI/FS	61.13	77.4	12/30/10
100-HR-3-D	199-D4-95	C7083	100-D Area pump-and-treat	117.22	121.4	2/23/10
100-HR-3-D	199-D4-96	C7084	100-D Area pump-and-treat	101	106.5	2/23/10
100-HR-3-D	199-D4-97	C7085	100-D Area pump-and-treat	106.1	111	2/23/10
100-HR-3-D	199-D4-98	C7086	100-D Area pump-and-treat	103.2	111	2/23/10
100-HR-3-D	199-D4-99	C7087	100-D Area pump-and-treat	110.87	116.2	2/23/10
100-HR-3-D	199-D2-10	C7089	100-D Area pump-and-treat	27.87	31	2/23/10
100-HR-3-D	199-D2-12	C7090	100-D Area pump-and-treat	29.84	34	2/23/10
100-HR-3-D	199-D8-89	C7091	100-D Area pump-and-treat	80.07	84.8	2/23/10
100-HR-3-D	199-D8-90	C7092	100-D Area pump-and-treat	52.45	56.4	2/23/10
100-HR-3-D	199-D8-91	C7093	100-D Area pump-and-treat	43.44	46.5	2/23/10
100-HR-3-D	199-D8-93	C7095	100-D Area pump-and-treat	18.06	21	2/23/10
100-HR-3-D	199-D8-94	C7096	100-D Area pump-and-treat	28.01	31.3	2/23/10
100-HR-3-D	199-D4-101	C7580	100-D Area pump-and-treat	106.23	109.9	5/4/10
100-HR-3-D	199-D8-97	C7582	100-D Area pump-and-treat	100.91	104.3	5/4/10
100-HR-3-D	199-D5-101	C7583	100-D Area pump-and-treat	111.24	114.3	5/4/10
100-HR-3-D	199-D8-95	C7589	100-D Area pump-and-treat	99.96	104.4	5/4/10
100-HR-3-D	199-D5-130	C7590	100-D Area pump-and-treat	99.05	101.4	5/4/10
100-HR-3-D	199-D5-127	C7591	100-D Area pump-and-treat	104.39	109	5/4/10
100-HR-3-D	199-D6-1	C7592	100-D Area pump-and-treat	105	107	5/4/10
100-HR-3-D	199-D8-99	C7593	100-D Area pump-and-treat	84.96	88.9	5/4/10
100-HR-3-D	199-D7-4	C7594	100-D Area pump-and-treat	75	77.5	5/4/10
100-HR-3-D	199-D7-3	C7599	100-D Area pump-and-treat	87.29	89.3	5/4/10
100-HR-3-D	199-D5-129	C7600	100-D Area pump-and-treat	108.03	113.5	5/4/10
100-HR-3-D	199-D5-131	C7601	100-D Area pump-and-treat	111.18	116.4	5/4/10
100-HR-3-D	199-D8-98	C7602	100-D Area pump-and-treat	87.95	91.4	5/4/10
100-HR-3-D	199-D8-96	C7603	100-D Area pump-and-treat	95.07	101.5	5/4/10
100-HR-3-D	199-D6-2	C7607	100-D Area pump-and-treat	77.04	80.4	5/4/10
100-HR-3-D	199-D7-5	C7608	100-D Area pump-and-treat	58.51	63.5	6/29/10
100-HR-3-D	199-D7-6	C7611	100-D Area pump-and-treat	40.5	43.8	6/29/10
100-HR-3-D	199-D5-128	C7612	100-D Area pump-and-treat	102.92	106.6	2/23/10
100-HR-3-D	199-H4-80	C7595	100-D Area pump-and-treat	69.2	74.3	6/29/10
100-HR-3-D	199-H4-81	C7596	100-D Area pump-and-treat	41.5	44.4	6/29/10
100-HR-3-D	199-H4-82	C7609	100-D Area pump-and-treat	55.68	59.1	6/29/10
100-HR-3-D	199-H1-5	C7610	100-D Area pump-and-treat	44.1	46.5	6/29/10

Table 16-1. (Cont.)

Operable Unit	Well Name	Well ID	Well Purpose	Construction (ft bgs)	Drilled Depth (ft bgs)	Acceptance Date
100-HR-3-H	199-H1-38	C7098	100-H Area pump-and-treat	44.53	47.5	2/23/10
100-HR-3-H	199-H1-37	C7099	100-H Area pump-and-treat	43.52	46.4	7/1/10
100-HR-3-H	199-H1-32	C7100	100-H Area pump-and-treat	45.5	51.4	7/1/10
100-HR-3-H	199-H1-36	C7102	100-H Area pump-and-treat	41	46.5	7/1/10
100-HR-3-H	199-H1-40	C7104	100-H Area pump-and-treat	41	44.4	7/1/10
100-HR-3-H	199-H1-33	C7105	100-H Area pump-and-treat	41	45	7/1/10
100-HR-3-H	199-H1-35	C7106	100-H Area pump-and-treat	43.5	48	7/1/10
100-HR-3-H	199-H1-42	C7107	100-H Area pump-and-treat	40.89	44	11/5/09
100-HR-3-H	199-H1-34	C7108	100-H Area pump-and-treat	42.6	44.9	7/1/10
100-HR-3-H	199-H1-39	C7109	100-H Area pump-and-treat	41	44	7/1/10
100-HR-3-H	199-H3-25	C7110	100-H Area pump-and-treat	56.72	61.3	11/5/09
100-HR-3-H	199-H1-21	C7111	100-H Area pump-and-treat	35.11	39.8	7/1/10
100-HR-3-H	199-H1-20	C7113	100-H Area pump-and-treat	34.44	57.7	7/1/10
100-HR-3-H	199-H3-27	C7114	100-H Area pump-and-treat	58.79	61.9	11/5/09
100-HR-3-H	199-H3-26	C7115	100-H Area pump-and-treat	52.99	56.3	11/5/09
100-HR-3-H	199-H1-45	C7477	100-H Area pump-and-treat	56.88	61.08	11/5/09
100-HR-3-H	199-H1-25	C7478	100-H Area pump-and-treat	34.55	39.5	7/1/10
100-HR-3-H	199-H1-27	C7480	100-H Area pump-and-treat	37.2	41.2	7/1/10
100-HR-3-H	199-H4-70	C7483	100-H Area pump-and-treat	58	61.4	11/5/09
100-HR-3-H	199-H4-73	C7484	100-H Area pump-and-treat	66.29	71	11/5/09
100-HR-3-H	199-H4-69	C7485	100-H Area pump-and-treat	58.77	63.83	11/5/09
100-HR-3-H	199-H4-71	C7487	100-H Area pump-and-treat	63.09	71	11/5/09
100-HR-3-H	199-H4-72	C7488	100-H Area pump-and-treat	58.01	61.25	11/5/09
100-HR-3-H	199-H6-2	C7489	100-H Area pump-and-treat	52.83	60.7	11/5/09
100-HR-3-H	199-H1-43	C7492	100-H Area pump-and-treat	45	49	11/5/09
100-HR-3-H	199-H1-2	C7584	100-H Area pump-and-treat	50.4	54.5	10/6/10
100-HR-3-H	199-H1-1	C7585	100-H Area pump-and-treat	38	41.1	10/6/10
100-HR-3-H	199-H4-79	C7586	100-H Area pump-and-treat	64.05	65	10/6/10
100-HR-3-H	199-H4-76	C7587	100-H Area pump-and-treat	52	56.5	10/6/10
100-HR-3-H	199-H4-78	C7588	100-H Area pump-and-treat	61	64.1	10/6/10
100-HR-3-H	199-H4-75	C7597	100-H Area pump-and-treat	54.5	59.2	10/6/10
100-HR-3-H	199-H4-74	C7598	100-H Area pump-and-treat	43	46	10/6/10
100-HR-3-H	199-H4-77	C7605	100-H Area pump-and-treat	47.58	51	10/6/10
100-KR-4	199-K-187	C7687	Support RI/FS	202.2	202.4	11/18/10
100-KR-4	199-K-190	C7690	Support RI/FS	138.47	152	11/18/10
100-KR-4	199-K-191	C7691	Support RI/FS	105.31	158	11/18/10
100-KR-4	199-K-200	C7831	Support RI/FS	59.39	59.39	11/5/10
100-KR-4	199-K-201	C7832	Support RI/FS	58.8	60.4	11/5/10
100-NR-2	199-N-234	C7293	Apatite barrier injection/monitoring	14.82	16.8	5/21/10
100-NR-2	199-N-233	C7294	Apatite barrier injection/monitoring	25.04	27.3	12/14/09
100-NR-2	199-N-232	C7295	Apatite barrier injection/monitoring	14.61	16.3	5/21/10
100-NR-2	199-N-231	C7296	Apatite barrier injection/monitoring	25.08	26.2	12/14/09
100-NR-2	199-N-230	C7297	Apatite barrier injection/monitoring	15.42	15.8	5/21/10

Table 16-1. (Cont.)

Operable Unit	Well Name	Well ID	Well Purpose	Construction (ft bgs)	Drilled Depth (ft bgs)	Acceptance Date
100-NR-2	199-N-229	C7298	Apatite barrier injection/monitoring	24.92	26.5	12/15/09
100-NR-2	199-N-228	C7299	Apatite barrier injection/monitoring	14.61	16.1	5/21/10
100-NR-2	199-N-227	C7300	Apatite barrier injection/monitoring	25.29	27.5	12/15/09
100-NR-2	199-N-226	C7301	Apatite barrier injection/monitoring	14.88	16	5/21/10
100-NR-2	199-N-225	C7302	Apatite barrier injection/monitoring	24.73	26.8	2/26/10
100-NR-2	199-N-224	C7303	Apatite barrier injection/monitoring	15.3	17.5	5/21/10
100-NR-2	199-N-223	C7304	Apatite barrier injection/monitoring	24.96	26.7	2/26/10
100-NR-2	199-N-222	C7305	Apatite barrier injection/monitoring	17.1	27.1	5/21/10
100-NR-2	199-N-221	C7306	Apatite barrier injection/monitoring	25.47	26.9	2/26/10
100-NR-2	199-N-220	C7307	Apatite barrier injection/monitoring	16.3	26.2	5/21/10
100-NR-2	199-N-219	C7308	Apatite barrier injection/monitoring	25.53	27.5	2/26/10
100-NR-2	199-N-218	C7309	Apatite barrier injection/monitoring	15.29	17.1	5/21/10
100-NR-2	199-N-217	C7310	Apatite barrier injection/monitoring	24.88	26.7	2/26/10
100-NR-2	199-N-216	C7311	Apatite barrier injection/monitoring	14.77	16.3	5/21/10
100-NR-2	199-N-215	C7312	Apatite barrier injection/monitoring	24.31	27.2	11/18/09
100-NR-2	199-N-214	C7313	Apatite barrier injection/monitoring	14.6	16	5/21/10
100-NR-2	199-N-213	C7314	Apatite barrier injection/monitoring	24.53	26.2	11/18/09
100-NR-2	199-N-212	C7315	Apatite barrier injection/monitoring	15.07	16	5/21/10
100-NR-2	199-N-211	C7316	Apatite barrier injection/monitoring	24.63	26.2	11/18/09
100-NR-2	199-N-210	C7317	Apatite barrier injection/monitoring	15.46	16.5	5/21/10
100-NR-2	199-N-209	C7318	Apatite barrier injection/monitoring	25.48	26.3	11/2/09
100-NR-2	199-N-208	C7319	Apatite barrier injection/monitoring	15.19	16.2	5/21/10
100-NR-2	199-N-207	C7320	Apatite barrier injection/monitoring	25.9	27	11/2/09
100-NR-2	199-N-206	C7321	Apatite barrier injection/monitoring	15.16	17.6	5/21/10
100-NR-2	199-N-205	C7322	Apatite barrier injection/monitoring	25.01	26.2	10/30/09
100-NR-2	199-N-204	C7323	Apatite barrier injection/monitoring	15.2	16.05	5/21/10
100-NR-2	199-N-203	C7324	Apatite barrier injection/monitoring	24.4	27.1	10/30/09
100-NR-2	199-N-202	C7325	Apatite barrier injection/monitoring	15.04	17.1	5/21/10
100-NR-2	199-N-201	C7326	Apatite barrier injection/monitoring	25.09	26.4	10/30/09
100-NR-2	199-N-200	C7327	Apatite barrier injection/monitoring	15.52	18	5/21/10
100-NR-2	199-N-235	C7328	Apatite barrier injection/monitoring	15.05	16.2	5/21/10
100-NR-2	199-N-236	C7329	Apatite barrier injection/monitoring	24.82	26.6	12/7/09
100-NR-2	199-N-237	C7330	Apatite barrier injection/monitoring	15.29	16.8	5/21/10
100-NR-2	199-N-238	C7331	Apatite barrier injection/monitoring	25.18	26.7	12/7/09
100-NR-2	199-N-239	C7332	Apatite barrier injection/monitoring	15.48	16.9	5/21/10
100-NR-2	199-N-240	C7333	Apatite barrier injection/monitoring	24.59	26.4	12/7/09
100-NR-2	199-N-241	C7334	Apatite barrier injection/monitoring	15.24	16.4	5/21/10
100-NR-2	199-N-242	C7335	Apatite barrier injection/monitoring	25.26	26.4	12/14/09
100-NR-2	199-N-243	C7336	Apatite barrier injection/monitoring	15.49	16.9	5/21/10
100-NR-2	199-N-244	C7337	Apatite barrier injection/monitoring	24.28	26.2	12/14/09
100-NR-2	199-N-245	C7338	Apatite barrier injection/monitoring	15.48	17.3	5/21/10
100-NR-2	199-N-246	C7339	Apatite barrier injection/monitoring	24.86	27	1/22/10
100-NR-2	199-N-247	C7340	Apatite barrier injection/monitoring	15.49	18	5/21/10

Table 16-1. (Cont.)

