FOURTH QUARTER 2009 REPORT

Operational and Environmental Monitoring Within a Three-Mile Radius of Project Rulison

APRIL 2010

Prepared by:

URS

Prepared for:

noble energy

Williams

ENCANA

EnCana Oil & Gas (USA) Inc.

FOURTH QUARTER AND ANNUAL 2009 REPORT

OPERATIONAL AND ENVIRONMENTAL MONITORING WITHIN A THREE-MILE RADIUS OF PROJECT RULISON

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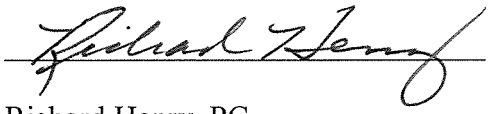

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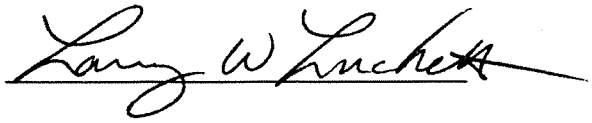

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LIST OF ACRONYMS

^{228}Ac	actinium-228
^{124}Sb	antimony-124
^{214}Bi	bismuth-214
BM	Battlement Mesa
^{14}C	carbon-14 or radiocarbon
CCR	Code of Colorado Regulations
CDPHE	Colorado Department of Public Health and Environment
^{36}Cl	chlorine-36
COC	chain-of-custody
COGCC	Colorado Oil and Gas Conservation Commission
^{134}Cs	cesium-134
^{137}Cs	cesium-137
^{56}Co	cobalt-56
DRO	diesel range organics
EnCana	EnCana Oil & Gas (USA) Inc.
^{155}Eu	europium-155
GRO	gasoline range organics
^{3}H	tritium or hydrogen-3
J	estimated data qualifier
^{85}Kr	krypton-85
mg/L	milligram per liter
MRO	motor oil range organics
Noble	Noble Energy Inc.
^{210}Pb	lead-210
^{214}Pb	lead-214
^{239}Np	Neptunium-239
^{40}K	potassium-40
pCi/L	picoCuries per liter
^{228}Ra	radium-228
RSAP	Rulison Sampling and Analysis Plan
^{22}Na	sodium-22
^{90}Sr	strontium-90
^{99}Tc	technetium-99
TF	total fraction
^{232}Th	thorium-232
Tritium	^{3}H or hydrogen-3
TU	tritium unit
^{238}U	uranium-238
U	Result is less than the detection limit (i.e., not detected)
UJ	Result is estimated below the detection limit (i.e., not detected)
µg/L	microgram per liter
µR/Hr	microRoentgen per hour
URS	URS Corporation
Williams	Williams Production RMT

1 Introduction

This quarterly report presents the fourth quarter, October 1 through December 31, 2009, operational and environmental monitoring results for Noble Energy Inc. (Noble), EnCana Oil & Gas (USA) Inc. (EnCana), and Williams Production RMT (Williams) natural gas drilling, completion, and production operations within a three-mile radius of the former Project Rulison site near Rulison, Colorado (Figure 1). Monitoring activities conducted during the fourth quarter included the following:

- 30-day first gas sales delivery sampling and analysis of produced water and natural gas at Noble's Tier I gas wells BM 26-23A, BM 26-23C, and BM 26-34D gas wells in monitoring sectors 9 and 10; and Noble's Tier II gas wells BM 26-22C, BM 26-23D, BM 26-24B, BM 26-24C, BM 26-24D, BM 34-22B, BM 34-22C, and RF 17-12B in monitoring sectors 2, 9, and 10.

- Quarterly sampling of natural gas and produced water at Noble's existing Tier I gas wells BM 36-13B, BM 26-22D, BM 26-23A, BM 26-23B, BM 26-23C, BM 26-33C, BM 26-34A, and BM 26-34D in monitoring sectors 7, 9, and 10; Noble's Tier II BM 26-24B, BM 26-24C, and RF 17-12C gas wells in monitoring sectors 2 and 9; and Williams' Tier II gas wells SP 22-13 and SP 411-13 in monitoring sectors 1 and 12.

- Annual environmental sampling and analysis of 12 groundwater and surface water locations within and adjacent to the Project Rulison monitoring zone between October 14 and 21, 2009.

Sampling and analysis was performed in accordance with the Rulison Sampling and Analysis Plan (RSAP) Revision 2 dated March 31, 2008 (URS 2008).

2 Tier I Monitoring

2.1 Gamma-Ray Log Review

No new Tier I gas wells were drilled during the fourth quarter 2009.

2.2 Tier I Drilling Monitoring

No new Tier I gas wells were drilled during the fourth quarter 2009.

2.3 Tier I Completion Monitoring

No new Tier I wells were completed during the fourth quarter 2009.

2.4 Tier I Production Monitoring

2.4.1 First Gas Delivery Sampling and Analysis

Noble's BM 26-23A, BM 26-23C, and BM 26-34D Tier I gas wells on the 26K and 26N well pads in monitoring sectors 9 and 10 were brought into production during the third and fourth quarters of 2009. First gas sales occurred at Noble's BM 26-23A and BM 26-23C on August 16 and 18, 2009, respectively. Produced water and natural gas were sampled at these wells on November 3, 2009. First gas sales occurred at Noble's BM 26-34D on September 26, 2009. Produced water and natural gas were sampled at this well on October 9, 2009. Sampling and analysis was performed as described below.

Produced water was obtained from an effluent line at the separator. If more than one gas well was plumbed to the separator, valves were closed by the Company representative to isolate the gas well of interest. Residual fluids in the produced water and natural gas lines were discharged prior to sampling so that a well-specific sample was obtained.

Produced water was collected by discharging the water from the effluent line into a clean 5-gallon bucket until full. Sample aliquots were then taken from the 5-gallon bucket and placed in the appropriately preserved laboratory-supplied sample bottles. Once filled, the sample bottles were capped, labeled, documented on the COC, and placed in an iced cooler. Field parameters, temperature, pH, specific conductance, dissolved oxygen, and oxidation-reduction potential, were measured on a separate sample aliquot at the well site.

Natural gas was sampled by connecting a braided steel sampling hose between the sampling port on the separator line and a laboratory-supplied, evacuated 20-pound gas tank. The sampling

hose was flushed with natural gas prior to collecting the sample. The gas tanks are shipped under vacuum from the laboratory, so flushing of the gas tank is not required prior to filling. Because the gas sampling tanks are under vacuum, sampling simply involves opening the sampling hose and tank valves and allowing the tank to fill to capacity. Once filled, the valve on the gas sampling tank and sample port were closed. The Company representative returned any closed valves at the separator to their initial open configuration. The gas tank was labeled, documented on the COC, and placed in a shipping carton.

The iced coolers and gas tanks were shipped by overnight carrier to the analytical laboratories for analysis of the radiological and nonradiological analytes listed in Tables 3 and 4 of the RSAP (URS 2008). The analytical laboratories used included GEL Laboratories LLC in Charleston, South Carolina (for radionuclides other than ^{3}H), ALS Laboratory Group (formerly Paragon Analytics) in Fort Collins, Colorado (for non-radionuclides), and Isotech Laboratories, Inc. in Champaign, Illinois (for ^{3}H in produced water and ^{3}H, carbon-14 (^{14}C), and gas composition in natural gas).

The analytical results are discussed in Section 5 and are summarized in Tables 1 through 5. The laboratory data packages are included in Appendix A. Laboratory data were independently validated by URS. Data validation reports are included in Appendix B. Field sampling records are included in Appendix C.

2.4.2 Quarterly Tier I Well Sampling and Analysis

Quarterly sampling of produced water and natural gas was performed at eight existing Noble Tier I gas wells BM 36-13B, BM 26-22D, BM 26-23A, BM 26-23B, BM 26-23C, BM 26-33C, BM 26-34A, and BM 26-34D in monitoring sectors 7, 9, and 10 on December 2, 17, and 21, 2009. These wells are currently the closest producing Tier I gas wells within monitoring sectors 7, 9, and 10. Sampling at these wells was performed to fulfill RSAP requirements for quarterly sampling of the existing Tier I producing gas wells for one year and/or sampling at the closest gas well within each monitoring sector.

Natural gas and produced water samples were not obtained at Noble Tier I gas wells BM 36-13 and BM 36-23 because these wells were shut-in on August 14, 2009 and are currently on indefinite standby and not producing.

Sampling and analysis of the produced water and natural gas was performed as discussed in Section 2.4.1 of this report.

The analytical results are discussed in Section 5 and are summarized in Tables 1 through 5. The laboratory data packages are included in Appendix A. Laboratory data were independently validated by URS. Data validation reports are included in Appendix B. Field sampling records are included in Appendix C.

2.5 Tier I Application for Permit to Drill Conditions of Approval (COA) Monitoring

No new Tier I wells were drilled or completed during the fourth quarter 2009.

3 Tier II Monitoring

3.1 Tier II Drilling Monitoring

3.1.1 Gamma-Ray Log Review

No new Tier II gas wells were drilled during the fourth quarter 2009.

3.2 Tier II Production Monitoring

3.2.1 First Gas Delivery Sampling and Analysis

Noble's Tier II gas wells BM 26-22C, BM 26-23D, BM 26-24B, BM 26-24C, BM 26-24D, BM 34-22B, BM 34-22C, and RF 17-12B in monitoring sectors 2, 9, and 10 were brought into production during the third and fourth quarters of 2009. First gas sales occurred at RF 17-12B in monitoring sector 2 on October 18, 2009. Produced water and natural gas was sampled at this well on November 12, 2009. First gas sales occurred at BM 26-22C in monitoring sector 10 on September 14, 2009. Produced water and natural gas was sampled at this well on October 9, 2009. First gas sales occurred at BM 26-23D on the 26K well pad in monitoring sector 9 on September 12, 2009 and at BM 26-24C, BM 26-24B, BM 26-24D on the 26N well pad in monitoring sector 9 on September 24, September 30, and October 16, 2009, respectively. Produced water and natural gas was sampled at BM 26-24B on October 9, 2009, at BM 26-24C on October 22, and at BM 26-23D and BM 26-24D on November 3, 2009. First gas sales occurred at BM 34-22B and BM 34-22C on the 34F well pad in monitoring sector 10 on December 2 and 14, 2009, respectively. Produced water and natural gas were sampled at these wells on December 21, 2009.

Sampling and analysis of produced water and natural gas was performed as discussed in Section 2.4.1 of this report.

The analytical results are discussed in Section 5 and are summarized in Tables 1 through 5. The laboratory data packages included in Appendix A. Laboratory data were independently validated by URS. Data validation reports are included in Appendix B. Field sampling records are included in Appendix C.

3.2.2 Quarterly Tier II Gas Well Sampling and Analysis

Quarterly Tier II sampling and analysis was performed at Noble's RF 17-12C, BM 26-24B, and BM 26-24C and Williams SP 22-13 and SP 411-13 gas wells during the fourth quarter 2009. At present, RF 17-12C, SP 22-13, and SP 411-13 are the closest producing gas wells within Rulison

monitoring sectors 2, 1, and 12, respectively. Produced water and natural gas samples were obtained at these gas wells on December 1, 2009.

Sampling and analysis of produced water and natural gas was performed as discussed in Section 2.4.1 of this report.

The analytical results are discussed in Section 5 and are summarized in Tables 1 through 5. The laboratory data packages in Appendix A. Laboratory data were independently validated by URS. Data validation reports are included in Appendix B. Field sampling records are included in Appendix C.

3.3 Tier II Application for Permit to Drill Conditions of Approval (COA) Monitoring

No new Tier II wells were drilled or completed during the fourth quarter 2009.

4 Annual Areal Environmental Monitoring

The 2009 annual areal environmental surface water and groundwater monitoring was performed between October 14 and 21, 2009 to document groundwater and surface water quality within and adjacent to the Project Rulison monitoring area. Although environmental monitoring of the near surface aquifers, springs, and streams by both the DOE and the Companies have not detected any verified Project Rulison-related radionuclides and no pathway for radionuclides to migrate from the Project Rulison cavity to the shallow subsurface has been recognized, the Companies have elected to perform this monitoring because of COGCC, CDPHE, and public concerns about a verified Project Rulison-related radionuclide release to the local water supply.

The 2009 annual areal environmental monitoring included sampling of 9 groundwater and 3 surface water monitoring locations (Figure 2). Sampling at three additional locations was proposed but was not performed because the landowners (Kent, Warren, and Weldon) did not grant permission to sample their wells. These locations have been previously sampled by both DOE and the Companies.

The groundwater and surface water samples were collected in accordance with the procedures described in Sections 5.5 and 5.6 of the RSAP Revision 2 (URS 2008). The samples collected were shipped by overnight carrier to the analytical laboratories for analysis of the radiological and nonradiological analytes listed in Tables 3 and 4 of the RSAP. The analytical laboratories used included GEL Laboratories LLC in Charleston, South Carolina (for radionuclides other than tritium [^{3}H]), Isotech Laboratories, Inc. in Champaign, Illinois (for ^{3}H), and ALS Laboratory Group (formerly Paragon Analytics) in Fort Collins, Colorado (for nonradionuclides).

The analytical results are discussed in Section 6 and are summarized in Tables 6 through 9. The laboratory data packages in Appendix A. Laboratory data were independently validated by URS. Data validation reports are included in Appendix B. Field sampling records are included in Appendix C.

5 Tier I and II Operational Monitoring Results

5.1 Tier I and II Radiological Analytical Results

Gross alpha, gross beta, gamma-emitting radionuclides, strontium-90 (^{90}Sr), technetium-99 (^{99}Tc), and chlorine-36 (^{36}Cl) activities were analyzed in produced water (PW) collected at Tier I and II gas wells during the fourth quarter 2009. ^{3}H was analyzed in produced water and natural gas (NG) samples. ^{14}C was also analyzed in natural gas from the producing wells sampled.

The results of the radiological analyses are summarized in Table 1. Table 1 includes both radionuclides detected and those that were analyzed but were not detected. The table is sorted so that the detected radionuclides occur at the top. These data were independently validated by URS and most of the radiological results were found to be usable without qualification. Data that are deemed usable as qualified or unusable are flagged and identified in the data validation reports (Appendix B) and Table 1. Unusable results are not reported in Table 1.

5.1.1 Gross Alpha Results

Gross alpha activities in produced water ranged between not detected (less than 29.3) and 123 ± 36.9 picoCuries per liter (pCi/L). Gross alpha activity was generally reported at an elevated reporting activity because of the high total dissolved solids (TDS) concentration of the produced water samples. The high TDS concentrations resulted in the evaporation of a smaller sample volume during analysis because the gross alpha analytical method limits the residue after evaporation to 100 milligrams or less. The lowest gross alpha activity detected (less than 29.3 pCi/L) occurred in produced water from Noble's BM 26-24B Tier II gas well on the 26N well pad in monitoring sector 9. The highest gross alpha activity detected (123 ± 36.9 pCi/L) occurred in produced water from Noble's BM 26-23B Tier I gas well on the 26K well pad in monitoring sector 10. The gross alpha activity detected is related to naturally occurring alpha-emitting radionuclides, primarily ^{238}U, ^{232}Th, and their daughter products (Figures 3 and 4), found in the subsurface formation fluids or fluids used for drilling or completion.

5.1.2 Gross Beta Results

Gross beta activities in produced water ranged between not detected (less than 24.4) and 238 ± 39.4 pCi/L. Gross beta activity was generally reported at an elevated reporting activity because of the high TDS concentration in the produced water samples. The high TDS concentrations resulted in the evaporation of a smaller sample volume during analysis because the gross beta analytical method limits the residue after evaporation to 100 milligrams or less. The highest gross beta activity detected (238 ± 39.4 pCi/L) occurred in produced water from Noble's BM 26-

23B Tier I gas well on the 26K well pad in monitoring sector 10. The lowest gross beta activity detected (less than 24.4 pCi/L) occurred in produced water from Williams SP 22-13 Tier II gas well in monitoring sector 1.

The elevated gross beta activities are typically related to naturally occurring potassium-40 (^{40}K) in the subsurface formation fluids or fluids used for drilling and completion. ^{40}K activities in the produced water samples ranged between 64.7 ± 25.7 and 585 ± 85.7 pCi/L. These values are consistent with the gross beta activities reported above. The highest ^{40}K activity detected (585 ± 85.7 pCi/L) occurred in produced water from Noble's BM 26-22C Tier II gas well on the 26K well pad in monitoring sector 10. The lowest ^{40}K activity detected (64.7 ± 25.7 pCi/L) occurred in produced water from Williams SP 22-13 Tier II gas well in monitoring sector 1.

5.1.3 ^{3}H Results

^{3}H, the most abundant and mobile radionuclide in the inventory at Project Rulison, was not detected above its reporting concentration in any of the produced water samples analyzed during the fourth quarter 2009. The ^{3}H reporting concentration in the produced waters were less than 10 tritium units (TU). One TU equals 1 tritium atom per 10^{18} hydrogen atoms or approximately 3.19 pCi/L (Kazemi et al. 2006). Thus, the ^{3}H activities in the produced water samples were less than 32 pCi/L. The Colorado Department of Public Health and Environment (CDPHE) basic ground water standard for ^{3}H is 20,000 pCi/L (CDPHE 2009).

5.1.4 ^{90}Sr and ^{99}Tc Results

^{90}Sr and ^{99}Tc, common radionuclides in the inventory at Project Rulison, were not detected above their reporting activities in any of the produced water samples analyzed during the fourth quarter 2009. The ^{90}Sr and ^{99}Tc reporting activities in the produced water samples ranged between less than 0.562 and less than 2.41 pCi/L, and less than 20.3 and less than 90.1 pCi/L, respectively.

5.1.5 ^{36}Cl Results

^{36}Cl, a less common radionuclide in the inventory at Project Rulison, was not detected above its reporting activities in any of the produced water samples analyzed during the fourth quarter 2009. The ^{36}Cl reporting activities in the produced water samples ranged between less than 0.323 and less than 505 pCi/L. ^{36}Cl was generally reported at an elevated reporting activity because of the high natural chloride concentration in these samples. The high chloride concentrations resulted in the use of a smaller sample volume (1 to 5 milliliters) because the ^{36}Cl analytical method limits the precipitate volume used in the analysis.

5.1.6 Gamma-Emitting Radionuclide Results

Most of the gamma-emitting radionuclides, including ^{137}Cs, in the produced water samples analyzed during the fourth quarter 2009 were not detected above their reporting activities. Verified gamma-emitting radionuclides detected include those that naturally occur in the subsurface formation fluids and rocks in the Williams Fork Formation. Naturally occurring gamma-emitting radionuclides detected included actinium-228 (^{228}Ac), bismuth-214 (^{214}Bi), ^{40}K, lead-212 (^{212}Pb), lead-214 (^{214}Pb), radium-228 (^{228}Ra), and thallium-208 (^{208}Tl). All of these radionuclides, except for ^{40}K, are decay products of the thorium-232 (^{228}Ac, ^{212}Pb, ^{228}Ra, and ^{208}Tl) and uranium-238 (^{214}Bi and ^{214}Pb) decay series. The thorium and uranium series decay chains are shown as Figures 3 and 4.

5.1.7 ^{3}H and ^{14}C in Natural Gas Results

^{3}H was not detected above its reporting concentration in the methane fraction (tritium C1) of any of the natural gas samples analyzed during the fourth quarter 2009 (Table 1). ^{3}H reporting concentrations in natural gas were less than 10 TU (Table 1). One TU equals 1 tritium atom per 10^{18} hydrogen atoms or approximately 3.19 pCi/L in water (pCi/L_{water}; Kazemi et al. 2006). For ^{3}H analysis, water in the gas is removed using a molecular sieve and the dry methane is subsequently combusted to produce carbon dioxide and water. At 20^{o}C and one atmosphere, it takes approximately 621 liters of combusted methane to produce one liter of water. To convert the reported methane tritium results to pCi/L methane gas ($pCi/L_{methane}$), a conversion factor of 1.61E-3 $L_{water}/L_{methane}$ is used. Thus, the ^{3}H activities in the methane fraction of the natural gas samples were less than 0.05 $pCi/L_{methane}$.

^{14}C concentrations in the methane fraction (14C1) of the natural gas samples analyzed during the fourth quarter 2009 ranged between not detected (less than 0.4) and 1.3 ± 0.2 percent modern carbon (pMC) as shown in Table 1. ^{14}C is reported as pMC which is set by convention as 13.56 decays per minute per gram of carbon (Kazemi et al. 2006), or 100 pMC. ^{14}C results less than 2 pMC indicate that modern ^{14}C is not present in the gas and that the natural gas has been isolated from sources of modern ^{14}C, such as Project Rulison, for thousands of years.

5.1.8 Radiological Results Summary

Project Rulison-related radionuclides, including the most abundant radionuclides in the Project Rulison inventory (Table 1 in URS 2008), ^{3}H, ^{137}Cs, ^{90}Sr, ^{99}Tc, and ^{36}Cl were not detected above their reporting activities in any of the produced water or natural gas samples collected within the Project Rulison monitoring zone during the fourth quarter 2009.

^{14}C was detected in natural gas at concentrations less than 2 pMC which indicates that the natural gas has been isolated from sources of modern ^{14}C, such as Project Rulison, for thousands of years.

The only verified gamma-emitting radionuclides detected (e.g., ^{40}K and daughter products of the ^{238}U and ^{232}Th decay series) are those that naturally occur in the subsurface formation fluids and rocks in the Williams Fork Formation.

Based on the reported results, no verified Project Rulison-related radionuclides were detected in produced water or natural gas during the fourth quarter 2009. The fourth quarter 2009 radiological results for produced waters and natural gases are consistent with the radiological results reported for these media during previous quarters.

5.2 Tier I and II Non-Radiological Analytical Results

Total metal, inorganic parameters, and organic constituents were analyzed in produced water (PW) samples collected during the fourth quarter 2009. The composition of natural gas samples from producing wells was also determined. The results of nonradiological analyses (i.e., total metals, inorganic parameters, organic constituents, and natural gas composition) are summarized in Tables 2 through 5. Independent data validation by URS indicates that most of the non-radiological results are usable without qualification. Data that are deemed usable as qualified or unusable are flagged and identified in the data validation reports (Appendix B). Unusable results are not reported in these tables.

5.2.1 Major Cation and Trace Metal Results

Total metals in produced water samples analyzed during the fourth quarter 2009 were determined for major cations (calcium, magnesium, sodium, and potassium) and trace metals (arsenic, barium, boron, cadmium, chromium, iron, lead, lithium, manganese, mercury, selenium, strontium, and uranium). The analytical results indicate that these metals are detected at varying concentrations. The results of the major cation and trace metal analyses are summarized in Table 2.

Sodium and potassium are the dominant major cations in the produced water samples. The mean sodium and potassium concentrations detected are 7,874 milligrams per liter (mg/L) and 434 mg/L, respectively. Calcium and magnesium in the produced waters are found at significantly lower concentrations compared to sodium and potassium. The mean calcium and magnesium concentrations are 354 mg/L and 47 mg/L, respectively.

Barium, iron, strontium, lithium, boron, and manganese are the dominant trace metals detected in the produced water samples. Barium, iron, strontium, boron, lithium, and manganese were detected in all of the produced water samples analyzed. Mean concentrations of these trace metals in the produced waters includes barium (110,565 micrograms per liter [µg/L]), iron (80,087 µg/L), strontium (50,826 µg/L), lithium (5,839 µg/L), boron (5,422 µg/L), and manganese (1,251 µg/L). Less common trace metals detected in some of the produced waters (percentage of detections shown in parenthesis) includes chromium (70%), arsenic (78%), lead (78%), cadmium (48%), selenium (35%), uranium (43%), and mercury (39%). Mean concentrations of these less common trace metals that are less than 50 µg/L but greater than 5 µg/L includes chromium (27.0 µg/L) and lead (5.78 µg/L). The mean concentrations of the remaining trace metals detected but are less than 5 µg/L includes arsenic (3.79 µg/L), cadmium (1.27 µg/L), uranium (0.53 µg/L), selenium (0.31 µg/L), and mercury (0.22 µg/L).

5.2.2 Major and Minor Anion and pH Results

Major and minor anions and pH in produced water samples were analyzed during the fourth quarter 2009. The results of these analyses are summarized in Table 3. Chloride is the dominant major anion in the produced waters. The mean chloride concentration is 15,387 milligrams per liter (mg/L). Chloride is the primary constituent comprising the mean total dissolved solids (TDS) concentration (25,478 mg/L). The next most abundant major anion in the produced waters is bicarbonate (as $CaCO_3$) whose mean concentration is 1,428 mg/L. Bicarbonate is the primary constituent comprising the mean total alkalinity (as $CaCO_3$) of 1,428 mg/L. The mean pH for the produced waters is 6.57, which is consistent with bicarbonate being the dominant carbonate component in these fluids. Carbonate (as $CaCO_3$) was not detected at concentrations above its reporting limit of less than 100 mg/L.

Bromide and ammonia (as N) are the predominant minor anions in produced water with mean concentrations of 89 and 31 mg/L, respectively. Sulfate was detected in 17 produced water samples at an estimated (J) mean concentration of 50 mg/L. Fluoride was detected in 9 produced water samples at an estimated (J) mean concentration of 2.2 mg/L. Nitrate (as N) was detected in two produced water samples at estimated (J) concentrations of 3.4 and 3.5 mg/L. The remaining nitrate (as N) and sulfate results, and the fluoride, orthophosphate (as P), nitrate/nitrite (as N), and nitrite (as N) results were not detected above their respective reporting limits. The occurrence of ammonia and general lack of nitrate and nitrite suggests that these fluids are generally reducing, resulting in the reduction of nitrogen to a -3 oxidation state. The reducing conditions are also consistent with the high dissolved iron concentrations and iron oxyhydroxide precipitates often observed during sampling.

5.2.3 Gasoline, Diesel, and Motor Oil Constituent Results

Produced water samples were analyzed for gasoline, diesel, and motor oil range constituents during the fourth quarter 2009. The results of these analyses are summarized in Table 4. The produced waters had a mean dissolved petroleum hydrocarbon concentration of 916 mg/L. The mean dissolved petroleum hydrocarbons are comprised of 599 mg/L diesel range organics (DRO), 294 mg/L gasoline range organics (GRO), and 23 mg/L motor oil range organics (MRO). Mean concentrations of the dissolved BTEX constituents includes benzene (13,626 µg/L), ethylbenzene (2,133 µg/L), toluene (34,191 µg/L), m+p-xylenes (30,035 µg/L), and o-xylenes (4,565 µg/L). Total xylenes (41 percent) and toluene (40 percent) comprise the bulk of the dissolved BTEX constituents in the produced waters. The mean dissolved methane concentration in the produced waters is 3,347 µg/L.

5.2.4 Gas Composition Results

The composition of the natural gas samples was determined during the fourth quarter 2009. The results of these analyses are summarized in Table 5. Natural gas composition analyses indicate that methane is the predominant component of the gas. The mean methane gas component comprises 86.7 percent. Carbon dioxide (6.9 percent), ethane (4.1 percent), and propane (1.1 percent) comprise the next most abundant natural gas components. These four constituents comprise about 99 percent of the natural gas. The remaining 1 percent of the gas is comprised of iso-butane (0.224 percent), n-butane (0.211 percent), C6+ (0.216 percent), nitrogen (0.412 percent), iso-pentane (0.084 percent), n-pentane (0.060 percent), oxygen (0.035 percent), and traces of hydrogen (0.006 percent) and helium (0.004 percent). Ethylene, argon, carbon monoxide, and hydrogen sulfide were not detected above their respective reporting limits.

The mean heating value of the natural gas at base conditions (14.696 pound per square inch atmosphere and 60 degrees Fahrenheit [^{o}F]; ASTM 2003) is 1008 British thermal units per cubic foot (BTU/Ft^3). The mean relative gas density (calculated as the ratio of natural gas density to air density, ρ_g/ρ_a) is 0.666. The mean $\delta\ ^{13}$C value of the methane (C1) gas fraction is -36.2 parts per mil (i.e., parts per thousand, ‰) which suggests that the natural gas is of thermogenic origin.

5.2.5 Non-Radiological Results Summary

The fourth quarter 2009 nonradiological results for produced waters and natural gases are consistent with the nonradiological results reported for these media during previous quarters.

6 Annual Environmental Monitoring Results

6.1 Environmental Radiological Analytical Results

Gross alpha, gross beta, gamma-emitting radionuclides, strontium-90 (^{90}Sr), technetium-99 (^{99}Tc), and chlorine-36 (^{36}Cl) activities were analyzed in surface water and groundwater samples collected in and adjacent to the Project Rulison monitoring area. The results of the radiological analyses are summarized in Table 6. Table 6 includes both radionuclides detected and those that were analyzed but were not detected. The table is sorted so that the detected radionuclides occur at the top. These data were independently validated by URS and most of the radiological results were found to be usable without qualification. Data that are deemed usable as qualified or unusable are flagged and identified in the data validation reports (Appendix B) and Table 6. Unusable results are not reported in Table 6.

6.1.1 Gross Alpha Results

Gross alpha activities in surface water and groundwater ranged between not detected (less than 2.79) and 9.78 ± 3.95 picoCuries per liter (pCi/L). The lowest gross alpha activity detected (less than 2.79 pCi/L) occurred in groundwater from RS-W4. The highest gross alpha activity detected (9.78 ± 3.95 pCi/L) occurred in groundwater from GVS-SP1. The gross alpha activity detected is related to naturally occurring alpha-emitting radionuclides, primarily uranium-238 (^{238}U), thorium-232 (^{232}Th), and their daughter products (Figures 3 and 4), found in the surface and subsurface soils and rock formations.

Gross alpha is regulated under the Colorado basic standards for groundwater. None of these constituents exceeded the gross alpha standard of 15 pCi/L.

6.1.2 Gross Beta Results

Gross beta activities in surface water and groundwater ranged between not detected (less than 2.72) and 934 ± 14.9 pCi/L. The lowest gross beta activity detected (less than 2.72 pCi/L) occurred in groundwater at EG-SP2. The highest gross beta activity detected (934 ± 14.9 pCi/L) occurred in groundwater at HC-S2. Gross beta activities in these waters are related to naturally occurring potassium-40 (^{40}K), radium-228 (^{228}Ra), and ^{238}U daughters, protactinium-234 (^{234}Pa) and thorium-234 (^{234}Th), in the surface and subsurface soils and rock formations.

The gross beta result at HC-S2 may be a false positive as the most likely beta emitters, ^{40}K and ^{3}H, that would contribute to gross beta were not detected above their reporting activities in this

sample. Re-analysis of this sample was not possible to confirm the gross beta result because of insufficient sample volume.

Gross beta is regulated under the Colorado basic standards for groundwater as beta and photon emitters (4 millirem per year). With the exception of the groundwater sample at HC-S2, none of the other surface water or groundwater samples exceeded the gross beta screening criterion of 50 pCi/L (40 CFR 141.26[b][1][i]).

6.1.3 ^{3}H Results

^{3}H, the most abundant and mobile radionuclide in the inventory at Project Rulison, was not detected above its reporting concentration in any of the surface water or groundwater samples analyzed during the fourth quarter 2009. The ^{3}H reporting concentrations in these fluids ranged between less than 10 and less than 11.7 tritium units (TU). One TU equals 1 tritium atom per 10^{18} hydrogen atoms or approximately 3.19 pCi/L (Kazemi et al. 2006). Thus, the ^{3}H activities in these fluid samples ranged between less than 32 to less than 37 pCi/L. The Colorado Department of Public Health and Environment (CDPHE) basic ground water standard for ^{3}H is 20,000 pCi/L (CDPHE 2009).

6.1.4 ^{90}Sr and ^{99}Tc Results

^{90}Sr and ^{99}Tc, common radionuclides in the inventory at Project Rulison, were not detected above their reporting activities in any of the surface water or groundwater samples analyzed during the fourth quarter 2009. The ^{90}Sr and ^{99}Tc reporting activities in these waters ranged between less than 1.40 and less than 1.98 pCi/L, and less than 32.7 and less than 37 pCi/L, respectively.

6.1.5 ^{36}Cl Results

^{36}Cl, a less common radionuclide in the inventory at Project Rulison, was not detected above its reporting activities in any of the surface water or groundwater samples analyzed during the fourth quarter 2009. The ^{36}Cl reporting activities in these media ranged between less than 183 and less than 376 pCi/L for these waters.

6.1.6 Gamma-Emitting Radionuclide Results

Most of the gamma-emitting radionuclides in surface water and groundwater samples analyzed during the fourth quarter 2009 were not detected above their reporting activities. Verified gamma-emitting radionuclides detected include those that naturally occur in surface water, groundwater, and in the surficial and subsurface soils and rock formations in the area. Naturally

occurring gamma-emitting radionuclides detected included bismuth-214 (^{214}Bi) and lead-214 (^{214}Pb). These two radionuclides are decay products of the ^{238}U decay series. The uranium series decay chain is shown as Figure 4.

6.1.7 Radiological Results Summary

Project Rulison-related radionuclides, including the most abundant radionuclides in the Project Rulison inventory (Table 1 in URS 2008), ^{3}H, ^{137}Cs, ^{90}Sr, ^{99}Tc, and ^{36}Cl were not detected above their reporting activities in any of the surface water or groundwater samples collected within the Project Rulison monitoring zone during the fourth quarter 2009.

The only verified gamma-emitting radionuclides detected (e.g., daughter products of the ^{238}U decay series) are those that naturally occur in the surface waters, groundwaters, surficial and subsurface soils and rock formations.

Based on the reported results, no verified Project Rulison-related radionuclides were detected in surface water and groundwater samples collected during the fourth quarter 2009. The annual environmental radiological monitoring results for surface waters and groundwaters in 2009 are consistent with the radiological results previously reported for these media.

6.2 Environmental Non-Radiological Analytical Results

Total metal and inorganic and organic constituent concentrations were analyzed in surface water and groundwater samples collected during the fourth quarter 2009. The results of nonradiological analyses (i.e., total metals, inorganic parameters, and organic constituents) are summarized in Tables 7 through 9. Independent data validation by URS indicates that most of the non-radiological results are usable without qualification. Data that are deemed usable as qualified or unusable are flagged and identified in the data validation reports (Appendix B). Unusable results are not reported in these tables.

6.2.1 Major Cation and Trace Metal Results

Total metals in surface water and groundwater samples during the fourth quarter 2009 were determined for major cations (calcium, magnesium, sodium, and potassium) and trace metals (arsenic, barium, boron, cadmium, chromium, iron, lead, lithium, manganese, mercury, selenium, strontium, and uranium). The analytical results indicate that these metals are detected at varying concentrations. The results of the major cation and trace metal analyses are summarized in Table 7.

Calcium, sodium, and magnesium are the dominant major cations in the surface water and groundwater samples analyzed. The mean calcium, sodium, and magnesium concentrations detected are 41.4, 32.2, and 26.5 milligrams per liter (mg/L), respectively. Potassium in surface water and groundwater samples is found at significantly lower concentrations compared to calcium, sodium, and magnesium. The mean potassium concentrations are 1.8 mg/L. None of these constituents are regulated under the Colorado basic standards for ground water (CDPHE 2009).

Total arsenic, barium, boron, iron, lithium, manganese, mercury, selenium, strontium, and uranium were detected at trace concentrations in the surface water and groundwater samples analyzed. Total cadmium, chromium, and lead were not detected above their respective reporting limits. Arsenic, barium, boron, strontium, and uranium were detected in all of the surface water and groundwater samples analyzed. Mean concentrations of these trace metals includes, barium, boron, strontium, and uranium concentrations are arsenic (2.9 µg/L), barium (63.4 µg/L), boron (67.9 µg/L), strontium (541 µg/L), and uranium (2.9 µg/L). Less common trace metals detected in some of the surface water and groundwater samples (percentage of detections shown in parenthesis), includes iron (58%), lithium (83%), manganese (50%), mercury (17%), and selenium (67%). Mean concentrations of these less common trace metals are iron (122 µg/L), lithium (12.8 µg/L), manganese (6.9 µg/L), mercury (0.01 µg/L), and selenium (1.64 µg/L).

Arsenic, barium, boron, iron, manganese, mercury, selenium, and uranium are regulated under the Colorado basic standards for ground water. With the exception of one iron result (0.31 mg/L) that slightly exceeded its 0.3 mg/L standard, none of these constituents exceeded their respective groundwater quality standard.

6.2.2 Major and Minor Anion and pH Results

Major and minor anions and pH in surface water and groundwater samples were analyzed during the fourth quarter 2009. The results of these analyses are summarized in Table 8. Bicarbonate is the dominant major anion in the surface waters and groundwaters. The mean bicarbonate concentration is 251 milligrams per liter (mg/L). Bicarbonate is the primary constituent comprising the mean total dissolved solids (TDS) concentration (341 mg/L) and the mean total alkalinity as CaCO3 (253 mg/L). The next most abundant major anions in the surface waters and groundwaters are sulfate and chloride whose mean concentrations are 49 and 3.9 mg/L, respectively. The mean pH for the surface waters and groundwaters is 8.08, which is consistent with bicarbonate being the dominant carbonate component in these fluids. Carbonate (as $CaCO_3$) was not detected at concentrations above its reporting limit of less than 20 mg/L.

Less common anions detected in some of the surface water and groundwater samples included nitrate/nitrite (as N), ammonia (as N), bromide, and fluoride. Nitrate/nitrite (as N) was detected in eleven samples at a mean concentration of 0.56 mg/L. Fluoride was detected in 8 samples at a mean concentration of 0.32 mg/L. Bromide was detected in one sample at an estimated (J) concentration of 0.15 mg/L. Ammonia (as N) was detected in two samples at an estimated (J) mean concentration of 0.042 mg/L. The remaining nitrate (as N), ammonia (as N), bromide, and fluoride results, and the orthophosphate (as P) results were not detected above their respective reporting limits. The occurrence of nitrate/nitrite (as N) and the lack of ammonia (as N) suggests that these waters are generally oxidizing. The oxidizing conditions are also consistent with the low dissolved iron concentrations detected.

Nitrate/nitrite (as N), sulfate, chloride, fluoride, and pH are regulated under the Colorado groundwater quality standards. None of these constituents exceeded their respective standards.

6.2.3 Gasoline, Diesel, and Motor Oil Constituent Results

Surface water and groundwater samples were analyzed for gasoline, diesel, and motor oil range constituents during the fourth quarter 2009. The results of these analyses are summarized in Table 9. With the exception of one diesel range organics result reported at an estimated (J) concentration of 0.039 mg/L at TJ-W6, none of these constituents were detected above their respective reporting limits.

6.2.4 Non-Radiological Results Summary

The fourth quarter 2009 nonradiological results for surface waters and groundwaters are consistent with the nonradiological results reported for these media during previous annual environmental sampling events.

7 References

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Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-23A	Tier I	11/03/2009	NG	SA	14C1	1	0.2		pMC		Yes
BM26-23C	Tier I	11/03/2009	NG	SA	14C1	0.9	0.2		pMC		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	14C1	0.4	0.1		pMC		Yes
BM26-23D	Tier II	11/03/2009	NG	SA	14C1	0.8	0.2		pMC		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	14C1	1.3	0.2		pMC		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Ac-228	19.9	17.7	12.2	pCi/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Ac-228	38.1	17.3	11.5	pCi/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Ac-228	22.4	17	13.6	pCi/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Ac-228	32.4	13.9	11.8	pCi/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Ac-228	35.1	19	11.8	pCi/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Ac-228	24.6	13.3	10.9	pCi/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Ac-228	24.9	15.7	16	pCi/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Ac-228	36.8	15.7	12.7	pCi/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Ac-228	21.4	10.5	7.81	pCi/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Ac-228	49.4	15.3	11.6	pCi/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Ac-228	35.3	15.3	11.2	pCi/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Ac-228	72.8	18	14	pCi/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Ac-228	58.5	18.8	12	pCi/L		Yes
BM26-24B	Tier II	12/29/2009	PW	SA	Ac-228	39.2	17.9	13	pCi/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Ac-228	51	14.1	9.59	pCi/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Ac-228	20.7	13.9	11.8	pCi/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Ac-228	54.7	11.8	7.46	pCi/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Ac-228	30.5	17.4	13.9	pCi/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Ac-228	39.7	14.1	12.3	pCi/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Ac-228	9.12	7.05	6.21	pCi/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Bi-214	24.8	7.07	6.49	pCi/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Bi-214	21.1	10.3	7.43	pCi/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Bi-214	14.6	8.1	7.16	pCi/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Bi-214	13	6.13	4.36	pCi/L		Yes

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-22C	Tier II	10/09/2009	PW	SA	Bi-214	25.6	9.21	7.03	pCi/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Bi-214	25.1	8.93	7.71	pCi/L		Yes
BM26-24B	Tier II	12/29/2009	PW	SA	Bi-214	20.9	9.74	7.27	pCi/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Bi-214	21.8	7.38	7.03	pCi/L		Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Bi-214	15.4	8.9	7.03	pCi/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Bi-214	18.7	8.78	6.22	pCi/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Bi-214	28.1	7.23	4.26	pCi/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Bi-214	8.4	5.86	3.59	pCi/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Gross Alpha	48.3	28.4	41.8	pCi/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Gross Alpha	123	36.9	44.1	pCi/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Gross Alpha	35.5	20.6	30.8	pCi/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Gross Alpha	36	22.4	33	pCi/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Gross Alpha	36.1	20.7	29.7	pCi/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Gross Alpha	60.8	27.4	37.8	pCi/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Gross Alpha	25.5	16.8	24.7	pCi/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Gross Beta	144	36.9	56.5	pCi/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Gross Beta	110	25.3	36	pCi/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Gross Beta	164	39.1	59.7	pCi/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Gross Beta	238	39.4	56.6	pCi/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Gross Beta	81.7	25	37.7	pCi/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Gross Beta	184	40.3	61	pCi/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Gross Beta	163	26.3	33.4	pCi/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Gross Beta	144	31.4	43.6	pCi/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Gross Beta	127	29.4	40.7	pCi/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Gross Beta	151	30.8	46.9	pCi/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Gross Beta	34.6	18.3	29	pCi/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Gross Beta	101	21.5	29.9	pCi/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Gross Beta	142	36.3	55.7	pCi/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Gross Beta	69	25.4	39.7	pCi/L		Yes

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-24B	Tier II	12/29/2009	PW	SA	Gross Beta	42.1	15	22.3	pCi/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Gross Beta	126	47.4	75.5	pCi/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Gross Beta	33.4	19.8	31.7	pCi/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Gross Beta	50.8	19.3	29.1	pCi/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Gross Beta	58.1	18.9	27.5	pCi/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Gross Beta	52.2	26.8	42.2	pCi/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Gross Beta	66.6	28.7	46.1	pCi/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	K-40	417	60.8	30.5	pCi/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	K-40	394	71.4	35.2	pCi/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	K-40	353	65.9	43.9	pCi/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	K-40	445	73.6	31.6	pCi/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	K-40	447	77.8	36.7	pCi/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	K-40	363	76.1	39.7	pCi/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	K-40	282	65.2	37	pCi/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	K-40	285	61.7	37.1	pCi/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	K-40	280	49.9	22.7	pCi/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	K-40	336	63.5	22.9	pCi/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	K-40	184	48.3	32	pCi/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	K-40	585	85.7	40.1	pCi/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	K-40	395	71.8	43.5	pCi/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	K-40	264	62.9	42.1	pCi/L		Yes
BM26-24B	Tier II	12/29/2009	PW	SA	K-40	118	55.5	37	pCi/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	K-40	200	41.4	24.9	pCi/L		Yes
BM26-24C	Tier II	12/21/2009	PW	SA	K-40	142	46.1	31.9	pCi/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	K-40	119	45.4	27.2	pCi/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	K-40	170	55.6	28.4	pCi/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	K-40	123	32.8	21.4	pCi/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	K-40	92.6	42.3	53	pCi/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	K-40	83.4	49.8	33.5	pCi/L		Yes

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
SP22-13	Tier II	12/01/2009	PW	SA	K-40	64.7	25.7	16.9	pCi/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	K-40	68.2	52	31.5	pCi/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Pb-212	14	8.28	6.37	pCi/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Pb-212	35.6	7.98	8.14	pCi/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Pb-212	26.8	6.34	5.43	pCi/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Pb-212	7.43	7	5.98	pCi/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Pb-212	10.6	4.46	4.25	pCi/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Pb-212	7.95	6.08	6.53	pCi/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Pb-214	23.3	10.3	8.29	pCi/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Pb-214	21.5	7.61	7.09	pCi/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Pb-214	23.6	9.14	7.15	pCi/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Pb-214	19.3	10	8.91	pCi/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Pb-214	18.7	6.89	4.88	pCi/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Pb-214	13.3	9.16	8.41	pCi/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Pb-214	27.1	9.19	8.26	pCi/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Pb-214	11.7	7.37	8.48	pCi/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Pb-214	26.4	8.63	8.2	pCi/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Pb-214	26.5	8.12	6.47	pCi/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Pb-214	20.7	7.72	7.42	pCi/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Pb-214	14.4	9.74	8.31	pCi/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Pb-214	24.7	6.61	4.63	pCi/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Pb-214	15.6	8.89	7.11	pCi/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Pb-214	11.7	5.06	3.96	pCi/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Ra-228	19.9	17.7	12.2	pCi/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Ra-228	38.1	17.3	11.5	pCi/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Ra-228	22.4	17	13.6	pCi/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Ra-228	32.4	13.9	11.8	pCi/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Ra-228	35.1	19	11.8	pCi/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Ra-228	24.6	13.3	10.9	pCi/L		Yes