Operable Unit	Well Name	Well ID	Well Purpose	Construction (ft bgs)	Drilled Depth (ft bgs)	Acceptance Date
100-NR-2	199-N-248	C7341	Apatite barrier injection/monitoring	24.79	26.8	1/22/10
100-NR-2	199-N-249	C7342	Apatite barrier injection/monitoring	15.42	17.1	5/21/10
100-NR-2	199-N-250	C7343	Apatite barrier injection/monitoring	25.22	27	1/22/10
100-NR-2	199-N-251	C7344	Apatite barrier injection/monitoring	15.41	17	5/21/10
100-NR-2	199-N-252	C7345	Apatite barrier injection/monitoring	24.7	26.5	1/25/10
100-NR-2	199-N-253	C7346	Apatite barrier injection/monitoring	15.47	17.2	5/21/10
100-NR-2	199-N-254	C7347	Apatite barrier injection/monitoring	24.73	26.5	1/2/10
100-NR-2	199-N-255	C7348	Apatite barrier injection/monitoring	15.39	17.2	5/21/10
100-NR-2	199-N-256	C7349	Apatite barrier injection/monitoring	24.93	27.1	1/26/10
100-NR-2	199-N-257	C7350	Apatite barrier injection/monitoring	15.29	17	5/21/10
100-NR-2	199-N-258	C7351	Apatite barrier injection/monitoring	24.65	26.6	1/26/10
100-NR-2	199-N-259	C7352	Apatite barrier injection/monitoring	15.28	17.2	5/21/10
100-NR-2	199-N-260	C7353	Apatite barrier injection/monitoring	24.94	26.4	1/26/10
100-NR-2	199-N-261	C7354	Apatite barrier injection/monitoring	15.31	17.7	5/21/10
100-NR-2	199-N-262	C7355	Apatite barrier injection/monitoring	25.31	26.3	1/27/10
100-NR-2	199-N-263	C7356	Apatite barrier injection/monitoring	15.28	17.7	5/21/10
100-NR-2	199-N-264	C7357	Apatite barrier injection/monitoring	25.06	26.6	1/27/10
100-NR-2	199-N-265	C7358	Apatite barrier injection/monitoring	15.31	17.3	5/21/10
100-NR-2	199-N-266	C7359	Apatite barrier injection/monitoring	24.77	26.9	1/27/10
100-NR-2	199-N-267	C7360	Apatite barrier injection/monitoring	15.33	17.7	5/21/10
100-NR-2	199-N-268	C7361	Apatite barrier injection/monitoring	24.75	26.9	1/28/10
100-NR-2	199-N-269	C7362	Apatite barrier injection/monitoring	15.31	17.5	5/21/10
100-NR-2	199-N-270	C7363	Apatite barrier injection/monitoring	25.35	26.5	1/28/10
100-NR-2	199-N-271	C7364	Apatite barrier injection/monitoring	15.31	18	5/21/10
100-NR-2	199-N-272	C7365	Apatite barrier injection/monitoring	25.03	26.8	1/28/10
100-NR-2	199-N-273	C7366	Apatite barrier injection/monitoring	15.34	17.7	5/21/10
100-NR-2	199-N-274	C7367	Apatite barrier injection/monitoring	24.71	26	2/16/10
100-NR-2	199-N-275	C7368	Apatite barrier injection/monitoring	15.37	17.5	5/21/10
100-NR-2	199-N-276	C7369	Apatite barrier injection/monitoring	25.19	26.3	2/16/10
100-NR-2	199-N-277	C7370	Apatite barrier injection/monitoring	15.34	17.9	5/21/10
100-NR-2	199-N-278	C7371	Apatite barrier injection/monitoring	24.77	26.4	2/16/10
100-NR-2	199-N-279	C7372	Apatite barrier injection/monitoring	15.31	17.7	5/21/10
100-NR-2	199-N-280	C7373	Apatite barrier injection/monitoring	25.25	27	2/16/10
100-NR-2	199-N-281	C7374	Apatite barrier injection/monitoring	16	18.1	5/21/10
100-NR-2	199-N-282	C7375	Apatite barrier injection/monitoring	24.6	26.8	2/17/10
100-NR-2	199-N-283	C7376	Apatite barrier injection/monitoring	15.88	17.7	5/21/10
100-NR-2	199-N-284	C7377	Apatite barrier injection/monitoring	24.82	25.9	2/17/10
100-NR-2	199-N-285	C7378	Apatite barrier injection/monitoring	15.88	17.7	5/21/10
100-NR-2	199-N-286	C7379	Apatite barrier injection/monitoring	25.03	27.4	2/17/10
100-NR-2	199-N-287	C7380	Apatite barrier injection/monitoring	15.33	17.6	5/21/10
100-NR-2	199-N-288	C7381	Apatite barrier injection/monitoring	24.5	27.1	4/29/10
100-NR-2	199-N-289	C7382	Apatite barrier injection/monitoring	15.3	17	5/21/10

Table 16-1. (Cont.)

Operable Unit	Well Name	Well ID	Well Purpose	Construction (ft bgs)	Drilled Depth (ft bgs)	Acceptance Date
100-NR-2	199-N-290	C7383	Apatite barrier injection/monitoring	24.81	27.5	4/29/10
100-NR-2	199-N-291	C7384	Apatite barrier injection/monitoring	15.31	17.3	5/21/10
100-NR-2	199-N-292	C7385	Apatite barrier injection/monitoring	24.87	27.5	4/29/10
100-NR-2	199-N-293	C7386	Apatite barrier injection/monitoring	15	17.6	5/21/10
100-NR-2	199-N-294	C7387	Apatite barrier injection/monitoring	24.88	27.1	4/29/10
100-NR-2	199-N-295	C7388	Apatite barrier injection/monitoring	15.84	17.9	5/21/10
100-NR-2	199-N-296	C7389	Apatite barrier injection/monitoring	24.68	27.2	4/29/10
100-NR-2	199-N-297	C7390	Apatite barrier injection/monitoring	15.32	17.9	5/21/10
100-NR-2	199-N-298	C7391	Apatite barrier injection/monitoring	24.55	27.4	4/23/10
100-NR-2	199-N-299	C7392	Apatite barrier injection/monitoring	15.43	18	5/21/10
100-NR-2	199-N-300	C7393	Apatite barrier injection/monitoring	24.67	27.2	4/23/10
100-NR-2	199-N-301	C7394	Apatite barrier injection/monitoring	16.2	17.5	5/21/10
100-NR-2	199-N-302	C7395	Apatite barrier injection/monitoring	25	27.1	4/22/10
100-NR-2	199-N-303	C7396	Apatite barrier injection/monitoring	15.43	16.9	5/21/10
100-NR-2	199-N-304	C7397	Apatite barrier injection/monitoring	25.47	27.9	4/14/10
100-NR-2	199-N-305	C7398	Apatite barrier injection/monitoring	15.53	17.9	5/21/10
100-NR-2	199-N-306	C7399	Apatite barrier injection/monitoring	25.48	27.6	4/14/10
100-NR-2	199-N-307	C7400	Apatite barrier injection/monitoring	15.83	17.1	5/21/10
100-NR-2	199-N-308	C7401	Apatite barrier injection/monitoring	25.74	26.9	4/14/10
100-NR-2	199-N-309	C7402	Apatite barrier injection/monitoring	15.86	17.8	5/21/10
100-NR-2	199-N-310	C7403	Apatite barrier injection/monitoring	25.44	27.5	4/14/10
100-NR-2	199-N-311	C7404	Apatite barrier injection/monitoring	15.43	17.6	5/21/10
100-NR-2	199-N-312	C7405	Apatite barrier injection/monitoring	25.9	28	4/15/10
100-NR-2	199-N-313	C7406	Apatite barrier injection/monitoring	16.29	17.2	5/21/10
100-NR-2	199-N-314	C7407	Apatite barrier injection/monitoring	25.72	26.7	4/15/10
100-NR-2	199-N-315	C7408	Apatite barrier injection/monitoring	15.19	17.5	5/21/10
100-NR-2	199-N-316	C7409	Apatite barrier injection/monitoring	25.43	27.6	4/13/10
100-NR-2	199-N-317	C7410	Apatite barrier injection/monitoring	15.43	17.5	5/21/10
100-NR-2	199-N-318	C7411	Apatite barrier injection/monitoring	25.35	26.8	4/13/10
100-NR-2	199-N-319	C7412	Apatite barrier injection/monitoring	15.31	16.9	5/21/10
100-NR-2	199-N-320	C7413	Apatite barrier injection/monitoring	25.46	27.3	4/13/10
100-NR-2	199-N-321	C7414	Apatite barrier injection/monitoring	15.43	17.9	5/21/10
100-NR-2	199-N-322	C7415	Apatite barrier injection/monitoring	25.15	26.6	4/13/10
100-NR-2	199-N-323	C7416	Apatite barrier injection/monitoring	15.43	17.2	5/21/10
100-NR-2	199-N-324	C7417	Apatite barrier injection/monitoring	25.54	26.8	4/13/10
100-NR-2	199-N-325	C7418	Apatite barrier injection/monitoring	16.32	18.1	5/21/10
100-NR-2	199-N-326	C7419	Apatite barrier injection/monitoring	25.6	26.5	4/15/10
100-NR-2	199-N-327	C7420	Apatite barrier injection/monitoring	15.43	17.9	5/21/10
100-NR-2	199-N-328	C7421	Apatite barrier injection/monitoring	24.61	26	4/15/10
100-NR-2	199-N-329	C7422	Apatite barrier injection/monitoring	15.44	16.8	5/21/10
100-NR-2	199-N-330	C7423	Apatite barrier injection/monitoring	25.26	25.9	3/19/10
100-NR-2	199-N-331	C7424	Apatite barrier injection/monitoring	15.02	18.6	5/21/10
100-NR-2	199-N-332	C7425	Apatite barrier injection/monitoring	24.77	26.3	3/19/10

Table 16-1. (Cont.)

Operable Unit	Well Name	Well ID	Well Purpose	Construction (ft bgs)	Drilled Depth (ft bgs)	Acceptance Date
100-NR-2	199-N-333	C7426	Apatite barrier injection/monitoring	15.08	17.3	5/21/10
100-NR-2	199-N-334	C7427	Apatite barrier injection/monitoring	24.72	26.3	3/18/10
100-NR-2	199-N-335	C7428	Apatite barrier injection/monitoring	14.88	17.3	5/21/10
100-NR-2	199-N-336	C7429	Apatite barrier injection/monitoring	24.96	26.8	3/18/10
100-NR-2	199-N-337	C7430	Apatite barrier injection/monitoring	15.17	17.4	5/21/10
100-NR-2	199-N-338	C7431	Apatite barrier injection/monitoring	25.11	27	3/18/10
100-NR-2	199-N-339	C7432	Apatite barrier injection/monitoring	15.31	17.4	5/21/10
100-NR-2	199-N-340	C7433	Apatite barrier injection/monitoring	24.57	25.9	3/19/10
100-NR-2	199-N-341	C7434	Apatite barrier injection/monitoring	15.26	17.1	5/21/10
100-NR-2	199-N-342	C7435	Apatite barrier injection/monitoring	24.4	28.4	2/18/10
100-NR-2	199-N-343	C7436	Apatite barrier injection/monitoring	15.3	17.4	5/21/10
100-NR-2	199-N-344	C7437	Apatite barrier injection/monitoring	24.58	27.4	2/18/10
100-NR-2	199-N-345	C7438	Apatite barrier injection/monitoring	15.3	18.1	5/21/10
100-NR-2	199-N-349	C7439	Apatite barrier injection/monitoring	24.83	26.7	3/8/10
100-NR-2	199-N-348	C7440	Apatite barrier injection/monitoring	24.79	26.5	3/8/10
100-NR-2	199-N-347	C7441	Apatite barrier injection/monitoring	24.68	26.8	3/8/10
100-NR-2	199-N-346	C7442	Apatite barrier injection/monitoring	24.72	26.8	3/8/10
100-NR-2	199-N-350	C7443	Apatite barrier injection/monitoring	24.69	26.9	2/9/10
100-NR-2	199-N-351	C7444	Apatite barrier injection/monitoring	24.87	26.9	2/9/10
100-NR-2	199-N-352	C7445	Apatite barrier injection/monitoring	25.22	27	2/9/10
100-NR-2	199-N-353	C7446	Apatite barrier injection/monitoring	25.15	26.4	3/25/10
100-NR-2	199-N-354	C7447	Apatite barrier injection/monitoring	25.3	26.9	3/25/10
100-NR-2	199-N-355	C7448	Apatite barrier injection/monitoring	25.33	26.6	3/25/10
100-NR-2	199-N-356	C7449	Apatite barrier injection/monitoring	24.64	25.6	3/25/10
100-NR-2	199-N-357	C7450	Apatite barrier injection/monitoring	25.34	26.8	3/25/10
100-NR-2	199-N-358	C7451	Apatite barrier injection/monitoring	25.09	26.5	3/25/10
100-NR-2	199-N-359	C7452	Apatite barrier injection/monitoring	24.8	26.9	4/29/10
100-NR-2	199-N-360	C7453	Apatite barrier injection/monitoring	25.06	26.5	4/29/10
100-NR-2	199-N-361	C7454	Apatite barrier injection/monitoring	25.43	27	4/29/10
100-NR-2	199-N-362	C7455	Apatite barrier injection/monitoring	25.21	27.1	4/15/10
100-NR-2	199-N-363	C7456	Apatite barrier injection/monitoring	25.18	26.9	4/15/10
100-NR-2	199-N-364	C7457	Apatite barrier injection/monitoring	25.24	27.4	4/15/10
100-NR-2	199-N-365	C7458	Apatite barrier injection/monitoring	25.18	26.4	4/15/10
100-NR-2	199-N-366	C7459	Apatite barrier injection/monitoring	24.76	25.5	4/15/10
100-NR-2	199-N-368	C7460	Apatite barrier injection/monitoring	25.39	26.2	11/10/09
100-NR-2	199-N-369	C7461	Apatite barrier injection/monitoring	23.8	26.2	11/10/09
100-NR-2	199-N-370	C7462	Apatite barrier injection/monitoring	24.07	26.2	11/10/09
100-NR-2	199-N-367	C7463	Apatite barrier injection/monitoring	24.64	27.1	4/15/10
200-BP-5	299-E29-54	C5860	200-BP-5 OU support RI/FS	322.69	375.2	3/23/10
200-BP-5	299-E24-25	C7514	200-BP-5 OU support RI/FS	309.03	361.9	3/23/10
200-BP-5	299-E28-30	C7515	200-BP-5 OU support RI/FS	323.99	375.6	3/23/10
200-BP-5	299-E33-265	C7564	Support Milestone M-24	282.77	283.6	9/7/10
200-BP-5	299-E33-266	C7565	Support Milestone M-24	286.06	286.06	9/7/10

Table 16-1. (Cont.)

Operable Unit	Well Name	Well ID	Well Purpose	Construction (ft bgs)	Drilled Depth (ft bgs)	Acceptance Date
200-BP-5	299-E27-24	C7570	Support Milestone M-24	317.59	317.8	9/7/10
200-BP-5	299-E27-25	C7571	Support Milestone M-24	234.16	248	9/7/10
200-BP-5	199-K-183	C7683	200-BP-5 OU support RI/FS	112	153.2	11/18/10
200-UP-1	299-W17-3	C7577	200 West Area expansion	440.01	492	9/27/10
200-UP-1	299-W22-89	C7664	Support Milestone M-24	269.19	332.6	9/7/10
200-ZP-1	299-W11-49	C7019	200 West Area expansion	430	457	9/27/10
200-ZP-1	299-W11-90	C7022	200 West Area expansion	519.53	525.9	9/27/10
200-ZP-1	299-W14-74	C7024	200 West Area expansion	504.85	508	3/1/10
200-ZP-1	299-W14-74	C7024	200 West Area expansion	504.85	508	3/1/10
200-ZP-1	299-W11-92	C7025	200 West Area expansion	405.25	460	9/27/10
200-ZP-1	299-W12-2	C7027	200 West Area expansion	492.03	505	3/1/10
200-ZP-1	299-W12-3	C7028	200 West Area expansion	494.9	496	3/1/10
200-ZP-1	299-W12-4	C7029	200 West Area expansion	508.7	515.8	3/1/10
200-ZP-1	299-W14-21	C7494	200 West Area expansion	520	525	3/1/10
200-ZP-1	299-W15-226	C7574	200 West Area expansion	448.63	489	9/27/10
200-ZP-1	299-W15-227	C7575	200 West Area expansion	456.2	511.85	9/27/10
200-ZP-1	299-W17-2	C7576	200 West Area expansion	405.22	470	9/27/10
200-ZP-1	699-45-67	C7578	200 West Area expansion	325.08	421	9/27/10
200-ZP-1	699-43-67	C7579	200 West Area expansion	365.1	478	9/27/10
200-ZP-1	299-W11-96	C7754	200 West Area expansion	474.7	480.3	3/1/10
300-FF-5	699-S5-E2	C7829	618-10 dust control	245	246	11/19/10
300-FF-5	699-S5-E2B	C7830	618-10 dust control	254.48	260	11/19/10
300-FF-5	399-3-35	C7874	Support IFRC	37.99	41.6	5/4/10
300-FF-5	399-2-34	C7875	Support IFRC	37.4	41.9	5/4/10
300-FF-5	399-2-37	C7876	Support IFRC	38.4	40.6	5/4/10

Table 16-2. Characterization Boreholes and Direct-Push Technology Installation, Calendar Year 2010