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-33C	Tier I	12/02/2009	PW	FD	Ra-228	36.8	15.7	12.7	pCi/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Ra-228	24.9	15.7	16	pCi/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Ra-228	21.4	10.5	7.81	pCi/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Ra-228	49.4	15.3	11.6	pCi/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Ra-228	35.3	15.3	11.2	pCi/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Ra-228	72.8	18	14	pCi/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Ra-228	58.5	18.8	12	pCi/L		Yes
BM26-24B	Tier II	12/29/2009	PW	SA	Ra-228	39.2	17.9	13	pCi/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Ra-228	51	14.1	9.59	pCi/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Ra-228	20.7	13.9	11.8	pCi/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Ra-228	54.7	11.8	7.46	pCi/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Ra-228	30.5	17.4	13.9	pCi/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Ra-228	39.7	14.1	12.3	pCi/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Ra-228	9.12	7.05	6.21	pCi/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Tl-208	8.75	4.94	3.79	pCi/L	J,D-I	Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Tl-208	7.61	4.76	4.17	pCi/L	J,D-I	Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Tl-208	6.64	3.26	3.02	pCi/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Tl-208	8.03	5.4	3.55	pCi/L		Yes
BM26-22D	Tier I	12/17/2009	NG	SA	14C1	0.6		0.6	pMC	U	No
BM26-23A	Tier I	12/17/2009	NG	SA	14C1	0.6		0.6	pMC	U	No
BM26-23B	Tier I	12/17/2009	NG	SA	14C1	0.6		0.6	pMC	U	No
BM26-23C	Tier I	12/17/2009	NG	SA	14C1	0.6		0.6	pMC	U	No
BM26-33C	Tier I	12/02/2009	NG	SA	14C1	0.8		0.8	pMC	U	No
BM26-33C	Tier I	12/02/2009	NG	FD	14C1	1		1	pMC	U	No
BM26-34A	Tier I	12/02/2009	NG	SA	14C1	0.8		0.8	pMC	U	No
BM26-34D	Tier I	10/19/2009	NG	SA	14C1	0.5		0.5	pMC	U	No
BM26-34D	Tier I	12/21/2009	NG	SA	14C1	0.6		0.6	pMC	U	No
BM36-13B	Tier I	12/17/2009	NG	SA	14C1	0.6		0.6	pMC	U	No
BM26-24B	Tier II	10/19/2009	NG	SA	14C1	0.4		0.4	pMC	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-24B	Tier II	12/29/2009	NG	SA	14C1	0.6		0.6	pMC	U	No
BM26-24C	Tier II	10/22/2009	NG	SA	14C1	0.7		0.7	pMC	U	No
BM26-24C	Tier II	12/21/2009	NG	SA	14C1	0.5		0.5	pMC	U	No
BM34-22B	Tier II	12/21/2009	NG	SA	14C1	0.5		0.5	pMC	U	No
BM34-22C	Tier II	12/21/2009	NG	SA	14C1	0.8		0.8	pMC	U	No
RF17-12B	Tier II	11/12/2009	NG	SA	14C1	1		1	pMC	U	No
RF17-12C	Tier II	12/01/2009	NG	SA	14C1	1		1	pMC	U	No
SP22-13	Tier II	12/01/2009	NG	SA	14C1	0.6		0.6	pMC	U	No
SP411-13	Tier II	12/01/2009	NG	SA	14C1	0.5		0.5	pMC	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Ac-228	25	15.6	25	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Ac-228	11.8	12.7	16.9	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Ag-110m	-0.311	1.92	3.17	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Ag-110m	0.93	2.1	3.71	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Ag-110m	1.51	1.93	3.53	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Ag-110m	0.617	1.97	3.16	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Ag-110m	-1.3	2.24	3.06	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Ag-110m	0.0165	1.89	3.22	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Ag-110m	-0.753	2.47	3.36	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Ag-110m	-0.502	2.35	3.42	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Ag-110m	0.0528	1.18	2.03	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Ag-110m	-2.56	2.07	3.1	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Ag-110m	-2.13	1.95	2.88	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Ag-110m	-0.316	2.06	3.39	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Ag-110m	0.376	2.36	3.96	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Ag-110m	-0.66	2.25	3.74	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Ag-110m	-2.2	2	3.04	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Ag-110m	1.37	1.75	3.19	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Ag-110m	1.13	1.86	3.28	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Ag-110m	-1.4	1.83	2.89	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM34-22B	Tier II	12/21/2009	PW	SA	Ag-110m	-0.964	1.97	3.19	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Ag-110m	0.0131	1.33	2.22	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Ag-110m	-1.67	2.37	3.6	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Ag-110m	0.266	1.89	3.27	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Ag-110m	-0.318	1.04	1.69	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Ag-110m	1.46	1.87	3.33	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Am-241	-10.6	12.4	20.2	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Am-241	-0.286	21.6	36.7	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Am-241	7.14	22.3	34.8	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Am-241	2.52	12.6	18.7	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Am-241	-3.25	4.48	7.04	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Am-241	3.07	16.8	25.3	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Am-241	-17.1	16.9	27.7	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Am-241	-11.1	17.5	29.2	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Am-241	10.2	14.1	22.2	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Am-241	-2.54	15.3	25.2	pCi/L	UJ,D-I	No
BM26-34D	Tier I	12/21/2009	PW	SA	Am-241	8.83	10.7	16.8	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Am-241	16.8	14.8	23.1	pCi/L	UJ,D-I	No
BM26-23D	Tier II	11/03/2009	PW	SA	Am-241	-2.43	5.58	7.42	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Am-241	-10.8	16.8	28.6	pCi/L	UJ,D-I	No
BM26-24B	Tier II	12/29/2009	PW	SA	Am-241	4.07	16.3	25.9	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Am-241	9.24	9.88	15.5	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Am-241	-18.8	12.4	19.4	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Am-241	0.798	11.2	17.5	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Am-241	0.841	8.83	13.5	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Am-241	-1.8	7.25	10.7	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Am-241	-0.675	5.2	7.56	pCi/L	UJ,D-I	No
RF17-12C	Tier II	12/01/2009	PW	SA	Am-241	-12.2	20.2	33.4	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Am-241	0.682	5.63	8.49	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
SP411-13	Tier II	12/01/2009	PW	SA	Am-241	-8.89	10.2	16.7	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Ba-133	-0.515	3.04	4.45	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Ba-133	-0.589	3.32	4.82	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Ba-133	1.39	3.14	4.82	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Ba-133	0.0268	2.62	4	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Ba-133	-0.729	2.98	4.37	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Ba-133	0.64	2.99	4.46	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Ba-133	2.94	3.42	5.44	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Ba-133	-0.747	3.09	4.51	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Ba-133	-1.38	2.08	2.94	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Ba-133	-0.958	3.95	5.36	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Ba-133	-2.37	3.2	4.41	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Ba-133	1.8	3.25	5.03	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Ba-133	1.91	3.13	5.25	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Ba-133	-0.682	3.42	4.99	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Ba-133	0.347	3.5	5.23	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Ba-133	-0.0673	2.58	3.81	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Ba-133	0.309	2.99	4.49	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Ba-133	2.62	2.79	4.45	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Ba-133	-1.89	3.67	5.05	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Ba-133	1.27	1.95	2.94	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Ba-133	1.16	3	4.74	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Ba-133	3.38	3.5	5.04	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Ba-133	-0.547	1.71	2.41	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Ba-133	2.61	3.01	4.77	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Ba-140	-1.4	10.4	15.1	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Ba-140	-7.67	9.64	14.2	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Ba-140	2.18	10	15.3	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Ba-140	1.88	9.12	15.6	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-23C	Tier I	11/03/2009	PW	SA	Ba-140	7.01	8.58	14.7	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Ba-140	-2.62	8.67	14.5	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Ba-140	5.35	9	15.6	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Ba-140	0.259	7.98	13.2	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Ba-140	-3.47	5.34	8.22	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Ba-140	-2.44	8.74	14.7	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Ba-140	3.83	9.93	17.1	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Ba-140	-5.04	8.95	14.2	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Ba-140	5.72	9.32	16.2	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Ba-140	-0.532	9.3	15.1	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Ba-140	-4.05	10.5	16.4	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Ba-140	1.52	8.18	13.7	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Ba-140	-5.74	14.8	18.2	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Ba-140	0.468	7.42	12.9	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Ba-140	-10.1	10.8	16.2	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Ba-140	-1.32	6.18	10.3	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Ba-140	0.311	10.9	18.4	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Ba-140	-3.67	8.25	12.8	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Ba-140	0.265	4.3	7.31	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Ba-140	1.44	7.48	12.7	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Be-7	-5.69	17	28.1	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Be-7	-5.05	19	30.7	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Be-7	4.94	18.8	31.7	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Be-7	-16.2	15.9	24.5	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Be-7	3.22	16.8	28.4	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Be-7	17.3	17.9	31.6	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Be-7	-4.51	18.1	29.5	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Be-7	-12.7	19.2	30.7	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Be-7	-5.59	11.4	18.3	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-34D	Tier I	10/09/2009	PW	SA	Be-7	4.91	18.2	30.6	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Be-7	4.32	18	30.9	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Be-7	3.23	18.4	31.5	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Be-7	4.2	18.6	32	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Be-7	-0.677	20.9	34.5	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Be-7	-13.5	19.6	30.5	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Be-7	11.7	15.2	26.8	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Be-7	4.1	16.9	29.2	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Be-7	8.84	16.8	28.8	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Be-7	6.39	17.5	29.6	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Be-7	5.06	11.3	19.7	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Be-7	-7.07	18	29.3	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Be-7	5.16	18	30.4	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Be-7	-8.46	8.8	14.1	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Be-7	-1.42	16.4	27.4	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Bi-212	-5.85	19	27.4	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Bi-212	6.04	18.5	32.3	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Bi-212	10.2	16.9	30.2	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Bi-212	21.7	18.2	30.9	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Bi-212	8.54	20.3	34	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Bi-212	5.58	16.4	28.7	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Bi-212	22.3	19.1	34.9	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Bi-212	16.7	17	31.5	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Bi-212	8.56	10.7	19	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Bi-212	3.45	20.5	32.3	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Bi-212	10.2	17	29.5	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Bi-212	24.1	23.2	41.5	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Bi-212	24.3	31.6	36.9	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Bi-212	30.3	19.6	36.8	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-24C	Tier II	10/22/2009	PW	SA	Bi-212	9.93	15.8	28.4	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Bi-212	2.79	14	23.7	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Bi-212	-2.61	15.9	26.4	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Bi-212	12.7	20	32.3	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Bi-212	16.1	12.8	19.9	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Bi-212	10.9	23.2	36.3	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Bi-212	20	17.1	31.9	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Bi-212	8.31	8.92	15.6	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Bi-212	7.92	16.7	28.7	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Bi-214	8.99	11.1	11.4	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Ce-139	0.452	1.94	3.23	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Ce-139	-1.22	2.16	3.43	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Ce-139	0.849	2.09	3.47	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Ce-139	-0.177	1.94	3.25	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Ce-139	-1.75	1.8	2.89	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Ce-139	-1.42	1.98	3.3	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Ce-139	0.349	1.92	3.21	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Ce-139	-1.78	2.44	3.92	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Ce-139	-0.544	1.34	2.15	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Ce-139	-0.329	2.1	3.6	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Ce-139	-0.228	2.01	3.3	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Ce-139	1.94	2.28	3.89	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Ce-139	0.668	1.83	3.14	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Ce-139	-1.63	2.3	3.68	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Ce-139	-0.495	2.23	3.65	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Ce-139	0.446	1.9	3.12	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Ce-139	-1.11	2.02	3.25	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Ce-139	-0.62	1.84	2.97	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Ce-139	-1.41	2.11	3.3	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM34-22C	Tier II	12/21/2009	PW	SA	Ce-139	-0.459	1.23	2.08	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Ce-139	-1.03	1.78	2.9	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Ce-139	-1.73	2.12	3.31	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Ce-139	-0.64	0.966	1.61	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Ce-139	0.448	1.88	3.15	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Ce-141	0.949	3.63	6.09	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Ce-141	-3.7	4	6.3	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Ce-141	0.269	3.99	6.57	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Ce-141	1.49	3.45	5.96	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Ce-141	-0.637	3.08	5.2	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Ce-141	2.4	3.87	6.44	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Ce-141	-0.419	3.89	5.85	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Ce-141	0.0114	4.19	7.01	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Ce-141	-0.489	2.27	3.71	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Ce-141	-0.123	4.06	6.55	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Ce-141	4.06	3.9	6.76	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Ce-141	-1.98	4.37	6.71	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Ce-141	1.92	3.02	5.27	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Ce-141	2.27	4.58	6.99	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Ce-141	-2.36	4.29	6.98	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Ce-141	1.09	3.57	5.9	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Ce-141	2.34	3.99	6.78	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Ce-141	-5.1	3.59	5.07	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Ce-141	2.55	3.89	6.54	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Ce-141	-0.881	2.51	3.83	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Ce-141	-0.762	3.15	5.28	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Ce-141	-2.62	3.62	5.73	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Ce-141	-0.489	1.73	2.94	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Ce-141	1.47	3.61	5.67	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-22D	Tier I	12/17/2009	PW	SA	Ce-144	-1.75	14.1	23.3	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Ce-144	10.4	16	27.1	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Ce-144	-0.467	16.5	25.5	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Ce-144	1	13.8	23.5	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Ce-144	-7.19	12.4	20.7	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Ce-144	8.08	15.5	25.8	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Ce-144	-15.1	18.1	29.2	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Ce-144	12.1	14.7	25.4	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Ce-144	7.9	9.78	16.4	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Ce-144	8.83	16	26.5	pCi/L	UJ,D-I	No
BM26-34D	Tier I	12/21/2009	PW	SA	Ce-144	4.02	14.3	24.1	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Ce-144	2.54	17.1	28.6	pCi/L	UJ,D-I	No
BM26-23D	Tier II	11/03/2009	PW	SA	Ce-144	3.12	12.4	21.4	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Ce-144	3.91	16.6	28	pCi/L	UJ,D-I	No
BM26-24B	Tier II	12/29/2009	PW	SA	Ce-144	9.73	16.4	28	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Ce-144	1.33	13.4	22.1	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Ce-144	-2.69	14.3	23.6	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Ce-144	11.5	13.1	22.5	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Ce-144	-13.8	16	23.9	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Ce-144	0.118	9.53	15.8	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Ce-144	-5.36	12.1	20.1	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Ce-144	9.87	15.3	25.9	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Ce-144	-4.53	7.29	12.3	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Ce-144	8.44	14.3	23.6	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Cl-36	-80.4	229	397	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Cl-36	-187	192	338	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Cl-36	-4.58	178	308	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Cl-36	-215	140	259	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Cl-36	154	176	295	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-23C	Tier I	12/17/2009	PW	SA	Cl-36	-70.4	132	237	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Cl-36	-108	204	357	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Cl-36	-49.2	168	293	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Cl-36	-282	184	334	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Cl-36	0.304	0.272	0.454	pCi/L	UJ,D-I	No
BM26-34D	Tier I	12/21/2009	PW	SA	Cl-36	-254	165	301	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Cl-36	-0.4	0.321	0.568	pCi/L	UJ,D-I	No
BM26-23D	Tier II	11/03/2009	PW	SA	Cl-36	85.6	193	329	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Cl-36	-0.179	0.178	0.323	pCi/L	UJ,D-I	No
BM26-24B	Tier II	12/29/2009	PW	SA	Cl-36	-377	284	505	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Cl-36	152	172	290	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Cl-36	-455	174	327	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Cl-36	198	202	338	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Cl-36	-16.7	208	359	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Cl-36	-273	276	492	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Cl-36	-179	216	381	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Cl-36	-199	164	296	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Cl-36	-140	219	383	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Cl-36	21.6	131	227	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Co-56	-1.31	2.04	3.13	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Co-56	0.0155	2.3	3.87	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Co-56	-1.78	2.25	3.45	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Co-56	0.345	1.79	3.13	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Co-56	1.07	2.08	3.67	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Co-56	1.38	2.34	4.13	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Co-56	0.861	2.03	3.63	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Co-56	-0.546	2.72	3.67	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Co-56	-0.0466	1.3	2.18	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Co-56	0.958	2.23	3.89	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-34D	Tier I	12/21/2009	PW	SA	Co-56	0.839	2.01	3.59	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Co-56	-1.31	2.21	3.43	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Co-56	2.09	2.47	4.59	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Co-56	1.83	2.15	3.88	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Co-56	-1.74	2.06	3.09	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Co-56	0.477	1.9	3.3	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Co-56	-0.921	1.89	2.94	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Co-56	1.55	1.88	3.4	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Co-56	-0.451	2.33	3.81	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Co-56	-1.11	1.31	2.12	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Co-56	-0.396	2.62	4.41	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Co-56	-0.828	2.07	3.31	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Co-56	0.166	1.05	1.83	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Co-56	0.673	2.32	3.45	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Co-57	1.12	1.94	3.31	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Co-57	-0.558	2.29	3.44	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Co-57	-0.571	2.04	3.34	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Co-57	-0.779	1.77	2.98	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Co-57	-0.297	1.54	2.64	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Co-57	-0.382	2.01	3.24	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Co-57	0.261	1.84	3.11	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Co-57	-0.462	2.25	3.75	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Co-57	-0.0287	1.26	2.08	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Co-57	-0.422	2.12	3.41	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Co-57	-0.242	1.78	2.95	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Co-57	-0.418	2.16	3.57	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Co-57	0.0342	1.57	2.68	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Co-57	-0.343	2.17	3.62	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Co-57	0.625	2.02	3.45	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-24C	Tier II	10/22/2009	PW	SA	Co-57	-0.167	1.72	2.82	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Co-57	0.101	1.87	3.12	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Co-57	0.648	1.68	2.86	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Co-57	-0.116	1.82	2.99	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Co-57	0.271	1.11	1.94	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Co-57	1.38	1.5	2.68	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Co-57	-0.755	1.92	3.13	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Co-57	-0.518	0.915	1.56	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Co-57	0.0916	1.8	3.01	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Co-58	-0.166	2.06	3.39	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Co-58	-0.442	1.97	3.23	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Co-58	-0.689	2.25	3.67	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Co-58	-0.503	2.03	3.41	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Co-58	0.278	2.45	4.15	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Co-58	-0.325	2.11	3.49	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Co-58	0.408	2.08	3.61	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Co-58	-1.8	2.19	3.42	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Co-58	-0.313	1.29	2.14	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Co-58	-0.000548	2.08	3.49	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Co-58	1.13	2.16	3.73	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Co-58	-1.57	2.11	3.24	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Co-58	1.75	2.55	4.66	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Co-58	-1.19	2.16	3.41	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Co-58	-0.0318	2.09	3.49	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Co-58	-1.04	1.75	2.78	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Co-58	-0.176	2.05	3.37	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Co-58	-1.36	1.91	2.94	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Co-58	0.905	2.23	3.88	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Co-58	-0.222	1.25	2.02	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
RF17-12B	Tier II	11/12/2009	PW	SA	Co-58	-0.102	2.32	3.96	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Co-58	-0.241	2.19	3.64	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Co-58	0.282	1.06	1.77	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Co-58	0.24	1.76	2.93	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Co-60	-2.04	2.53	3.48	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Co-60	-0.294	2.39	3.98	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Co-60	-1.02	2.08	3.26	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Co-60	-0.407	2.14	3.44	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Co-60	1.61	2.65	4.57	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Co-60	-0.0541	2.34	3.96	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Co-60	0.201	2.55	4.28	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Co-60	-1.59	1.99	2.93	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Co-60	-0.35	1.35	2.24	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Co-60	-0.0218	2.07	3.52	pCi/L	UJ,D-I	No
BM26-34D	Tier I	12/21/2009	PW	SA	Co-60	-2.1	2.09	2.97	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Co-60	-2.85	2.82	4.15	pCi/L	UJ,D-I	No
BM26-23D	Tier II	11/03/2009	PW	SA	Co-60	0.884	2.76	4.76	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Co-60	2.37	2.31	4.36	pCi/L	UJ,D-I	No
BM26-24B	Tier II	12/29/2009	PW	SA	Co-60	0.228	2.24	3.81	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Co-60	-1.36	2.04	3.01	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Co-60	-2.73	2.38	3.24	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Co-60	1.43	1.9	3.51	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Co-60	-0.752	1.95	3.07	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Co-60	-1.41	1.6	2.24	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Co-60	-0.626	3.17	4.62	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Co-60	0.311	2.09	3.62	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Co-60	-0.681	1.54	2.04	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Co-60	0.282	2.27	3.87	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Cr-51	5.53	18	31.4	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-23A	Tier I	11/03/2009	PW	SA	Cr-51	-2.27	19	31.9	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Cr-51	-4.95	20.6	34.4	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Cr-51	0.252	18.2	29.5	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Cr-51	0.681	16.2	27.9	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Cr-51	-21	20.1	31.4	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Cr-51	0.35	20.9	35.8	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Cr-51	6.85	18.2	31.9	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Cr-51	-5.49	11.9	19.8	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Cr-51	-3.16	20.7	34.4	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Cr-51	-5.72	19.7	33.1	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Cr-51	2.87	19.6	33.9	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Cr-51	3.5	17.7	31.1	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Cr-51	6.68	20.3	35.2	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Cr-51	17.8	20.7	36.9	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Cr-51	-4.89	17.2	28.7	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Cr-51	-4.82	19	32.1	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Cr-51	-5.23	15.8	26.2	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Cr-51	-9.84	20.7	33.8	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Cr-51	-11.9	12.8	19.8	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Cr-51	-14.3	18	29.4	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Cr-51	1.72	18.3	31.2	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Cr-51	2.47	9.91	16.4	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Cr-51	-3.29	17	28.8	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Cs-134	3.02	2.69	4.88	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Cs-134	5.07	2.96	5.67	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Cs-134	2.94	2.62	4.88	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Cs-134	0.973	2.51	4.47	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Cs-134	2.14	3.3	5.83	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Cs-134	0.701	2.41	4.18	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-33C	Tier I	12/02/2009	PW	FD	Cs-134	4.05	3.07	5.82	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Cs-134	2.22	2.67	4.9	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Cs-134	-0.409	1.61	2.66	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Cs-134	0.808	2.69	4.65	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Cs-134	-0.674	2.53	4.04	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Cs-134	-1.87	3.57	5.56	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Cs-134	0.369	2.9	4.9	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Cs-134	0.828	2.55	4.41	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Cs-134	3.38	2.4	4.54	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Cs-134	0.932	2.4	4.13	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Cs-134	1.32	2.96	4.76	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Cs-134	2.01	2.46	4.45	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Cs-134	1.34	3.11	5.56	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Cs-134	2.09	2.49	4.55	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Cs-134	-0.165	1.35	2.2	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Cs-134	2.07	2.54	4.51	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Cs-136	1.52	3.33	5.96	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Cs-136	-1.07	3.22	5.09	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Cs-136	2.98	3.78	6.78	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Cs-136	-2.25	3.17	4.85	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Cs-136	-0.078	3.81	6.52	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Cs-136	2.42	3.67	6.53	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Cs-136	2.04	3.58	6.42	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Cs-136	0.0327	3.08	5.13	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Cs-136	1.13	1.9	3.28	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Cs-136	0.647	3.5	5.9	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Cs-136	-4.23	4.35	6.56	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Cs-136	-2.56	3.28	5.17	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Cs-136	-7.57	5.09	5.77	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-24B	Tier II	10/09/2009	PW	SA	Cs-136	2.95	3.31	6.17	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Cs-136	0.283	3.56	6.16	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Cs-136	-1.47	3.4	5.26	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Cs-136	0.42	3.62	6.28	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Cs-136	0.515	2.42	4.25	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Cs-136	-2.38	4.07	6.49	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Cs-136	-1.38	2.46	3.96	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Cs-136	1.89	4.16	7.4	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Cs-136	-0.604	2.79	4.45	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Cs-136	-1.29	1.78	2.84	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Cs-136	-2.81	4.01	5.58	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Cs-137	-1.66	2.38	3.47	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Cs-137	0.79	2.3	4.04	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Cs-137	-1.37	2.16	3.46	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Cs-137	-0.491	2.13	3.44	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Cs-137	1.17	5.74	3.52	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Cs-137	-1.21	2.16	3.48	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Cs-137	-0.0137	2.7	3.85	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Cs-137	1.74	4.34	3.62	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Cs-137	0.000807	1.37	2.33	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Cs-137	1.82	2.26	4.1	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Cs-137	1	2.22	3.83	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Cs-137	-1.09	2.4	3.86	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Cs-137	0.234	2.89	4.8	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Cs-137	2.87	2.51	4.62	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Cs-137	2.91	2.33	4.34	pCi/L	UJ,D-I	No
BM26-24C	Tier II	10/22/2009	PW	SA	Cs-137	-1.06	1.89	3.08	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Cs-137	-2.49	2.4	3.13	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Cs-137	-1.45	2.67	3.73	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM34-22B	Tier II	12/21/2009	PW	SA	Cs-137	-0.696	2.03	3.32	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Cs-137	0.775	1.45	2.49	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Cs-137	-1.73	3.3	4.3	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Cs-137	-1.82	2.23	3.51	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Cs-137	0.254	1.16	1.96	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Cs-137	0.2	2.11	3.54	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Eu-152	0.0201	8.54	10	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Eu-152	-2.56	6.68	10.6	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Eu-152	2.74	6.49	10.9	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Eu-152	-0.13	5.75	9.63	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Eu-152	-2.56	7.16	10.5	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Eu-152	-1.36	6.56	10.4	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Eu-152	-7.69	8.14	11.7	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Eu-152	2.96	6.24	11	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Eu-152	-2.84	4.44	6.7	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Eu-152	3.36	7.97	11.3	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Eu-152	-3.88	6.97	9.83	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Eu-152	-3.31	8.97	11.3	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Eu-152	-4.47	6.63	10	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Eu-152	2.04	7.1	12.2	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Eu-152	0.492	6.95	11	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Eu-152	-1.05	5.43	8.74	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Eu-152	-0.324	6.73	10.4	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Eu-152	-1.25	5.95	9.54	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Eu-152	-0.342	6.92	10.7	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Eu-152	-0.137	3.93	6.37	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Eu-152	0.78	5.74	9.72	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Eu-152	-1.03	7.42	10.8	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Eu-152	1.04	3.35	5.54	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
SP411-13	Tier II	12/01/2009	PW	SA	Eu-152	0.6	6.24	10.4	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Eu-154	-2.14	6.17	10	pCi/L	UJ,D-I	No
BM26-23A	Tier I	11/03/2009	PW	SA	Eu-154	3.56	6.47	11.7	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Eu-154	5.95	5.92	11.3	pCi/L	UJ,D-I	No
BM26-23B	Tier I	12/17/2009	PW	SA	Eu-154	-5.52	6.33	9.19	pCi/L	UJ,D-I	No
BM26-23C	Tier I	11/03/2009	PW	SA	Eu-154	-0.5	7.74	12.9	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Eu-154	0.538	6.38	11	pCi/L	UJ,D-I	No
BM26-33C	Tier I	12/02/2009	PW	SA	Eu-154	1.99	6.18	11	pCi/L	UJ,D-I	No
BM26-33C	Tier I	12/02/2009	PW	FD	Eu-154	-4.98	6.95	10.4	pCi/L	UJ,D-I	No
BM26-34A	Tier I	12/02/2009	PW	SA	Eu-154	-6.54	3.77	5.28	pCi/L	UJ,D-I	No
BM26-34D	Tier I	10/09/2009	PW	SA	Eu-154	-1.05	5.81	9.64	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Eu-154	-6.67	6.66	9.72	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Eu-154	4.07	6.4	11.6	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Eu-154	8.56	7.63	14.5	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Eu-154	-3.83	6.55	10.2	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Eu-154	-1.33	6.21	10.1	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Eu-154	2.15	5.48	9.51	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Eu-154	1.2	5.79	10.1	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Eu-154	3.29	6.1	10.9	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Eu-154	-4.75	5.46	7.93	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Eu-154	-3.79	3.74	5.51	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Eu-154	1.88	7.34	12.6	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Eu-154	0.0731	6.53	11.1	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Eu-154	-0.091	3.29	5.45	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Eu-154	0.82	6.04	10.3	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Eu-155	-1.45	8.19	13.6	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Eu-155	10.7	9.43	16.5	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Eu-155	1.14	8.94	15	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Eu-155	0.477	7.6	13.2	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-23C	Tier I	11/03/2009	PW	SA	Eu-155	-0.399	6.26	10.9	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Eu-155	6.37	8.89	15	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Eu-155	7.28	7.98	14.1	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Eu-155	2.3	9.94	16.9	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Eu-155	-0.874	5.56	9.22	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Eu-155	-1.35	9.38	15.3	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Eu-155	-3.2	7.67	12.6	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Eu-155	-2.73	9.38	15.5	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Eu-155	0.785	6.32	11	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Eu-155	7.7	9.07	15.9	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Eu-155	4.84	8.64	15	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Eu-155	8.8	7.32	12.6	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Eu-155	2.7	7.89	13.4	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Eu-155	-0.719	7.36	12.4	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Eu-155	-1.4	7.56	12.4	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Eu-155	-0.308	4.75	8.3	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Eu-155	5.24	6.04	10.8	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Eu-155	0.635	8.69	14.5	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Eu-155	-0.161	3.81	6.66	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Eu-155	3.86	7.65	13.1	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Fe-59	-0.544	3.58	6.02	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Fe-59	4.45	4.33	7.95	pCi/L	UJ,D-I	No
BM26-23A	Tier I	12/17/2009	PW	SA	Fe-59	1.75	3.83	6.69	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Fe-59	5.5	4.2	7.96	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Fe-59	-3.56	4.54	7.04	pCi/L	UJ,D-I	No
BM26-23C	Tier I	12/17/2009	PW	SA	Fe-59	-2.97	5	7.17	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Fe-59	2.75	4.17	7.58	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Fe-59	0.517	4.12	6.93	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Fe-59	0.853	2.71	4.57	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-34D	Tier I	10/09/2009	PW	SA	Fe-59	-4.33	4.36	6.18	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Fe-59	-1.69	4.36	7.05	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Fe-59	-3.23	4.12	6.46	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Fe-59	-4.38	5.11	7.58	pCi/L	UJ,D-I	No
BM26-24B	Tier II	10/09/2009	PW	SA	Fe-59	-2.48	4.36	6.96	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Fe-59	5.56	4.63	8.79	pCi/L	UJ,D-I	No
BM26-24C	Tier II	10/22/2009	PW	SA	Fe-59	0.819	3.29	5.66	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Fe-59	0.896	3.93	6.89	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Fe-59	0.519	3.37	5.85	pCi/L	UJ,D-I	No
BM34-22B	Tier II	12/21/2009	PW	SA	Fe-59	-2.77	3.9	6.02	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Fe-59	-2.56	2.63	4.03	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Fe-59	-0.5	5.1	8.42	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Fe-59	2.3	3.66	6.55	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Fe-59	0.837	2.17	3.77	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Fe-59	3.2	4.07	7.45	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Gross Alpha	38	30.2	47.8	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Gross Alpha	22.7	35.6	61.3	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Gross Alpha	2.06	24.5	44.2	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Gross Alpha	-0.176	38.5	70.4	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Gross Alpha	10.2	30.5	53.8	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Gross Alpha	20.9	26.9	44.7	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Gross Alpha	12.5	27.7	49.7	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Gross Alpha	9.06	21.6	38	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Gross Alpha	63.7	41.7	66.9	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Gross Alpha	2.4	31.7	56.1	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Gross Alpha	53.2	42.9	70.5	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Gross Alpha	22.1	18.3	29.3	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Gross Alpha	51.5	44.7	72.4	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Gross Alpha	27.3	22.5	35.8	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
RF17-12B	Tier II	11/12/2009	PW	SA	Gross Alpha	45.1	30.9	47.3	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Gross Alpha	24.8	33.4	57.1	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Gross Alpha	13.8	21.9	38	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Gross Beta	19.3	19.8	33	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Gross Beta	7.38	43.6	74.5	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Gross Beta	15.2	14.7	24.4	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Hg-203	1.02	2.19	3.86	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Hg-203	2.49	2.23	4.03	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Hg-203	-1.13	2.18	3.61	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Hg-203	0.61	2.21	3.67	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Hg-203	0.613	2.49	3.92	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Hg-203	2.55	2.42	4.31	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Hg-203	0.868	2.04	3.61	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Hg-203	1.98	2.56	4.57	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Hg-203	-0.942	1.88	2.37	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Hg-203	-1.03	2.46	4.06	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Hg-203	1.03	2.32	4.08	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Hg-203	0.867	2.45	4.28	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Hg-203	-1.14	2.25	3.53	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Hg-203	0.546	2.45	4.26	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Hg-203	0.775	2.54	4.42	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Hg-203	0.3	2.05	3.52	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Hg-203	1.15	2.18	3.85	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Hg-203	-1.16	2.24	3.24	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Hg-203	-0.488	2.33	3.89	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Hg-203	-0.0851	1.72	2.47	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Hg-203	1.66	2.16	3.72	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Hg-203	-1.04	2.53	3.74	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Hg-203	-1.94	1.69	1.92	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
SP411-13	Tier II	12/01/2009	PW	SA	Hg-203	0.0307	2.05	3.53	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Ir-192	-1.12	1.98	3.29	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Ir-192	0.28	2.07	3.53	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Ir-192	0.43	2.25	3.86	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Ir-192	-0.428	2.09	3.34	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Ir-192	0.046	1.76	3.04	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Ir-192	1.78	2.15	3.79	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Ir-192	-2.07	2.17	3.39	pCi/L	UJ,D-I	No
BM26-33C	Tier I	12/02/2009	PW	FD	Ir-192	-0.0985	2.3	3.94	pCi/L	UJ,D-I	No
BM26-34A	Tier I	12/02/2009	PW	SA	Ir-192	-1.24	1.31	2.13	pCi/L	UJ,D-I	No
BM26-34D	Tier I	10/09/2009	PW	SA	Ir-192	-0.922	2.55	3.86	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Ir-192	-0.996	1.97	3.27	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Ir-192	2.01	2.16	3.87	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Ir-192	1.74	2.07	3.57	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Ir-192	0.448	2.27	3.91	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Ir-192	-0.748	2.15	3.59	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Ir-192	0.57	1.95	3.35	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Ir-192	-0.123	2.03	3.48	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Ir-192	1.02	1.85	3.24	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Ir-192	0.666	2.19	3.75	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Ir-192	-0.217	1.36	2.2	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Ir-192	-0.694	2.01	3.15	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Ir-192	-0.0317	2.03	3.43	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Ir-192	-0.269	1.07	1.73	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Ir-192	1.04	1.89	3.34	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Kr-85	-2180	630	849	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Kr-85	-1640	727	1040	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Kr-85	-2080	644	854	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Kr-85	-1630	694	967	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-23C	Tier I	12/17/2009	PW	SA	Kr-85	-2170	715	939	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Kr-85	-818	739	1170	pCi/L	UJ,D-I	No
BM26-33C	Tier I	12/02/2009	PW	SA	Kr-85	-2340	707	915	pCi/L	UJ,D-I	No
BM26-34A	Tier I	12/02/2009	PW	SA	Kr-85	-1380	444	636	pCi/L	UJ,D-I	No
BM26-34D	Tier I	12/21/2009	PW	SA	Kr-85	-1740	602	831	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Kr-85	-1490	665	995	pCi/L	UJ,D-I	No
BM26-23D	Tier II	11/03/2009	PW	SA	Kr-85	160	562	857	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Kr-85	-3140	736	873	pCi/L	UJ,D-I	No
BM26-24B	Tier II	12/29/2009	PW	SA	Kr-85	-2350	698	897	pCi/L	UJ,D-I	No
BM26-24C	Tier II	12/21/2009	PW	SA	Kr-85	-2500	617	780	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Kr-85	-1960	632	824	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Kr-85	-1220	607	923	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Kr-85	-2610	478	544	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Kr-85	511	536	877	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Kr-85	-1120	699	1040	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Kr-85	-2310	407	450	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Kr-85	-1560	635	918	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Mn-54	0.724	1.99	3.41	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Mn-54	1.84	2.15	3.9	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Mn-54	1.04	2.05	3.62	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Mn-54	-1.18	1.92	3.09	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Mn-54	-1.53	2.22	3.44	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Mn-54	-2.72	1.98	2.76	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Mn-54	0.385	2.23	3.88	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Mn-54	0.865	2.01	3.56	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Mn-54	-0.381	1.36	2.25	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Mn-54	-0.348	2.15	3.54	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Mn-54	-2.05	2.1	3.28	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Mn-54	1.72	2.16	3.82	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-23D	Tier II	11/03/2009	PW	SA	Mn-54	1.26	2.69	4.52	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Mn-54	-0.817	2.39	3.87	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Mn-54	1.59	2.3	4.08	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Mn-54	-0.394	1.7	2.82	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Mn-54	0.227	2.31	3.59	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Mn-54	-0.306	1.81	2.95	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Mn-54	1.35	2.25	3.96	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Mn-54	-0.293	1.31	2.23	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Mn-54	-1.76	2.17	3.33	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Mn-54	-0.398	2.3	3.8	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Mn-54	-0.541	1.09	1.82	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Mn-54	-0.0527	1.86	3.17	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Na-22	-0.966	2.23	3.6	pCi/L	UJ,D-I	No
BM26-23A	Tier I	11/03/2009	PW	SA	Na-22	1.35	2.31	4.2	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Na-22	2.23	2.12	4.08	pCi/L	UJ,D-I	No
BM26-23B	Tier I	12/17/2009	PW	SA	Na-22	-1.67	2.21	3.27	pCi/L	UJ,D-I	No
BM26-23C	Tier I	11/03/2009	PW	SA	Na-22	-0.691	2.81	4.59	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Na-22	0.192	2.27	3.91	pCi/L	UJ,D-I	No
BM26-33C	Tier I	12/02/2009	PW	FD	Na-22	-1.8	2.47	3.67	pCi/L	UJ,D-I	No
BM26-33C	Tier I	12/02/2009	PW	SA	Na-22	0.182	2.25	3.89	pCi/L	UJ,D-I	No
BM26-34A	Tier I	12/02/2009	PW	SA	Na-22	-2.06	1.31	1.89	pCi/L	UJ,D-I	No
BM26-34D	Tier I	10/09/2009	PW	SA	Na-22	-0.0982	2.02	3.42	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Na-22	-2.3	2.38	3.5	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Na-22	1.53	2.26	4.11	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Na-22	3.15	2.72	5.21	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Na-22	-1.37	2.33	3.62	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Na-22	-0.503	2.21	3.6	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Na-22	0.496	1.99	3.4	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Na-22	0.191	2.1	3.6	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-24D	Tier II	11/03/2009	PW	SA	Na-22	1.25	2.18	3.91	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Na-22	-1.35	1.91	2.86	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Na-22	-1.35	1.33	1.96	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Na-22	0.668	2.62	4.49	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Na-22	-0.193	2.33	3.93	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Na-22	-0.0423	1.17	1.94	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Na-22	0.24	2.14	3.65	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Nb-94	-1.74	2.11	3.26	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Nb-94	0.441	1.95	3.39	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Nb-94	-0.103	2.12	3.58	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Nb-94	-0.334	2.1	3.41	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Nb-94	0.466	2.2	3.81	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Nb-94	1.51	1.86	3.39	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Nb-94	1.14	2.11	3.66	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Nb-94	-1.27	1.97	3.17	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Nb-94	-1.17	1.3	2.1	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Nb-94	0.803	2.14	3.74	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Nb-94	-1.83	2.05	3.11	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Nb-94	-2.53	2.22	3.36	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Nb-94	1.97	2.39	4.26	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Nb-94	1.2	2.29	4.03	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Nb-94	0.863	2.16	3.78	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Nb-94	-0.851	1.76	2.89	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Nb-94	-0.785	1.84	2.94	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Nb-94	-0.652	1.9	3.12	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Nb-94	0.911	1.93	3.39	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Nb-94	1.35	1.32	2.32	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Nb-94	1.26	2.05	3.61	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Nb-94	0.228	2.11	3.63	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
SP22-13	Tier II	12/01/2009	PW	SA	Nb-94	0.708	1.16	1.99	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Nb-94	0.0732	2.04	3.39	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Nb-95	-1.04	2.09	3.3	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Nb-95	0.314	2.2	3.29	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Nb-95	-0.965	2.57	3.72	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Nb-95	-1.7	2.33	3.52	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Nb-95	1.75	2.48	4.13	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Nb-95	2.69	2.1	3.98	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Nb-95	-0.488	2.04	3.39	pCi/L	UJ,D-I	No
BM26-33C	Tier I	12/02/2009	PW	FD	Nb-95	2.43	2.47	4.43	pCi/L	UJ,D-I	No
BM26-34A	Tier I	12/02/2009	PW	SA	Nb-95	1.17	1.41	2.5	pCi/L	UJ,D-I	No
BM26-34D	Tier I	10/09/2009	PW	SA	Nb-95	1.23	2.25	3.98	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Nb-95	0.841	2.43	4.13	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Nb-95	1.73	2.29	4.05	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Nb-95	0.963	2.27	4.08	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Nb-95	-0.202	2.57	4.29	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Nb-95	2.53	3.2	4.88	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Nb-95	0.0378	1.98	3.39	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Nb-95	0.916	2.3	3.96	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Nb-95	-0.89	1.93	3.08	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Nb-95	-4.44	2.96	3.59	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Nb-95	1.07	1.58	2.71	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Nb-95	-3.85	3.39	4.16	pCi/L	UJ,D-I	No
RF17-12C	Tier II	12/01/2009	PW	SA	Nb-95	-0.494	2.06	3.39	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Nb-95	-0.524	1.21	1.93	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Nb-95	-0.19	1.91	3.11	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Nd-147	9.57	16.5	29	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Nd-147	-19.8	17.9	26	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Nd-147	-2.52	17.3	28	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-23B	Tier I	12/17/2009	PW	SA	Nd-147	6.34	17.7	30.6	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Nd-147	11.5	16.4	28.7	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Nd-147	7.16	17	30.3	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Nd-147	2.8	18	30.6	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Nd-147	-9.24	17.4	24.4	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Nd-147	-4.79	10.1	16	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Nd-147	-5.42	16.9	28.3	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Nd-147	-2.39	21.2	35.1	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Nd-147	-8.42	18.9	30.8	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Nd-147	-13.1	17.5	26.9	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Nd-147	-6.42	18.9	29.9	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Nd-147	11.2	22.4	38.2	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Nd-147	-16.7	15.8	23	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Nd-147	-14.8	21.7	34.3	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Nd-147	3.11	16	26.5	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Nd-147	-9.72	22.6	37.5	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Nd-147	2.03	12.3	21.1	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Nd-147	5.15	22.4	38.3	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Nd-147	-6.58	17.6	27.8	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Nd-147	-2.48	10.4	14.6	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Nd-147	-5.17	14.3	23.2	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Np-239	-16.7	15.8	23.9	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Np-239	6.43	15.9	26.9	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Np-239	-13.2	15.8	25.1	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Np-239	-3.45	13.2	22.4	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Np-239	-0.805	12.5	20.4	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Np-239	-2.03	15.2	24.5	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Np-239	-10.7	14.3	23.1	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Np-239	3.61	17.2	29.3	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-34A	Tier I	12/02/2009	PW	SA	Np-239	4.14	9.84	16.5	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Np-239	0.698	15.8	25.8	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Np-239	-0.082	13.8	23.1	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Np-239	6.61	16	27	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Np-239	1.16	11.7	20.1	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Np-239	-11.7	17	27.9	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Np-239	5.58	15.2	26.1	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Np-239	15.2	13.1	22.5	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Np-239	-9.71	14.6	23.6	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Np-239	-10.4	12.7	20.4	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Np-239	4.26	14	23.4	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Np-239	0.911	8.35	14.6	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Np-239	-6.82	11.1	18.5	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Np-239	10.5	15.4	26.4	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Np-239	-4.84	7.05	12	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Np-239	3.71	13.6	23	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Pb-210	-13.3	253	428	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Pb-210	-240	967	1430	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Pb-210	-596	925	1370	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Pb-210	-49.6	341	493	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Pb-210	19.5	75.8	68	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Pb-210	-415	487	763	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Pb-210	370	504	833	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Pb-210	-236	583	993	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Pb-210	-133	618	848	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Pb-210	-453	493	738	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Pb-210	-317	228	349	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Pb-210	-240	331	501	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Pb-210	-24.1	55.7	85.8	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-24B	Tier II	10/09/2009	PW	SA	Pb-210	163	514	832	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Pb-210	538	472	798	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Pb-210	-32.9	216	335	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Pb-210	-127	293	447	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Pb-210	109	310	480	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Pb-210	189	260	231	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Pb-210	-15.4	191	251	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Pb-210	-39	50.5	81	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Pb-210	-114	799	1220	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Pb-210	74.2	235	179	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Pb-210	-250	230	353	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Pb-212	0.131	5.48	6.99	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Pb-212	3.91	6.19	7.66	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Pb-214	6.78	5.98	9.57	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Pm-144	0.0732	1.9	3.18	pCi/L	UJ,D-I	No
BM26-23A	Tier I	11/03/2009	PW	SA	Pm-144	-0.767	2.24	3.4	pCi/L	UJ,D-I	No
BM26-23A	Tier I	12/17/2009	PW	SA	Pm-144	1.73	2.12	3.84	pCi/L	UJ,D-I	No
BM26-23B	Tier I	12/17/2009	PW	SA	Pm-144	0.827	2.03	3.46	pCi/L	UJ,D-I	No
BM26-23C	Tier I	11/03/2009	PW	SA	Pm-144	-0.0371	2.19	3.73	pCi/L	UJ,D-I	No
BM26-23C	Tier I	12/17/2009	PW	SA	Pm-144	-0.293	1.88	3.13	pCi/L	UJ,D-I	No
BM26-33C	Tier I	12/02/2009	PW	FD	Pm-144	0.0474	2.33	3.86	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Pm-144	-1.15	1.88	3.02	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Pm-144	0.0631	1.33	2.26	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Pm-144	0.0695	2.67	3.74	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Pm-144	0.0714	2.14	3.54	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Pm-144	2.02	2.29	4.06	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Pm-144	2.05	2.59	4.58	pCi/L	UJ,D-I	No
BM26-24B	Tier II	10/09/2009	PW	SA	Pm-144	-1.55	2.2	3.5	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Pm-144	-1.59	2.19	3.49	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-24C	Tier II	10/22/2009	PW	SA	Pm-144	0.521	1.91	3.34	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Pm-144	1.59	1.89	3.38	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Pm-144	1.56	1.88	3.39	pCi/L	UJ,D-I	No
BM34-22B	Tier II	12/21/2009	PW	SA	Pm-144	0.888	2.08	3.65	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Pm-144	0.271	1.28	2.15	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Pm-144	0.406	2.42	4.05	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Pm-144	0.0819	1.96	3.35	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Pm-144	-0.624	1.11	1.76	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Pm-144	0.783	1.88	3.23	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Pm-146	-0.666	2.59	4.31	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Pm-146	-0.0926	2.97	4.91	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Pm-146	-0.647	2.88	4.69	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Pm-146	-0.95	2.52	4.16	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Pm-146	-1.57	2.79	4.46	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Pm-146	0.924	2.79	4.71	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Pm-146	1.99	2.9	5.14	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Pm-146	2.67	2.69	4.86	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Pm-146	2.55	1.8	3.17	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Pm-146	0.447	2.75	4.59	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Pm-146	-0.53	2.52	4.19	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Pm-146	0.701	2.91	5	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Pm-146	-2.98	3.02	4.68	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Pm-146	-0.938	3.16	5.12	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Pm-146	-2.89	3.17	4.36	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Pm-146	-1.31	2.64	3.95	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Pm-146	-0.241	2.51	4.22	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Pm-146	-1.24	2.47	3.9	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Pm-146	0.457	3.33	4.89	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Pm-146	-0.72	1.62	2.7	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
RF17-12B	Tier II	11/12/2009	PW	SA	Pm-146	1.01	2.81	4.91	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Pm-146	-2.31	2.8	4.3	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Pm-146	-1.28	1.44	2.34	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Pm-146	2.92	2.51	4.57	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Ra-228	25	15.6	25	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Ra-228	11.8	12.7	16.9	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Ru-106	17.3	17.4	31.6	pCi/L	UJ,D-I	No
BM26-23A	Tier I	11/03/2009	PW	SA	Ru-106	-15.9	18	28.4	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Ru-106	-15.7	17.5	27.4	pCi/L	UJ,D-I	No
BM26-23B	Tier I	12/17/2009	PW	SA	Ru-106	0.682	17.3	28.9	pCi/L	UJ,D-I	No
BM26-23C	Tier I	11/03/2009	PW	SA	Ru-106	-1.45	19.8	33.9	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Ru-106	24.1	19.8	37	pCi/L	UJ,D-I	No
BM26-33C	Tier I	12/02/2009	PW	SA	Ru-106	-4.8	18.7	29.7	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Ru-106	10.5	21.4	37.1	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Ru-106	-2.02	11.7	19.9	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Ru-106	-1.77	19.6	33.3	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Ru-106	4.97	18.9	32.1	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Ru-106	-1.39	20.2	33.7	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Ru-106	12.1	22.4	39.2	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Ru-106	-8.83	21.3	35.3	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Ru-106	15.8	20.5	37	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Ru-106	1.58	17.5	28.8	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Ru-106	-5	16	26	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Ru-106	1.54	17.1	29.4	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Ru-106	14.8	18.2	33.2	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Ru-106	5.39	12	20.6	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Ru-106	5	19.5	33.3	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Ru-106	-15.6	18.7	29.6	pCi/L	UJ,D-I	No
SP22-13	Tier II	12/01/2009	PW	SA	Ru-106	0.44	9.58	16.1	pCi/L	UJ,D-I	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
SP411-13	Tier II	12/01/2009	PW	SA	Ru-106	15	18.9	33.6	pCi/L	UJ,D-I	No
BM26-22D	Tier I	12/17/2009	PW	SA	Sb-124	-1.66	4.71	7.45	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Sb-124	2.11	4.63	8.28	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Sb-124	-3.08	4.3	6.09	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Sb-124	0.316	4.1	7.04	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Sb-124	3.53	4.82	9.07	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Sb-124	0.427	5.24	8.61	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Sb-124	4.08	5.01	9.56	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Sb-124	-2.44	4.02	5.8	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Sb-124	0.0526	2.96	4.93	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Sb-124	4.08	4.36	8.44	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Sb-124	-5.11	4.82	6.34	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Sb-124	-0.891	4.66	7.56	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Sb-124	0.535	4.89	8.43	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Sb-124	1.65	4.17	7.58	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Sb-124	3.11	4.45	8.42	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Sb-124	0.792	3.58	6.29	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Sb-124	-5	4.91	6.83	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Sb-124	-2.63	4.51	6.98	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Sb-124	-2.21	5.25	8.04	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Sb-124	-0.701	3.06	5.06	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Sb-124	-3.78	5.49	7.97	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Sb-124	-0.953	4.29	6.82	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Sb-124	0.594	2.42	4.21	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Sb-124	0.629	4.03	6.84	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Sb-125	1.46	5.58	9.64	pCi/L	UJ,D-I	No
BM26-23A	Tier I	11/03/2009	PW	SA	Sb-125	6.18	6.01	10.7	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Sb-125	-3.73	6.14	9.73	pCi/L	UJ,D-I	No
BM26-23B	Tier I	12/17/2009	PW	SA	Sb-125	-0.76	5.51	9.31	pCi/L	UJ,D-I	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-23C	Tier I	11/03/2009	PW	SA	Sb-125	-2.23	5.92	9.66	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Sb-125	-1.55	6.15	9.96	pCi/L	UJ,D-I	No
BM26-33C	Tier I	12/02/2009	PW	FD	Sb-125	-0.379	6.84	11.5	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Sb-125	-0.877	5.19	8.59	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Sb-125	-1.87	3.74	6.06	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Sb-125	-2.84	6.21	9.87	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Sb-125	-3.44	5.25	8.43	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Sb-125	5.95	6.04	10.9	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Sb-125	0.0847	6.08	10.4	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Sb-125	-0.494	6.7	11.1	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Sb-125	1.22	6.03	10.2	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Sb-125	0.419	5.49	9.21	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Sb-125	-1.48	5.29	8.81	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Sb-125	3.88	5.49	9.59	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Sb-125	-0.86	5.76	9.39	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Sb-125	1.96	3.47	6.14	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Sb-125	0.0141	6.21	10.6	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Sb-125	3.12	5.47	9.52	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Sb-125	-1.62	3	5.01	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Sb-125	5.13	5.57	10	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Sn-113	-0.83	2.64	4.2	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Sn-113	-2.94	2.82	4.35	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Sn-113	-0.56	2.65	4.36	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Sn-113	-0.854	2.51	4.21	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Sn-113	2.32	2.7	4.82	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Sn-113	1.01	2.74	4.67	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Sn-113	-1.25	2.96	4.89	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Sn-113	-0.741	2.59	4.27	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Sn-113	-1.72	1.7	2.7	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-34D	Tier I	10/09/2009	PW	SA	Sn-113	1.53	2.57	4.46	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Sn-113	2.47	2.4	4.36	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Sn-113	-1.51	3.06	4.77	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Sn-113	0.473	2.51	4.37	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Sn-113	2.34	2.84	5.01	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Sn-113	1.96	2.88	5.03	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Sn-113	1.22	2.35	4.09	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Sn-113	-0.839	2.67	4.47	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Sn-113	1.07	2.41	4.15	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Sn-113	-0.0555	2.53	4.19	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Sn-113	0.541	1.62	2.84	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Sn-113	1.23	2.73	4.84	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Sn-113	-1.53	2.57	4.09	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Sn-113	-0.268	1.38	2.36	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Sn-113	-1.6	2.49	4.03	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Sr-90	-0.156	1.28	2.41	pCi/L	UJ,MS-L	No
BM26-23A	Tier I	11/03/2009	PW	SA	Sr-90	-0.495	0.811	1.58	pCi/L	UJ,MS-L	No
BM26-23A	Tier I	12/17/2009	PW	SA	Sr-90	1.34	1.05	1.67	pCi/L	UJ,MS-L	No
BM26-23B	Tier I	12/17/2009	PW	SA	Sr-90	1.58	1.34	2.18	pCi/L	UJ,MS-L	No
BM26-23C	Tier I	11/03/2009	PW	SA	Sr-90	-0.433	0.678	1.35	pCi/L	UJ,MS-L	No
BM26-23C	Tier I	12/17/2009	PW	SA	Sr-90	-0.809	0.65	1.56	pCi/L	UJ,MS-L	No
BM26-33C	Tier I	12/02/2009	PW	SA	Sr-90	0.312	0.534	0.924	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Sr-90	0.199	0.37	0.654	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Sr-90	0.0376	0.296	0.564	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Sr-90	0.398	0.752	1.32	pCi/L	UJ,MS-L	No
BM26-34D	Tier I	12/21/2009	PW	SA	Sr-90	0.558	0.668	1.13	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Sr-90	0.589	0.513	0.816	pCi/L	UJ,MS-L	No
BM26-23D	Tier II	11/03/2009	PW	SA	Sr-90	0.357	0.65	1.13	pCi/L	UJ,MS-L	No
BM26-24B	Tier II	10/09/2009	PW	SA	Sr-90	1.39	1.03	1.66	pCi/L	UJ,MS-L	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-24B	Tier II	12/29/2009	PW	SA	Sr-90	0.788	1.12	1.93	pCi/L	UJ,MS-L	No
BM26-24C	Tier II	10/22/2009	PW	SA	Sr-90	-0.536	0.609	1.36	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Sr-90	0.438	0.796	1.4	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Sr-90	0.32	0.726	1.28	pCi/L	UJ,MS-L	No
BM34-22B	Tier II	12/21/2009	PW	SA	Sr-90	-0.39	0.654	1.38	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Sr-90	0.809	0.582	0.878	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Sr-90	0.058	0.489	0.937	pCi/L	UJ,MS-L	No
RF17-12C	Tier II	12/01/2009	PW	SA	Sr-90	-0.0108	0.284	0.562	pCi/L	UJ,MS-L	No
SP22-13	Tier II	12/01/2009	PW	SA	Sr-90	-0.072	0.555	1.03	pCi/L	UJ,MS-L	No
SP411-13	Tier II	12/01/2009	PW	SA	Sr-90	0.463	0.668	1.14	pCi/L	UJ,MS-L	No
BM26-22D	Tier I	12/17/2009	PW	SA	Tc-99	-10.3	21.3	37.2	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Tc-99	3.84	11.8	20.3	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Tc-99	4.76	24	41.1	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Tc-99	-15.2	20.3	35.7	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Tc-99	-4.99	11.8	21	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Tc-99	-1.55	21.1	36.4	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Tc-99	-1.52	20.7	35.9	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Tc-99	-9.79	20.7	36.2	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Tc-99	3.02	20.4	35	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Tc-99	-34.9	24.4	42.5	pCi/L	UJ,Y/T-I	No
BM26-34D	Tier I	12/21/2009	PW	SA	Tc-99	-3.12	19.2	33.5	pCi/L	UJ,MS-L	No
BM26-22C	Tier II	10/09/2009	PW	SA	Tc-99	-21.2	27	46.5	pCi/L	UJ,Y/T-I	No
BM26-23D	Tier II	11/03/2009	PW	SA	Tc-99	-3.14	23.7	41.5	pCi/L	UJ,Y/T-I	No
BM26-24B	Tier II	10/09/2009	PW	SA	Tc-99	0.717	25.6	44	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Tc-99	-12.1	22	38.3	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Tc-99	-16.3	27.3	50	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Tc-99	-4.54	25.5	44.4	pCi/L	UJ,MS-L	No
BM26-24D	Tier II	11/03/2009	PW	SA	Tc-99	-12.1	52.5	90.1	pCi/L	UJ,Y/T-I	No
BM34-22B	Tier II	12/21/2009	PW	SA	Tc-99	1.37	18.2	31.5	pCi/L	UJ,MS-L	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM34-22C	Tier II	12/21/2009	PW	SA	Tc-99	6.29	18.5	31.7	pCi/L	UJ,MS-L	No
RF17-12B	Tier II	11/12/2009	PW	SA	Tc-99	-2.6	20.9	36	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Tc-99	-16.6	20.6	36.3	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Tc-99	1.48	20.7	35.6	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Tc-99	8.54	21.1	35.9	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Th-230	538	3540	1580	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Th-230	368	2730	2310	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Th-230	-379	2710	2070	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Th-230	748	4850	1330	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Th-230	-55.5	563	705	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Th-230	1230	7910	1690	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Th-230	824	5410	2080	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Th-230	723	4740	2070	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Th-230	475	3140	1330	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Th-230	509	3390	1750	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Th-230	390	2640	1290	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Th-230	-13	1220	1740	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Th-230	392	2540	798	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Th-230	190	1610	1850	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Th-230	-74.9	1150	1730	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Th-230	-724	4680	1420	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Th-230	1050	6750	1200	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Th-230	475	3110	795	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Th-230	561	3600	649	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Th-230	-157	1600	2110	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Th-230	-1270	8090	1270	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Th-234	-65.7	123	183	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Th-234	-61.5	197	299	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Th-234	73.5	225	282	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-23B	Tier I	12/17/2009	PW	SA	Th-234	13	112	153	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Th-234	-46	55.4	88.3	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Th-234	6.96	186	219	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Th-234	82.1	167	245	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Th-234	93.2	155	256	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Th-234	86	152	177	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Th-234	-68.5	144	218	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Th-234	33.9	115	147	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Th-234	130	215	193	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Th-234	15.2	74.3	74.4	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Th-234	-16.5	164	268	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Th-234	74.9	255	270	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Th-234	101	102	125	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Th-234	-59	112	180	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Th-234	108	130	178	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Th-234	72.7	126	134	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Th-234	26.4	92.7	92.4	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Th-234	7.39	71.2	69.4	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Th-234	-59.5	178	276	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Th-234	14.5	69.8	93.1	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Th-234	-3.13	100	161	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Tl-208	2.71	3.05	3.54	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Tl-208	3.93	4.32	5.53	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Tl-208	3.96	2.72	4.62	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Tl-208	2.77	2.77	4.75	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Tl-208	-2.08	2.65	3.79	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Tl-208	1.39	2.91	4.71	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Tl-208	0.0836	2.84	2.52	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Tl-208	1.41	3.84	4.7	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-22D	Tier I	12/17/2009	PW	SA	Total Uranium	0.143	0.0463	0.928	ug/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Total Uranium	0.2	0.023	0.743	ug/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Total Uranium	0.304	0.0267	0.928	ug/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Total Uranium	0.0276	0.0126	0.928	ug/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Total Uranium	0.142	0.0162	0.743	ug/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Total Uranium	0.0616	0.0172	0.928	ug/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Total Uranium	0.807	0.218	4.64	ug/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Total Uranium	0.636	0.233	4.64	ug/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Total Uranium	1.35	0.478	4.64	ug/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Total Uranium	0.151	0.0163	0.743	ug/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Total Uranium	0.229	0.016	0.66	ug/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Total Uranium	0.152	0.0172	0.743	ug/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Total Uranium	-1.45	0.12	7.43	ug/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Total Uranium	0.165	0.0127	0.743	ug/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Total Uranium	0.354	0.0187	0.66	ug/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Total Uranium	0	0	0.743	ug/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Total Uranium	0.254	0.011	0.66	ug/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Total Uranium	1.2	0.0733	7.43	ug/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Total Uranium	-0.015	0.006	0.66	ug/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Total Uranium	0.461	0.0211	0.66	ug/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Total Uranium	-0.342	0.0498	3.72	ug/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Total Uranium	0.906	0.343	4.64	ug/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Total Uranium	-0.0526	0.0259	4.64	ug/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Total Uranium	0.274	0.12	4.64	ug/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Tritium	10		10	TU	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-23C	Tier I	12/17/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Tritium	10		10	TU	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Tritium	10		10	TU	U	No
BM36-13B	Tier I	12/17/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Tritium	10		10	TU	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Tritium	10		10	TU	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Tritium	10		10	TU	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Tritium	10		10	TU	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Tritium	10		10	TU	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Tritium	10		10	TU	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Tritium	10		10	TU	U	No
BM26-22D	Tier I	12/17/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-23A	Tier I	11/03/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-23A	Tier I	12/17/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-23B	Tier I	12/17/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-23C	Tier I	11/03/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-23C	Tier I	12/17/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-33C	Tier I	12/02/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-33C	Tier I	12/02/2009	NG	FD	Tritium C1	10		10	TU	U	No
BM26-34A	Tier I	12/02/2009	NG	SA	Tritium C1	10		10	TU	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-34D	Tier I	10/19/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-34D	Tier I	12/21/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM36-13B	Tier I	12/17/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-22C	Tier II	10/19/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-23D	Tier II	11/03/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-24B	Tier II	10/19/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-24B	Tier II	12/29/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-24C	Tier II	10/22/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-24C	Tier II	12/21/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-24D	Tier II	11/03/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM34-22B	Tier II	12/21/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM34-22C	Tier II	12/21/2009	NG	SA	Tritium C1	10		10	TU	U	No
RF17-12B	Tier II	11/12/2009	NG	SA	Tritium C1	10		0	TU	U	No
RF17-12C	Tier II	12/01/2009	NG	SA	Tritium C1	10		10	TU	U	No
SP22-13	Tier II	12/01/2009	NG	SA	Tritium C1	10		10	TU	U	No
SP411-13	Tier II	12/01/2009	NG	SA	Tritium C1	10		10	TU	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	U-235	-15	17.6	25.4	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	U-235	-7.14	18.4	28.1	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	U-235	1.13	19.6	27.7	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	U-235	-5.56	15.1	24	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	U-235	10.1	14.8	24.1	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	U-235	9.03	18.2	27.3	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	U-235	-24	20.8	30.1	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	U-235	1.9	18	25.1	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	U-235	-2.05	14	16.7	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	U-235	5.88	17.5	28.6	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	U-235	-12.9	15.6	24.9	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	U-235	-16.7	18.9	28.3	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	U-235	-7.95	15.1	23.1	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-24B	Tier II	10/09/2009	PW	SA	U-235	5.41	26	28.9	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	U-235	2.54	19.9	30.1	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	U-235	0.773	17.6	24.4	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	U-235	-16.8	17.8	25.6	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	U-235	7.14	15.6	24.5	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	U-235	-8.84	17.4	25.2	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	U-235	14	14.1	14.7	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	U-235	-1.31	15.1	21.9	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	U-235	-11.1	17.8	25.6	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	U-235	6.85	9.78	13.4	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	U-235	-8.71	17.4	24	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	U-238	-65.7	123	183	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	U-238	-61.5	197	299	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	U-238	73.5	225	282	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	U-238	13	112	153	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	U-238	-46	55.4	88.3	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	U-238	6.96	186	219	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	U-238	82.1	167	245	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	U-238	93.2	155	256	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	U-238	86	152	177	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	U-238	-68.5	144	218	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	U-238	33.9	115	147	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	U-238	130	215	193	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	U-238	15.2	74.3	74.4	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	U-238	-16.5	164	268	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	U-238	74.9	255	270	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	U-238	101	102	125	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	U-238	-59	112	180	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	U-238	108	130	178	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM34-22B	Tier II	12/21/2009	PW	SA	U-238	72.7	126	134	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	U-238	26.4	92.7	92.4	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	U-238	7.39	71.2	69.4	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	U-238	-59.5	178	276	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	U-238	14.5	69.8	93.1	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	U-238	-3.13	100	161	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Y-88	-0.939	2.17	3.34	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Y-88	-0.88	2.37	3.64	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Y-88	-0.704	2.03	3.1	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Y-88	0.107	1.82	3.1	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Y-88	-0.653	2.15	3.41	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Y-88	-0.0417	2.19	3.61	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Y-88	-0.813	2.13	3.32	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Y-88	1.03	2.25	4.05	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Y-88	1.34	1.39	2.54	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Y-88	0.214	2.3	3.87	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Y-88	0.433	2.27	3.98	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Y-88	1.46	2.05	3.81	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Y-88	0.985	2.87	5.1	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Y-88	-0.127	2.41	4.03	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Y-88	0.257	2.71	4.63	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Y-88	-0.724	1.59	2.4	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Y-88	1.09	2.11	3.81	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Y-88	-0.317	1.74	2.84	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Y-88	-0.821	2.11	3.34	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Y-88	1.27	1.41	2.61	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Y-88	-0.107	2.6	4.31	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Y-88	1.09	2.4	4.27	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Y-88	-0.376	1.13	1.82	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
SP411-13	Tier II	12/01/2009	PW	SA	Y-88	-2.16	2.22	3.17	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Zn-65	-1.85	4.63	7.61	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Zn-65	-4.22	5.44	8.14	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Zn-65	-3.77	4.71	6.91	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Zn-65	0.874	4.85	7.25	pCi/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Zn-65	0.409	5.44	8.08	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Zn-65	-5.74	5.02	7.01	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Zn-65	-9.96	5.95	8.13	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Zn-65	0.392	4.53	6.58	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Zn-65	0.476	3.24	4.66	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Zn-65	-9.19	5.41	6.97	pCi/L	UJ,D-I	No
BM26-34D	Tier I	12/21/2009	PW	SA	Zn-65	-3.17	4.73	7.42	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Zn-65	-5.66	5.31	8.21	pCi/L	UJ,D-I	No
BM26-23D	Tier II	11/03/2009	PW	SA	Zn-65	-4.82	6.47	9.92	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Zn-65	3.78	5.54	8.93	pCi/L	UJ,D-I	No
BM26-24B	Tier II	12/29/2009	PW	SA	Zn-65	3.16	4.94	8	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Zn-65	3.3	4.22	7.11	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Zn-65	-4.86	4.57	6.94	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Zn-65	-4.29	4.73	7.29	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Zn-65	0.473	4.39	7.59	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Zn-65	0.108	2.93	4.29	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Zn-65	-1.05	6.39	10.5	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Zn-65	0.75	4.56	6.67	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Zn-65	2.13	2.58	4.11	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Zn-65	0.0219	4.41	7.45	pCi/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Zr-95	4.59	3.56	6.59	pCi/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Zr-95	1.53	3.55	6.26	pCi/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Zr-95	-3.53	3.88	5.76	pCi/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Zr-95	-1.95	3.9	6.05	pCi/L	U	No

Table 1
Radiological Results - Produced Water and Natural Gas

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BM26-23C	Tier I	11/03/2009	PW	SA	Zr-95	2.51	3.73	6.7	pCi/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Zr-95	-1.6	4.07	6.61	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Zr-95	-0.49	4.28	6.94	pCi/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Zr-95	1.08	3.46	6.09	pCi/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Zr-95	0.261	2.24	3.82	pCi/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Zr-95	2.12	3.87	6.85	pCi/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Zr-95	0.743	3.71	6.23	pCi/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Zr-95	3.73	4.36	7.35	pCi/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Zr-95	3.77	4.33	7.76	pCi/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Zr-95	1.48	4.19	7.26	pCi/L	U	No
BM26-24B	Tier II	12/29/2009	PW	SA	Zr-95	0.345	4.23	7.17	pCi/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Zr-95	4.02	3.39	6.34	pCi/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Zr-95	0.452	3.18	5.37	pCi/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Zr-95	3.63	3.36	6.19	pCi/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Zr-95	0.735	3.89	6.66	pCi/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Zr-95	0.119	2.48	4.1	pCi/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Zr-95	-3.4	4.41	6.46	pCi/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Zr-95	0.925	3.15	5.5	pCi/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Zr-95	-0.204	1.96	3.2	pCi/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Zr-95	-0.991	3.07	4.86	pCi/L	U	No

Notes: FB = flowback water; FW = fracing fluids; PW = produced water;SA = primary sample; FD = field duplicate; pCi/L = picoCuries per liter; µg/L = micrograms per liter; pMC = percent modern carbon; TU = tritium units; pCi/g = picoCuries per gram; U = analyte was analyzed but was not detected above the minimum detectable activity (MDA); J = the reported analytical result is estimated; UJ = the analyte was analyzed for but was not detected above the MDA; the reported analytical result is an estimate; MS = outside matrix spike acceptance range; D = result was qualified as estimated because the duplicate error ratio criterion was not met; Y/T = tracer yield recovery outside acceptance range; MS = matrix spike recovery outside acceptance range; I = indeterminant result bias; L = likely low result bias; H = likely high result bias.

Table 2
Major Cation and Total Metal Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-22D	Tier I	12/17/2009	PW	SA	Arsenic	1.5	2	µg/L	J,SQL-I	Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Arsenic	2.9	2	µg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Arsenic	3.9	2	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Arsenic	1.9	2	µg/L	J,SQL-I	Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Arsenic	2.1	2	µg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Arsenic	2.2	2	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Arsenic	2.5	2	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Arsenic	2.7	2	µg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Arsenic	12	2	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Arsenic	3.5	2	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Arsenic	4.5	2	µg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Arsenic	2.6	2	µg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Arsenic	3.5	2	µg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Arsenic	4.1	2	µg/L	J,P-L	Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Arsenic	5.7	2	µg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Arsenic	2.8	2	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Arsenic	3	2	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Arsenic	6.9	2	µg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Barium	96000	10000	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Barium	120000	10000	µg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Barium	79000	10000	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Barium	110000	10000	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Barium	110000	10000	µg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Barium	86000	10000	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Barium	20000	1000	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Barium	21000	1000	µg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Barium	46000	1000	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Barium	120000	10000	µg/L		Yes

Table 2
Major Cation and Total Metal Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-34D	Tier I	12/21/2009	PW	SA	Barium	29000	500	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Barium	250000	10000	µg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Barium	100000	10000	µg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Barium	280000	10000	µg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Barium	220000	10000	µg/L	J,P-L	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Barium	96000	5000	µg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Barium	63000	10000	µg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Barium	120000	5000	µg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Barium	210000	5000	µg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Barium	130000	10000	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Barium	140000	10000	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Barium	53000	1000	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Barium	44000	1000	µg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Boron	4000	500	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Boron	4000	500	µg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Boron	4200	500	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Boron	3300	500	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Boron	5100	500	µg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Boron	4600	500	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Boron	3200	1000	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Boron	3200	1000	µg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Boron	3500	1000	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Boron	5200	500	µg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Boron	4000	500	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Boron	4700	500	µg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Boron	4400	500	µg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Boron	7000	500	µg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Boron	6500	1000	µg/L	J,P-L	Yes

Table 2
Major Cation and Total Metal Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-24C	Tier II	12/21/2009	PW	SA	Boron	4600	500	µg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Boron	10000	500	µg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Boron	5000	500	µg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Boron	5900	500	µg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Boron	6000	500	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Boron	6000	1000	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Boron	11000	1000	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Boron	9300	1000	µg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Cadmium	0.89	0.3	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Cadmium	0.59	0.3	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Cadmium	0.43	0.3	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Cadmium	1.4	0.3	µg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Cadmium	2.1	0.3	µg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Cadmium	2	0.3	µg/L		Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Cadmium	1.5	0.3	µg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Cadmium	0.2	0.3	µg/L	J,SQL-I	Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Cadmium	0.35	0.3	µg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Cadmium	0.92	0.3	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Cadmium	3.6	0.3	µg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Calcium	320000	5000	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Calcium	370000	5000	µg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Calcium	290000	5000	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Calcium	370000	5000	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Calcium	370000	5000	µg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Calcium	330000	5000	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Calcium	390000	10000	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Calcium	380000	10000	µg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Calcium	270000	10000	µg/L		Yes

Table 2
Major Cation and Total Metal Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-34D	Tier I	10/09/2009	PW	SA	Calcium	530000	5000	µg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Calcium	300000	5000	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Calcium	590000	5000	µg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Calcium	430000	5000	µg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Calcium	460000	5000	µg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Calcium	580000	10000	µg/L	J,P-L	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Calcium	300000	5000	µg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Calcium	310000	5000	µg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Calcium	350000	5000	µg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Calcium	480000	5000	µg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Calcium	260000	5000	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Calcium	250000	10000	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Calcium	110000	10000	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Calcium	94000	10000	µg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Chromium	7.2	50	µg/L	J,SQL-I	Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Chromium	19	50	µg/L	J,SQL-I	Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Chromium	25	50	µg/L	J,SQL-I	Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Chromium	13	50	µg/L	J,SQL-I	Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Chromium	15	50	µg/L	J,SQL-I	Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Chromium	9.5	50	µg/L	J,SQL-I	Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Chromium	4.8	100	µg/L	J,SQL-I	Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Chromium	5.8	100	µg/L	J,SQL-I	Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Chromium	58	50	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Chromium	77	50	µg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Chromium	32	50	µg/L	J,SQL-I	Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Chromium	33	50	µg/L	J,SQL-I	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Chromium	22	50	µg/L	J,SQL-I	Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Chromium	34	50	µg/L	J,SQL-I	Yes

Table 2
Major Cation and Total Metal Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM34-22C	Tier II	12/21/2009	PW	SA	Chromium	58	50	µg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Chromium	18	50	µg/L	J,SQL-I	Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Iron	51000	500	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Iron	94000	500	µg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Iron	58000	500	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Iron	81000	500	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Iron	48000	500	µg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Iron	65000	500	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Iron	100000	1000	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Iron	110000	1000	µg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Iron	56000	1000	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Iron	87000	500	µg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Iron	68000	500	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Iron	97000	500	µg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Iron	100000	500	µg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Iron	57000	500	µg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Iron	47000	1000	µg/L	J,P-L	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Iron	49000	500	µg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Iron	370000	500	µg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Iron	36000	500	µg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Iron	63000	500	µg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Iron	69000	500	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Iron	110000	1000	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Iron	15000	1000	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Iron	11000	1000	µg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Lead	0.82	0.5	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Lead	5.4	0.5	µg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Lead	2.9	0.5	µg/L		Yes

Table 2
Major Cation and Total Metal Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-23B	Tier I	12/17/2009	PW	SA	Lead	0.65	0.5	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Lead	0.55	0.5	µg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Lead	0.41	0.5	µg/L	J,SQL-I	Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Lead	0.79	0.5	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Lead	1.4	0.5	µg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Lead	3.3	0.5	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Lead	4.7	0.5	µg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Lead	3.1	0.5	µg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Lead	7.1	0.5	µg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Lead	66	0.5	µg/L	J,P-L	Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Lead	0.68	0.5	µg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Lead	3.4	0.5	µg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Lead	0.43	0.5	µg/L	J,SQL-I	Yes
SP22-13	Tier II	12/01/2009	PW	SA	Lead	1.5	0.5	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Lead	0.92	0.5	µg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Lithium	5200	50	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Lithium	5500	50	µg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Lithium	5100	50	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Lithium	5800	50	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Lithium	5500	50	µg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Lithium	5700	50	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Lithium	4700	100	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Lithium	4700	100	µg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Lithium	5100	100	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Lithium	6300	50	µg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Lithium	4900	50	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Lithium	6400	50	µg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Lithium	5600	50	µg/L		Yes