Project/Location	Well Name	Drill Depth (ft bgs)	Type of Borehole
100-C-7:1	C7883	89.7	Characterization
100-C-7:1	C7884	91.1	Characterization
116-D-1B	C7855	91.2	Characterization
116-D-7	C7851	69	Characterization
116-DR-9	C7850	72.3	Characterization
116-H-1	C7864	50.8	Characterization
116-H-4	C7862	52.4	Characterization
116-H-6	199-H4-84	48.6	Characterization
216-A-25 Pond	C6960	4	Direct push
216-A-25 Pond	C6961	4.5	Direct push
216-B-3 Pond	C6962	9.5	Direct push
216-E-127 pipeline	C6723	25	Direct push
216-E-127 pipeline	C6724	25	Direct push
216-E-127 pipeline	C6725	25	Direct push
216-E-127 pipeline	C6726	25	Direct push
216-E-127 pipeline	C7885	25	Direct push
216-E-127 pipeline	C7886	25	Direct push
216-E-127 pipeline	C7887	25	Direct push
216-E-127 pipeline	C7888	25	Direct push
216-E-127 pipeline	C7889	15	Direct push
216-E-127 pipeline	C7890	10	Direct push
216-E-127 pipeline	C7892	15	Direct push
216-E-127 pipeline	C7893	15	Direct push
216-S-16 Pond	C5727	9.7	Direct push
216-S-17 Pond	C5758	9.7	Direct push
216-S-17 Pond	C5759	5.5	Direct push
216-S-26 Crib	C7965	17	Direct push
216-S-26 Crib	C7966	17	Direct push
216-S-26 Crib	C7967	17	Direct push
216-S-26 Crib	C7968	17	Direct push
216-T-4B Pond	C6969	3	Direct push
216-T-4B Pond	C6970	5	Direct push
216-T-4B Pond	C7944	5	Direct push
216-U-10 Pond	C5766	6.8	Direct push
216-U-10 Pond	C5767	6.8	Direct push
216-U-10 Pond	C5768	5.7	Direct push
216-U-10 Pond	C5773	7	Direct push
216-U-10 Pond	C6968	8.5	Direct push
216-U-10 Pond	C7945	6.8	Direct push
216-U-10 Pond	C7946	6.8	Direct push
216-U-10 Pond	C7947	6.8	Direct push
216-U-10 Pond	C7948	10.5	Direct push
216-U-10 Pond	C7949	6.9	Direct push
216-U-10 Pond	C7950	6.2	Direct push
216-U-10 Pond	C7951	6.2	Direct push
600 OCL	C5804	15	Direct push
600 OCL	C7952	21	Direct push
600 OCL	C7953	14	Direct push
600 OCL	C7954	19	Direct push
600 OCL	C7955	16	Direct push
600 OCL	C7956	23	Direct push
600 OCL	C7957	18	Direct push
600 OCL	C7958	18	Direct push
600 OCL	C7959	21	Direct push
600 OCL	C7960	21	Direct push
600 OCL	C7961	21	Direct push
600 OCL	C7962	21	Direct push
600-218	C7834	4	Direct push
600-218	C7835	9.5	Direct push
600-218	C7836	8.5	Direct push
600-218	C7837	9.5	Direct push
600-218	C7838	9.3	Direct push
600-220	C8037	4	Direct push
600-220	C8038	7	Direct push
600-220	C8039	7	Direct push
600-220	C8040	7	Direct push
600-228	C8051	4	Direct push
600-228	C8052	4	Direct push
600-228	C8053	4	Direct push
600-228	C8054	4	Direct push
600-228	C8055	4	Direct push
600-228	C8056	13	Direct push
600-228	C8057	4	Direct push
600-228	C8058	4	Direct push
600-228	C8059	4	Direct push
600-228	C8060	4	Direct push
600-228	C8061	4	Direct push
600-228	C8062	4	Direct push
600-228	C8063	4	Direct push
600-228	C8125	4	Direct push
600-262	C7772	8	Direct push
600-262	C7808	8	Direct push
600-37	C5799	22.6	Direct push
600-37	C5800	22.1	Direct push
600-37	C5801	21.1	Direct push
600-37	C5802	27.2	Direct push
600-37	C5803	27.5	Direct push
UPR 600-12	C5788	16	Direct push
UPR 600-12	C5789	16	Direct push
UPR 600-12	C5790	16	Direct push
UPR 600-12	C5791	16	Direct push
UPR 600-12	C5792	16	Direct push
UPR 600-12	C5793	16	Direct push
UPR 600-12	C5794	16	Direct push
UPR 600-12	C5795	16	Direct push
UPR 600-12	C5796	16	Direct push

Table 16-3. Well Maintenance Summary for the Reporting Period

Well Name	Well ID	Field Order No.
699-38-65	A5148	WMO-NR-2010-3-096
299-W11-18	A7284	WMO-NR-2010-4-081
699-12-4D	A8252	WMO-NR-2010-2-033
199-H4-15CS	A4625	WMO-NR-2009-4-053
199-H4-15CS	A4625	WMO-NR-2009-4-053
199-K-119A	B2806	WMO-NR-2010-2-011
299-E28-1	A6784	WMO-NR-2010-3-103
199-F7-3	A4605	WMO-NR-2010-4-060
299-E33-15	A4842	WMO-NR-2010-2-025
299-W11-12	A4902	WMO-NR-2011-1-017
299-W11-12	A4902	WMO-NR-2011-1-017
299-W19-20	A4949	WMO-NR-2011-1-342
699-53-35	A5238	WMO-NR-2010-3-105
699-53-35	A5238	WMO-NR-2010-3-105
699-54-45A	A5251	WMO-NR-2010-3-048
299-W19-36	B2461	WMO-NR-2010-2-076
299-W10-1	A7136	WMO-NR-2010-3-133
299-W14-6	A7331	WMO-NR-2011-1-322
299-W14-6	A7331	WMO-NR-2010-4-048
199-D4-15	B8073	WMO-NR-2010-3-099
199-D8-69	B2773	WMO-NR-2010-3-041
199-D8-69	B2773	WMO-NR-2010-3-010
199-K-114A	B2801	WMO-NR-2010-4-065
199-K-116A	B2803	WMO-NR-2010-2-064
299-E28-18	A4821	WMO-NR-2010-4-032
199-N-26	A4675	WMO-NR-2010-1-022
199-D8-6	A4585	WMO-NR-2010-3-043
199-K-113A	B2800	WMO-NR-2010-4-063
199-K-113A	B2800	WMO-NR-2010-4-063
299-W10-14	A4891	WMO-NR-2010-3-076
299-W10-24	B8546	WMO-NR-2010-2-053
299-E33-44	B8554	WMO-NR-2010-4-069
299-W14-15	C3114	WMO-NR-2011-1-315
299-W14-15	C3114	WMO-NR-2010-3-164
299-W11-40	C3118	WMO-NR-2010-3-162
299-W14-17	C3121	WMO-NR-2011-1-317
299-W11-42	C3242	WMO-NR-2010-3-102
299-W19-43	C3381	WMO-NR-2010-4-009
299-W19-43	C3381	WMO-NR-2010-1-025
299-W19-45	C3394	WMO-NR-2011-1-352
299-W19-45	C3394	WMO-NR-2010-3-075
299-W14-18	C3396	WMO-NR-2011-1-318
299-W14-18	C3396	WMO-NR-2010-3-082
699-23-34A	A5087	WMO-NR-2011-1-531
199-N-32	A4681	WMO-NR-2010-3-078

Well Name	Well ID	Field Order No.
199-D5-130	C7590	WMO-NR-2010-3-119
199-H1-5	C7610	WMO-NR-2011-1-526
199-H4-80	C7595	WMO-NR-2010-4-037
199-H4-81	C7596	WMO-NR-2011-1-527
199-B5-5	C7505	WMO-NR-2010-4-004
199-N-281	C7374	WMO-NR-2011-1-158
199-N-287	C7380	WMO-NR-2011-1-164
299-E27-24	C7570	WMO-NR-2011-1-238
199-N-297	C7390	WMO-NR-2011-1-174
199-N-299	C7392	WMO-NR-2011-1-175
199-N-306	C7399	WMO-NR-2011-1-182
199-N-315	C7408	WMO-NR-2011-1-191
199-D4-95	C7083	WMO-NR-2010-2-037
199-D4-95	C7083	WMO-NR-2010-2-037
199-D4-96	C7084	WMO-NR-2010-2-039
199-D4-99	C7087	WMO-NR-2010-2-041
299-W15-225	C7017	WMO-NR-2010-2-022
199-D2-12	C7090	WMO-NR-2010-3-146
C7074	C7074	WMO-NR-2010-1-069
199-D8-89	C7091	WMO-NR-2010-2-043
199-D8-90	C7092	WMO-NR-2010-2-042
199-D8-94	C7096	WMO-NR-2010-3-148
199-K-178	C7149	WMO-NR-2011-1-052
199-K-179	C7150	WMO-NR-2010-2-013
199-K-180	C7151	WMO-NR-2010-2-024
299-E28-30	C7515	WMO-NR-2010-3-047
199-N-362	C7455	WMO-NR-2011-1-209
199-N-200	C7327	WMO-NR-2011-1-106
C7756	C7756	WMO-NR-2010-1-070
199-H4-10	A4614	WMO-NR-2010-2-062
299-E27-13	A4811	WMO-NR-2010-3-128
299-E33-31	A4856	WMO-NR-2010-4-068
299-W11-14	A4903	WMO-NR-2011-1-298
699-42-40C	A5169	WMO-NR-2010-3-012
299-W15-2	A5466	WMO-NR-2010-4-083
199-K-115A	B2802	WMO-NR-2010-4-064
199-B3-47	A4554	WMO-NR-2010-4-001
199-N-75	A4718	WMO-NR-2011-1-215
299-E28-1	A6784	WMO-NR-2010-4-077
199-K-18	A4647	WMO-NR-2010-2-061
199-N-18	A4667	WMO-NR-2011-1-104
299-E25-28	A4773	WMO-NR-2010-3-084
299-E25-36	A4784	WMO-NR-2011-1-226
299-W12-1	A4912	WMO-NR-2010-3-094
299-W15-15	A4919	WMO-NR-2010-4-066

Table 16-3. (Cont.)

Well Name	Well ID	Field Order No.
299-E17-22	C3826	WMO-NR-2010-4-044
199-D4-92	C4688	WMO-NR-2010-4-125
199-D4-93	C4689	WMO-NR-2010-4-126
299-W11-43	C4694	WMO-NR-2011-1-306
199-K-134	C4735	WMO-NR-2010-4-119
199-K-135	C4736	WMO-NR-2010-4-120
299-W19-101	C4966	WMO-NR-2010-3-141
299-W19-101	C4966	WMO-NR-2010-4-073
299-W22-69	C4969	WMO-NR-2011-1-365
299-W22-72	C4970	WMO-NR-2011-1-366
299-W22-86	C4971	WMO-NR-2011-1-370
699-50-59	C4882	WMO-NR-2010-3-049
199-N-126	C5032	WMO-NR-2011-1-071
299-W14-71	C5102	WMO-NR-2010-3-093
299-W14-72	C5103	WMO-NR-2010-3-069
N116mArray-11A	C5265	WMO-NR-2010-4-021
199-N-152	C5320	WMO-NR-2011-1-092
299-W15-44	C3956	WMO-NR-2011-1-432
299-W15-44	C3956	WMO-NR-2010-3-077
299-W14-19	C3957	WMO-NR-2010-3-080
299-E27-4	C4125	WMO-NR-2010-3-129
299-W15-47	C4184	WMO-NR-2010-4-008
199-D5-32	C4185	WMO-NR-2010-2-019
399-4-9	A5056	WMO-NR-2010-2-029
299-E29-54	C5860	WMO-NR-2010-4-057
699-52-55B	C5862	WMO-NR-2010-3-022
699-52-55B	C5862	WMO-NR-2010-3-022
199-D5-119	C5933	WMO-NR-2010-3-013
C6240	C6240	WMO-NR-2010-4-012
299-E33-49	C4261	WMO-NR-2010-3-169
199-N-159	C6177	WMO-NR-2011-1-097
199-D5-107	C5577	WMO-NR-2010-4-105
199-D5-112	C5582	WMO-NR-2010-4-108
199-N-169	C7034	WMO-NR-2011-1-100
299-E24-25	C7514	WMO-NR-2010-2-023
199-D8-98	C7602	WMO-NR-2010-3-122
199-D8-99	C7593	WMO-NR-2010-3-152
199-D7-5	C7608	WMO-NR-2010-4-075
199-H4-80	C7595	WMO-NR-2011-1-529
199-H4-81	C7596	WMO-NR-2010-4-036
199-D6-1	C7592	WMO-NR-2010-3-153
199-N-250	C7343	WMO-NR-2011-1-135
199-B2-14	C7665	WMO-NR-2010-4-003
199-B2-14	C7665	WMO-NR-2010-3-050
199-B3-50	C7506	WMO-NR-2011-1-022

Well Name	Well ID	Field Order No.
299-W22-26	A4968	WMO-NR-2011-1-356
299-W22-26	A4968	WMO-NR-2011-1-424
699-26-15A	A5100	WMO-NR-2010-3-027
699-35-70	A5140	WMO-NR-2010-4-040
699-40-33A	A5153	WMO-NR-2010-2-006
699-53-35	A5238	WMO-NR-2010-3-105
699-53-55C	A5246	WMO-NR-2010-1-057
699-61-62	A5285	WMO-NR-2010-3-024
699-63-90	A5293	WMO-NR-2010-2-000
699-8-25	A5334	WMO-NR-2010-3-032
299-W11-3	A5473	WMO-NR-2010-4-091
299-W19-36	B2461	WMO-NR-2010-2-076
199-N-103A	A9988	WMO-NR-2011-1-065
299-E28-18	A4821	WMO-NR-2010-4-032
299-E26-8	A4805	WMO-NR-2010-4-061
699-48-71	A5214	WMO-NR-2010-3-111
199-D5-40	B8749	WMO-NR-2010-4-090
299-W22-50	B8814	WMO-NR-2011-1-364
299-W11-39	C3117	WMO-NR-2010-3-165
299-W22-83	C3126	WMO-NR-2010-3-158
299-W11-42	C3242	WMO-NR-2010-3-160
299-W15-763	C3339	WMO-NR-2011-1-331
199-D4-85	C3317	WMO-NR-2010-3-006
199-D4-86	C3318	WMO-NR-2010-3-097
299-W19-43	C3381	WMO-NR-2011-1-350
299-W14-18	C3396	WMO-NR-2010-3-166
299-W14-18	C3396	WMO-NR-2010-3-082
399-8-3	A5061	WMO-NR-2010-2-030
299-W22-10	A7835	WMO-NR-2011-1-355
699-S18-E2B	A9199	WMO-NR-2010-4-038
699-25-33A	A5094	WMO-NR-2010-4-053
299-W22-9	A7834	WMO-NR-2011-1-372
199-N-27	A4676	WMO-NR-2011-1-146
299-W11-31	A5472	WMO-NR-2011-1-300
199-D8-88	C4536	WMO-NR-2010-3-107
299-W11-43	C4694	WMO-NR-2010-3-140
199-N-131	C5037	WMO-NR-2011-1-076
199-N-132	C5038	WMO-NR-2011-1-077
199-N-144	C5050	WMO-NR-2011-1-086
199-N-150	C5318	WMO-NR-2011-1-090
199-N-151	C5319	WMO-NR-2011-1-091
199-K-150	C5366	WMO-NR-2010-2-058
299-W14-19	C3957	WMO-NR-2011-1-319
199-D5-32	C4185	WMO-NR-2010-2-019
299-E27-23	C4190	WMO-NR-2010-1-051

Table 16-3. (Cont.)