Table 2
Major Cation and Total Metal Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-24B	Tier II	10/09/2009	PW	SA	Lithium	7700	50	µg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Lithium	7800	100	µg/L	J,P-L	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Lithium	5300	50	µg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Lithium	7100	50	µg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Lithium	5300	50	µg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Lithium	7200	50	µg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Lithium	6000	50	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Lithium	7300	100	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Lithium	5400	100	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Lithium	4700	100	µg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Magnesium	41000	5000	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Magnesium	50000	5000	µg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Magnesium	40000	5000	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Magnesium	47000	5000	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Magnesium	52000	5000	µg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Magnesium	44000	5000	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Magnesium	45000	10000	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Magnesium	45000	10000	µg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Magnesium	34000	10000	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Magnesium	75000	5000	µg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Magnesium	44000	5000	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Magnesium	84000	5000	µg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Magnesium	57000	5000	µg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Magnesium	56000	5000	µg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Magnesium	73000	10000	µg/L	J,P-L	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Magnesium	44000	5000	µg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Magnesium	35000	5000	µg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Magnesium	72000	5000	µg/L		Yes

Table 2
Major Cation and Total Metal Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM34-22C	Tier II	12/21/2009	PW	SA	Magnesium	63000	5000	µg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Magnesium	32000	5000	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Magnesium	30000	10000	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Magnesium	13000	10000	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Magnesium	13000	10000	µg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Manganese	830	20	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Manganese	1600	20	µg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Manganese	930	20	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Manganese	1300	20	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Manganese	890	20	µg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Manganese	990	20	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Manganese	2000	20	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Manganese	1900	20	µg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Manganese	990	20	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Manganese	1800	20	µg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Manganese	1200	20	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Manganese	2000	20	µg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Manganese	1800	20	µg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Manganese	940	10	µg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Manganese	990	20	µg/L	J,P-L	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Manganese	840	20	µg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Manganese	3200	20	µg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Manganese	680	20	µg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Manganese	1100	20	µg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Manganese	1200	20	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Manganese	1200	20	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Manganese	180	2	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Manganese	210	2	µg/L		Yes

Table 2
Major Cation and Total Metal Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-23A	Tier I	11/03/2009	PW	SA	Mercury	0.11	0.2	µg/L	J,SQL-I	Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Mercury	0.7	0.2	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Mercury	0.021	0.2	µg/L	J,SQL,CCB,MB-L	Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Mercury	0.32	0.2	µg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Mercury	0.093	0.2	µg/L	J,SQL-I	Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Mercury	0.13	0.2	µg/L	J,SQL-I	Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Mercury	0.097	0.2	µg/L	J,SQL,P-L	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Mercury	0.39	0.2	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Mercury	0.074	0.2	µg/L	J,SQL,CCB-L	Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Potassium	630000	5000	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Potassium	640000	5000	µg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Potassium	580000	5000	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Potassium	670000	5000	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Potassium	680000	5000	µg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Potassium	610000	5000	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Potassium	500000	10000	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Potassium	490000	10000	µg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Potassium	510000	10000	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Potassium	550000	5000	µg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Potassium	340000	5000	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Potassium	990000	5000	µg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Potassium	560000	5000	µg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Potassium	470000	5000	µg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Potassium	280000	10000	µg/L	J,P-L	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Potassium	220000	5000	µg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Potassium	260000	5000	µg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Potassium	230000	5000	µg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Potassium	250000	5000	µg/L		Yes

Table 2
Major Cation and Total Metal Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
RF17-12B	Tier II	11/12/2009	PW	SA	Potassium	140000	5000	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Potassium	150000	10000	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Potassium	98000	10000	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Potassium	140000	10000	µg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Selenium	0.29	1	µg/L	J,SQL-I	Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Selenium	0.24	1	µg/L	J,SQL-I	Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Selenium	0.25	1	µg/L	J,SQL-I	Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Selenium	0.41	1	µg/L	J,SQL-I	Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Selenium	0.44	1	µg/L	J,SQL-I	Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Selenium	0.37	1	µg/L	J,SQL-I	Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Selenium	0.25	1	µg/L	J,SQL,P-L	Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Selenium	0.19	1	µg/L	J,SQL-I	Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Sodium	7600000	100000	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Sodium	7200000	100000	µg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Sodium	7100000	100000	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Sodium	8000000	100000	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Sodium	7600000	100000	µg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Sodium	7600000	100000	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Sodium	7000000	100000	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Sodium	7100000	100000	µg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Sodium	7100000	100000	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Sodium	9000000	100000	µg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Sodium	7600000	50000	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Sodium	11000000	100000	µg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Sodium	7700000	100000	µg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Sodium	10000000	100000	µg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Sodium	9500000	100000	µg/L	J,P-L	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Sodium	7900000	50000	µg/L		Yes

Table 2
Major Cation and Total Metal Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-24D	Tier II	11/03/2009	PW	SA	Sodium	6100000	100000	µg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Sodium	8800000	50000	µg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Sodium	11000000	50000	µg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Sodium	6900000	100000	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Sodium	8000000	100000	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Sodium	5700000	100000	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Sodium	5600000	100000	µg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Strontium	48000	50	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Strontium	57000	1000	µg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Strontium	44000	50	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Strontium	58000	1000	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Strontium	52000	1000	µg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Strontium	45000	50	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Strontium	42000	100	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Strontium	42000	100	µg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Strontium	32000	100	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Strontium	67000	1000	µg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Strontium	35000	50	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Strontium	100000	1000	µg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Strontium	56000	1000	µg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Strontium	75000	1000	µg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Strontium	69000	100	µg/L	J,P-L	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Strontium	38000	50	µg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Strontium	49000	50	µg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Strontium	43000	50	µg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Strontium	64000	500	µg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Strontium	58000	1000	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Strontium	55000	100	µg/L		Yes

Table 2
Major Cation and Total Metal Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
SP22-13	Tier II	12/01/2009	PW	SA	Strontium	22000	100	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Strontium	18000	100	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Uranium	0.081	0.1	µg/L	J,SQL-I	Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Uranium	0.076	0.1	µg/L	J,SQL-I	Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Uranium	0.35	0.1	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Uranium	0.11	0.1	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Uranium	0.15	0.1	µg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Uranium	0.15	0.1	µg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Uranium	0.32	0.1	µg/L	J,P-I	Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Uranium	3.6	0.1	µg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Uranium	0.23	0.1	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Uranium	0.2	0.1	µg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Arsenic	2.6	2.6	µg/L	U,MB-I	No
BM26-24C	Tier II	12/21/2009	PW	SA	Arsenic	3.1	3.1	µg/L	U,MB-I	No
BM34-22B	Tier II	12/21/2009	PW	SA	Arsenic	3.1	3.1	µg/L	U,MB-I	No
BM34-22C	Tier II	12/21/2009	PW	SA	Arsenic	5.5	5.5	µg/L	U,MB-I	No
RF17-12C	Tier II	12/01/2009	PW	SA	Arsenic	2	2	µg/L	U,CCB-I	No
BM26-23A	Tier I	12/17/2009	PW	SA	Cadmium	0.3	0.3	µg/L	U,CCB-I	No
BM26-33C	Tier I	12/02/2009	PW	SA	Cadmium	0.3	0.3	µg/L	U,MB-I	No
BM26-33C	Tier I	12/02/2009	PW	FD	Cadmium	0.3	0.3	µg/L	U,MB-I	No
BM26-34A	Tier I	12/02/2009	PW	SA	Cadmium	0.3	0.3	µg/L	U,MB-I	No
BM26-34D	Tier I	10/09/2009	PW	SA	Cadmium	0.96	0.96	µg/L	U,CCB-I	No
BM26-22C	Tier II	10/09/2009	PW	SA	Cadmium	1	1	µg/L	U,CCB-I	No
BM26-23D	Tier II	11/03/2009	PW	SA	Cadmium	0.3	0.3	µg/L	U,MB,CCB-I	No
BM26-24B	Tier II	10/09/2009	PW	SA	Cadmium	0.3	0.3	µg/L	U,CCB-I	No
BM26-24C	Tier II	10/22/2009	PW	SA	Cadmium	0.3	0.3	µg/L	UJ,CCB,P-L	No
RF17-12B	Tier II	11/12/2009	PW	SA	Cadmium	0.3	0.3	µg/L	U,MB,CCB-I	No
SP22-13	Tier II	12/01/2009	PW	SA	Cadmium	0.3	0.3	µg/L	U,MB,CCB-I	No

Table 2
Major Cation and Total Metal Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
SP411-13	Tier II	12/01/2009	PW	SA	Cadmium	0.3	0.3	µg/L	U,MB,CCB-I	No
BM26-33C	Tier I	12/02/2009	PW	FD	Chromium	100	100	µg/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Chromium	50	50	µg/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Chromium	100	100	µg/L	UJ,MB,CCB,P-L	No
BM26-24D	Tier II	11/03/2009	PW	SA	Chromium	50	50	µg/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Chromium	100	100	µg/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Chromium	100	100	µg/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Chromium	100	100	µg/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Lead	1.3	1.3	µg/L	U,CCB-I	No
BM26-34D	Tier I	12/21/2009	PW	SA	Lead	0.5	0.5	µg/L	U,MB,CCB-I	No
BM26-24C	Tier II	12/21/2009	PW	SA	Lead	0.91	0.91	µg/L	U,MB,CCB-I	No
BM34-22B	Tier II	12/21/2009	PW	SA	Lead	1	1	µg/L	U,MB-I	No
RF17-12C	Tier II	12/01/2009	PW	SA	Lead	0.5	0.5	µg/L	U,MB,CCB-I	No
BM26-22D	Tier I	12/17/2009	PW	SA	Mercury	0.2	0.2	µg/L	U,MB,CCB-I	No
BM26-23B	Tier I	12/17/2009	PW	SA	Mercury	0.2	0.2	µg/L	U,MB,CCB-I	No
BM26-23C	Tier I	11/03/2009	PW	SA	Mercury	0.2	0.2	µg/L	U,MB-I	No
BM26-23C	Tier I	12/17/2009	PW	SA	Mercury	0.2	0.2	µg/L	U,MB,CCB-I	No
BM26-33C	Tier I	12/02/2009	PW	SA	Mercury	0.2	0.2	µg/L	U,CCB-I	No
BM26-33C	Tier I	12/02/2009	PW	FD	Mercury	0.2	0.2	µg/L	U,MB,CCB-I	No
BM26-34A	Tier I	12/02/2009	PW	SA	Mercury	0.2	0.2	µg/L	U,CCB-I	No
BM26-34D	Tier I	12/21/2009	PW	SA	Mercury	0.2	0.2	µg/L	U,MB,CCB-I	No
BM26-24D	Tier II	11/03/2009	PW	SA	Mercury	0.2	0.2	µg/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Mercury	0.2	0.2	µg/L	U,MB,CCB-I	No
BM34-22C	Tier II	12/21/2009	PW	SA	Mercury	0.2	0.2	µg/L	U,MB,CCB-I	No
RF17-12B	Tier II	11/12/2009	PW	SA	Mercury	0.2	0.2	µg/L	U,MB-I	No
RF17-12C	Tier II	12/01/2009	PW	SA	Mercury	0.2	0.2	µg/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Mercury	0.2	0.2	µg/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Selenium	1	1	µg/L	U	No

Table 2
Major Cation and Total Metal Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-23A	Tier I	11/03/2009	PW	SA	Selenium	1	1	µg/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Selenium	1	1	µg/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Selenium	1	1	µg/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Selenium	1	1	µg/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Selenium	1	1	µg/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Selenium	1	1	µg/L	U,MB,CCB-I	No
BM26-23D	Tier II	11/03/2009	PW	SA	Selenium	1	1	µg/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Selenium	1	1	µg/L	U,MB,CCB-I	No
BM26-24D	Tier II	11/03/2009	PW	SA	Selenium	1	1	µg/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Selenium	1	1	µg/L	U,MB,CCB-I	No
BM34-22C	Tier II	12/21/2009	PW	SA	Selenium	1	1	µg/L	U,MB,CCB-I	No
RF17-12C	Tier II	12/01/2009	PW	SA	Selenium	1	1	µg/L	U,MB,CCB-I	No
SP22-13	Tier II	12/01/2009	PW	SA	Selenium	1	1	µg/L	U,MB,CCB-I	No
SP411-13	Tier II	12/01/2009	PW	SA	Selenium	1	1	µg/L	U,MB,CCB-I	No
BM26-22D	Tier I	12/17/2009	PW	SA	Uranium	0.1	0.1	µg/L	U,MB,CCB-I	No
BM26-23A	Tier I	11/03/2009	PW	SA	Uranium	0.1	0.1	µg/L	U,CCB-I	No
BM26-23A	Tier I	12/17/2009	PW	SA	Uranium	0.1	0.1	µg/L	U,MB,CCB-I	No
BM26-23B	Tier I	12/17/2009	PW	SA	Uranium	0.1	0.1	µg/L	U,MB,CCB-I	No
BM26-23C	Tier I	11/03/2009	PW	SA	Uranium	0.1	0.1	µg/L	U,MB,CCB-I	No
BM26-23C	Tier I	12/17/2009	PW	SA	Uranium	0.1	0.1	µg/L	U,MB,CCB-I	No
BM26-34D	Tier I	12/21/2009	PW	SA	Uranium	0.1	0.1	µg/L	U,MB,CCB-I	No
BM26-23D	Tier II	11/03/2009	PW	SA	Uranium	0.1	0.1	µg/L	U,CCB-I	No
BM26-24C	Tier II	12/21/2009	PW	SA	Uranium	0.1	0.1	µg/L	U,MB,CCB-I	No
BM34-22B	Tier II	12/21/2009	PW	SA	Uranium	0.1	0.1	µg/L	U,MB,CCB-I	No
RF17-12B	Tier II	11/12/2009	PW	SA	Uranium	0.1	0.1	µg/L	U,MB,CCB-I	No
RF17-12C	Tier II	12/01/2009	PW	SA	Uranium	0.1	0.1	µg/L	U,MB,CCB-I	No
SP411-13	Tier II	12/01/2009	PW	SA	Uranium	0.1	0.1	µg/L	U,MB,CCB-I	No

Table 2
Major Cation and Total Metal Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?

Notes: FB = flowback water; FW = fracing fluids; PW = produced water; SA = primary sample; FD = field duplicate; µg/L = micrograms per liter; mg/L = milligrams per liter; U = analyte was analyzed but was not detected above the reporting limit; J = the reported analytical result is estimated; UJ = the analyte was analyzed for but was not detected above the reporting limit; the reported analytical result is an estimate; SQL = result is below the standard quantitation limit but above than the method detection limit; P = sample did not meet preservation requirement of temperature, pH, and/or headspace; MB = analyte detected in method blank; CCB = analyte detected in continuing calibration blank; MS = outside matrix spike acceptance range; DL = serial dilution analysis results were outside evaluation criterion; PDS = post-digestion spike recovery outside acceptance range; I = indeterminant result bias; L = likely low result bias; H = likely high result bias.

Table 3
Major and Minor Anion and pH Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-22D	Tier I	12/17/2009	PW	SA	Ammonia (as N)	31	5	mg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Ammonia (as N)	49	1	mg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Ammonia (as N)	52	5	mg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Ammonia (as N)	47	5	mg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Ammonia (as N)	35	1	mg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Ammonia (as N)	34	5	mg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Ammonia (as N)	15	0.5	mg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Ammonia (as N)	15	0.5	mg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Ammonia (as N)	17	0.5	mg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Ammonia (as N)	27	5	mg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Ammonia (as N)	18	5	mg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Ammonia (as N)	19	5	mg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Ammonia (as N)	25	1	mg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Ammonia (as N)	23	5	mg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Ammonia (as N)	35	5	mg/L		Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Ammonia (as N)	20	5	mg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Ammonia (as N)	140	5	mg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Ammonia (as N)	20	5	mg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Ammonia (as N)	27	5	mg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Ammonia (as N)	19	1	mg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Ammonia (as N)	17	0.5	mg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Ammonia (as N)	11	0.5	mg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Ammonia (as N)	9.3	0.5	mg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Bicarbonate (as $CaCO_3$)	950	100	mg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Bicarbonate (as $CaCO_3$)	1100	100	mg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Bicarbonate (as $CaCO_3$)	1100	100	mg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Bicarbonate (as $CaCO_3$)	980	100	mg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Bicarbonate (as $CaCO_3$)	1300	100	mg/L		Yes

Table 3
Major and Minor Anion and pH Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-23C	Tier I	12/17/2009	PW	SA	Bicarbonate (as $CaCO_3$)	1100	100	mg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Bicarbonate (as $CaCO_3$)	1000	100	mg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Bicarbonate (as $CaCO_3$)	1000	100	mg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Bicarbonate (as $CaCO_3$)	980	100	mg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Bicarbonate (as $CaCO_3$)	2000	100	mg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Bicarbonate (as $CaCO_3$)	1100	100	mg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Bicarbonate (as $CaCO_3$)	1700	100	mg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Bicarbonate (as $CaCO_3$)	1600	100	mg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Bicarbonate (as $CaCO_3$)	1700	100	mg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Bicarbonate (as $CaCO_3$)	2600	100	mg/L		Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Bicarbonate (as $CaCO_3$)	1500	100	mg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Bicarbonate (as $CaCO_3$)	2100	100	mg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Bicarbonate (as $CaCO_3$)	2400	100	mg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Bicarbonate (as $CaCO_3$)	2300	100	mg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Bicarbonate (as $CaCO_3$)	1000	100	mg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Bicarbonate (as $CaCO_3$)	940	100	mg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Bicarbonate (as $CaCO_3$)	1100	100	mg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Bicarbonate (as $CaCO_3$)	1300	100	mg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Bromide	96	10	mg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Bromide	100	10	mg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Bromide	93	10	mg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Bromide	100	10	mg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Bromide	100	10	mg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Bromide	93	10	mg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Bromide	86	10	mg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Bromide	90	10	mg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Bromide	94	10	mg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Bromide	85	10	mg/L		Yes

Table 3
Major and Minor Anion and pH Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-34D	Tier I	12/21/2009	PW	SA	Bromide	100	10	mg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Bromide	68	10	mg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Bromide	99	10	mg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Bromide	72	10	mg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Bromide	110	10	mg/L		Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Bromide	98	10	mg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Bromide	81	10	mg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Bromide	87	10	mg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Bromide	91	10	mg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Bromide	110	10	mg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Bromide	95	10	mg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Bromide	56	4	mg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Bromide	44	4	mg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Chloride	15000	200	mg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Chloride	16000	200	mg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Chloride	14000	200	mg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Chloride	15000	200	mg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Chloride	20000	200	mg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Chloride	15000	200	mg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Chloride	13000	200	mg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Chloride	13000	200	mg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Chloride	12000	200	mg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Chloride	17000	200	mg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Chloride	14000	200	mg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Chloride	23000	400	mg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Chloride	17000	200	mg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Chloride	18000	200	mg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Chloride	23000	200	mg/L		Yes

Table 3
Major and Minor Anion and pH Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-24C	Tier II	12/21/2009	PW	SA	Chloride	15000	200	mg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Chloride	13000	200	mg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Chloride	15000	200	mg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Chloride	20000	200	mg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Chloride	15000	200	mg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Chloride	14000	200	mg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Chloride	8900	100	mg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Chloride	8000	100	mg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Fluoride	1.4	5	mg/L	J,SQL-I	Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Fluoride	1.4	5	mg/L	J,SQL-I	Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Fluoride	1.3	5	mg/L	J,SQL-I	Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Fluoride	1.3	5	mg/L	J,SQL-I	Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Fluoride	1.2	5	mg/L	J,SQL-I	Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Fluoride	1.2	5	mg/L	J,SQL-I	Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Fluoride	4	5	mg/L	J,SQL,MS-L	Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Fluoride	1.2	5	mg/L	J,SQL-I	Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Fluoride	6.5	5	mg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Nitrate (as N)	3.5	10	mg/L	J,SQL-I	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Nitrate (as N)	3.4	10	mg/L	J,SQL-I	Yes
BM26-22D	Tier I	12/17/2009	PW	SA	pH	6.39	0.1	pH	J,HT-I	Yes
BM26-23A	Tier I	11/03/2009	PW	SA	pH	6.58	0.1	pH	J,HT-I	Yes
BM26-23A	Tier I	12/17/2009	PW	SA	pH	6.49	0.1	pH	J,HT-I	Yes
BM26-23B	Tier I	12/17/2009	PW	SA	pH	6.31	0.1	pH	J,HT-I	Yes
BM26-23C	Tier I	11/03/2009	PW	SA	pH	6.57	0.1	pH	J,HT-I	Yes
BM26-23C	Tier I	12/17/2009	PW	SA	pH	6.44	0.1	pH	J,HT-I	Yes
BM26-33C	Tier I	12/02/2009	PW	SA	pH	6.55	0.1	pH	J,HT-I	Yes
BM26-33C	Tier I	12/02/2009	PW	FD	pH	6.69	0.1	pH	J,HT-I	Yes
BM26-34A	Tier I	12/02/2009	PW	SA	pH	6.42	0.1	pH	J,HT-I	Yes

Table 3
Major and Minor Anion and pH Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-34D	Tier I	10/09/2009	PW	SA	pH	6.71	0.1	pH	J,HT-I	Yes
BM26-34D	Tier I	12/21/2009	PW	SA	pH	6.39	0.1	pH	J,HT-I	Yes
BM26-22C	Tier II	10/09/2009	PW	SA	pH	6.59	0.1	pH	J,HT-I	Yes
BM26-23D	Tier II	11/03/2009	PW	SA	pH	6.47	0.1	pH	J,HT-I	Yes
BM26-24B	Tier II	10/09/2009	PW	SA	pH	6.58	0.1	pH	J,HT-I	Yes
BM26-24C	Tier II	10/22/2009	PW	SA	pH	6.81	0.1	pH	J,HT-I	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	pH	6.6	0.1	pH	J,HT-I	Yes
BM26-24D	Tier II	11/03/2009	PW	SA	pH	6.44	0.1	pH	J,HT-I	Yes
BM34-22B	Tier II	12/21/2009	PW	SA	pH	6.65	0.1	pH	J,HT-I	Yes
BM34-22C	Tier II	12/21/2009	PW	SA	pH	6.71	0.1	pH	J,HT-I	Yes
RF17-12B	Tier II	11/12/2009	PW	SA	pH	6.62	0.1	pH	J,HT-I	Yes
RF17-12C	Tier II	12/01/2009	PW	SA	pH	6.52	0.1	pH	J,HT-I	Yes
SP22-13	Tier II	12/01/2009	PW	SA	pH	6.79	0.1	pH	J,HT-I	Yes
SP411-13	Tier II	12/01/2009	PW	SA	pH	6.7	0.1	pH	J,HT-I	Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Sulfate	27	50	mg/L	J,SQL-I	Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Sulfate	72	50	mg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Sulfate	32	50	mg/L	J,SQL-I	Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Sulfate	33	50	mg/L	J,SQL-I	Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Sulfate	69	50	mg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Sulfate	35	50	mg/L	J,SQL-I	Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Sulfate	52	50	mg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Sulfate	55	50	mg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Sulfate	36	50	mg/L	J,SQL-I	Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Sulfate	41	50	mg/L	J,SQL-I	Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Sulfate	87	50	mg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Sulfate	67	50	mg/L		Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Sulfate	31	50	mg/L	J,SQL-I	Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Sulfate	84	50	mg/L		Yes

Table 3
Major and Minor Anion and pH Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM34-22B	Tier II	12/21/2009	PW	SA	Sulfate	27	50	mg/L	J,SQL-I	Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Sulfate	25	50	mg/L	J,SQL-I	Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Sulfate	79	50	mg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	950	100	mg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	1100	100	mg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	1100	100	mg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	980	100	mg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	1300	100	mg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	1100	100	mg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	1000	100	mg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Total Alkalinity (as $CaCO_3$)	1000	100	mg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	980	100	mg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	2000	100	mg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	1100	100	mg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	1700	100	mg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	1600	100	mg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	1700	100	mg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	2600	100	mg/L		Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	1500	100	mg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	2100	100	mg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	2400	100	mg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	2300	100	mg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	1000	100	mg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	940	100	mg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	1100	100	mg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Total Alkalinity (as $CaCO_3$)	1300	100	mg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Total Dissolved Solids	25000	2000	mg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Total Dissolved Solids	26000	1000	mg/L		Yes

Table 3
Major and Minor Anion and pH Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-23A	Tier I	12/17/2009	PW	SA	Total Dissolved Solids	25000	1000	mg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Total Dissolved Solids	25000	2000	mg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Total Dissolved Solids	27000	1000	mg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Total Dissolved Solids	24000	2000	mg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Total Dissolved Solids	21000	1000	mg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Total Dissolved Solids	21000	1000	mg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Total Dissolved Solids	21000	1000	mg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Total Dissolved Solids	32000	1000	mg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Total Dissolved Solids	22000	1000	mg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Total Dissolved Solids	36000	1000	mg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Total Dissolved Solids	28000	1000	mg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Total Dissolved Solids	34000	1000	mg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Total Dissolved Solids	34000	1000	mg/L		Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Total Dissolved Solids	24000	1000	mg/L		Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Total Dissolved Solids	22000	1000	mg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Total Dissolved Solids	26000	1000	mg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Total Dissolved Solids	36000	1000	mg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Total Dissolved Solids	24000	1000	mg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Total Dissolved Solids	23000	1000	mg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Total Dissolved Solids	16000	400	mg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Total Dissolved Solids	14000	400	mg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-23C	Tier I	12/17/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No

Table 3
Major and Minor Anion and pH Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-33C	Tier I	12/02/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Carbonate (as $CaCO_3$)	100	100	mg/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Fluoride	5	5	mg/L	UJ,MS-L	No
BM26-23C	Tier I	11/03/2009	PW	SA	Fluoride	5	5	mg/L	UJ,MS-L	No
BM26-34A	Tier I	12/02/2009	PW	SA	Fluoride	5	5	mg/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Fluoride	5	5	mg/L	UJ,MS-L	No
BM26-34D	Tier I	12/21/2009	PW	SA	Fluoride	5	5	mg/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Fluoride	5	5	mg/L	UJ,MS-L	No
BM26-23D	Tier II	11/03/2009	PW	SA	Fluoride	5	5	mg/L	UJ,MS-L	No
BM26-24C	Tier II	10/22/2009	PW	SA	Fluoride	1.1	5	mg/L	U	No
BM26-24C	Tier II	12/21/2009	PW	SA	Fluoride	5	5	mg/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Fluoride	5	5	mg/L	UJ,MS-L	No
BM34-22C	Tier II	12/21/2009	PW	SA	Fluoride	5	5	mg/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Fluoride	5	5	mg/L	U,CCB-I	No

Table 3
Major and Minor Anion and pH Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
SP22-13	Tier II	12/01/2009	PW	SA	Fluoride	2	2	mg/L	U,CCB-I	No
SP411-13	Tier II	12/01/2009	PW	SA	Fluoride	2	2	mg/L	U,CCB-I	No
BM26-22D	Tier I	12/17/2009	PW	SA	Nitrate (as N)	10	10	mg/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Nitrate (as N)	10	10	mg/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	Nitrate (as N)	10	10	mg/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Nitrate (as N)	10	10	mg/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Nitrate (as N)	10	10	mg/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Nitrate (as N)	10	10	mg/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Nitrate (as N)	10	10	mg/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Nitrate (as N)	10	10	mg/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Nitrate (as N)	10	10	mg/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Nitrate (as N)	10	10	mg/L	U	No
BM26-24C	Tier II	10/22/2009	PW	SA	Nitrate (as N)	1.3	10	mg/L	UJ,HT-L	No
BM26-24D	Tier II	11/03/2009	PW	SA	Nitrate (as N)	10	10	mg/L	U	No
BM34-22B	Tier II	12/21/2009	PW	SA	Nitrate (as N)	10	10	mg/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Nitrate (as N)	10	10	mg/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Nitrate (as N)	10	10	mg/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Nitrate (as N)	10	10	mg/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Nitrate (as N)	4	4	mg/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Nitrate (as N)	4	4	mg/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Nitrate/Nitrite (as N)	0.05	0.05	mg/L	U	No
BM26-22C	Tier II	10/09/2009	PW	SA	Nitrate/Nitrite (as N)	0.5	0.5	mg/L	U	No
BM26-24B	Tier II	10/09/2009	PW	SA	Nitrate/Nitrite (as N)	0.01	0.01	mg/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Nitrite (as N)	5	5	mg/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Nitrite (as N)	5	5	mg/L	UJ,MS-L	No
BM26-23A	Tier I	12/17/2009	PW	SA	Nitrite (as N)	5	5	mg/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Nitrite (as N)	5	5	mg/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Nitrite (as N)	5	5	mg/L	UJ,MS-L	No

Table 3
Major and Minor Anion and pH Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-23C	Tier I	12/17/2009	PW	SA	Nitrite (as N)	5	5	mg/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Nitrite (as N)	5	5	mg/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Nitrite (as N)	5	5	mg/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Nitrite (as N)	5	5	mg/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Nitrite (as N)	5	5	mg/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Nitrite (as N)	5	5	mg/L	UJ,MS-L	No
BM26-24C	Tier II	10/22/2009	PW	SA	Nitrite (as N)	1.9	5	mg/L	UJ,MS,HT-L	No
BM26-24C	Tier II	12/21/2009	PW	SA	Nitrite (as N)	5	5	mg/L	U	No
BM26-24D	Tier II	11/03/2009	PW	SA	Nitrite (as N)	5	5	mg/L	UJ,MS-L	No
BM34-22B	Tier II	12/21/2009	PW	SA	Nitrite (as N)	5	5	mg/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Nitrite (as N)	5	5	mg/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Nitrite (as N)	5	5	mg/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Nitrite (as N)	5	5	mg/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Nitrite (as N)	2	2	mg/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Nitrite (as N)	2	2	mg/L	U	No
BM26-22D	Tier I	12/17/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	U	No
BM26-23A	Tier I	11/03/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	UJ,MS,CCV,MB-L	No
BM26-23A	Tier I	12/17/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	U	No
BM26-23B	Tier I	12/17/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	U	No
BM26-23C	Tier I	11/03/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	UJ,MS,CCV,MB-L	No
BM26-23C	Tier I	12/17/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	U	No
BM26-33C	Tier I	12/02/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	U	No
BM26-33C	Tier I	12/02/2009	PW	FD	Orthophosphate (as P)	25	25	mg/L	U	No
BM26-34A	Tier I	12/02/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	U	No
BM26-34D	Tier I	12/21/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	U	No
BM26-23D	Tier II	11/03/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	UJ,MS,CCV,MB-L	No
BM26-24C	Tier II	10/22/2009	PW	SA	Orthophosphate (as P)	6.5	25	mg/L	UJ,HT-L	No
BM26-24C	Tier II	12/21/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	U	No

Table 3
Major and Minor Anion and pH Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-24D	Tier II	11/03/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	UJ,MS,CCV,MB-L	No
BM34-22B	Tier II	12/21/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	U	No
BM34-22C	Tier II	12/21/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	U	No
RF17-12B	Tier II	11/12/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	U	No
RF17-12C	Tier II	12/01/2009	PW	SA	Orthophosphate (as P)	25	25	mg/L	U	No
SP22-13	Tier II	12/01/2009	PW	SA	Orthophosphate (as P)	10	10	mg/L	U	No
SP411-13	Tier II	12/01/2009	PW	SA	Orthophosphate (as P)	10	10	mg/L	U	No
BM26-34D	Tier I	10/09/2009	PW	SA	Sulfate	50	50	mg/L	U,CCB-I	No
BM26-22C	Tier II	10/09/2009	PW	SA	Sulfate	50	50	mg/L	U,CCB-I	No
BM26-24B	Tier II	10/09/2009	PW	SA	Sulfate	50	50	mg/L	U,CCB-I	No
RF17-12C	Tier II	12/01/2009	PW	SA	Sulfate	50	50	mg/L	U,CCB-I	No
SP22-13	Tier II	12/01/2009	PW	SA	Sulfate	20	20	mg/L	U,CCB-I	No
SP411-13	Tier II	12/01/2009	PW	SA	Sulfate	20	20	mg/L	U,CCB-I	No

Notes: FB = flowback water; FW = fracing fluids; PW = produced water; SA = primary sample; FD = field duplicate; µg/L = micrograms per liter; mg/L = milligrams per liter; U = analyte was analyzed but was not detected above the reporting limit; J = the reported analytical result is estimated; UJ = the analyte was analyzed for but was not detected above the reporting limit; the reported analytical result is an estimate; HT = sample exceeded holding time; SQL = result is below the standard quantitation limit but above than the method detection limit; MB = analyte detected in method blank; CCB = analyte detected in continuing calibration blank; CCV = initial and continuing calibration verification recoveries were outside acceptance range; MS = outside matrix spike acceptance range; I = indeterminant result bias; H = likely high result bias; L = likely low result bias.

Table 4
Gasoline, Diesel, and Motor Oil Organics Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-22D	Tier I	12/17/2009	PW	SA	Benzene	15000	1000	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Benzene	20000	1000	µg/L	J,P-I	Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Benzene	15000	1000	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Benzene	13000	1000	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Benzene	15000	1000	µg/L	J,P-I	Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Benzene	9000	1000	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Benzene	17000	500	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Benzene	17000	500	µg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Benzene	17000	500	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Benzene	19000	500	µg/L	J,P-I	Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Benzene	16000	500	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Benzene	13000	500	µg/L	J,P-I	Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Benzene	15000	1000	µg/L	J,P-I	Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Benzene	20000	500	µg/L	J,P-I	Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Benzene	10000	1000	µg/L	J,P-I	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Benzene	17000	500	µg/L	J,P-I	Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Benzene	4500	1000	µg/L	J,P-I	Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Benzene	9100	500	µg/L	J,P-I	Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Benzene	11000	500	µg/L	J,P-I	Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Benzene	14000	1000	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Benzene	8700	1000	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Benzene	6100	100	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Benzene	12000	1000	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Diesel Range Organics	2900	38	mg/L	D	Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Diesel Range Organics	340	3.8	mg/L	D	Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Diesel Range Organics	730	9.5	mg/L	D	Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Diesel Range Organics	880	9.6	mg/L	D	Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Diesel Range Organics	180	3.8	mg/L	D	Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Diesel Range Organics	480	9.5	mg/L	L,D	Yes

Table 4
Gasoline, Diesel, and Motor Oil Organics Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-34D	Tier I	12/21/2009	PW	SA	Diesel Range Organics	140	1.9	mg/L	L	Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Diesel Range Organics	900	9.5	mg/L	L,D	Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Diesel Range Organics	850	9.5	mg/L	D	Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Diesel Range Organics	560	9.4	mg/L	L,D	Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Diesel Range Organics	1300	23	mg/L		Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Diesel Range Organics	250	3.8	mg/L	L	Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Diesel Range Organics	27	0.47	mg/L	D	Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Diesel Range Organics	310	4.7	mg/L	L	Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Diesel Range Organics	400	9.5	mg/L	L	Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Diesel Range Organics	2000	26	mg/L	D,B	Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Diesel Range Organics	310	3.8	mg/L	D	Yes
SP22-13	Tier II	12/01/2009	PW	SA	Diesel Range Organics	150	1.9	mg/L	D	Yes
SP411-13	Tier II	12/01/2009	PW	SA	Diesel Range Organics	440	4.7	mg/L	D	Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Dissolved Methane	3300	1	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Dissolved Methane	1600	1	µg/L		Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Dissolved Methane	5400	1	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Dissolved Methane	680	1	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Dissolved Methane	2400	1	µg/L		Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Dissolved Methane	5400	1	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Dissolved Methane	3900	1	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Dissolved Methane	3200	1	µg/L		Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Dissolved Methane	3400	1	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Dissolved Methane	1700	1	µg/L		Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Dissolved Methane	5100	1	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Dissolved Methane	1900	1	µg/L		Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Dissolved Methane	2500	1	µg/L		Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Dissolved Methane	1700	1	µg/L		Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Dissolved Methane	2200	1	µg/L	J,P-L	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Dissolved Methane	3300	1	µg/L		Yes

Table 4
Gasoline, Diesel, and Motor Oil Organics Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-24D	Tier II	11/03/2009	PW	SA	Dissolved Methane	2300	1	µg/L		Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Dissolved Methane	1400	1	µg/L		Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Dissolved Methane	1400	1	µg/L		Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Dissolved Methane	6000	1	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Dissolved Methane	8000	1	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Dissolved Methane	5500	1	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Dissolved Methane	4700	1	µg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Ethylbenzene	3400	1000	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Ethylbenzene	1700	1000	µg/L	J,P-I	Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Ethylbenzene	900	1000	µg/L	J,SQL,P-I	Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Ethylbenzene	1900	500	µg/L	J,FD-I	Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Ethylbenzene	1200	500	µg/L	J,FD-I	Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Ethylbenzene	2400	2000	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Ethylbenzene	3300	500	µg/L	J,P-I	Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Ethylbenzene	970	500	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Ethylbenzene	680	500	µg/L	J,P-I	Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Ethylbenzene	1700	1000	µg/L	J,P-I	Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Ethylbenzene	4500	500	µg/L	J,P-I	Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Ethylbenzene	8000	1000	µg/L	J,P-I	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Ethylbenzene	930	500	µg/L	J,P-I	Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Ethylbenzene	400	1000	µg/L	J,SQL,P-I	Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Ethylbenzene	690	500	µg/L	J,P-I	Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Ethylbenzene	1500	500	µg/L	J,P-I	Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Ethylbenzene	780	100	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Ethylbenzene	6300	1000	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Ethylbenzene	830	100	µg/L	J,MS-L	Yes
SP411-13	Tier II	12/01/2009	PW	SA	Ethylbenzene	4000	1000	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Gasoline Range Organics	150	10	mg/L	G	Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Gasoline Range Organics	140	25	mg/L	J,G,P-I	Yes

Table 4
Gasoline, Diesel, and Motor Oil Organics Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-23C	Tier I	11/03/2009	PW	SA	Gasoline Range Organics	260	10	mg/L	J,G,H,P-I	Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Gasoline Range Organics	810	10	mg/L	J,G,H,SUR,FD-I	Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Gasoline Range Organics	440	10	mg/L	J,G,H,FD-I	Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Gasoline Range Organics	340	10	mg/L	G,H	Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Gasoline Range Organics	430	50	mg/L	J,G,H,P-I	Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Gasoline Range Organics	120	5	mg/L	G	Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Gasoline Range Organics	130	10	mg/L	J,G,P-I	Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Gasoline Range Organics	130	2	mg/L	J,G,P-I	Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Gasoline Range Organics	270	50	mg/L	J,G,P-I	Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Gasoline Range Organics	1700	500	mg/L	J,G,H,P-I	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Gasoline Range Organics	200	40	mg/L	G	Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Gasoline Range Organics	35	1	mg/L	J,G,P-I	Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Gasoline Range Organics	330	50	mg/L	G	Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Gasoline Range Organics	230	25	mg/L	G	Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Gasoline Range Organics	130	2.5	mg/L	G,H	Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Gasoline Range Organics	240	10	mg/L	G,H	Yes
SP22-13	Tier II	12/01/2009	PW	SA	Gasoline Range Organics	110	10	mg/L	J,G,H,MS-L	Yes
SP411-13	Tier II	12/01/2009	PW	SA	Gasoline Range Organics	270	20	mg/L	J,G,P-I	Yes
BM26-22D	Tier I	12/17/2009	PW	SA	M+P-Xylene	46000	1000	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	M+P-Xylene	22000	1000	µg/L	J,P-I	Yes
BM26-23A	Tier I	12/17/2009	PW	SA	M+P-Xylene	9600	1000	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	M+P-Xylene	10000	1000	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	M+P-Xylene	11000	1000	µg/L	J,P-I	Yes
BM26-23C	Tier I	12/17/2009	PW	SA	M+P-Xylene	6300	1000	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	M+P-Xylene	26000	500	µg/L	J,FD-I	Yes
BM26-33C	Tier I	12/02/2009	PW	SA	M+P-Xylene	14000	500	µg/L	J,FD-I	Yes
BM26-34A	Tier I	12/02/2009	PW	SA	M+P-Xylene	31000	2000	µg/L	J,MS-L	Yes
BM26-34D	Tier I	10/09/2009	PW	SA	M+P-Xylene	44000	500	µg/L	J,P-I	Yes
BM26-34D	Tier I	12/21/2009	PW	SA	M+P-Xylene	12000	500	µg/L		Yes

Table 4
Gasoline, Diesel, and Motor Oil Organics Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-22C	Tier II	10/09/2009	PW	SA	M+P-Xylene	8700	500	µg/L	J,P-I	Yes
BM26-23D	Tier II	11/03/2009	PW	SA	M+P-Xylene	23000	1000	µg/L	J,P-I	Yes
BM26-24B	Tier II	10/09/2009	PW	SA	M+P-Xylene	63000	500	µg/L	J,P-I	Yes
BM26-24C	Tier II	10/22/2009	PW	SA	M+P-Xylene	120000	1000	µg/L	J,P-I	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	M+P-Xylene	12000	500	µg/L	J,P-I	Yes
BM26-24D	Tier II	11/03/2009	PW	SA	M+P-Xylene	5100	1000	µg/L	J,P-I	Yes
BM34-22B	Tier II	12/21/2009	PW	SA	M+P-Xylene	9100	500	µg/L	J,P-I	Yes
BM34-22C	Tier II	12/21/2009	PW	SA	M+P-Xylene	21000	500	µg/L	J,P-I	Yes
RF17-12B	Tier II	11/12/2009	PW	SA	M+P-Xylene	10000	100	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	M+P-Xylene	110000	1000	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	M+P-Xylene	13000	100	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	M+P-Xylene	64000	1000	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Motor Oil Range Organics	57	38	mg/L	D	Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Motor Oil Range Organics	5.7	3.8	mg/L	D	Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Motor Oil Range Organics	5.9	9.5	mg/L	J,SQL-I	Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Motor Oil Range Organics	8.4	9.6	mg/L	J,SQL-I	Yes
BM26-34A	Tier I	12/02/2009	PW	SA	Motor Oil Range Organics	11	3.8	mg/L	D	Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Motor Oil Range Organics	13	9.5	mg/L	D	Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Motor Oil Range Organics	1.5	1.9	mg/L	J,SQL-I	Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Motor Oil Range Organics	28	9.5	mg/L	D	Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Motor Oil Range Organics	60	9.5	mg/L	D	Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Motor Oil Range Organics	55	9.4	mg/L	D	Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Motor Oil Range Organics	160	23	mg/L		Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Motor Oil Range Organics	11	3.8	mg/L	L	Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Motor Oil Range Organics	12	0.47	mg/L	M	Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Motor Oil Range Organics	4.3	4.7	mg/L	J,SQL-I	Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Motor Oil Range Organics	18	9.5	mg/L	L	Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Motor Oil Range Organics	42	26	mg/L	D	Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Motor Oil Range Organics	6.4	3.8	mg/L	D	Yes

Table 4
Gasoline, Diesel, and Motor Oil Organics Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
SP22-13	Tier II	12/01/2009	PW	SA	Motor Oil Range Organics	1.5	1.9	mg/L	J,SQL-I	Yes
BM26-22D	Tier I	12/17/2009	PW	SA	O-Xylene	6600	1000	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	O-Xylene	3500	1000	µg/L	J,P-I	Yes
BM26-23C	Tier I	11/03/2009	PW	SA	O-Xylene	1800	1000	µg/L	J,P-I	Yes
BM26-33C	Tier I	12/02/2009	PW	FD	O-Xylene	4500	500	µg/L	J,FD-I	Yes
BM26-33C	Tier I	12/02/2009	PW	SA	O-Xylene	2300	500	µg/L	J,FD-I	Yes
BM26-34A	Tier I	12/02/2009	PW	SA	O-Xylene	4500	2000	µg/L		Yes
BM26-34D	Tier I	10/09/2009	PW	SA	O-Xylene	6800	500	µg/L	J,P-I	Yes
BM26-34D	Tier I	12/21/2009	PW	SA	O-Xylene	1900	500	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	O-Xylene	1400	500	µg/L	J,P-I	Yes
BM26-23D	Tier II	11/03/2009	PW	SA	O-Xylene	3500	1000	µg/L	J,P-I	Yes
BM26-24B	Tier II	10/09/2009	PW	SA	O-Xylene	9300	500	µg/L	J,P-I	Yes
BM26-24C	Tier II	10/22/2009	PW	SA	O-Xylene	19000	1000	µg/L	J,P-I	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	O-Xylene	1900	500	µg/L	J,P-I	Yes
BM26-24D	Tier II	11/03/2009	PW	SA	O-Xylene	1000	1000	µg/L	J,P-I	Yes
BM34-22B	Tier II	12/21/2009	PW	SA	O-Xylene	1500	500	µg/L	J,P-I	Yes
BM34-22C	Tier II	12/21/2009	PW	SA	O-Xylene	3300	500	µg/L	J,P-I	Yes
RF17-12B	Tier II	11/12/2009	PW	SA	O-Xylene	1600	100	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	O-Xylene	16000	1000	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	O-Xylene	1900	100	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	O-Xylene	8100	1000	µg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Toluene	48000	1000	µg/L		Yes
BM26-23A	Tier I	11/03/2009	PW	SA	Toluene	38000	1000	µg/L	J,P-I	Yes
BM26-23A	Tier I	12/17/2009	PW	SA	Toluene	27000	1000	µg/L		Yes
BM26-23B	Tier I	12/17/2009	PW	SA	Toluene	23000	1000	µg/L		Yes
BM26-23C	Tier I	11/03/2009	PW	SA	Toluene	30000	1000	µg/L	J,P-I	Yes
BM26-23C	Tier I	12/17/2009	PW	SA	Toluene	16000	1000	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	FD	Toluene	34000	500	µg/L		Yes
BM26-33C	Tier I	12/02/2009	PW	SA	Toluene	30000	500	µg/L		Yes

Table 4
Gasoline, Diesel, and Motor Oil Organics Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-34A	Tier I	12/02/2009	PW	SA	Toluene	48000	2000	µg/L	J,MS-L	Yes
BM26-34D	Tier I	10/09/2009	PW	SA	Toluene	54000	5000	µg/L	J,P-I	Yes
BM26-34D	Tier I	12/21/2009	PW	SA	Toluene	31000	500	µg/L		Yes
BM26-22C	Tier II	10/09/2009	PW	SA	Toluene	21000	500	µg/L	J,P-I	Yes
BM26-23D	Tier II	11/03/2009	PW	SA	Toluene	34000	1000	µg/L	J,P-I	Yes
BM26-24B	Tier II	10/09/2009	PW	SA	Toluene	66000	5000	µg/L	J,P-I	Yes
BM26-24C	Tier II	10/22/2009	PW	SA	Toluene	67000	1000	µg/L	J,P-I	Yes
BM26-24C	Tier II	12/21/2009	PW	SA	Toluene	34000	500	µg/L	J,P-I	Yes
BM26-24D	Tier II	11/03/2009	PW	SA	Toluene	9400	1000	µg/L	J,P-I	Yes
BM34-22B	Tier II	12/21/2009	PW	SA	Toluene	19000	500	µg/L	J,P-I	Yes
BM34-22C	Tier II	12/21/2009	PW	SA	Toluene	32000	500	µg/L	J,P-I	Yes
RF17-12B	Tier II	11/12/2009	PW	SA	Toluene	25000	1000	µg/L		Yes
RF17-12C	Tier II	12/01/2009	PW	SA	Toluene	42000	1000	µg/L		Yes
SP22-13	Tier II	12/01/2009	PW	SA	Toluene	14000	1000	µg/L		Yes
SP411-13	Tier II	12/01/2009	PW	SA	Toluene	44000	1000	µg/L		Yes
BM26-22D	Tier I	12/17/2009	PW	SA	Diesel Range Organics	240	3.8	mg/L	L	No
BM26-23A	Tier I	12/17/2009	PW	SA	Diesel Range Organics	180	3.8	mg/L	L	No
BM26-23B	Tier I	12/17/2009	PW	SA	Diesel Range Organics	72	0.94	mg/L	L	No
BM26-23C	Tier I	12/17/2009	PW	SA	Diesel Range Organics	140	3.8	mg/L	L	No
BM26-23A	Tier I	12/17/2009	PW	SA	Ethylbenzene	1000	1000	µg/L	U,TB-I	No
BM26-23B	Tier I	12/17/2009	PW	SA	Ethylbenzene	1000	1000	µg/L	U,TB-I	No
BM26-23C	Tier I	12/17/2009	PW	SA	Ethylbenzene	1000	1000	µg/L	U,TB-I	No
BM26-22D	Tier I	12/17/2009	PW	SA	Gasoline Range Organics	120	50	mg/L	G	No
BM26-23B	Tier I	12/17/2009	PW	SA	Gasoline Range Organics	110	5	mg/L	G	No
BM26-23C	Tier I	12/17/2009	PW	SA	Gasoline Range Organics	74	5	mg/L	G	No
BM26-22D	Tier I	12/17/2009	PW	SA	Motor Oil Range Organics	10	3.8	mg/L	L	No
BM26-23A	Tier I	12/17/2009	PW	SA	Motor Oil Range Organics	4.1	3.8	mg/L	L	No
BM26-23B	Tier I	12/17/2009	PW	SA	Motor Oil Range Organics	2.8	0.94	mg/L	L	No
BM26-23C	Tier I	12/17/2009	PW	SA	Motor Oil Range Organics	4	3.8	mg/L	L	No

Table 4
Gasoline, Diesel, and Motor Oil Organics Results - Produced Water

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
SP411-13	Tier II	12/01/2009	PW	SA	Motor Oil Range Organics	4.7	4.7	mg/L	U	No
BM26-23A	Tier I	12/17/2009	PW	SA	O-Xylene	1700	1700	µg/L	U,TB-I	No
BM26-23B	Tier I	12/17/2009	PW	SA	O-Xylene	1700	1700	µg/L	U,TB-I	No
BM26-23C	Tier I	12/17/2009	PW	SA	O-Xylene	1200	1200	µg/L	U,TB-I	No

Notes: PW = produced water; SA = primary sample; FD = field duplicate; µg/L = micrograms per liter; mg/L = milligrams per liter; U = analyte was analyzed but was not detected above the reporting limit; J = the reported analytical result is estimated; UJ = the analyte was analyzed for but was not detected above the reporting limit; the reported analytical result is an estimate; B = analyte detected in associated method blank as well as the sample; D = fuel pattern resembles diesel; G = fuel pattern resembles gasoline; H = fuel pattern was in the heavier end of the retention time window; L = fuel pattern was in the lighter end of the retention time window; M = fuel pattern resembles motor oil; Z = fuel pattern did not resemble typical petroleum hydrocarbon patterns (e.g., gasoline, JP4, JP8, diesel, mineral spirits, motor oil, Stoddard solvent, or bunker C); P = sample did not meet preservation requirement of temperature, pH, and/or headspace (see data validation report for further explanation); SQL-I = sample result is below the sample quantitation limit but above the method detection limit, indeterminant result bias; MS = matrix spike is outside acceptance range; FD = field duplicate acceptance criterion not met; SUR = surrogate recovery outside acceptance range; TB = analyte reported in trip blank; I = indeterminant result bias; H = likely high result bias; L = likely low result bias.

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-22D	Tier I	12/17/2009	NG	SA	BTU	1044		BTU/Ft^3		Yes
BM26-23A	Tier I	11/03/2009	NG	SA	BTU	1019		BTU/Ft^3		Yes
BM26-23A	Tier I	12/17/2009	NG	SA	BTU	1040		BTU/Ft^3		Yes
BM26-23B	Tier I	12/17/2009	NG	SA	BTU	1047		BTU/Ft^3		Yes
BM26-23C	Tier I	11/03/2009	NG	SA	BTU	1034		BTU/Ft^3		Yes
BM26-23C	Tier I	12/17/2009	NG	SA	BTU	1043		BTU/Ft^3		Yes
BM26-33C	Tier I	12/02/2009	NG	SA	BTU	1056		BTU/Ft^3		Yes
BM26-33C	Tier I	12/02/2009	NG	FD	BTU	1053		BTU/Ft^3		Yes
BM26-34A	Tier I	12/02/2009	NG	SA	BTU	1055		BTU/Ft^3		Yes
BM26-34D	Tier I	10/19/2009	NG	SA	BTU	989		BTU/Ft^3		Yes
BM26-34D	Tier I	12/21/2009	NG	SA	BTU	1042		BTU/Ft^3		Yes
BM36-13B	Tier I	12/17/2009	NG	SA	BTU	1033		BTU/Ft^3		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	BTU	989		BTU/Ft^3		Yes
BM26-23D	Tier II	11/03/2009	NG	SA	BTU	1037		BTU/Ft^3		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	BTU	980		BTU/Ft^3		Yes
BM26-24B	Tier II	12/29/2009	NG	SA	BTU	1011		BTU/Ft^3		Yes
BM26-24C	Tier II	10/22/2009	NG	SA	BTU	688		BTU/Ft^3		Yes
BM26-24C	Tier II	12/21/2009	NG	SA	BTU	1038		BTU/Ft^3		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	BTU	980		BTU/Ft^3		Yes
BM34-22B	Tier II	12/21/2009	NG	SA	BTU	962		BTU/Ft^3		Yes
BM34-22C	Tier II	12/21/2009	NG	SA	BTU	960		BTU/Ft^3		Yes
RF17-12B	Tier II	11/12/2009	NG	SA	BTU	1022		BTU/Ft^3		Yes
RF17-12C	Tier II	12/01/2009	NG	SA	BTU	1034		BTU/Ft^3		Yes
SP22-13	Tier II	12/01/2009	NG	SA	BTU	1022		BTU/Ft^3		Yes
SP411-13	Tier II	12/01/2009	NG	SA	BTU	1014		BTU/Ft^3		Yes
BM26-22D	Tier I	12/17/2009	NG	SA	C6+	0.158		%		Yes
BM26-23A	Tier I	11/03/2009	NG	SA	C6+	0.156		%		Yes

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-23A	Tier I	12/17/2009	NG	SA	C6+	0.149		%		Yes
BM26-23B	Tier I	12/17/2009	NG	SA	C6+	0.175		%		Yes
BM26-23C	Tier I	11/03/2009	NG	SA	C6+	0.257		%		Yes
BM26-23C	Tier I	12/17/2009	NG	SA	C6+	0.143		%		Yes
BM26-33C	Tier I	12/02/2009	NG	FD	C6+	0.15		%		Yes
BM26-33C	Tier I	12/02/2009	NG	SA	C6+	0.197		%		Yes
BM26-34A	Tier I	12/02/2009	NG	SA	C6+	0.135		%		Yes
BM26-34D	Tier I	10/19/2009	NG	SA	C6+	0.159		%		Yes
BM26-34D	Tier I	12/21/2009	NG	SA	C6+	0.177		%		Yes
BM36-13B	Tier I	12/17/2009	NG	SA	C6+	0.155		%		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	C6+	0.15		%		Yes
BM26-23D	Tier II	11/03/2009	NG	SA	C6+	0.251		%		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	C6+	1.39		%		Yes
BM26-24B	Tier II	12/29/2009	NG	SA	C6+	0.13		%		Yes
BM26-24C	Tier II	10/22/2009	NG	SA	C6+	0.222		%		Yes
BM26-24C	Tier II	12/21/2009	NG	SA	C6+	0.21		%		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	C6+	0.122		%		Yes
BM34-22B	Tier II	12/21/2009	NG	SA	C6+	0.135		%		Yes
BM34-22C	Tier II	12/21/2009	NG	SA	C6+	0.232		%		Yes
RF17-12B	Tier II	11/12/2009	NG	SA	C6+	0.189		%		Yes
RF17-12C	Tier II	12/01/2009	NG	SA	C6+	0.154		%		Yes
SP22-13	Tier II	12/01/2009	NG	SA	C6+	0.103		%		Yes
SP411-13	Tier II	12/01/2009	NG	SA	C6+	0.104		%		Yes
BM26-22D	Tier I	12/17/2009	NG	SA	Carbon Dioxide	3.63		%		Yes
BM26-23A	Tier I	11/03/2009	NG	SA	Carbon Dioxide	5.23		%		Yes
BM26-23A	Tier I	12/17/2009	NG	SA	Carbon Dioxide	4.04		%		Yes
BM26-23B	Tier I	12/17/2009	NG	SA	Carbon Dioxide	4.04		%		Yes

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-23C	Tier I	11/03/2009	NG	SA	Carbon Dioxide	4.95		%		Yes
BM26-23C	Tier I	12/17/2009	NG	SA	Carbon Dioxide	4.31		%		Yes
BM26-33C	Tier I	12/02/2009	NG	SA	Carbon Dioxide	3.18		%		Yes
BM26-33C	Tier I	12/02/2009	NG	FD	Carbon Dioxide	3.18		%		Yes
BM26-34A	Tier I	12/02/2009	NG	SA	Carbon Dioxide	2.86		%		Yes
BM26-34D	Tier I	10/19/2009	NG	SA	Carbon Dioxide	9.21		%		Yes
BM26-34D	Tier I	12/21/2009	NG	SA	Carbon Dioxide	4.02		%		Yes
BM36-13B	Tier I	12/17/2009	NG	SA	Carbon Dioxide	5.32		%		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	Carbon Dioxide	9.15		%		Yes
BM26-23D	Tier II	11/03/2009	NG	SA	Carbon Dioxide	4.39		%		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	Carbon Dioxide	10.25		%		Yes
BM26-24B	Tier II	12/29/2009	NG	SA	Carbon Dioxide	5.65		%		Yes
BM26-24C	Tier II	10/22/2009	NG	SA	Carbon Dioxide	36.99		%		Yes
BM26-24C	Tier II	12/21/2009	NG	SA	Carbon Dioxide	5.13		%		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	Carbon Dioxide	8.21		%		Yes
BM34-22B	Tier II	12/21/2009	NG	SA	Carbon Dioxide	12.02		%		Yes
BM34-22C	Tier II	12/21/2009	NG	SA	Carbon Dioxide	13.06		%		Yes
RF17-12B	Tier II	11/12/2009	NG	SA	Carbon Dioxide	3.28		%		Yes
RF17-12C	Tier II	12/01/2009	NG	SA	Carbon Dioxide	3.3		%		Yes
SP22-13	Tier II	12/01/2009	NG	SA	Carbon Dioxide	3.23		%		Yes
SP411-13	Tier II	12/01/2009	NG	SA	Carbon Dioxide	3.64		%		Yes
BM26-34D	Tier I	10/19/2009	NG	SA	D13C1	-35.23		‰		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	D13C1	-37.59		‰		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	D13C1	-35.83		‰		Yes
BM26-22D	Tier I	12/17/2009	NG	SA	Ethane	4.09		%		Yes
BM26-23A	Tier I	11/03/2009	NG	SA	Ethane	4.14		%		Yes
BM26-23A	Tier I	12/17/2009	NG	SA	Ethane	4.19		%		Yes

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-23B	Tier I	12/17/2009	NG	SA	Ethane	4.41		%		Yes
BM26-23C	Tier I	11/03/2009	NG	SA	Ethane	4.47		%		Yes
BM26-23C	Tier I	12/17/2009	NG	SA	Ethane	4.5		%		Yes
BM26-33C	Tier I	12/02/2009	NG	FD	Ethane	4.47		%		Yes
BM26-33C	Tier I	12/02/2009	NG	SA	Ethane	4.47		%		Yes
BM26-34A	Tier I	12/02/2009	NG	SA	Ethane	4.44		%		Yes
BM26-34D	Tier I	10/19/2009	NG	SA	Ethane	4.21		%		Yes
BM26-34D	Tier I	12/21/2009	NG	SA	Ethane	4.32		%		Yes
BM36-13B	Tier I	12/17/2009	NG	SA	Ethane	5.37		%		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	Ethane	4.13		%		Yes
BM26-23D	Tier II	11/03/2009	NG	SA	Ethane	4.43		%		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	Ethane	4.33		%		Yes
BM26-24B	Tier II	12/29/2009	NG	SA	Ethane	3.78		%		Yes
BM26-24C	Tier II	10/22/2009	NG	SA	Ethane	3.1		%		Yes
BM26-24C	Tier II	12/21/2009	NG	SA	Ethane	4.55		%		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	Ethane	4.01		%		Yes
BM34-22B	Tier II	12/21/2009	NG	SA	Ethane	4.49		%		Yes
BM34-22C	Tier II	12/21/2009	NG	SA	Ethane	4.61		%		Yes
RF17-12B	Tier II	11/12/2009	NG	SA	Ethane	3.21		%		Yes
RF17-12C	Tier II	12/01/2009	NG	SA	Ethane	3.51		%		Yes
SP22-13	Tier II	12/01/2009	NG	SA	Ethane	2.94		%		Yes
SP411-13	Tier II	12/01/2009	NG	SA	Ethane	2.68		%		Yes
BM26-22D	Tier I	12/17/2009	NG	SA	Helium	0.003		%		Yes
BM26-23A	Tier I	11/03/2009	NG	SA	Helium	0.003		%		Yes
BM26-23A	Tier I	12/17/2009	NG	SA	Helium	0.003		%		Yes
BM26-23B	Tier I	12/17/2009	NG	SA	Helium	0.0028		%		Yes
BM26-23C	Tier I	11/03/2009	NG	SA	Helium	0.0034		%		Yes