Well Name	Well ID	Field Order No.
199-B5-6	C7507	WMO-NR-2011-1-449
199-B5-6	C7507	WMO-NR-2010-2-071
199-N-257	C7350	WMO-NR-2011-1-138
199-N-258	C7351	WMO-NR-2011-1-139
199-N-282	C7375	WMO-NR-2011-1-159
199-N-284	C7377	WMO-NR-2011-1-161
199-N-292	C7385	WMO-NR-2011-1-169
199-N-303	C7396	WMO-NR-2011-1-180
199-N-350	C7443	WMO-NR-2011-1-199
199-N-355	C7448	WMO-NR-2011-1-202
199-D4-95	C7083	WMO-NR-2010-2-037
199-D4-96	C7084	WMO-NR-2010-2-039
199-D4-97	C7085	WMO-NR-2010-2-038
199-D4-99	C7087	WMO-NR-2010-2-041
199-D8-91	C7093	WMO-NR-2010-2-044
199-D4-94	C7075	WMO-NR-2010-4-127
199-K-178	C7149	WMO-NR-2010-2-054
199-N-226	C7301	WMO-NR-2011-1-113
199-N-225	C7302	WMO-NR-2011-1-112
199-N-249	C7342	WMO-NR-2011-1-134
199-K-183	C7683	WMO-NR-2011-1-054
199-B9-2	A4565	WMO-NR-2010-3-018
299-E27-13	A4811	WMO-NR-2010-3-128
399-1-2	A5035	WMO-NR-2010-2-008
699-35-78A	A5141	WMO-NR-2010-3-092
699-S30-E15A	A5377	WMO-NR-2010-3-062
699-12-4D	A8252	WMO-NR-2010-2-033
199-K-115A	B2802	WMO-NR-2010-4-064
199-B3-47	A4554	WMO-NR-2010-4-001
299-E13-4	A5852	WMO-NR-2011-1-219
299-W27-1	A8062	WMO-NR-2010-2-021
199-N-99A	A9910	WMO-NR-2011-1-218
299-E33-18	A4844	WMO-NR-2010-3-167
299-E33-39	A4864	WMO-NR-2010-1-056
299-W12-1	A4912	WMO-NR-2011-1-312
299-W12-1	A4912	WMO-NR-2010-3-094
299-W15-15	A4919	WMO-NR-2011-1-324
299-W22-26	A4968	WMO-NR-2011-1-424
699-34-42	A5136	WMO-NR-2010-2-036
699-40-1	A5152	WMO-NR-2010-2-005
699-53-35	A5238	WMO-NR-2010-3-105
699-37-E4	A8588	WMO-NR-2010-2-004
299-W19-36	B2461	WMO-NR-2010-1-026
299-W19-36	B2461	WMO-NR-2010-1-026
299-E33-16	A6855	WMO-NR-2010-4-071

Well Name	Well ID	Field Order No.
399-3-11	A8077	WMO-NR-2010-2-068
299-E27-155	C5852	WMO-NR-2011-1-235
C6242	C6242	WMO-NR-2010-4-013
199-K-165	C6451	WMO-NR-2010-2-035
199-K-166	C6452	WMO-NR-2011-1-049
199-N-171	C7036	WMO-NR-2011-1-102
199-D5-101	C7583	WMO-NR-2010-3-091
199-D5-127	C7591	WMO-NR-2010-3-089
199-D8-95	C7589	WMO-NR-2010-3-118
199-D8-97	C7582	WMO-NR-2010-3-120
199-D7-3	C7599	WMO-NR-2010-3-121
199-H4-80	C7595	WMO-NR-2010-4-037
199-H4-81	C7596	WMO-NR-2011-1-527
199-H4-82	C7609	WMO-NR-2011-1-528
199-B2-14	C7665	WMO-NR-2011-1-021
199-N-270	C7363	WMO-NR-2011-1-147
199-N-272	C7365	WMO-NR-2011-1-149
199-N-275	C7368	WMO-NR-2011-1-152
199-N-278	C7371	WMO-NR-2011-1-155
199-N-279	C7372	WMO-NR-2011-1-156
199-N-280	C7373	WMO-NR-2011-1-157
199-N-286	C7379	WMO-NR-2011-1-163
199-N-300	C7393	WMO-NR-2011-1-177
199-N-307	C7400	WMO-NR-2011-1-183
199-N-309	C7402	WMO-NR-2011-1-185
199-N-358	C7451	WMO-NR-2011-1-205
199-D4-97	C7085	WMO-NR-2010-2-038
199-D4-97	C7085	WMO-NR-2010-2-038
199-D2-10	C7089	WMO-NR-2010-3-147
199-D2-12	C7090	WMO-NR-2010-3-146
199-D8-90	C7092	WMO-NR-2010-2-042
199-N-222	C7305	WMO-NR-2011-1-109
199-N-236	C7329	WMO-NR-2011-1-122
199-N-242	C7335	WMO-NR-2011-1-127
199-N-246	C7339	WMO-NR-2011-1-132
199-K-185	C7685	WMO-NR-2011-1-055
299-W22-24Q	A9569	WMO-NR-2010-3-054
199-N-76	A4719	WMO-NR-2011-1-216
299-E24-20	A4756	WMO-NR-2010-2-077
299-E33-31	A4856	WMO-NR-2010-1-055
399-1-2	A5035	WMO-NR-2010-2-008
699-42-37	A5164	WMO-NR-2011-1-532
699-63-58	A5292	WMO-NR-2010-3-025
199-K-115A	B2802	WMO-NR-2010-4-064
299-E28-1	A6784	WMO-NR-2010-4-077

Table 16-3. (Cont.)

Well Name	Well ID	Field Order No.
299-W14-6	A7331	WMO-NR-2010-4-048
299-W11-13	A5465	WMO-NR-2010-2-026
299-W11-13	A5465	WMO-NR-2010-2-026
299-E17-21	B8500	WMO-NR-2010-4-043
199-K-114A	B2801	WMO-NR-2010-4-065
199-K-114A	B2801	WMO-NR-2010-4-065
1199-41-15	A9371	WMO-NR-2010-3-067
199-K-125A	B8559	WMO-NR-2010-2-012
699-20-20	A5080	WMO-NR-2010-3-029
299-E26-8	A4805	WMO-NR-2010-4-061
299-W22-46	A4977	WMO-NR-2011-1-360
299-W19-42	B8553	WMO-NR-2011-1-349
199-D5-37	B8745	WMO-NR-2010-3-100
299-W22-49	B8813	WMO-NR-2011-1-363
299-W15-41	B8815	WMO-NR-2011-1-535
299-W15-41	B8815	WMO-NR-2011-1-535
199-D4-25	B8976	WMO-NR-2010-4-123
199-D4-27	B8978	WMO-NR-2010-4-122
199-D4-39	B8990	WMO-NR-2010-3-036
299-W14-15	C3114	WMO-NR-2010-3-164
299-W11-40	C3118	WMO-NR-2010-3-162
299-W11-41	C3119	WMO-NR-2011-1-304
299-W14-17	C3121	WMO-NR-2010-3-083
299-W22-82	C3124	WMO-NR-2010-3-157
299-W10-27	C3125	WMO-NR-2011-1-295
299-W19-43	C3381	WMO-NR-2010-1-025
299-W19-44	C3393	WMO-NR-2011-1-351
299-E33-339	C3392	WMO-NR-2010-1-047
299-W14-18	C3396	WMO-NR-2010-4-082
699-65-83	A5303	WMO-NR-2010-3-051
299-E25-26	A4771	WMO-NR-2010-3-085
199-N-32	A4681	WMO-NR-2010-3-078
299-E27-7	A4816	WMO-NR-2010-1-058
299-W6-10	A5435	WMO-NR-2011-1-376
299-W22-47	C4667	WMO-NR-2010-3-155
299-W11-46	C4950	WMO-NR-2011-1-308
299-W15-224	C4986	WMO-NR-2011-1-323
299-W22-87	C4977	WMO-NR-2010-2-063
699-50-59	C4882	WMO-NR-2010-3-049
399-3-20	C5002	WMO-NR-2010-3-125
199-N-139	C5045	WMO-NR-2011-1-082
299-W11-48	C5243	WMO-NR-2011-1-310
199-K-153	C5369	WMO-NR-2010-3-004
199-K-129	C4117	WMO-NR-2010-4-062
299-E27-21	C4127	WMO-NR-2010-1-059

Well Name	Well ID	Field Order No.
299-W15-35	B2749	WMO-NR-2011-1-327
299-E17-15	A4733	WMO-NR-2011-1-220
299-E25-41	A4790	WMO-NR-2011-1-227
299-W11-12	A4902	WMO-NR-2011-1-017
299-W10-20	A5439	WMO-NR-2010-3-070
199-K-107A	A9843	WMO-NR-2011-1-030
199-K-108A	A9844	WMO-NR-2011-1-031
299-W19-36	B2461	WMO-NR-2010-2-076
299-W10-1	A7136	WMO-NR-2010-3-133
299-W10-1	A7136	WMO-NR-2010-3-086
299-W10-1	A7136	WMO-NR-2010-3-086
199-K-111A	A9830	WMO-NR-2011-1-032
699-38-15	A8594	WMO-NR-2010-3-031
699-84-34B	A9021	WMO-NR-2010-2-001
299-E28-2	A6785	WMO-NR-2011-1-240
299-E28-9	A4828	WMO-NR-2010-4-076
299-W11-13	A5465	WMO-NR-2010-2-026
299-W11-34P	B2403	WMO-NR-2011-1-301
199-D4-15	B8073	WMO-NR-2010-3-099
199-N-105A	B2408	WMO-NR-2011-1-067
299-W15-30	B2410	WMO-NR-2010-4-050
199-N-106A	B2538	WMO-NR-2011-1-066
199-N-16	A4665	WMO-NR-2010-1-007
299-E28-18	A4821	WMO-NR-2010-4-032
299-W18-23	A4935	WMO-NR-2011-1-337
299-W10-4	A7137	WMO-NR-2011-1-207
299-W10-4	A7137	WMO-NR-2010-3-134
199-K-32A	A4657	WMO-NR-2011-1-062
199-K-113A	B2800	WMO-NR-2010-4-063
299-W18-30	A4942	WMO-NR-2011-1-338
699-25-34A	A5095	WMO-NR-2010-2-003
299-W22-24	A7845	WMO-NR-2010-4-029
199-D5-37	B8745	WMO-NR-2010-3-100
199-D5-44	B8754	WMO-NR-2010-3-142
199-D4-22	B8778	WMO-NR-2010-2-055
199-D4-38	B8989	WMO-NR-2010-3-038
199-D4-38	B8989	WMO-NR-2010-3-007
199-D4-38	B8989	WMO-NR-2011-1-046
299-W23-21	C3113	WMO-NR-2010-3-159
299-W11-41	C3119	WMO-NR-2010-3-163
299-W14-17	C3121	WMO-NR-2010-3-083
299-W10-27	C3125	WMO-NR-2010-3-161
199-D4-84	C3316	WMO-NR-2010-3-039
199-D4-84	C3316	WMO-NR-2010-3-008
299-W14-18	C3396	WMO-NR-2010-3-166

Table 16-3. (Cont.)

Well Name	Well ID	Field Order No.
299-W15-47	C4184	WMO-NR-2010-4-008
199-D5-106	C5511	WMO-NR-2010-2-020
199-D5-106	C5511	WMO-NR-2010-2-020
299-E33-343	C5858	WMO-NR-2010-1-046
199-B8-8	C5672	WMO-NR-2010-2-066
299-E33-47	C4259	WMO-NR-2010-3-168
299-E33-49	C4261	WMO-NR-2010-3-169
199-N-119	C4471	WMO-NR-2011-1-068
199-D5-109	C5579	WMO-NR-2010-4-104
199-D5-101	C7583	WMO-NR-2010-3-091
199-D5-128	C7612	WMO-NR-2010-3-143
199-D8-95	C7589	WMO-NR-2010-3-118
199-D8-99	C7593	WMO-NR-2010-3-152
199-D7-3	C7599	WMO-NR-2010-3-121
199-D7-4	C7594	WMO-NR-2010-3-151
199-H1-5	C7610	WMO-NR-2011-1-526
199-H4-80	C7595	WMO-NR-2011-1-529
199-H4-82	C7609	WMO-NR-2011-1-528
199-B5-5	C7505	WMO-NR-2011-1-023
199-B5-5	C7505	WMO-NR-2010-4-004
199-B3-50	C7506	WMO-NR-2010-2-070
199-B5-6	C7507	WMO-NR-2011-1-449
199-B5-6	C7507	WMO-NR-2011-1-449
199-N-267	C7360	WMO-NR-2011-1-143
199-N-273	C7366	WMO-NR-2011-1-150
199-N-283	C7376	WMO-NR-2011-1-160
199-N-285	C7378	WMO-NR-2011-1-162
199-N-301	C7394	WMO-NR-2011-1-178
199-N-308	C7401	WMO-NR-2011-1-184
199-N-310	C7403	WMO-NR-2011-1-186
199-N-311	C7404	WMO-NR-2011-1-187
199-D4-95	C7083	WMO-NR-2010-2-037
199-D4-98	C7086	WMO-NR-2010-2-040
199-D4-99	C7087	WMO-NR-2010-2-041
199-D2-10	C7089	WMO-NR-2010-3-147
199-D8-90	C7092	WMO-NR-2010-2-042
199-D8-93	C7095	WMO-NR-2010-3-149
199-K-180	C7151	WMO-NR-2010-2-024
199-N-229	C7298	WMO-NR-2011-1-116
199-N-237	C7330	WMO-NR-2011-1-123
199-N-238	C7331	WMO-NR-2011-1-124
199-N-239	C7332	WMO-NR-2011-1-125
199-N-240	C7333	WMO-NR-2011-1-126
C7755	C7755	WMO-NR-2010-1-071
C7757	C7757	WMO-NR-2010-1-072

Well Name	Well ID	Field Order No.
299-W14-18	C3396	WMO-NR-2010-4-082
299-W22-84	C3398	WMO-NR-2011-1-369
199-K-30	A4655	WMO-NR-2011-1-060
199-N-14	A4664	WMO-NR-2011-1-083
199-N-32	A4681	WMO-NR-2010-3-078
299-W8-1	A5016	WMO-NR-2010-4-092
199-N-2	A4669	WMO-NR-2011-1-105
299-W19-48	C4300	WMO-NR-2011-1-354
199-D8-88	C4536	WMO-NR-2010-3-011
299-W22-47	C4667	WMO-NR-2011-1-361
299-W22-47	C4667	WMO-NR-2010-3-155
199-K-132	C4670	WMO-NR-2010-3-136
299-W11-47	C4990	WMO-NR-2011-1-309
199-N-128	C5034	WMO-NR-2011-1-073
199-N-136	C5042	WMO-NR-2011-1-079
199-N-137	C5043	WMO-NR-2011-1-080
199-K-137	C5112	WMO-NR-2011-1-034
699-50-56	C5197	WMO-NR-2010-1-053
199-N-156	C5324	WMO-NR-2011-1-096
199-K-150	C5366	WMO-NR-2010-3-035
299-W15-44	C3956	WMO-NR-2011-1-329
299-W14-19	C3957	WMO-NR-2010-3-080
199-K-129	C4117	WMO-NR-2010-4-062
199-K-129	C4117	WMO-NR-2010-4-062
299-W22-85	C3399	WMO-NR-2010-4-093
299-E27-4	C4125	WMO-NR-2010-3-129
299-E27-4	C4125	WMO-NR-2010-1-054
299-E27-23	C4190	WMO-NR-2010-3-156
299-E27-23	C4190	WMO-NR-2010-1-051
399-3-11	A8077	WMO-NR-2010-3-005
199-D8-55	A4584	WMO-NR-2010-3-145
199-D5-106	C5511	WMO-NR-2010-3-101
299-E33-345	C6226	WMO-NR-2010-1-052
299-E27-155	C5852	WMO-NR-2010-3-154
299-E33-340	C5853	WMO-NR-2010-3-019
C6241	C6241	WMO-NR-2010-4-011
199-K-165	C6451	WMO-NR-2011-1-048
199-K-165	C6451	WMO-NR-2010-2-035
299-E25-236	C6542	WMO-NR-2011-1-224
199-D8-73	C4474	WMO-NR-2010-3-042
199-D8-73	C4474	WMO-NR-2010-3-042
199-D5-115	C5585	WMO-NR-2010-4-112
199-D5-117	C5587	WMO-NR-2010-4-114
199-N-172	C7037	WMO-NR-2011-1-103
199-D4-101	C7580	WMO-NR-2010-3-090

Table 16-3. (Cont.)