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-23C	Tier I	12/17/2009	NG	SA	Helium	0.0028		%		Yes
BM26-33C	Tier I	12/02/2009	NG	FD	Helium	0.0036		%		Yes
BM26-33C	Tier I	12/02/2009	NG	SA	Helium	0.0039		%		Yes
BM26-34A	Tier I	12/02/2009	NG	SA	Helium	0.0037		%		Yes
BM26-34D	Tier I	10/19/2009	NG	SA	Helium	0.0028		%		Yes
BM26-34D	Tier I	12/21/2009	NG	SA	Helium	0.003		%		Yes
BM36-13B	Tier I	12/17/2009	NG	SA	Helium	0.0027		%		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	Helium	0.0023		%		Yes
BM26-23D	Tier II	11/03/2009	NG	SA	Helium	0.0037		%		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	Helium	0.0021		%		Yes
BM26-24B	Tier II	12/29/2009	NG	SA	Helium	0.0028		%		Yes
BM26-24C	Tier II	10/22/2009	NG	SA	Helium	0.0015		%		Yes
BM26-24C	Tier II	12/21/2009	NG	SA	Helium	0.003		%		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	Helium	0.003		%		Yes
BM34-22B	Tier II	12/21/2009	NG	SA	Helium	0.0023		%		Yes
BM34-22C	Tier II	12/21/2009	NG	SA	Helium	0.0022		%		Yes
RF17-12B	Tier II	11/12/2009	NG	SA	Helium	0.0027		%		Yes
RF17-12C	Tier II	12/01/2009	NG	SA	Helium	0.0037		%		Yes
SP22-13	Tier II	12/01/2009	NG	SA	Helium	0.038		%		Yes
SP411-13	Tier II	12/01/2009	NG	SA	Helium	0.0035		%		Yes
BM26-22D	Tier I	12/17/2009	NG	SA	Hydrogen	0.0048		%		Yes
BM26-23A	Tier I	11/03/2009	NG	SA	Hydrogen	0.0043		%		Yes
BM26-23A	Tier I	12/17/2009	NG	SA	Hydrogen	0.0037		%		Yes
BM26-23B	Tier I	12/17/2009	NG	SA	Hydrogen	0.0033		%		Yes
BM26-23C	Tier I	11/03/2009	NG	SA	Hydrogen	0.0044		%		Yes
BM26-23C	Tier I	12/17/2009	NG	SA	Hydrogen	0.0036		%		Yes
BM26-33C	Tier I	12/02/2009	NG	FD	Hydrogen	0.0051		%		Yes

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-33C	Tier I	12/02/2009	NG	SA	Hydrogen	0.0051		%		Yes
BM26-34A	Tier I	12/02/2009	NG	SA	Hydrogen	0.005		%		Yes
BM26-34D	Tier I	10/19/2009	NG	SA	Hydrogen	0.0062		%		Yes
BM26-34D	Tier I	12/21/2009	NG	SA	Hydrogen	0.0044		%		Yes
BM36-13B	Tier I	12/17/2009	NG	SA	Hydrogen	0.0023		%		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	Hydrogen	0.0058		%		Yes
BM26-23D	Tier II	11/03/2009	NG	SA	Hydrogen	0.0045		%		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	Hydrogen	0.0038		%		Yes
BM26-24B	Tier II	12/29/2009	NG	SA	Hydrogen	0.002		%		Yes
BM26-24C	Tier II	10/22/2009	NG	SA	Hydrogen	0.0112		%		Yes
BM26-24C	Tier II	12/21/2009	NG	SA	Hydrogen	0.0041		%		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	Hydrogen	0.0059		%		Yes
BM34-22B	Tier II	12/21/2009	NG	SA	Hydrogen	0.0059		%		Yes
BM34-22C	Tier II	12/21/2009	NG	SA	Hydrogen	0.0061		%		Yes
RF17-12B	Tier II	11/12/2009	NG	SA	Hydrogen	0.0032		%		Yes
RF17-12C	Tier II	12/01/2009	NG	SA	Hydrogen	0.0035		%		Yes
SP22-13	Tier II	12/01/2009	NG	SA	Hydrogen	0.036		%		Yes
SP411-13	Tier II	12/01/2009	NG	SA	Hydrogen	0.0028		%		Yes
BM26-22D	Tier I	12/17/2009	NG	SA	Iso-Butane	0.23		%		Yes
BM26-23A	Tier I	11/03/2009	NG	SA	Iso-Butane	0.242		%		Yes
BM26-23A	Tier I	12/17/2009	NG	SA	Iso-Butane	0.231		%		Yes
BM26-23B	Tier I	12/17/2009	NG	SA	Iso-Butane	0.253		%		Yes
BM26-23C	Tier I	11/03/2009	NG	SA	Iso-Butane	0.283		%		Yes
BM26-23C	Tier I	12/17/2009	NG	SA	Iso-Butane	0.265		%		Yes
BM26-33C	Tier I	12/02/2009	NG	FD	Iso-Butane	0.254		%		Yes
BM26-33C	Tier I	12/02/2009	NG	SA	Iso-Butane	0.256		%		Yes
BM26-34A	Tier I	12/02/2009	NG	SA	Iso-Butane	0.241		%		Yes

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-34D	Tier I	10/19/2009	NG	SA	Iso-Butane	0.231		%		Yes
BM26-34D	Tier I	12/21/2009	NG	SA	Iso-Butane	0.225		%		Yes
BM36-13B	Tier I	12/17/2009	NG	SA	Iso-Butane	0.218		%		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	Iso-Butane	0.237		%		Yes
BM26-23D	Tier II	11/03/2009	NG	SA	Iso-Butane	0.261		%		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	Iso-Butane	0.243		%		Yes
BM26-24B	Tier II	12/29/2009	NG	SA	Iso-Butane	0.182		%		Yes
BM26-24C	Tier II	10/22/2009	NG	SA	Iso-Butane	0.218		%		Yes
BM26-24C	Tier II	12/21/2009	NG	SA	Iso-Butane	0.251		%		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	Iso-Butane	0.207		%		Yes
BM34-22B	Tier II	12/21/2009	NG	SA	Iso-Butane	0.235		%		Yes
BM34-22C	Tier II	12/21/2009	NG	SA	Iso-Butane	0.255		%		Yes
RF17-12B	Tier II	11/12/2009	NG	SA	Iso-Butane	0.169		%		Yes
RF17-12C	Tier II	12/01/2009	NG	SA	Iso-Butane	0.177		%		Yes
SP22-13	Tier II	12/01/2009	NG	SA	Iso-Butane	0.126		%		Yes
SP411-13	Tier II	12/01/2009	NG	SA	Iso-Butane	0.113		%		Yes
BM26-22D	Tier I	12/17/2009	NG	SA	Iso-Pentane	0.0905		%		Yes
BM26-23A	Tier I	11/03/2009	NG	SA	Iso-Pentane	0.0912		%		Yes
BM26-23A	Tier I	12/17/2009	NG	SA	Iso-Pentane	0.0847		%		Yes
BM26-23B	Tier I	12/17/2009	NG	SA	Iso-Pentane	0.0962		%		Yes
BM26-23C	Tier I	11/03/2009	NG	SA	Iso-Pentane	0.116		%		Yes
BM26-23C	Tier I	12/17/2009	NG	SA	Iso-Pentane	0.0964		%		Yes
BM26-33C	Tier I	12/02/2009	NG	FD	Iso-Pentane	0.0912		%		Yes
BM26-33C	Tier I	12/02/2009	NG	SA	Iso-Pentane	0.0941		%		Yes
BM26-34A	Tier I	12/02/2009	NG	SA	Iso-Pentane	0.087		%		Yes
BM26-34D	Tier I	10/19/2009	NG	SA	Iso-Pentane	0.0881		%		Yes
BM26-34D	Tier I	12/21/2009	NG	SA	Iso-Pentane	0.0828		%		Yes

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM36-13B	Tier I	12/17/2009	NG	SA	Iso-Pentane	0.0621		%		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	Iso-Pentane	0.0888		%		Yes
BM26-23D	Tier II	11/03/2009	NG	SA	Iso-Pentane	0.104		%		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	Iso-Pentane	0.0873		%		Yes
BM26-24B	Tier II	12/29/2009	NG	SA	Iso-Pentane	0.0592		%		Yes
BM26-24C	Tier II	10/22/2009	NG	SA	Iso-Pentane	0.102		%		Yes
BM26-24C	Tier II	12/21/2009	NG	SA	Iso-Pentane	0.0987		%		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	Iso-Pentane	0.0778		%		Yes
BM34-22B	Tier II	12/21/2009	NG	SA	Iso-Pentane	0.0842		%		Yes
BM34-22C	Tier II	12/21/2009	NG	SA	Iso-Pentane	0.0991		%		Yes
RF17-12B	Tier II	11/12/2009	NG	SA	Iso-Pentane	0.0656		%		Yes
RF17-12C	Tier II	12/01/2009	NG	SA	Iso-Pentane	0.0658		%		Yes
SP22-13	Tier II	12/01/2009	NG	SA	Iso-Pentane	0.0469		%		Yes
SP411-13	Tier II	12/01/2009	NG	SA	Iso-Pentane	0.0428		%		Yes
BM26-22D	Tier I	12/17/2009	NG	SA	Methane (C1)	90.13		%		Yes
BM26-23A	Tier I	11/03/2009	NG	SA	Methane (C1)	87.5		%		Yes
BM26-23A	Tier I	12/17/2009	NG	SA	Methane (C1)	89.74		%		Yes
BM26-23B	Tier I	12/17/2009	NG	SA	Methane (C1)	89.39		%		Yes
BM26-23C	Tier I	11/03/2009	NG	SA	Methane (C1)	87.06		%		Yes
BM26-23C	Tier I	12/17/2009	NG	SA	Methane (C1)	88.83		%		Yes
BM26-33C	Tier I	12/02/2009	NG	SA	Methane (C1)	90.17		%		Yes
BM26-33C	Tier I	12/02/2009	NG	FD	Methane (C1)	90.14		%		Yes
BM26-34A	Tier I	12/02/2009	NG	SA	Methane (C1)	90.49		%		Yes
BM26-34D	Tier I	10/19/2009	NG	SA	Methane (C1)	84.47		%		Yes
BM26-34D	Tier I	12/21/2009	NG	SA	Methane (C1)	89.69		%		Yes
BM36-13B	Tier I	12/17/2009	NG	SA	Methane (C1)	87.57		%		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	Methane (C1)	84.69		%		Yes

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-23D	Tier II	11/03/2009	NG	SA	Methane (C1)	87.83		%		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	Methane (C1)	83.3		%		Yes
BM26-24B	Tier II	12/29/2009	NG	SA	Methane (C1)	89.07		%		Yes
BM26-24C	Tier II	10/22/2009	NG	SA	Methane (C1)	56.6		%		Yes
BM26-24C	Tier II	12/21/2009	NG	SA	Methane (C1)	88.01		%		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	Methane (C1)	84.61		%		Yes
BM34-22B	Tier II	12/21/2009	NG	SA	Methane (C1)	81.3		%		Yes
BM34-22C	Tier II	12/21/2009	NG	SA	Methane (C1)	80.08		%		Yes
RF17-12B	Tier II	11/12/2009	NG	SA	Methane (C1)	91		%		Yes
RF17-12C	Tier II	12/01/2009	NG	SA	Methane (C1)	91.6		%		Yes
SP22-13	Tier II	12/01/2009	NG	SA	Methane (C1)	92.62		%		Yes
SP411-13	Tier II	12/01/2009	NG	SA	Methane (C1)	92.51		%		Yes
BM26-22D	Tier I	12/17/2009	NG	SA	N-Butane	0.233		%		Yes
BM26-23A	Tier I	11/03/2009	NG	SA	N-Butane	0.236		%		Yes
BM26-23A	Tier I	12/17/2009	NG	SA	N-Butane	0.218		%		Yes
BM26-23B	Tier I	12/17/2009	NG	SA	N-Butane	0.247		%		Yes
BM26-23C	Tier I	11/03/2009	NG	SA	N-Butane	0.287		%		Yes
BM26-23C	Tier I	12/17/2009	NG	SA	N-Butane	0.254		%		Yes
BM26-33C	Tier I	12/02/2009	NG	SA	N-Butane	0.239		%		Yes
BM26-33C	Tier I	12/02/2009	NG	FD	N-Butane	0.235		%		Yes
BM26-34A	Tier I	12/02/2009	NG	SA	N-Butane	0.237		%		Yes
BM26-34D	Tier I	10/19/2009	NG	SA	N-Butane	0.221		%		Yes
BM26-34D	Tier I	12/21/2009	NG	SA	N-Butane	0.211		%		Yes
BM36-13B	Tier I	12/17/2009	NG	SA	N-Butane	0.153		%		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	N-Butane	0.219		%		Yes
BM26-23D	Tier II	11/03/2009	NG	SA	N-Butane	0.259		%		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	N-Butane	0.224		%		Yes

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-24B	Tier II	12/29/2009	NG	SA	N-Butane	0.137		%		Yes
BM26-24C	Tier II	10/22/2009	NG	SA	N-Butane	0.245		%		Yes
BM26-24C	Tier II	12/21/2009	NG	SA	N-Butane	0.252		%		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	N-Butane	0.204		%		Yes
BM34-22B	Tier II	12/21/2009	NG	SA	N-Butane	0.233		%		Yes
BM34-22C	Tier II	12/21/2009	NG	SA	N-Butane	0.256		%		Yes
RF17-12B	Tier II	11/12/2009	NG	SA	N-Butane	0.137		%		Yes
RF17-12C	Tier II	12/01/2009	NG	SA	N-Butane	0.144		%		Yes
SP22-13	Tier II	12/01/2009	NG	SA	N-Butane	0.107		%		Yes
SP411-13	Tier II	12/01/2009	NG	SA	N-Butane	0.0961		%		Yes
BM26-22D	Tier I	12/17/2009	NG	SA	Nitrogen	0.21		%		Yes
BM26-23A	Tier I	11/03/2009	NG	SA	Nitrogen	1.16		%		Yes
BM26-23A	Tier I	12/17/2009	NG	SA	Nitrogen	0.16		%		Yes
BM26-23B	Tier I	12/17/2009	NG	SA	Nitrogen	0.1		%		Yes
BM26-23C	Tier I	11/03/2009	NG	SA	Nitrogen	1.16		%		Yes
BM26-23C	Tier I	12/17/2009	NG	SA	Nitrogen	0.22		%		Yes
BM26-33C	Tier I	12/02/2009	NG	SA	Nitrogen	0.11		%		Yes
BM26-33C	Tier I	12/02/2009	NG	FD	Nitrogen	0.18		%		Yes
BM26-34A	Tier I	12/02/2009	NG	SA	Nitrogen	0.21		%		Yes
BM26-34D	Tier I	10/19/2009	NG	SA	Nitrogen	0.16		%		Yes
BM26-34D	Tier I	12/21/2009	NG	SA	Nitrogen	0.11		%		Yes
BM36-13B	Tier I	12/17/2009	NG	SA	Nitrogen	0.097		%		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	Nitrogen	0.12		%		Yes
BM26-23D	Tier II	11/03/2009	NG	SA	Nitrogen	1.15		%		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	Nitrogen	0.13		%		Yes
BM26-24B	Tier II	12/29/2009	NG	SA	Nitrogen	0.13		%		Yes
BM26-24C	Tier II	10/22/2009	NG	SA	Nitrogen	1.41		%		Yes

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-24C	Tier II	12/21/2009	NG	SA	Nitrogen	0.15		%		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	Nitrogen	1.39		%		Yes
BM34-22B	Tier II	12/21/2009	NG	SA	Nitrogen	0.2		%		Yes
BM34-22C	Tier II	12/21/2009	NG	SA	Nitrogen	0.082		%		Yes
RF17-12B	Tier II	11/12/2009	NG	SA	Nitrogen	1.14		%		Yes
RF17-12C	Tier II	12/01/2009	NG	SA	Nitrogen	0.17		%		Yes
SP22-13	Tier II	12/01/2009	NG	SA	Nitrogen	0.15		%		Yes
SP411-13	Tier II	12/01/2009	NG	SA	Nitrogen	0.2		%		Yes
BM26-22D	Tier I	12/17/2009	NG	SA	N-Pentane	0.0644		%		Yes
BM26-23A	Tier I	11/03/2009	NG	SA	N-Pentane	0.0648		%		Yes
BM26-23A	Tier I	12/17/2009	NG	SA	N-Pentane	0.0585		%		Yes
BM26-23B	Tier I	12/17/2009	NG	SA	N-Pentane	0.0691		%		Yes
BM26-23C	Tier I	11/03/2009	NG	SA	N-Pentane	0.0853		%		Yes
BM26-23C	Tier I	12/17/2009	NG	SA	N-Pentane	0.0671		%		Yes
BM26-33C	Tier I	12/02/2009	NG	SA	N-Pentane	0.0671		%		Yes
BM26-33C	Tier I	12/02/2009	NG	FD	N-Pentane	0.0638		%		Yes
BM26-34A	Tier I	12/02/2009	NG	SA	N-Pentane	0.0621		%		Yes
BM26-34D	Tier I	10/19/2009	NG	SA	N-Pentane	0.0648		%		Yes
BM26-34D	Tier I	12/21/2009	NG	SA	N-Pentane	0.0595		%		Yes
BM36-13B	Tier I	12/17/2009	NG	SA	N-Pentane	0.0414		%		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	N-Pentane	0.0638		%		Yes
BM26-23D	Tier II	11/03/2009	NG	SA	N-Pentane	0.0777		%		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	N-Pentane	0.0606		%		Yes
BM26-24B	Tier II	12/29/2009	NG	SA	N-Pentane	0.0396		%		Yes
BM26-24C	Tier II	10/22/2009	NG	SA	N-Pentane	0.0791		%		Yes
BM26-24C	Tier II	12/21/2009	NG	SA	N-Pentane	0.0726		%		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	N-Pentane	0.0569		%		Yes

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM34-22B	Tier II	12/21/2009	NG	SA	N-Pentane	0.0606		%		Yes
BM34-22C	Tier II	12/21/2009	NG	SA	N-Pentane	0.0753		%		Yes
RF17-12B	Tier II	11/12/2009	NG	SA	N-Pentane	0.0424		%		Yes
RF17-12C	Tier II	12/01/2009	NG	SA	N-Pentane	0.0427		%		Yes
SP22-13	Tier II	12/01/2009	NG	SA	N-Pentane	0.0314		%		Yes
SP411-13	Tier II	12/01/2009	NG	SA	N-Pentane	0.0295		%		Yes
BM26-22D	Tier I	12/17/2009	NG	SA	Oxygen	0.05		%		Yes
BM26-23A	Tier I	11/03/2009	NG	SA	Oxygen	0.042		%		Yes
BM26-23A	Tier I	12/17/2009	NG	SA	Oxygen	0.034		%		Yes
BM26-23B	Tier I	12/17/2009	NG	SA	Oxygen	0.017		%		Yes
BM26-23C	Tier I	11/03/2009	NG	SA	Oxygen	0.034		%		Yes
BM26-23C	Tier I	12/17/2009	NG	SA	Oxygen	0.055		%		Yes
BM26-33C	Tier I	12/02/2009	NG	SA	Oxygen	0.018		%		Yes
BM26-33C	Tier I	12/02/2009	NG	FD	Oxygen	0.044		%		Yes
BM26-34A	Tier I	12/02/2009	NG	SA	Oxygen	0.049		%		Yes
BM26-34D	Tier I	10/19/2009	NG	SA	Oxygen	0.0356		%		Yes
BM26-34D	Tier I	12/21/2009	NG	SA	Oxygen	0.019		%		Yes
BM36-13B	Tier I	12/17/2009	NG	SA	Oxygen	0.016		%		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	Oxygen	0.027		%		Yes
BM26-23D	Tier II	11/03/2009	NG	SA	Oxygen	0.027		%		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	Oxygen	0.031		%		Yes
BM26-24B	Tier II	12/29/2009	NG	SA	Oxygen	0.024		%		Yes
BM26-24C	Tier II	10/22/2009	NG	SA	Oxygen	0.027		%		Yes
BM26-24C	Tier II	12/21/2009	NG	SA	Oxygen	0.027		%		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	Oxygen	0.082		%		Yes
BM34-22B	Tier II	12/21/2009	NG	SA	Oxygen	0.047		%		Yes
BM34-22C	Tier II	12/21/2009	NG	SA	Oxygen	0.009		%		Yes

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
RF17-12B	Tier II	11/12/2009	NG	SA	Oxygen	0.031		%		Yes
RF17-12C	Tier II	12/01/2009	NG	SA	Oxygen	0.042		%		Yes
SP22-13	Tier II	12/01/2009	NG	SA	Oxygen	0.037		%		Yes
SP411-13	Tier II	12/01/2009	NG	SA	Oxygen	0.044		%		Yes
BM26-22D	Tier I	12/17/2009	NG	SA	Propane	1.11		%		Yes
BM26-23A	Tier I	11/03/2009	NG	SA	Propane	1.13		%		Yes
BM26-23A	Tier I	12/17/2009	NG	SA	Propane	1.09		%		Yes
BM26-23B	Tier I	12/17/2009	NG	SA	Propane	1.2		%		Yes
BM26-23C	Tier I	11/03/2009	NG	SA	Propane	1.29		%		Yes
BM26-23C	Tier I	12/17/2009	NG	SA	Propane	1.25		%		Yes
BM26-33C	Tier I	12/02/2009	NG	FD	Propane	1.18		%		Yes
BM26-33C	Tier I	12/02/2009	NG	SA	Propane	1.19		%		Yes
BM26-34A	Tier I	12/02/2009	NG	SA	Propane	1.18		%		Yes
BM26-34D	Tier I	10/19/2009	NG	SA	Propane	1.14		%		Yes
BM26-34D	Tier I	12/21/2009	NG	SA	Propane	1.08		%		Yes
BM36-13B	Tier I	12/17/2009	NG	SA	Propane	0.995		%		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	Propane	1.12		%		Yes
BM26-23D	Tier II	11/03/2009	NG	SA	Propane	1.21		%		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	Propane	1.2		%		Yes
BM26-24B	Tier II	12/29/2009	NG	SA	Propane	0.793		%		Yes
BM26-24C	Tier II	10/22/2009	NG	SA	Propane	0.994		%		Yes
BM26-24C	Tier II	12/21/2009	NG	SA	Propane	1.24		%		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	Propane	1.02		%		Yes
BM34-22B	Tier II	12/21/2009	NG	SA	Propane	1.19		%		Yes
BM34-22C	Tier II	12/21/2009	NG	SA	Propane	1.23		%		Yes
RF17-12B	Tier II	11/12/2009	NG	SA	Propane	0.73		%		Yes
RF17-12C	Tier II	12/01/2009	NG	SA	Propane	0.786		%		Yes

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
SP22-13	Tier II	12/01/2009	NG	SA	Propane	0.6		%		Yes
SP411-13	Tier II	12/01/2009	NG	SA	Propane	0.538		%		Yes
BM26-22D	Tier I	12/17/2009	NG	SA	Specific Gravity	0.634		ρ_g/ρ_a		Yes
BM26-23A	Tier I	11/03/2009	NG	SA	Specific Gravity	0.654		ρ_g/ρ_a		Yes
BM26-23A	Tier I	12/17/2009	NG	SA	Specific Gravity	0.638		ρ_g/ρ_a		Yes
BM26-23B	Tier I	12/17/2009	NG	SA	Specific Gravity	0.641		ρ_g/ρ_a		Yes
BM26-23C	Tier I	11/03/2009	NG	SA	Specific Gravity	0.659		ρ_g/ρ_a		Yes
BM26-23C	Tier I	12/17/2009	NG	SA	Specific Gravity	0.645		ρ_g/ρ_a		Yes
BM26-33C	Tier I	12/02/2009	NG	FD	Specific Gravity	0.632		ρ_g/ρ_a		Yes
BM26-33C	Tier I	12/02/2009	NG	SA	Specific Gravity	0.633		ρ_g/ρ_a		Yes
BM26-34A	Tier I	12/02/2009	NG	SA	Specific Gravity	0.629		ρ_g/ρ_a		Yes
BM26-34D	Tier I	10/19/2009	NG	SA	Specific Gravity	0.688		ρ_g/ρ_a		Yes
BM26-34D	Tier I	12/21/2009	NG	SA	Specific Gravity	0.638		ρ_g/ρ_a		Yes
BM36-13B	Tier I	12/17/2009	NG	SA	Specific Gravity	0.653		ρ_g/ρ_a		Yes
BM26-22C	Tier II	10/19/2009	NG	SA	Specific Gravity	0.687		ρ_g/ρ_a		Yes
BM26-23D	Tier II	11/03/2009	NG	SA	Specific Gravity	0.652		ρ_g/ρ_a		Yes
BM26-24B	Tier II	10/19/2009	NG	SA	Specific Gravity	0.699		ρ_g/ρ_a		Yes
BM26-24B	Tier II	12/29/2009	NG	SA	Specific Gravity	0.645		ρ_g/ρ_a		Yes
BM26-24C	Tier II	10/22/2009	NG	SA	Specific Gravity	0.957		ρ_g/ρ_a		Yes
BM26-24C	Tier II	12/21/2009	NG	SA	Specific Gravity	0.654		ρ_g/ρ_a		Yes
BM26-24D	Tier II	11/03/2009	NG	SA	Specific Gravity	0.68		ρ_g/ρ_a		Yes
BM34-22B	Tier II	12/21/2009	NG	SA	Specific Gravity	0.717		ρ_g/ρ_a		Yes
BM34-22C	Tier II	12/21/2009	NG	SA	Specific Gravity	0.731		ρ_g/ρ_a		Yes
RF17-12B	Tier II	11/12/2009	NG	SA	Specific Gravity	0.624		ρ_g/ρ_a		Yes
RF17-12C	Tier II	12/01/2009	NG	SA	Specific Gravity	0.622		ρ_g/ρ_a		Yes
SP22-13	Tier II	12/01/2009	NG	SA	Specific Gravity	0.613		ρ_g/ρ_a		Yes
SP411-13	Tier II	12/01/2009	NG	SA	Specific Gravity	0.615		ρ_g/ρ_a		Yes

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-22D	Tier I	12/17/2009	NG	SA	Argon	ND		%	U	No
BM26-23A	Tier I	11/03/2009	NG	SA	Argon	ND		%	U	No
BM26-23A	Tier I	12/17/2009	NG	SA	Argon	ND		%	U	No
BM26-23B	Tier I	12/17/2009	NG	SA	Argon	ND		%	U	No
BM26-23C	Tier I	11/03/2009	NG	SA	Argon	ND		%	U	No
BM26-23C	Tier I	12/17/2009	NG	SA	Argon	ND		%	U	No
BM26-33C	Tier I	12/02/2009	NG	FD	Argon	ND		%	U	No
BM26-33C	Tier I	12/02/2009	NG	SA	Argon	ND		%	U	No
BM26-34A	Tier I	12/02/2009	NG	SA	Argon	ND		%	U	No
BM26-34D	Tier I	10/19/2009	NG	SA	Argon	ND		%	U	No
BM26-34D	Tier I	12/21/2009	NG	SA	Argon	ND		%	U	No
BM36-13B	Tier I	12/17/2009	NG	SA	Argon	ND		%	U	No
BM26-22C	Tier II	10/19/2009	NG	SA	Argon	ND		%	U	No
BM26-23D	Tier II	11/03/2009	NG	SA	Argon	ND		%	U	No
BM26-24B	Tier II	10/19/2009	NG	SA	Argon	ND		%	U	No
BM26-24B	Tier II	12/29/2009	NG	SA	Argon	ND		%	U	No
BM26-24C	Tier II	10/22/2009	NG	SA	Argon	ND		%	U	No
BM26-24C	Tier II	12/21/2009	NG	SA	Argon	ND		%	U	No
BM26-24D	Tier II	11/03/2009	NG	SA	Argon	ND		%	U	No
BM34-22B	Tier II	12/21/2009	NG	SA	Argon	ND		%	U	No
BM34-22C	Tier II	12/21/2009	NG	SA	Argon	ND		%	U	No
RF17-12B	Tier II	11/12/2009	NG	SA	Argon	ND		%	U	No
RF17-12C	Tier II	12/01/2009	NG	SA	Argon	ND		%	U	No
SP22-13	Tier II	12/01/2009	NG	SA	Argon	ND		%	U	No
SP411-13	Tier II	12/01/2009	NG	SA	Argon	ND		%	U	No
BM26-22D	Tier I	12/17/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-23A	Tier I	11/03/2009	NG	SA	Carbon Monoxide	ND		%	U	No

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-23A	Tier I	12/17/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-23B	Tier I	12/17/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-23C	Tier I	11/03/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-23C	Tier I	12/17/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-33C	Tier I	12/02/2009	NG	FD	Carbon Monoxide	ND		%	U	No
BM26-33C	Tier I	12/02/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-34A	Tier I	12/02/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-34D	Tier I	10/19/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-34D	Tier I	12/21/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM36-13B	Tier I	12/17/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-22C	Tier II	10/19/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-23D	Tier II	11/03/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-24B	Tier II	10/19/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-24B	Tier II	12/29/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-24C	Tier II	10/22/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-24C	Tier II	12/21/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-24D	Tier II	11/03/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM34-22B	Tier II	12/21/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM34-22C	Tier II	12/21/2009	NG	SA	Carbon Monoxide	ND		%	U	No
RF17-12B	Tier II	11/12/2009	NG	SA	Carbon Monoxide	ND		%	U	No
RF17-12C	Tier II	12/01/2009	NG	SA	Carbon Monoxide	ND		%	U	No
SP22-13	Tier II	12/01/2009	NG	SA	Carbon Monoxide	ND		%	U	No
SP411-13	Tier II	12/01/2009	NG	SA	Carbon Monoxide	ND		%	U	No
BM26-22D	Tier I	12/17/2009	NG	SA	Ethylene	ND		%	U	No
BM26-23A	Tier I	11/03/2009	NG	SA	Ethylene	ND		%	U	No
BM26-23A	Tier I	12/17/2009	NG	SA	Ethylene	ND		%	U	No
BM26-23B	Tier I	12/17/2009	NG	SA	Ethylene	ND		%	U	No

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-23C	Tier I	11/03/2009	NG	SA	Ethylene	ND		%	U	No
BM26-23C	Tier I	12/17/2009	NG	SA	Ethylene	ND		%	U	No
BM26-33C	Tier I	12/02/2009	NG	SA	Ethylene	ND		%	U	No
BM26-33C	Tier I	12/02/2009	NG	FD	Ethylene	ND		%	U	No
BM26-34A	Tier I	12/02/2009	NG	SA	Ethylene	ND		%	U	No
BM26-34D	Tier I	10/19/2009	NG	SA	Ethylene	ND		%	U	No
BM26-34D	Tier I	12/21/2009	NG	SA	Ethylene	ND		%	U	No
BM36-13B	Tier I	12/17/2009	NG	SA	Ethylene	ND		%	U	No
BM26-22C	Tier II	10/19/2009	NG	SA	Ethylene	ND		%	U	No
BM26-23D	Tier II	11/03/2009	NG	SA	Ethylene	ND		%	U	No
BM26-24B	Tier II	10/19/2009	NG	SA	Ethylene	ND		%	U	No
BM26-24B	Tier II	12/29/2009	NG	SA	Ethylene	ND		%	U	No
BM26-24C	Tier II	10/22/2009	NG	SA	Ethylene	ND		%	U	No
BM26-24C	Tier II	12/21/2009	NG	SA	Ethylene	ND		%	U	No
BM26-24D	Tier II	11/03/2009	NG	SA	Ethylene	ND		%	U	No
BM34-22B	Tier II	12/21/2009	NG	SA	Ethylene	ND		%	U	No
BM34-22C	Tier II	12/21/2009	NG	SA	Ethylene	ND		%	U	No
RF17-12B	Tier II	11/12/2009	NG	SA	Ethylene	ND		%	U	No
RF17-12C	Tier II	12/01/2009	NG	SA	Ethylene	ND		%	U	No
SP22-13	Tier II	12/01/2009	NG	SA	Ethylene	ND		%	U	No
SP411-13	Tier II	12/01/2009	NG	SA	Ethylene	ND		%	U	No
BM26-22D	Tier I	12/17/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM26-23A	Tier I	11/03/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM26-23A	Tier I	12/17/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM26-23B	Tier I	12/17/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM26-23C	Tier I	11/03/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM26-23C	Tier I	12/17/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No

Table 5
Natural Gas Composition Results

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BM26-33C	Tier I	12/02/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM26-33C	Tier I	12/02/2009	NG	FD	Hydrogen Sulfide	ND		%	U	No
BM26-34A	Tier I	12/02/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM26-34D	Tier I	10/19/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM26-34D	Tier I	12/21/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM36-13B	Tier I	12/17/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM26-22C	Tier II	10/19/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM26-23D	Tier II	11/03/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM26-24B	Tier II	10/19/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM26-24B	Tier II	12/29/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM26-24C	Tier II	10/22/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM26-24C	Tier II	12/21/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM26-24D	Tier II	11/03/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM34-22B	Tier II	12/21/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
BM34-22C	Tier II	12/21/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
RF17-12B	Tier II	11/12/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
RF17-12C	Tier II	12/01/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
SP22-13	Tier II	12/01/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No
SP411-13	Tier II	12/01/2009	NG	SA	Hydrogen Sulfide	ND		%	U	No

Notes: NG = natural gas; SA = primary sample; FD = field duplicate; % = percent; BTU/Ft^3 = British Thermal Units per cubic foot at 14.696 psia and 60 ^oF; ρ_g/ρ_a = relative density (ratio of natural gas density to air density) at 14.696 psia and 60 ^oF; U = analyte was analyzed but was not detected above the reporting limit; ND = not detected; ‰ = parts per thousand.