Well Name	Well ID	Field Order No.
299-E27-13	A4811	WMO-NR-2011-1-233
699-35-78A	A5141	WMO-NR-2010-3-092
699-55-55	A5258	WMO-NR-2010-4-080
299-E28-5	A6787	WMO-NR-2011-1-244
199-B8-6	A4563	WMO-NR-2010-4-002
199-B8-6	A4563	WMO-NR-2010-4-002
699-98-49A	A5363	WMO-NR-2010-3-002
299-W19-18	A7743	WMO-NR-2011-1-341
699-81-58	A5338	WMO-NR-2009-3-085
199-K-31	A4656	WMO-NR-2011-1-061
199-N-18	A4667	WMO-NR-2010-4-024
299-W15-17	A4921	WMO-NR-2010-2-048
299-W18-21	A4933	WMO-NR-2011-1-336
399-1-16B	A5026	WMO-NR-2010-4-054
699-50-28B	A5222	WMO-NR-2010-3-046
699-53-55C	A5246	WMO-NR-2010-1-057
699-54-45A	A5251	WMO-NR-2010-3-171
299-W11-3	A5473	WMO-NR-2010-2-009
199-K-106A	A9842	WMO-NR-2011-1-029
299-W19-36	B2461	WMO-NR-2010-2-076
299-W19-36	B2461	WMO-NR-2010-2-076
299-W19-36	B2461	WMO-NR-2010-2-076
299-W19-36	B2461	WMO-NR-2010-1-026
299-W19-36	B2461	WMO-NR-2010-1-026
299-W19-36	B2461	WMO-NR-2010-1-026
299-W10-1	A7136	WMO-NR-2010-2-028
299-W10-1	A7136	WMO-NR-2010-3-086
699-21-6	A8438	WMO-NR-2010-2-056
299-E28-23	A6799	WMO-NR-2011-1-241
299-E28-24	A6800	WMO-NR-2011-1-242
299-E28-9	A4828	WMO-NR-2010-4-076
299-E28-9	A4828	WMO-NR-2010-4-076
699-52-19	A5233	WMO-NR-2010-2-031
699-101-48B	A5066	WMO-NR-2010-4-030
199-D8-69	B2773	WMO-NR-2010-3-041
199-K-114A	B2801	WMO-NR-2010-4-065
199-K-114A	B2801	WMO-NR-2010-4-065
199-K-116A	B2803	WMO-NR-2010-2-074
199-N-16	A4665	WMO-NR-2010-1-007
199-N-26	A4675	WMO-NR-2010-3-108
699-35-9	A5142	WMO-NR-2010-3-030
199-H4-9	A4640	WMO-NR-2010-2-078
199-H4-63	B2776	WMO-NR-2010-2-034
199-D8-6	A4585	WMO-NR-2010-3-043
199-K-113A	B2800	WMO-NR-2010-4-063

Well Name	Well ID	Field Order No.
199-D4-101	C7580	WMO-NR-2010-3-090
199-D5-127	C7591	WMO-NR-2010-3-089
199-D5-129	C7600	WMO-NR-2010-3-144
199-D5-130	C7590	WMO-NR-2010-3-119
199-D5-131	C7601	WMO-NR-2010-3-123
199-D5-131	C7601	WMO-NR-2010-3-123
199-D8-96	C7603	WMO-NR-2010-3-124
199-D8-97	C7582	WMO-NR-2010-3-120
199-H1-5	C7610	WMO-NR-2011-1-526
199-H4-80	C7595	WMO-NR-2011-1-529
199-H4-81	C7596	WMO-NR-2011-1-527
199-H4-82	C7609	WMO-NR-2011-1-528
199-N-251	C7344	WMO-NR-2011-1-136
199-N-252	C7345	WMO-NR-2011-1-137
199-B5-5	C7505	WMO-NR-2010-4-004
199-N-277	C7370	WMO-NR-2011-1-154
199-N-369	C7461	WMO-NR-2011-1-211
199-N-289	C7382	WMO-NR-2011-1-166
199-N-290	C7383	WMO-NR-2011-1-167
199-N-293	C7386	WMO-NR-2011-1-170
199-N-316	C7409	WMO-NR-2011-1-192
199-N-323	C7416	WMO-NR-2011-1-195
199-N-348	C7440	WMO-NR-2011-1-197
199-D4-98	C7086	WMO-NR-2010-2-040
299-W14-20	C7018	WMO-NR-2011-1-320
199-D8-90	C7092	WMO-NR-2010-2-042
199-K-180	C7151	WMO-NR-2010-2-024
199-N-230	C7297	WMO-NR-2011-1-117
199-N-228	C7299	WMO-NR-2011-1-115
199-N-224	C7303	WMO-NR-2011-1-111
199-N-247	C7340	WMO-NR-2011-1-130
C7758	C7758	WMO-NR-2010-1-073
C7764	C7764	WMO-NR-2010-1-075
C7765	C7765	WMO-NR-2010-1-076
699-10-E12Q	A9580	WMO-NR-2010-3-056
199-K-36	A4662	WMO-NR-2011-1-064
299-E33-31	A4856	WMO-NR-2010-1-055
699-42-12A	A5163	WMO-NR-2010-3-033
699-42-40C	A5169	WMO-NR-2010-3-139
299-W11-18	A7284	WMO-NR-2011-1-299
299-W11-18	A7284	WMO-NR-2010-4-081
199-B8-6	A4563	WMO-NR-2010-4-002
199-K-115A	B2802	WMO-NR-2010-4-064
199-K-115A	B2802	WMO-NR-2010-4-064
199-K-119A	B2806	WMO-NR-2010-2-011

Table 16-3. (Cont.)

Well Name	Well ID	Field Order No.
199-B2-12	A4550	WMO-NR-2010-4-000
199-D4-22	B8778	WMO-NR-2010-2-055
199-D4-23	B8779	WMO-NR-2010-3-098
299-W22-48	B8812	WMO-NR-2011-1-362
299-W15-41	B8815	WMO-NR-2010-4-051
199-D4-26	B8977	WMO-NR-2010-4-124
199-D4-38	B8989	WMO-NR-2011-1-026
199-D4-39	B8990	WMO-NR-2010-3-036
299-W14-17	C3121	WMO-NR-2010-3-083
299-W22-82	C3124	WMO-NR-2011-1-367
299-W11-42	C3242	WMO-NR-2011-1-305
199-D4-84	C3316	WMO-NR-2010-3-039
199-D4-85	C3317	WMO-NR-2010-3-040
299-W19-43	C3381	WMO-NR-2010-2-075
299-W19-43	C3381	WMO-NR-2010-1-025
SPC-P-1	B8106	WMO-NR-2010-3-057
299-W18-33	A5450	WMO-NR-2010-3-074
699-53-47A	A5239	WMO-NR-2010-4-041
699-25-33A	A5094	WMO-NR-2010-4-053
199-N-46	A5833	WMO-NR-2011-1-213
199-K-132	C4670	WMO-NR-2010-3-136
199-N-122	C4954	WMO-NR-2011-1-069
199-N-127	C5033	WMO-NR-2011-1-072
199-N-129	C5035	WMO-NR-2011-1-074
199-N-130	C5036	WMO-NR-2011-1-075
199-N-138	C5044	WMO-NR-2011-1-081
199-N-143	C5049	WMO-NR-2011-1-085
199-K-140	C5115	WMO-NR-2011-1-037
199-N-147	C5116	WMO-NR-2011-1-088
N116mArray-10A	C5264	WMO-NR-2010-4-020
199-N-153	C5321	WMO-NR-2011-1-093
199-K-144	C5360	WMO-NR-2011-1-039
299-W15-46	C3426	WMO-NR-2011-1-330
199-D5-32	C4185	WMO-NR-2010-3-044
299-E27-23	C4190	WMO-NR-2011-1-237
299-W17-1	C4237	WMO-NR-2010-4-084
199-D8-55	A4584	WMO-NR-2010-3-145
199-D5-106	C5511	WMO-NR-2010-3-101
299-E26-77	C6455	WMO-NR-2010-4-103
699-36-66B	C6219	WMO-NR-2011-1-428
299-E33-345	C6226	WMO-NR-2010-4-070
299-E27-155	C5852	WMO-NR-2010-3-001
299-E27-155	C5852	WMO-NR-2010-3-001
299-E33-340	C5853	WMO-NR-2010-3-019
C6239	C6239	WMO-NR-2010-4-010

Well Name	Well ID	Field Order No.
199-B3-47	A4554	WMO-NR-2010-4-001
699-98-49A	A5363	WMO-NR-2010-3-002
299-E28-3	A6786	WMO-NR-2010-4-078
399-1-10B	A8064	WMO-NR-2010-4-055
199-D5-18	A4575	WMO-NR-2011-1-025
199-K-20	A4649	WMO-NR-2011-1-058
199-K-31	A4656	WMO-NR-2010-2-060
299-E17-9	A4742	WMO-NR-2011-1-221
299-E25-28	A4773	WMO-NR-2010-3-084
299-E27-10	A4808	WMO-NR-2010-1-050
299-E27-14	A4812	WMO-NR-2011-1-234
299-E28-7	A4827	WMO-NR-2011-1-245
299-E33-18	A4844	WMO-NR-2010-3-167
299-W11-12	A4902	WMO-NR-2011-1-017
299-W11-12	A4902	WMO-NR-2011-1-017
699-24-33	A5089	WMO-NR-2010-4-049
699-61-62	A5285	WMO-NR-2010-3-024
699-S31-E10C	A5381	WMO-NR-2010-2-059
699-S34-E15	A5389	WMO-NR-2010-3-055
299-W14-5	A5475	WMO-NR-2011-1-321
299-W19-36	B2461	WMO-NR-2010-2-067
299-W10-1	A7136	WMO-NR-2010-3-133
299-W10-1	A7136	WMO-NR-2010-2-028
299-W10-1	A7136	WMO-NR-2010-3-014
699-12-18	A8254	WMO-NR-2010-3-017
699-20-E5A	A8428	WMO-NR-2010-3-034
299-E25-8	A6027	WMO-NR-2011-1-229
299-E33-16	A6855	WMO-NR-2011-1-530
299-E25-29P	A4774	WMO-NR-2010-1-045
299-E28-9	A4828	WMO-NR-2010-4-076
299-W11-13	A5465	WMO-NR-2010-2-026
299-W15-30	B2410	WMO-NR-2010-4-050
299-W15-33	B2643	WMO-NR-2010-2-045
199-K-116A	B2803	WMO-NR-2010-2-074
699-54-45B	A8862	WMO-NR-2010-3-137
199-N-81	A5443	WMO-NR-2011-1-217
199-B2-12	A4550	WMO-NR-2010-4-000
199-B2-12	A4550	WMO-NR-2010-4-000
299-W18-30	A4942	WMO-NR-2010-3-071
299-W23-15	A4984	WMO-NR-2010-3-003
199-D4-23	B8779	WMO-NR-2010-3-098
299-W15-41	B8815	WMO-NR-2011-1-328
299-W15-41	B8815	WMO-NR-2011-1-535
199-D4-38	B8989	WMO-NR-2011-1-026
199-D4-38	B8989	WMO-NR-2010-4-128

Table 16-3. (Cont.)

Well Name	Well ID	Field Order No.
299-E24-33	C4257	WMO-NR-2011-1-223
199-N-161	C6179	WMO-NR-2011-1-098
199-D5-108	C5578	WMO-NR-2010-4-110
199-D5-128	C7612	WMO-NR-2010-3-143
199-D5-129	C7600	WMO-NR-2010-3-144
199-D8-96	C7603	WMO-NR-2010-3-124
199-D7-5	C7608	WMO-NR-2010-4-075
199-D7-5	C7608	WMO-NR-2010-4-075
199-D7-6	C7611	WMO-NR-2010-4-033
199-H1-5	C7610	WMO-NR-2010-4-034
199-H4-82	C7609	WMO-NR-2010-4-035
199-B5-6	C7507	WMO-NR-2011-1-449
199-N-259	C7352	WMO-NR-2011-1-140
199-N-268	C7361	WMO-NR-2011-1-144
199-N-271	C7364	WMO-NR-2011-1-148
199-N-276	C7369	WMO-NR-2011-1-153
199-N-368	C7460	WMO-NR-2011-1-210
199-N-296	C7389	WMO-NR-2011-1-173
199-N-302	C7395	WMO-NR-2011-1-179
199-N-305	C7398	WMO-NR-2011-1-181
199-N-319	C7412	WMO-NR-2011-1-193
199-N-321	C7414	WMO-NR-2011-1-194
199-N-349	C7439	WMO-NR-2011-1-198
199-N-352	C7445	WMO-NR-2011-1-201
199-N-359	C7452	WMO-NR-2011-1-206
199-D4-96	C7084	WMO-NR-2010-2-039
199-D4-98	C7086	WMO-NR-2010-2-040
199-D4-99	C7087	WMO-NR-2010-2-041
199-K-181	C7464	WMO-NR-2011-1-053
199-D8-89	C7091	WMO-NR-2010-2-043
199-D8-91	C7093	WMO-NR-2010-2-044
199-D8-94	C7096	WMO-NR-2010-3-148
199-N-231	C7296	WMO-NR-2011-1-118
199-N-218	C7309	WMO-NR-2011-1-108
199-N-235	C7328	WMO-NR-2011-1-121
199-N-245	C7338	WMO-NR-2011-1-131
299-W22-89	C7664	WMO-NR-2011-1-371
299-W22-24Q	A9569	WMO-NR-2010-3-054
699-38-65	A5148	WMO-NR-2010-3-096
199-B9-2	A4565	WMO-NR-2010-3-018
299-W23-4	A4987	WMO-NR-2010-2-017
299-W7-7	A5013	WMO-NR-2010-3-073
399-1-2	A5035	WMO-NR-2010-2-008
699-42-40C	A5169	WMO-NR-2010-4-072
699-55-55	A5258	WMO-NR-2010-4-080

Well Name	Well ID	Field Order No.
299-W11-39	C3117	WMO-NR-2011-1-302
299-W11-39	C3117	WMO-NR-2010-3-165
299-W10-27	C3125	WMO-NR-2010-3-161
199-D4-84	C3316	WMO-NR-2010-3-106
199-D4-85	C3317	WMO-NR-2010-3-040
199-D4-86	C3318	WMO-NR-2010-3-097
299-W19-43	C3381	WMO-NR-2010-2-075
299-W19-43	C3381	WMO-NR-2010-2-075
299-W19-43	C3381	WMO-NR-2010-1-025
299-W19-44	C3393	WMO-NR-2010-2-027
299-W19-44	C3393	WMO-NR-2010-2-027
199-N-3	A4679	WMO-NR-2011-1-176
299-W22-44	A4975	WMO-NR-2011-1-358
299-W11-7	A4910	WMO-NR-2011-1-311
299-E27-7	A4816	WMO-NR-2010-1-058
299-E25-5	A6025	WMO-NR-2011-1-228
299-W18-9	A7526	WMO-NR-2010-3-000
299-W15-42	C3803	WMO-NR-2010-4-089
299-W22-45	A4976	WMO-NR-2011-1-359
299-E24-24	C4647	WMO-NR-2010-4-042
299-W14-11	C4668	WMO-NR-2011-1-313
199-K-132	C4670	WMO-NR-2010-3-136
199-K-132	C4670	WMO-NR-2010-3-136
299-W15-152	C4685	WMO-NR-2011-1-325
199-N-123	C4955	WMO-NR-2011-1-070
299-W19-101	C4966	WMO-NR-2011-1-339
299-W19-101	C4966	WMO-NR-2010-4-073
199-N-141	C5047	WMO-NR-2011-1-084
299-W14-71	C5102	WMO-NR-2010-3-093
199-K-139	C5114	WMO-NR-2011-1-036
699-50-56	C5197	WMO-NR-2010-1-053
199-N-149	C5317	WMO-NR-2011-1-089
199-N-154	C5322	WMO-NR-2011-1-094
299-W15-44	C3956	WMO-NR-2010-3-077
199-K-129	C4117	WMO-NR-2010-4-062
299-W15-765	C3397	WMO-NR-2010-3-079
299-E27-4	C4125	WMO-NR-2011-1-239
199-D8-55	A4584	WMO-NR-2010-3-009
C6132	C6132	WMO-NR-2010-4-022
199-K-165	C6451	WMO-NR-2010-2-035
199-D5-118	C5588	WMO-NR-2010-4-115
N116mArray-15A	C5512	WMO-NR-2010-4-023
199-N-167	C7032	WMO-NR-2011-1-099
199-N-170	C7035	WMO-NR-2011-1-101
199-D8-98	C7602	WMO-NR-2010-3-122

Table 16-3. (Cont.)

Well Name	Well ID	Field Order No.
699-9-E2	A5349	WMO-NR-2010-4-133
699-12-4D	A8252	WMO-NR-2010-2-033
199-K-124A	B2811	WMO-NR-2010-2-010
199-K-124A	B2811	WMO-NR-2010-2-010
699-14-38	A5068	WMO-NR-2010-3-015
299-E28-3	A6786	WMO-NR-2010-4-078
299-E28-3	A6786	WMO-NR-2010-4-078
699-53-55A	A5244	WMO-NR-2010-4-045
199-D5-16	A4573	WMO-NR-2010-2-073
199-F8-3	A4608	WMO-NR-2011-1-028
199-F8-3	A4608	WMO-NR-2010-4-058
199-K-34	A4660	WMO-NR-2011-1-063
199-N-18	A4667	WMO-NR-2010-4-024
299-E25-28	A4773	WMO-NR-2010-3-084
299-E33-39	A4864	WMO-NR-2010-1-056
299-W11-12	A4902	WMO-NR-2011-1-017
299-W18-21	A4933	WMO-NR-2010-4-031
299-W19-12	A4945	WMO-NR-2011-1-340
299-W19-39	B2460	WMO-NR-2011-1-347
299-W19-36	B2461	WMO-NR-2010-2-076
299-W19-35	A9515	WMO-NR-2011-1-344
299-E25-3	A6024	WMO-NR-2011-1-225
299-E28-25	A6801	WMO-NR-2011-1-243
699-42-40A	A5167	WMO-NR-2010-4-046
699-42-40A	A5167	WMO-NR-2010-4-046
299-W10-22	A9890	WMO-NR-2010-2-018
299-W19-37	B2465	WMO-NR-2010-2-046
199-N-106A	B2538	WMO-NR-2010-4-132
199-K-114A	B2801	WMO-NR-2010-4-065
199-K-116A	B2803	WMO-NR-2010-2-074
199-K-116A	B2803	WMO-NR-2010-2-064
199-N-26	A4675	WMO-NR-2010-3-108
199-N-26	A4675	WMO-NR-2010-1-022
299-E26-8	A4805	WMO-NR-2010-4-061
199-H4-63	B2776	WMO-NR-2010-2-034
199-K-113A	B2800	WMO-NR-2010-4-063
299-E25-10	A4760	WMO-NR-2010-4-088
699-25-34A	A5095	WMO-NR-2010-2-032
299-W10-26	B8548	WMO-NR-2011-1-294
299-W14-13	B8549	WMO-NR-2011-1-314
199-K-126	B8760	WMO-NR-2010-4-117
199-D4-22	B8778	WMO-NR-2010-2-055
199-D4-38	B8989	WMO-NR-2010-3-038
199-D4-38	B8989	WMO-NR-2011-1-046
299-W23-21	C3113	WMO-NR-2010-3-159

Well Name	Well ID	Field Order No.
199-D7-4	C7594	WMO-NR-2010-3-151
199-H4-82	C7609	WMO-NR-2010-4-035
199-D6-2	C7607	WMO-NR-2010-3-150
199-B2-14	C7665	WMO-NR-2010-4-003
199-N-265	C7358	WMO-NR-2011-1-141
199-N-294	C7387	WMO-NR-2011-1-171
199-N-313	C7406	WMO-NR-2011-1-189
199-N-314	C7407	WMO-NR-2011-1-190
199-N-351	C7444	WMO-NR-2011-1-200
199-N-357	C7450	WMO-NR-2011-1-204
199-D4-98	C7086	WMO-NR-2010-2-040
199-D8-89	C7091	WMO-NR-2010-2-043
199-D8-89	C7091	WMO-NR-2010-2-043
199-D8-93	C7095	WMO-NR-2010-3-127
199-N-232	C7295	WMO-NR-2011-1-119
199-N-227	C7300	WMO-NR-2011-1-114
199-N-223	C7304	WMO-NR-2011-1-110
199-N-244	C7337	WMO-NR-2011-1-129
199-K-190	C7690	WMO-NR-2011-1-057
C7766	C7766	WMO-NR-2010-1-077
299-E26-11	A4800	WMO-NR-2011-1-231
299-W23-4	A4987	WMO-NR-2010-2-017
699-35-78A	A5141	WMO-NR-2010-4-052
699-63-58	A5292	WMO-NR-2010-3-025
699-S36-E12B	A5391	WMO-NR-2010-3-059
299-W15-32	B2423	WMO-NR-2010-2-051
299-W11-12	A4902	WMO-NR-2011-1-017
299-W15-15	A4919	WMO-NR-2010-3-072
299-W22-21	A4966	WMO-NR-2011-1-357
699-53-35	A5238	WMO-NR-2010-3-105
699-63-90	A5293	WMO-NR-2010-2-000
299-W11-3	A5473	WMO-NR-2011-1-423
299-W18-1	A5481	WMO-NR-2010-2-050
299-W19-36	B2461	WMO-NR-2011-1-346
699-12-18	A8254	WMO-NR-2010-3-017
299-W19-35	A9515	WMO-NR-2010-3-138
299-E33-16	A6855	WMO-NR-2011-1-530
299-W11-13	A5465	WMO-NR-2011-1-297
699-74-44	A5328	WMO-NR-2010-3-088
299-W19-40	B2464	WMO-NR-2011-1-348
299-W19-37	B2465	WMO-NR-2011-1-345
199-K-125A	B8559	WMO-NR-2010-2-012
699-29-4	A8490	WMO-NR-2010-3-028
199-N-67	A4711	WMO-NR-2011-1-214
699-48-71	A5214	WMO-NR-2010-3-095

Table 16-3. (Cont.)

Well Name	Well ID	Field Order No.
299-W22-82	C3124	WMO-NR-2010-3-157
299-W22-83	C3126	WMO-NR-2011-1-368
299-W22-83	C3126	WMO-NR-2010-3-158
299-W11-42	C3242	WMO-NR-2010-3-160
299-W15-763	C3339	WMO-NR-2010-2-049
199-D4-83	C3315	WMO-NR-2010-3-037
299-W19-43	C3381	WMO-NR-2010-2-075
299-W19-43	C3381	WMO-NR-2010-2-075
299-W19-43	C3381	WMO-NR-2010-2-075
299-W19-43	C3381	WMO-NR-2010-4-009
299-W19-43	C3381	WMO-NR-2010-1-025
699-65-83	A5303	WMO-NR-2010-3-051
299-E26-5	A6641	WMO-NR-2010-4-087
699-S18-E2B	A9199	WMO-NR-2010-4-038
299-E17-22	C3826	WMO-NR-2010-2-002
AT-3-4-M	C4355	WMO-NR-2010-4-016
AT-3-5-S	C4358	WMO-NR-2010-4-017
199-D8-88	C4536	WMO-NR-2010-3-045
199-D8-88	C4536	WMO-NR-2010-3-045
299-W15-94	C4684	WMO-NR-2011-1-334
199-K-133	C4734	WMO-NR-2010-4-118
199-K-136	C4737	WMO-NR-2010-4-121
299-W22-69	C4969	WMO-NR-2011-1-536
199-N-133	C5039	WMO-NR-2011-1-078
N116mArray-13A	C5267	WMO-NR-2010-4-019
199-N-155	C5323	WMO-NR-2011-1-095
199-K-153	C5369	WMO-NR-2010-3-004
299-W15-44	C3956	WMO-NR-2011-1-432
299-W15-765	C3397	WMO-NR-2010-3-079
299-E27-4	C4125	WMO-NR-2010-1-054
299-E27-21	C4127	WMO-NR-2011-1-236
199-B8-7	C5671	WMO-NR-2010-2-065
299-E27-155	C5852	WMO-NR-2010-3-154
C6243	C6243	WMO-NR-2010-4-014
299-W19-47	C4258	WMO-NR-2011-1-353
199-D5-110	C5580	WMO-NR-2010-4-106
199-D5-111	C5581	WMO-NR-2010-4-107
299-E33-345	C6226	WMO-NR-2010-1-052
199-K-168	C6454	WMO-NR-2011-1-050
299-E33-47	C4259	WMO-NR-2010-3-168
299-E33-49	C4261	WMO-NR-2010-1-048
199-D5-113	C5583	WMO-NR-2010-4-109
199-D5-114	C5584	WMO-NR-2010-4-111
199-D5-116	C5586	WMO-NR-2010-4-113
199-D7-6	C7611	WMO-NR-2010-4-033

Well Name	Well ID	Field Order No.
699-48-71	A5214	WMO-NR-2010-3-095
299-W10-4	A7137	WMO-NR-2011-1-296
299-W10-4	A7137	WMO-NR-2011-1-207
699-S3-25	A5373	WMO-NR-2010-3-016
699-S32-E11	A9223	WMO-NR-2010-3-061
299-W19-34A	A9517	WMO-NR-2011-1-343
299-W11-37	A9889	WMO-NR-2010-2-016
299-W11-37	A9889	WMO-NR-2010-2-016
299-W15-31A	B2471	WMO-NR-2010-2-047
699-S29-E11	A9207	WMO-NR-2010-3-060
199-K-22	A4651	WMO-NR-2010-3-052
299-W14-13	B8549	WMO-NR-2010-3-081
199-D5-44	B8754	WMO-NR-2010-3-142
199-D4-20	B8750	WMO-NR-2010-4-116
DD-41-2	B8483	WMO-NR-2010-4-018
299-W11-40	C3118	WMO-NR-2011-1-303
299-W11-41	C3119	WMO-NR-2010-3-163
299-W14-16	C3120	WMO-NR-2011-1-316
299-W11-42	C3242	WMO-NR-2010-2-052
199-D4-83	C3315	WMO-NR-2010-3-037
299-W19-43	C3381	WMO-NR-2010-2-075
299-W19-44	C3393	WMO-NR-2010-2-027
299-W14-18	C3396	WMO-NR-2010-4-067
699-S37-E11A	A5393	WMO-NR-2010-3-068
699-S36-E13B	A9226	WMO-NR-2010-3-058
299-W15-8	A5468	WMO-NR-2011-1-333
199-F7-1	A4603	WMO-NR-2010-4-059
699-25-33A	A5094	WMO-NR-2010-4-053
199-K-29	A5480	WMO-NR-2011-1-059
AT-3-3-D	C4351	WMO-NR-2010-4-015
199-K-132	C4670	WMO-NR-2011-1-033
299-W11-45	C4948	WMO-NR-2011-1-307
199-N-146	C5052	WMO-NR-2011-1-087
199-K-138	C5113	WMO-NR-2011-1-035
199-K-142	C5304	WMO-NR-2011-1-038
199-K-150	C5366	WMO-NR-2010-3-035
199-K-150	C5366	WMO-NR-2010-2-058
199-K-157	C5373	WMO-NR-2011-1-040
199-K-129	C4117	WMO-NR-2010-4-062
299-W15-765	C3397	WMO-NR-2011-1-332
299-E25-93	C4122	WMO-NR-2011-1-232
299-E27-21	C4127	WMO-NR-2010-1-059
299-E27-23	C4190	WMO-NR-2010-3-156
299-E33-342	C5857	WMO-NR-2010-1-049
299-E28-30	C7515	WMO-NR-2010-3-047

Table 16-3. (Cont.)

Well Name	Well ID	Field Order No.
199-H1-5	C7610	WMO-NR-2010-4-034
199-H4-81	C7596	WMO-NR-2010-4-036
199-D6-1	C7592	WMO-NR-2010-3-153
199-D6-2	C7607	WMO-NR-2010-3-150
199-B2-14	C7665	WMO-NR-2010-4-003
199-B2-14	C7665	WMO-NR-2010-2-072
199-B5-5	C7505	WMO-NR-2010-2-069
199-B5-6	C7507	WMO-NR-2011-1-024
199-N-266	C7359	WMO-NR-2011-1-142
199-N-269	C7362	WMO-NR-2011-1-145
199-N-274	C7367	WMO-NR-2011-1-151
199-N-288	C7381	WMO-NR-2011-1-165
199-N-370	C7462	WMO-NR-2011-1-212
199-N-291	C7384	WMO-NR-2011-1-168
199-N-295	C7388	WMO-NR-2011-1-172

Well Name	Well ID	Field Order No.
199-K-173	C7016	WMO-NR-2011-1-051
199-N-234	C7293	WMO-NR-2011-1-120
199-N-221	C7306	WMO-NR-2011-1-107
199-N-243	C7336	WMO-NR-2011-1-128
199-N-248	C7341	WMO-NR-2011-1-133
199-K-189	C7689	WMO-NR-2011-1-056
199-D4-97	C7085	WMO-NR-2010-2-038
199-D8-91	C7093	WMO-NR-2010-2-044
199-D8-91	C7093	WMO-NR-2010-2-044
199-D8-93	C7095	WMO-NR-2010-3-149
199-N-356	C7449	WMO-NR-2011-1-203
199-D4-96	C7084	WMO-NR-2010-2-039
199-N-325	C7418	WMO-NR-2011-1-196
199-N-312	C7405	WMO-NR-2011-1-188

Table 16-4. Decommissioned Wells for the Reporting Period

Project/ Location	Well Name	Well ID	Out of Service Date
100-BC-5	199-B8-7	C5671	3/30/10
100-BC-5	199-B8-8	C5672	3/30/10
100-FR-3	699-57-25A	A5266	4/20/10
100-FR-3	699-59-24	A8915	4/28/10
100-FR-3	699-65-23	A5298	4/30/10
100-FR-3	699-74-48	A5329	5/10/10
100-FR-3	699-80-43Q	A8994	5/3/10
100-FR-3	699-80-43R	A8995	5/3/10
100-FR-3	699-85-40	A5343	5/12/10
100-FR-3	C3178	C3178	12/11/10
100-FR-3	C3180	C3180	12/11/10
100-FR-3	C3181	C3181	12/11/10
100-FR-3	C3183	C3183	12/11/10
100-FR-3	C3370	C3370	4/30/10
100-KR-4	199-K-35	A4661	5/11/10
200-BP-5	299-E35-2	A4886	5/18/10
200-BP-5	699-49-28	A5216	5/18/10
200-BP-5	699-49-32A	A8791	6/2/10
200-BP-5	699-50-28C	A8811	5/14/10
200-BP-5	699-52-37A	A8837	5/25/10
200-BP-5	699-52-37B	A8838	5/25/10
200-BP-5	699-52-38A	A8839	5/25/10
200-BP-5	699-52-38B	A8840	5/21/10
200-BP-5	699-52-57	A5237	5/19/10
200-BP-5	699-57-41A	A8896	12/13/10
200-BP-5	699-57-41F	A8901	12/13/10
200-BP-5	699-58-40	A8907	12/13/10
200-BP-5	699-58-41B	A8909	12/15/10
200-BP-5	699-59-41	C6470	7/1/10
200-BP-5	699-59-41B	C6471	7/1/10
200-BP-5	699-59-42	C6468	7/1/10
200-BP-5	699-59-42B	C6469	6/30/10
200-BP-5	699-59-43	C6462	6/25/10
200-BP-5	699-59-43B	C6463	6/25/10
200-BP-5	699-59-43C	C6464	6/28/10
200-BP-5	699-59-43D	C6465	6/29/10
200-BP-5	699-59-43E	C6466	6/29/10
200-BP-5	699-59-43F	C6467	6/29/10
200-BP-5	699-59-44	A8917	6/25/10
200-BP-5	699-59-44B	C6460	6/23/10
200-BP-5	699-59-44C	C6461	6/24/10
200-BP-5	C7789	C7789	7/7/10
200-BP-5	C7809	C7809	7/2/10
200-BP-5	C7810	C7810	7/2/10
200-BP-5	C8002	C8002	12/13/10
200-PO-1	299-E17-53	A5887	1/20/10
200-PO-1	299-E17-54	A5888	1/20/10
200-PO-1	699-10-30B	A8180	3/30/10
200-PO-1	699-11-45B	A8216	3/24/10
200-PO-1	699-11-45C	A8217	3/24/10
200-PO-1	699-13-26	A8269	4/2/10
200-PO-1	699-16-51	A8345	3/19/10
200-PO-1	699-17-25B	A8359	4/7/10
200-PO-1	699-17-26F	A8366	4/8/10
200-PO-1	699-18-25C	A8379	4/7/10
200-PO-1	699-19-27	A8409	4/7/10
200-PO-1	699-21-30A	A8439	3/19/10
200-PO-1	699-25-26	A8460	4/13/10
200-PO-1	699-26-29B	A8470	4/14/10
200-PO-1	699-32-18	A8511	3/5/10
200-PO-1	699-35-16	A8549	3/3/10
200-PO-1	699-35-19A	A8550	3/5/10
200-PO-1	699-35-19B	A8551	2/26/10
200-PO-1	699-36-17	A8564	3/3/10
200-PO-1	699-36-21	A8565	2/26/10
200-PO-1	699-37-16	A8576	3/1/10
200-PO-1	699-37-22	A8577	2/26/10
200-PO-1	699-37-25	A8578	3/15/10
200-PO-1	699-38-14	A8593	4/16/10
200-PO-1	699-38-19	A8595	3/1/10
200-PO-1	699-38-34B	A8597	4/16/10
200-PO-1	699-39-23	A8606	3/3/10
200-PO-1	699-40-13	A8636	8/20/10
200-PO-1	699-40-21	A8638	3/15/10
200-PO-1	B2871	B2871	2/8/10
200-PO-1	B2880	B2880	2/3/10
200-PO-1	B2881	B2881	6/7/10
200-PO-1	B8542	B8542	5/13/10
200-PO-1	C3359	C3359	4/27/10
200-PO-1	C3364	C3364	4/20/10
200-PO-1	C3368	C3368	4/16/10
200-PO-1	C3377	C3377	5/17/10

Table 16-4. (Cont.)

Project/ Location	Well Name	Well ID	Out of Service Date
200-PO-1	C3380	C3380	5/17/10
200-PO-1	C3403	C3403	2/3/10
200-PO-1	C3404	C3404	5/17/10
200-PO-1	C3405	C3405	5/17/10
200-PO-1	C3406	C3406	5/17/10
200-PO-1	C3407	C3407	2/3/10
200-PO-1	C3424	C3424	1/20/10
200-PO-1	C3425	C3425	5/17/10
200-PO-1	C3429	C3429	2/2/10
200-PO-1	C3430	C3430	1/20/10
200-PO-1	C3431	C3431	1/20/10
200-PO-1	C3432	C3432	2/2/10
200-PO-1	C3433	C3433	1/20/10
200-PO-1	C3435	C3435	5/17/10
200-PO-1	C3441	C3441	5/12/10
200-PO-1	C3518	C3518	4/16/10
200-PO-1	C3529	C3529	4/16/10
200-PO-1	C3530	C3530	4/16/10
200-PO-1	C7963	C7963	5/12/10
200-PO-1	C7964	C7964	5/27/10
200-UP-1	299-W23-14	A4983	1/25/10
200-UP-1	299-W23-43	A4974	1/25/10
200-UP-1	299-W26-11	A4993	1/25/10
300-FF-5	399-3-11	A8077	6/21/10
300-FF-5	644-S6-E4A	C4074	3/18/10
300-FF-5	644-S6-E4B	C4075	3/18/10
300-FF-5	644-S6-E4C	C4076	3/18/10
300-FF-5	644-S6-E4D	C4077	3/18/10
300-FF-5	644-S6-E4E	C4078	3/18/10
300-FF-5	644-S6-E4F	C4079	3/18/10
300-FF-5	644-S6-E4G	C4080	3/18/10
300-FF-5	644-S6-E4H	C4081	3/18/10
300-FF-5	644-S6-E4I	C4082	3/18/10
300-FF-5	644-S6-E4J	C4083	3/18/10
300-FF-5	644-S6-E4K	C4084	3/18/10
300-FF-5	644-S6-E4L	C4085	3/18/10
300-FF-5	644-S6-E4M	C4086	3/18/10
300-FF-5	644-S6-E4N	C4087	3/18/10
300-FF-5	699-11-E10	A8230	6/21/10
300-FF-5	699-9-E4A	A8126	6/9/10
300-FF-5	699-9-E4B	A8163	6/8/10

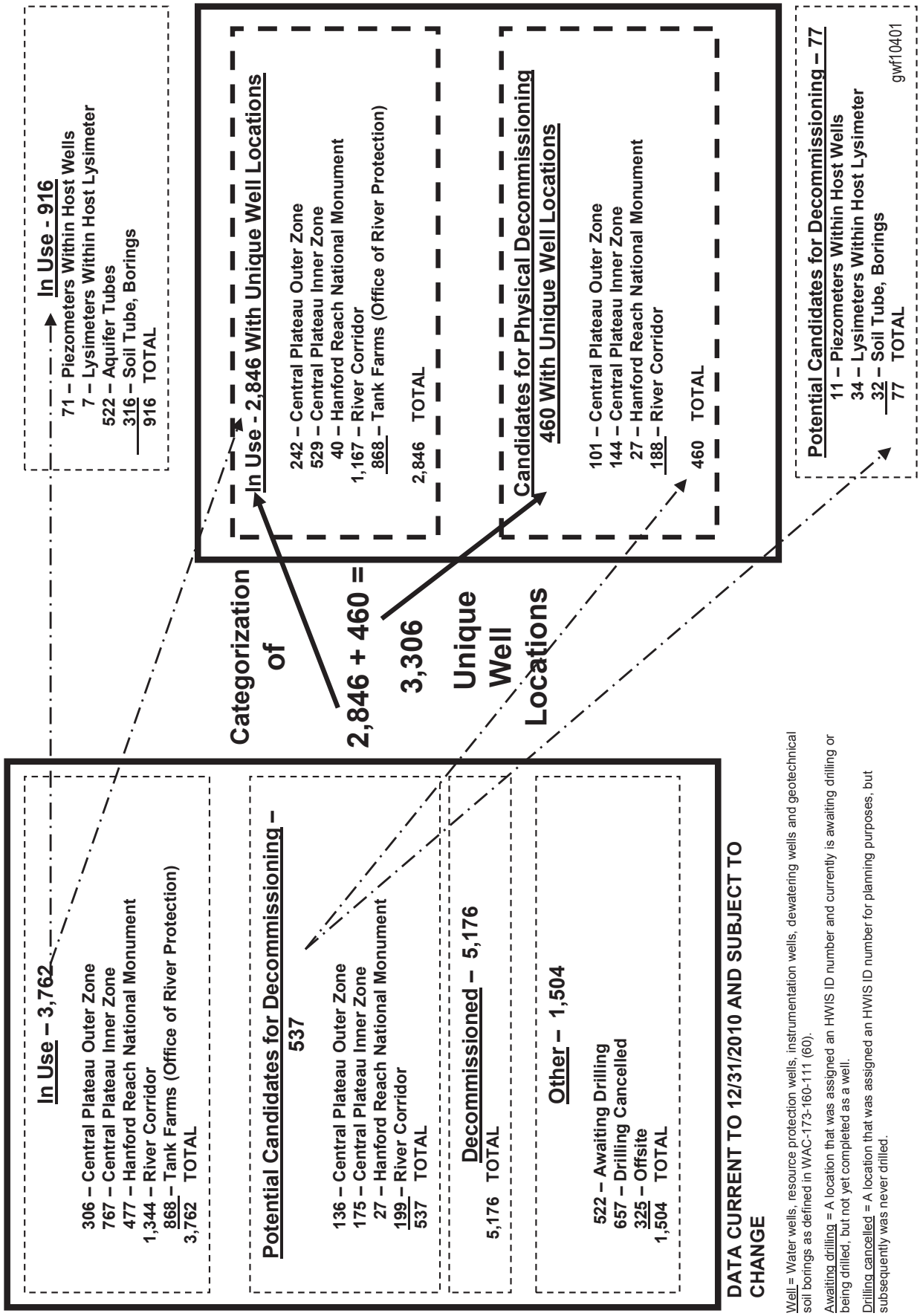
Project/ Location	Well Name	Well ID	Out of Service Date
300-FF-5	699-9-E5B	A8165	6/22/10
300-FF-5	B2874	B2874	4/15/10
300-FF-5	B2875	B2875	4/15/10
300-FF-5	B2883	B2883	5/17/10
300-FF-5	C3186	C3186	4/15/10
300-FF-5	C3187	C3187	4/15/10
300-FF-5	C3319	C3319	4/15/10
300-FF-5	C3348	C3348	6/4/10
300-FF-5	C3365	C3365	4/15/10
300-FF-5	C3371	C3371	5/12/10
300-FF-5	C3372	C3372	5/12/10
300-FF-5	C3373	C3373	6/3/10
300-FF-5	C3374	C3374	5/12/10
300-FF-5	C3375	C3375	5/12/10
300-FF-5	C3376	C3376	5/17/10
300-FF-5	C3408	C3408	5/12/10
300-FF-5	C3409	C3409	5/12/10
300-FF-5	C3410	C3410	5/12/10
300-FF-5	C3411	C3411	5/12/10
300-FF-5	C3412	C3412	5/12/10
300-FF-5	C3413	C3413	6/3/10
300-FF-5	C3414	C3414	6/3/10
300-FF-5	C3415	C3415	4/15/10
300-FF-5	C3416	C3416	4/15/10
300-FF-5	C3417	C3417	4/15/10
300-FF-5	C3418	C3418	4/15/10
300-FF-5	C3419	C3419	4/15/10
300-FF-5	C3420	C3420	4/15/10
300-FF-5	C3421	C3421	4/15/10
300-FF-5	C3422	C3422	4/15/10
300-FF-5	C3423	C3423	4/15/10
300-FF-5	C3434	C3434	5/17/10
300-FF-5	C3436	C3436	5/24/10
300-FF-5	C3437	C3437	5/24/10
300-FF-5	C3438	C3438	5/24/10
300-FF-5	C3439	C3439	5/24/10
300-FF-5	C3442	C3442	5/24/10
300-FF-5	C3443	C3443	5/24/10
300-FF-5	C3444	C3444	5/24/10
300-FF-5	C3445	C3445	5/24/10
300-FF-5	C3446	C3446	5/24/10

Table 16-4. (Cont.)

Project/ Location	Well Name	Well ID	Out of Service Date
300-FF-5	C3447	C3447	5/24/10
300-FF-5	C3453	C3453	5/27/10
300-FF-5	C3520	C3520	5/27/10
300-FF-5	C3521	C3521	5/27/10
300-FF-5	C3522	C3522	5/27/10
300-FF-5	C3523	C3523	5/27/10
300-FF-5	C3524	C3524	5/27/10
300-FF-5	C3525	C3525	5/27/10
300-FF-5	C3526	C3526	6/1/10
300-FF-5	C3527	C3527	6/1/10
300-FF-5	C3533	C3533	4/15/10
300-FF-5	C3534	C3534	4/15/10

Project/ Location	Well Name	Well ID	Out of Service Date
300-FF-5	C3535	C3535	4/15/10
300-FF-5	C3536	C3536	4/15/10
300-FF-5	C3537	C3537	6/1/10
300-FF-5	C8000	C8000	8/17/10
300-FF-5	C8001	C8001	8/17/10
Monument South (ALE, Riverland, McGee Ranch)	699-24-95	A8458	9/30/10
Monument South (ALE, Riverland, McGee Ranch)	699-S25-51	A9203	9/9/10
Monument South (ALE, Riverland, McGee Ranch)	C7762	C7762	8/19/10

Figure 16-1. Categorization of Unique Well Identification Numbers



Well = Water wells, resource protection wells, instrumentation wells, dewatering wells and geotechnical soil borings as defined in WAC-173-160-111 (60).

Awaiting drilling = A location that was assigned an HWIS ID number and currently is awaiting drilling or being drilled, but not yet completed as a well.

Drilling cancelled = A location that was assigned an HWIS ID number for planning purposes, but subsequently was never drilled.

Figure 16-2. Hanford Site and Surrounding Area Depicting Various Geographic Regions

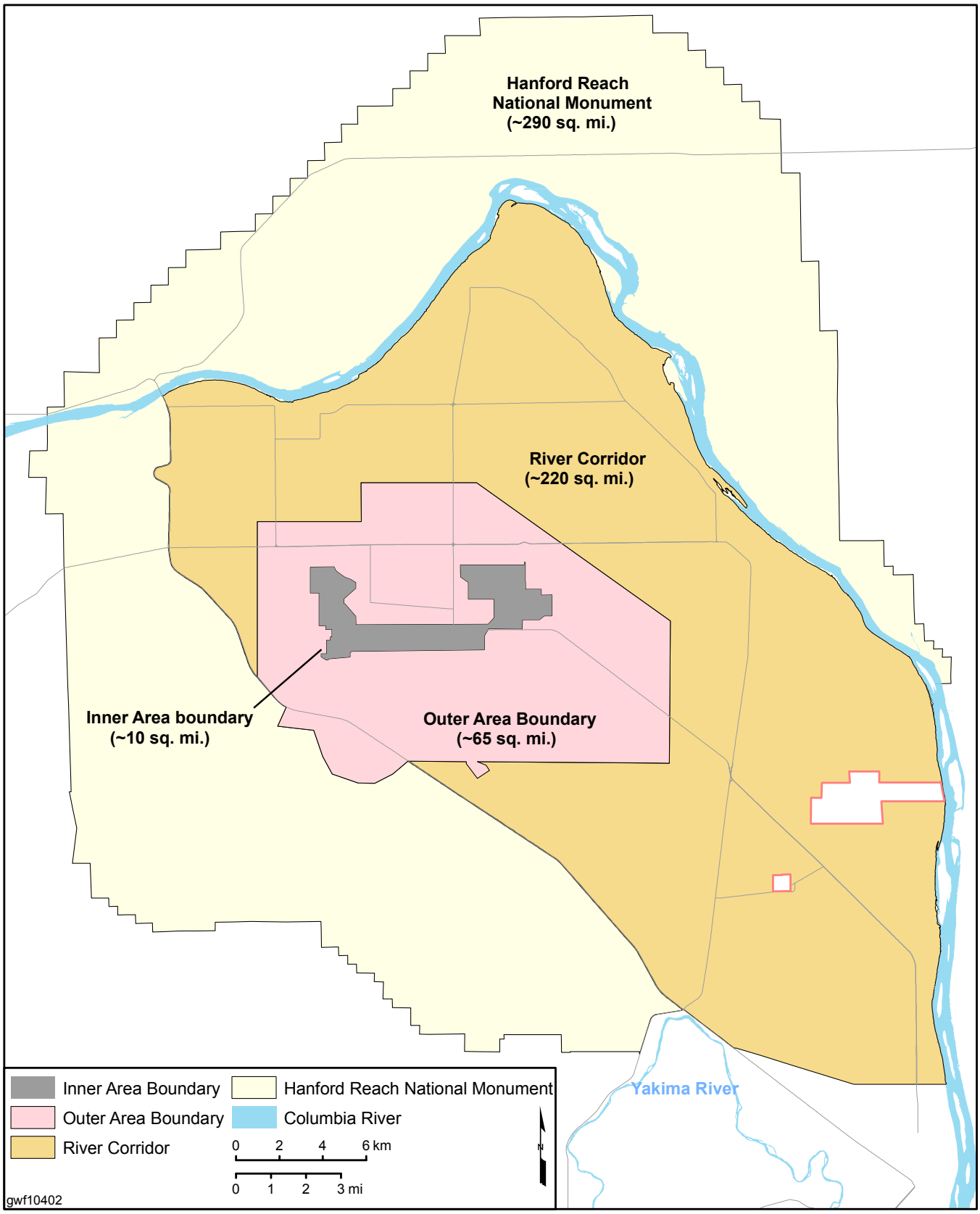
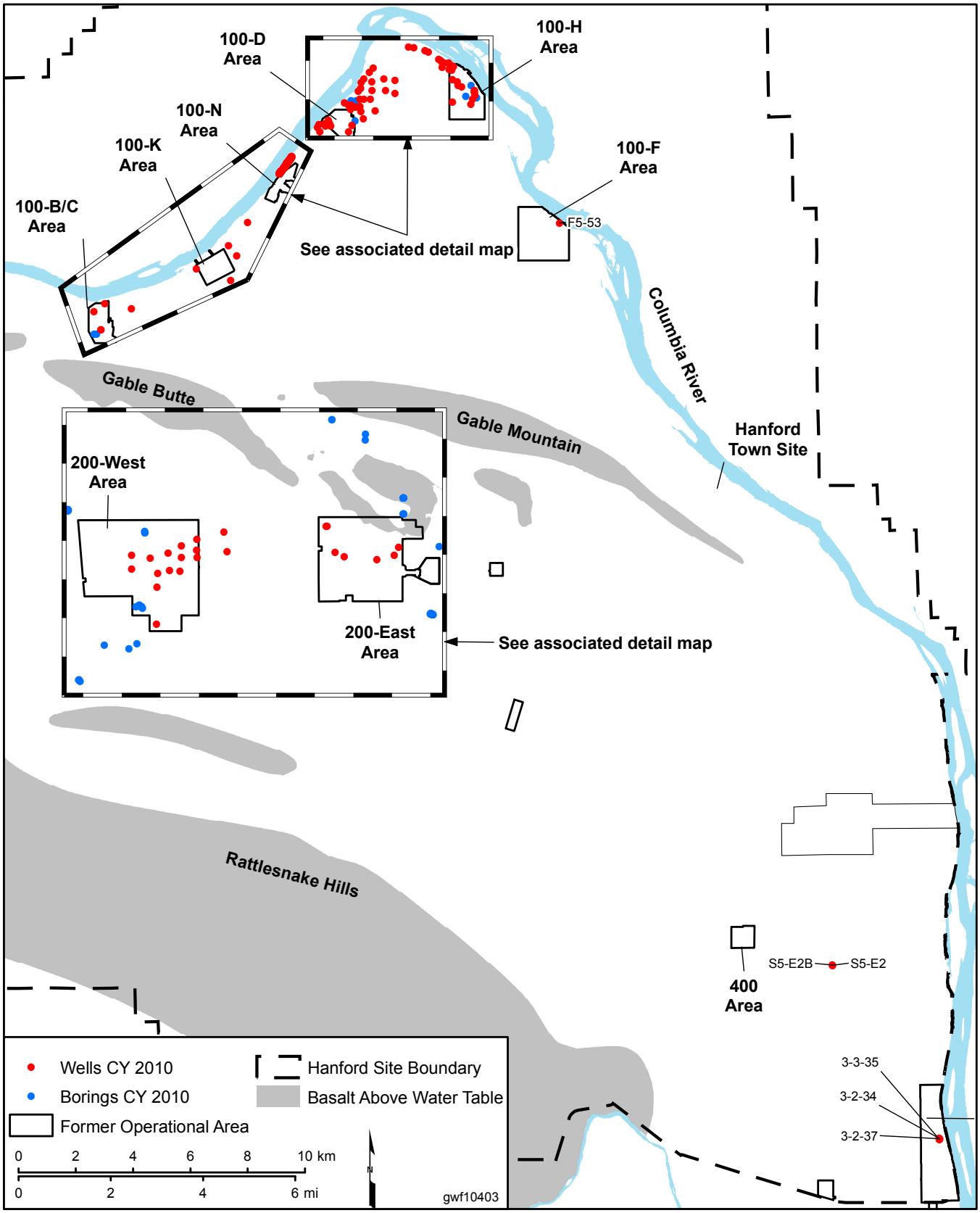


Figure 16-3. Site-Wide Well Installations for the Reporting Period



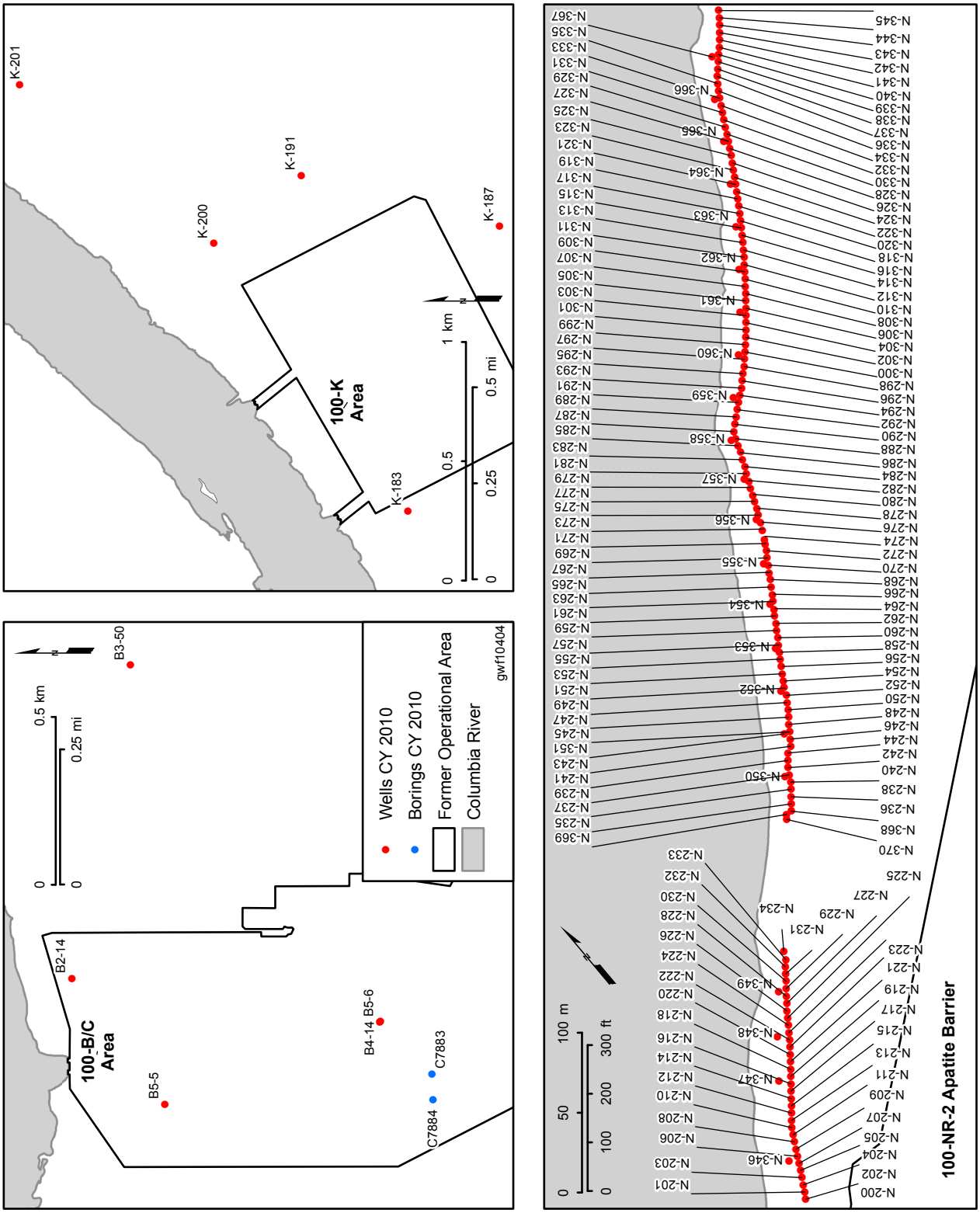


Figure 16-4. 100-B/C, 100-K, and 100-N Area Well Installations for the Reporting Period

Figure 16-5. 100-D and 100-H Area Well Installations for the Reporting Period

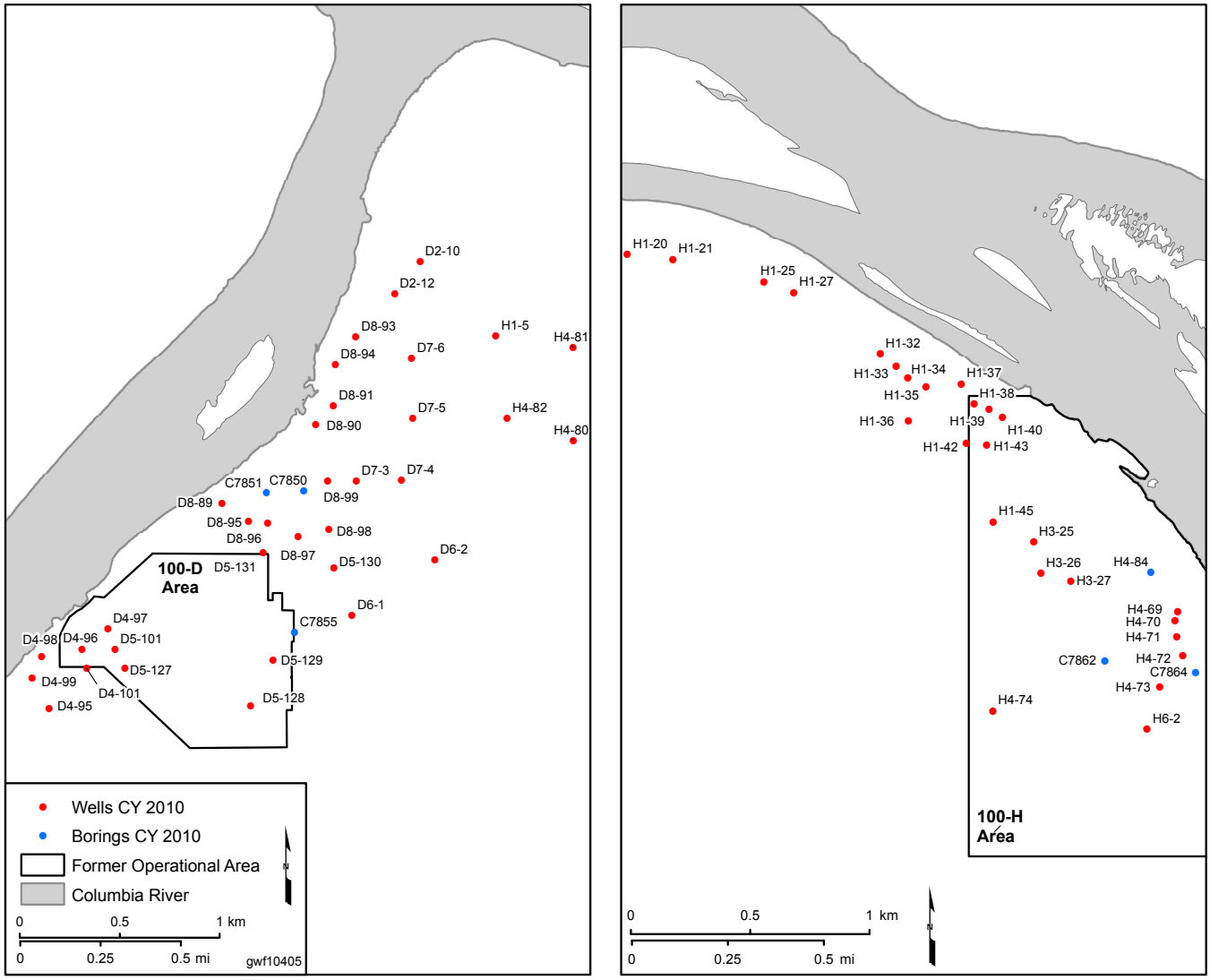
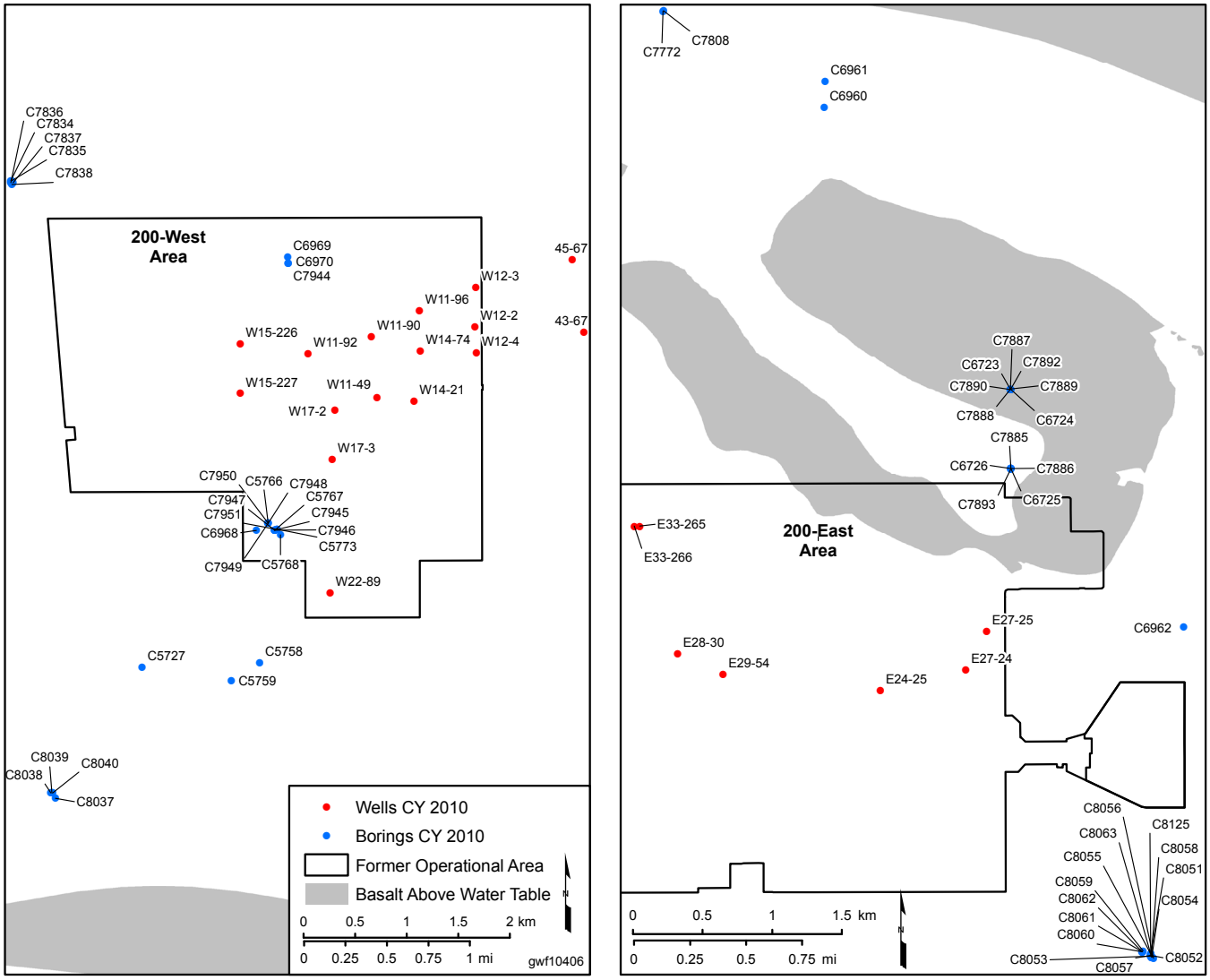



Figure 16-6. 200 East Area and 200 West Area Well Installations for the Reporting Period