Table 6
Radiological Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
CK-W5	Environmental	10/14/2009	GW	SA	Bi-214	46.5	10.2	7.39	pCi/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Bi-214	142	16.5	7.8	pCi/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Bi-214	96.8	13.4	6.61	pCi/L		Yes
LJS-W3	Environmental	10/15/2009	GW	SA	Bi-214	75.1	12.8	7.37	pCi/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Bi-214	11	6.36	7.21	pCi/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Bi-214	84.3	13.5	6.59	pCi/L		Yes
BC-HM	Environmental	10/21/2009	SW	SA	Gross Alpha	7.38	3.19	2.74	pCi/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Gross Alpha	7.86	4.37	5.28	pCi/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Gross Alpha	9.78	3.95	3.06	pCi/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Gross Alpha	7.3	3.73	3.52	pCi/L		Yes
LJS-W3	Environmental	10/15/2009	GW	SA	Gross Alpha	8.65	3.89	3.02	pCi/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Gross Alpha	5.08	2.93	4.48	pCi/L		Yes
BC-HM	Environmental	10/21/2009	SW	SA	Gross Beta	10.7	3.82	5.37	pCi/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Gross Beta	4.87	2.85	4.18	pCi/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Gross Beta	5.46	3.25	4.96	pCi/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Gross Beta	934	14.9	2.12	pCi/L		Yes
LJS-W3	Environmental	10/15/2009	GW	SA	Gross Beta	10.9	4.11	5.69	pCi/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Gross Beta	4.9	2.83	4.28	pCi/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Pb-214	56.1	9.83	7.59	pCi/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Pb-214	43.4	11.2	7.81	pCi/L	J,D-I	Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Pb-214	178	20.9	8.88	pCi/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Pb-214	114	15.4	8.08	pCi/L		Yes
LJS-W3	Environmental	10/15/2009	GW	SA	Pb-214	80.4	14.2	9.02	pCi/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Pb-214	93.4	14.2	8.23	pCi/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Total Uranium	5.63	0.161	0.743	ug/L		Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Total Uranium	1.68	0.0482	0.743	ug/L	J,D-I	Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Total Uranium	4.32	0.132	0.743	ug/L	J,D-I	Yes
HC-S2	Environmental	10/20/2009	SP	SA	Total Uranium	0.792	0.0253	0.743	ug/L	J,D-I	Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Total Uranium	3.41	0.105	0.743	ug/L		Yes

Table 6
Radiological Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
LH96-SP4	Environmental	10/15/2009	SP	SA	Total Uranium	3.32	0.0985	0.743	ug/L		Yes
LJS-W3	Environmental	10/15/2009	GW	SA	Total Uranium	6.8	0.189	0.743	ug/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Total Uranium	3.95	0.113	0.743	ug/L	J,D-I	Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Total Uranium	0.766	0.0274	0.743	ug/L		Yes
BC-HM	Environmental	10/21/2009	SW	SA	Ac-228	-4.88	9.09	13.2	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Ac-228	3.28	10.2	13.9	pCi/L	UJ,D-I	No
EG-SP2	Environmental	10/20/2009	SP	SA	Ac-228	2.34	9.7	14.1	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Ac-228	-4.66	8.33	13.2	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Ac-228	-3.72	10.3	14.7	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Ac-228	7.56	9.55	17	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Ac-228	-1.99	8.63	13.8	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Ac-228	-0.364	10.7	16	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Ac-228	-7.46	9.73	14.9	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Ac-228	-6.42	8.19	12.3	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Ac-228	-5.66	9.82	14.2	pCi/L	UJ,D-I	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Ac-228	-4.01	9.89	12.7	pCi/L	UJ,D-I	No
BC-HM	Environmental	10/21/2009	SW	SA	Ag-110m	1.05	1.72	3.02	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Ag-110m	1.96	1.99	3.68	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Ag-110m	-5.28	2.26	2.94	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Ag-110m	1.64	2.06	3.43	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Ag-110m	0.578	2.29	3.89	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Ag-110m	-2.53	2.25	3.5	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Ag-110m	-0.0402	1.97	3.25	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Ag-110m	-0.966	2.22	3.51	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Ag-110m	-0.49	2.08	3.46	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Ag-110m	0.447	1.83	3.18	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Ag-110m	0.529	2.05	3.56	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Ag-110m	-0.924	2.12	2.95	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Am-241	4.98	12.1	18.8	pCi/L	U	No

Table 6
Radiological Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
CK-W5	Environmental	10/14/2009	GW	SA	Am-241	-8.16	20.9	35.1	pCi/L	UJ,D-I	No
EG-SP2	Environmental	10/20/2009	SP	SA	Am-241	0.183	4.16	5.94	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Am-241	9.34	17	30.3	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Am-241	2.74	4.27	6.55	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Am-241	16.2	22.2	39.5	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Am-241	-16.5	15	24.6	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Am-241	-11.4	20	31.7	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Am-241	-0.745	15.2	25.1	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Am-241	9.02	10.8	17.7	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Am-241	-12.5	15.9	26.8	pCi/L	UJ,D-I	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Am-241	8.7	10.7	17.6	pCi/L	UJ,D-I	No
BC-HM	Environmental	10/21/2009	SW	SA	Ba-133	-2.25	2.66	4.28	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Ba-133	-0.587	2.99	4.32	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Ba-133	-3.42	2.61	3.98	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Ba-133	-0.334	3.15	4.66	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Ba-133	0.645	2.56	4.5	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Ba-133	-0.731	3.51	5.15	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Ba-133	1.48	3.22	4.94	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Ba-133	5.35	3.5	5.8	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Ba-133	-0.78	2.96	4.84	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Ba-133	2.13	2.8	4.41	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Ba-133	-0.145	3.22	4.75	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Ba-133	-3.29	3.02	3.85	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Ba-140	-13.6	11.3	12.8	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Ba-140	-6.44	10.5	15.8	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Ba-140	4.49	10.4	17.7	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Ba-140	-4.64	9.47	14.6	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Ba-140	2.73	11	18.8	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Ba-140	-5.91	11.5	17.9	pCi/L	U	No

Table 6
Radiological Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
LH96-SP4	Environmental	10/15/2009	SP	SA	Ba-140	-3.62	10.3	16.7	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Ba-140	-9.69	12	18	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Ba-140	6.05	9.82	17.5	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Ba-140	2.22	8.27	14.5	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Ba-140	-0.0786	11.3	18.4	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Ba-140	-10.3	9.02	12.9	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Be-7	-0.774	16.5	27.7	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Be-7	-1.58	19.2	31.5	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Be-7	-12.1	18.9	29.7	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Be-7	-14.5	17.8	27.4	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Be-7	-6.15	17.3	28.2	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Be-7	6.93	20.6	35.2	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Be-7	-2.6	18.1	30.2	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Be-7	4.04	21	35.9	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Be-7	6.86	20.2	34.1	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Be-7	8.4	15.6	26.9	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Be-7	1.28	21.7	36	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Be-7	-2.39	15.6	25.4	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Bi-212	1.14	15.7	24.1	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Bi-212	-11.5	17.7	26.9	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Bi-212	-19.9	20	27.5	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Bi-212	-3.7	14.2	23.5	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Bi-212	14.7	19.4	34.4	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Bi-212	7.69	16	28.7	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Bi-212	12	17.8	31	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Bi-212	9.12	20.7	35.4	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Bi-212	-4.25	19.8	29.8	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Bi-212	0.135	14.3	24.2	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Bi-212	-5.14	17	27.9	pCi/L	U	No

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Radiological Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
USGS-BC1	Environmental	10/14/2009	SW	SA	Bi-212	-3.51	13.2	21.5	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Bi-214	2.51	7.8	6.47	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Bi-214	3.18	5.94	8.88	pCi/L	UJ,D-I	No
HC-S2	Environmental	10/20/2009	SP	SA	Bi-214	-1.41	6.34	8.63	pCi/L	UJ,D-I	No
MC-S3	Environmental	10/20/2009	SW	SA	Bi-214	-2.86	5.5	8.73	pCi/L	UJ,D-I	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Bi-214	1.75	4.77	7.61	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Ce-139	0.0105	1.89	3.15	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Ce-139	-1.71	2.16	3.38	pCi/L	UJ,D-I	No
EG-SP2	Environmental	10/20/2009	SP	SA	Ce-139	-2.09	1.66	2.61	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Ce-139	1.15	1.95	3.33	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Ce-139	-0.105	1.63	2.74	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Ce-139	-1.25	2.45	3.96	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Ce-139	0.799	2.38	4.01	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Ce-139	-2.15	2.67	4.3	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Ce-139	-0.241	2.22	3.8	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Ce-139	-0.578	1.73	2.78	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Ce-139	-2.22	2.26	3.57	pCi/L	UJ,D-I	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Ce-139	-1.07	1.66	2.62	pCi/L	UJ,D-I	No
BC-HM	Environmental	10/21/2009	SW	SA	Ce-141	3.5	3.79	6.14	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Ce-141	0.333	3.94	6.51	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Ce-141	-0.44	3.28	4.97	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Ce-141	-0.0577	3.81	6.34	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Ce-141	-0.00792	3.04	5.16	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Ce-141	-1.89	4.49	7.34	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Ce-141	-2.61	4.7	7.35	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Ce-141	-5.07	4.56	7.26	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Ce-141	2.06	4.71	7.2	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Ce-141	-1.93	3.41	5.5	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Ce-141	-0.817	4.48	7.41	pCi/L	U	No

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Radiological Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
USGS-BC1	Environmental	10/14/2009	SW	SA	Ce-141	-1.08	3.26	5.31	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Ce-144	-3.87	14.2	23.6	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Ce-144	-6.67	15.3	24.6	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Ce-144	0.634	10.4	17.9	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Ce-144	14.9	15.3	26.6	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Ce-144	6.45	12.1	20.3	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Ce-144	-0.488	18.3	30.5	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Ce-144	-3.61	17	28.3	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Ce-144	-6.46	21.8	31.6	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Ce-144	4.42	15.6	25.6	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Ce-144	14.8	13.2	22.9	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Ce-144	-9.38	16.7	27.3	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Ce-144	-0.747	12.3	20.3	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Cl-36	-163	113	214	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Cl-36	-180	194	345	pCi/L	UJ,MS-L	No
EG-SP2	Environmental	10/20/2009	SP	SA	Cl-36	32	106	183	pCi/L	UJ,MS-L	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Cl-36	-66.4	115	209	pCi/L	UJ,MS-L	No
HC-S2	Environmental	10/20/2009	SP	SA	Cl-36	63.1	171	292	pCi/L	UJ,MS-L	No
JLS-W1	Environmental	10/15/2009	GW	SA	Cl-36	6.87	206	355	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Cl-36	245	224	373	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Cl-36	-486	177	334	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Cl-36	11.1	194	334	pCi/L	UJ,MS-L	No
RS-W4	Environmental	10/21/2009	GW	SA	Cl-36	4.97	105	185	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Cl-36	-3.99	168	293	pCi/L	UJ,MS-L	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Cl-36	-180	212	376	pCi/L	UJ,MS-L	No
BC-HM	Environmental	10/21/2009	SW	SA	Co-56	0.00833	1.89	3.23	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Co-56	-0.39	1.89	3.09	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Co-56	-1	2.42	3.69	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Co-56	-0.857	1.95	3.1	pCi/L	U	No

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Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
HC-S2	Environmental	10/20/2009	SP	SA	Co-56	0.00169	2.37	4.06	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Co-56	0.641	2.27	3.94	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Co-56	-1.38	2.17	3.49	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Co-56	-2.14	2.28	3.49	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Co-56	1.92	2.21	4.05	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Co-56	-0.401	1.99	3.24	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Co-56	0.496	2.4	4.08	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Co-56	0.042	1.93	3.22	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Co-57	-0.358	1.82	3.04	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Co-57	0.348	1.94	3.25	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Co-57	0.909	1.34	2.38	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Co-57	-0.708	1.89	3.12	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Co-57	0.63	1.4	2.45	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Co-57	-0.0151	2.27	3.81	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Co-57	-1.68	2.13	3.47	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Co-57	-1.94	2.47	4.03	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Co-57	0.502	2.15	3.53	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Co-57	0.0756	1.56	2.62	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Co-57	0.202	2.13	3.59	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Co-57	-0.559	1.5	2.46	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Co-58	-0.632	1.9	3.15	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Co-58	-2.79	2.28	3.33	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Co-58	1.31	2.03	3.65	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Co-58	0.863	2.09	3.69	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Co-58	-0.878	2.25	3.68	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Co-58	-1.17	2.42	3.9	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Co-58	-0.351	2.21	3.73	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Co-58	-0.526	2.07	3.45	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Co-58	1.48	2.1	3.8	pCi/L	U	No

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Radiological Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
RS-W4	Environmental	10/21/2009	GW	SA	Co-58	0.736	1.88	3.28	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Co-58	-0.956	2.57	3.93	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Co-58	0.512	1.77	3.06	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Co-60	-1.08	2.17	3.36	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Co-60	-1.07	1.98	3.06	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Co-60	1.7	2.11	3.94	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Co-60	0.548	1.98	3.51	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Co-60	1.47	2.35	4.28	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Co-60	-0.132	2.93	4.45	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Co-60	0.702	2.2	3.8	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Co-60	-0.411	2.2	3.53	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Co-60	-0.0292	2.29	3.89	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Co-60	1.03	1.79	3.26	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Co-60	0.782	2.18	3.84	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Co-60	-0.738	1.75	2.72	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Cr-51	12.8	18.2	32.3	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Cr-51	-12.2	20.2	32.8	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Cr-51	6.41	17.8	31.3	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Cr-51	-3.4	18.7	31.6	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Cr-51	-4.58	17.9	30.6	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Cr-51	5.06	22.6	39.1	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Cr-51	-10.9	21.7	36.2	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Cr-51	-1.06	22.8	39.1	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Cr-51	-4.02	20.8	34.3	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Cr-51	13.1	16.1	28.8	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Cr-51	-14.9	21.1	34.4	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Cr-51	-2.97	16.1	27	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Cs-134	-0.287	2.27	3.84	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Cs-134	-1.78	2.91	4.23	pCi/L	U	No

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Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
EG-SP2	Environmental	10/20/2009	SP	SA	Cs-134	1.9	2.46	4.47	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Cs-134	-0.0498	2.52	4.27	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Cs-134	1.64	2.78	5.08	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Cs-134	0.27	2.73	4.68	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Cs-134	1.23	2.36	4.23	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Cs-134	1.32	2.62	4.72	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Cs-134	2.29	2.49	4.61	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Cs-134	-1.95	2.09	3.08	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Cs-134	-1.54	2.62	4.12	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Cs-134	1.9	1.96	3.66	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Cs-136	-0.682	3.08	5.06	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Cs-136	-1.73	3.95	6.14	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Cs-136	-0.943	3.6	5.96	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Cs-136	-1.45	4.19	6.66	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Cs-136	1.8	4.79	8.42	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Cs-136	3.84	4.37	7.93	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Cs-136	0.343	3.49	5.95	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Cs-136	-3.26	4.07	5.79	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Cs-136	-1.31	3.67	5.73	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Cs-136	-1.98	3.07	4.81	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Cs-136	1.5	3.97	7.06	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Cs-136	4.56	3.3	6.47	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Cs-137	-0.785	2.02	3.21	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Cs-137	-1.95	2.14	3.33	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Cs-137	-3.79	3.2	5.1	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Cs-137	-1.09	2.46	3.84	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Cs-137	-0.906	3.25	5.01	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Cs-137	1.62	2.45	3.79	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Cs-137	-1.11	2.57	4.08	pCi/L	U	No

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Radiological Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
MC-S3	Environmental	10/20/2009	SW	SA	Cs-137	0.192	2.26	3.88	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Cs-137	-2.17	2.39	3.44	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Cs-137	-2.34	2.28	3.52	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Cs-137	0.963	2.36	3.56	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Eu-152	1.91	5.52	9.63	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Eu-152	-0.895	6.52	10.9	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Eu-152	1.24	5.56	9.67	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Eu-152	-0.479	6.21	10.5	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Eu-152	1.73	5.7	10.1	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Eu-152	-4.12	7.08	11.6	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Eu-152	2.62	7.1	11.7	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Eu-152	0.585	8.38	13.1	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Eu-152	3.01	6.64	11.4	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Eu-152	-1.37	5.07	8.37	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Eu-152	-0.327	7.38	12	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Eu-152	-3.98	5.14	8.15	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Eu-154	-2.09	5.19	8.12	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Eu-154	-1.95	5.46	8.78	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Eu-154	2.74	6.59	11.7	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Eu-154	-3.44	6.37	10.3	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Eu-154	-7.08	7.14	9.69	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Eu-154	-10.6	7.16	9.77	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Eu-154	-7.82	7.01	10.1	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Eu-154	2.31	6.13	10.8	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Eu-154	0.584	5.7	9.89	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Eu-154	1.18	5.18	8.99	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Eu-154	-0.0878	6.9	11.6	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Eu-154	0.608	5.1	8.72	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Eu-155	-4.69	7.53	12.4	pCi/L	U	No

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Radiological Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
CK-W5	Environmental	10/14/2009	GW	SA	Eu-155	3.35	8.85	15	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Eu-155	-5.15	5.08	8.37	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Eu-155	6.46	8.21	14.4	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Eu-155	-5.29	6.16	9.57	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Eu-155	8.02	10.4	18.1	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Eu-155	12.6	9.24	16.3	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Eu-155	-4.49	10.3	17.2	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Eu-155	2.83	8.89	14.7	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Eu-155	2.67	6.35	11	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Eu-155	-4.03	9.08	15.1	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Eu-155	0.916	6.14	10.5	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Fe-59	0.473	3.88	6.62	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Fe-59	0.67	4.21	7.07	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Fe-59	-3.26	4.23	6.47	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Fe-59	3.1	3.97	7.28	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Fe-59	-2.51	4.73	7.28	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Fe-59	-1.32	4.7	7.5	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Fe-59	-0.235	4.07	6.8	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Fe-59	4.69	4.74	8.85	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Fe-59	-0.337	4.58	7.46	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Fe-59	-0.85	3.67	6.07	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Fe-59	3.66	4.78	8.75	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Fe-59	1.85	3.66	6.59	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Gross Alpha	0.298	2.14	3.99	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Gross Alpha	1	2.59	4.6	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Gross Alpha	1.21	2.2	4.16	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Gross Alpha	0.0266	1.03	2.79	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Gross Alpha	0.827	1.84	3.56	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Gross Alpha	1.32	2	3.56	pCi/L	U	No

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Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
EG-SP2	Environmental	10/20/2009	SP	SA	Gross Beta	2.04	1.68	2.72	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Gross Beta	0.37	1.77	3.26	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Gross Beta	-0.0675	2	3.86	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Gross Beta	2.5	2	3.27	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Gross Beta	-0.381	1.78	3.57	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Gross Beta	-0.822	1.68	3.53	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Hg-203	-0.576	2.02	3.42	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Hg-203	1.62	2.38	4.21	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Hg-203	-1.58	2.46	3.52	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Hg-203	1.69	2.32	4.16	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Hg-203	1.02	2.12	3.59	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Hg-203	2.15	2.7	4.83	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Hg-203	1.24	2.54	4.46	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Hg-203	1.01	2.86	5.01	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Hg-203	1.53	2.31	4.05	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Hg-203	2.95	1.93	3.59	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Hg-203	0.789	2.49	4.33	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Hg-203	-0.54	2.18	3.43	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Ir-192	-1.46	1.9	3.11	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Ir-192	0.397	2.07	3.56	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Ir-192	0.681	1.91	3.37	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Ir-192	-0.0522	2	3.42	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Ir-192	0.688	2.05	3.4	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Ir-192	0.865	2.4	4.19	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Ir-192	1.19	2.31	4.05	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Ir-192	-1.16	2.48	4.14	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Ir-192	1.07	2.16	3.73	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Ir-192	0.964	1.82	3.19	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Ir-192	-0.00459	2.27	3.87	pCi/L	U	No

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Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
USGS-BC1	Environmental	10/14/2009	SW	SA	Ir-192	-0.323	1.7	2.84	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	K-40	0.894	31.8	50.6	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	K-40	-7.51	30	50.5	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	K-40	15.2	30.2	47.8	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	K-40	-14.3	29.5	48.9	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	K-40	34.4	25.4	49.6	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	K-40	26.8	29.3	31	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	K-40	-9.73	29.6	48.6	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	K-40	-17.9	31.4	48.8	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	K-40	13	33	49.6	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	K-40	6.59	45.7	37	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	K-40	6.39	33.5	34.6	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Kr-85	-947	628	970	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Kr-85	-1070	656	969	pCi/L	UJ,D-I	No
EG-SP2	Environmental	10/20/2009	SP	SA	Kr-85	-1590	651	888	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Kr-85	-2410	631	732	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Kr-85	-2220	704	909	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Kr-85	-1590	650	899	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Kr-85	-1060	641	983	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Kr-85	-2840	719	888	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Kr-85	-1810	714	965	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Kr-85	-1900	639	845	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Kr-85	-2100	635	811	pCi/L	UJ,D-I	No
BC-HM	Environmental	10/21/2009	SW	SA	Mn-54	-0.0621	1.72	2.94	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Mn-54	-0.331	1.99	3.27	pCi/L	UJ,D-I	No
EG-SP2	Environmental	10/20/2009	SP	SA	Mn-54	0.391	1.98	3.39	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Mn-54	-1.21	2	3.15	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Mn-54	1.12	2.14	3.89	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Mn-54	-0.6	1.96	3.19	pCi/L	U	No

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Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
LH96-SP4	Environmental	10/15/2009	SP	SA	Mn-54	-0.881	1.96	3.2	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Mn-54	-0.244	2.27	3.84	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Mn-54	-1.34	2.06	3.18	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Mn-54	0.523	1.8	3.09	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Mn-54	0.657	2.19	3.76	pCi/L	UJ,D-I	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Mn-54	-0.599	1.86	2.99	pCi/L	UJ,D-I	No
BC-HM	Environmental	10/21/2009	SW	SA	Na-22	-0.72	1.85	2.91	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Na-22	-0.545	1.92	3.13	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Na-22	0.8	2.37	4.15	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Na-22	-1.69	2.33	3.65	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Na-22	-2.52	2.54	3.46	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Na-22	-4.19	2.6	3.5	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Na-22	-2.76	2.49	3.6	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Na-22	0.853	2.19	3.86	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Na-22	0.271	2.04	3.56	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Na-22	0.42	1.85	3.2	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Na-22	-0.0864	2.45	4.11	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Na-22	0.191	1.81	3.1	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Nb-94	-1.09	1.83	2.84	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Nb-94	0.154	1.91	3.27	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Nb-94	-1.82	1.98	3.05	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Nb-94	0.598	1.98	3.48	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Nb-94	-1.22	2.15	3.28	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Nb-94	-1.15	2.71	4.01	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Nb-94	0.967	2.11	3.62	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Nb-94	0.708	2.26	3.84	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Nb-94	-1.22	1.98	3.14	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Nb-94	0.443	1.77	3.06	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Nb-94	-0.0476	2.08	3.52	pCi/L	U	No

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Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
USGS-BC1	Environmental	10/14/2009	SW	SA	Nb-94	1.03	1.69	3.02	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Nb-95	-0.521	2.48	3.48	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Nb-95	-1.08	2.41	3.9	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Nb-95	-0.368	1.98	3.27	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Nb-95	3.51	2.57	4.86	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Nb-95	0.353	2.32	4.07	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Nb-95	0.359	2.52	4.32	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Nb-95	1.63	2.09	3.76	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Nb-95	3.49	3.15	5.13	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Nb-95	1.07	2.08	3.67	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Nd-147	8.71	16.5	28.8	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Nd-147	-2.21	21.4	34.7	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Nd-147	3.34	18.1	30.5	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Nd-147	-3.12	19.5	31.6	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Nd-147	-5.78	19.8	32	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Nd-147	-15.6	23	35.6	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Nd-147	-8.22	21.1	34.3	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Nd-147	13.4	23.2	40.4	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Nd-147	-3.69	20.3	34.4	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Nd-147	4.22	17.2	28.7	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Nd-147	7.09	23.5	39.4	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Nd-147	-6.52	19	29.9	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Np-239	1.63	13.4	22.7	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Np-239	2.37	15.6	26	pCi/L	UJ,D-I	No
EG-SP2	Environmental	10/20/2009	SP	SA	Np-239	3.53	9.77	17.2	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Np-239	-6.37	14.8	24.3	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Np-239	6.24	10.2	18.1	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Np-239	-24.1	18.2	27.2	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Np-239	15.1	17.3	29.9	pCi/L	U	No

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Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
LJS-W3	Environmental	10/15/2009	GW	SA	Np-239	4.7	18.3	31.1	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Np-239	12.2	15.8	26.7	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Np-239	-4.77	12	19.7	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Np-239	12.2	16.2	28	pCi/L	UJ,D-I	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Np-239	-8.94	11.7	18.8	pCi/L	UJ,D-I	No
BC-HM	Environmental	10/21/2009	SW	SA	Pb-210	107	351	529	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Pb-210	76.4	769	1330	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Pb-210	24.8	73.8	53.2	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Pb-210	-216	684	1070	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Pb-210	-62.2	51.7	76.9	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Pb-210	-167	767	1330	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Pb-210	537	479	858	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Pb-210	-581	475	628	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Pb-210	-171	290	430	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Pb-210	-3.37	587	887	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Pb-210	-11	277	416	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Pb-212	-0.0726	4.89	7.33	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Pb-212	1.12	4.76	7.61	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Pb-212	-1.21	4.63	6.52	pCi/L	UJ,D-I	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Pb-212	-0.585	5.1	6.95	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Pb-212	2.6	4.54	7.13	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Pb-212	-4.37	6.01	8.17	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Pb-212	-0.341	5.12	8.35	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Pb-212	0.682	3.54	7.76	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Pb-212	-4.13	5.03	7.1	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Pb-212	-0.231	4.22	6.42	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Pb-212	-2.03	5.42	7.38	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Pb-212	1.25	4.45	6.03	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Pb-214	-0.179	5.18	7.56	pCi/L	U	No

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Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
EG-SP2	Environmental	10/20/2009	SP	SA	Pb-214	-2.48	5.16	7.41	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Pb-214	-5.11	5.29	7.64	pCi/L	UJ,D-I	No
MC-S3	Environmental	10/20/2009	SW	SA	Pb-214	-4.47	5.74	8.19	pCi/L	UJ,D-I	No
RS-W4	Environmental	10/21/2009	GW	SA	Pb-214	5.88	8.83	8.74	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Pb-214	-0.389	4.87	7.22	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Pm-144	-2.68	2.8	3.13	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Pm-144	0.614	1.9	3.33	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Pm-144	2.61	2.05	3.85	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Pm-144	0.64	2.04	3.59	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Pm-144	0.521	2.24	3.77	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Pm-144	-1.22	2.12	3.45	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Pm-144	0.205	2.1	3.5	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Pm-144	-0.0139	2.34	3.86	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Pm-144	1.53	2.01	3.66	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Pm-144	-0.871	1.76	2.83	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Pm-144	-0.32	2.18	3.64	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Pm-144	0.323	1.71	2.94	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Pm-146	1.05	2.47	4.31	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Pm-146	-0.138	2.78	4.58	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Pm-146	-1.2	2.47	3.94	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Pm-146	-0.89	2.74	4.45	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Pm-146	1.64	2.71	4.84	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Pm-146	-0.939	3.18	5.21	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Pm-146	0.883	3.43	5.01	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Pm-146	1.93	3.07	5.42	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Pm-146	1.04	2.94	4.97	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Pm-146	-0.312	2.51	4.1	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Pm-146	-0.21	3.03	5	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Pm-146	-2.88	2.61	3.65	pCi/L	U	No

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Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BC-HM	Environmental	10/21/2009	SW	SA	Ra-228	-4.88	9.09	13.2	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Ra-228	3.28	10.2	13.9	pCi/L	UJ,D-I	No
EG-SP2	Environmental	10/20/2009	SP	SA	Ra-228	2.34	9.7	14.1	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Ra-228	-4.66	8.33	13.2	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Ra-228	-3.72	10.3	14.7	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Ra-228	7.56	9.55	17	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Ra-228	-1.99	8.63	13.8	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Ra-228	-0.364	10.7	16	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Ra-228	-7.46	9.73	14.9	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Ra-228	-6.42	8.19	12.3	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Ra-228	-5.66	9.82	14.2	pCi/L	UJ,D-I	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Ra-228	-4.01	9.89	12.7	pCi/L	UJ,D-I	No
BC-HM	Environmental	10/21/2009	SW	SA	Ru-106	-5.23	17	27.4	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Ru-106	-5.27	19.6	32.9	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Ru-106	-9.94	18.6	30.4	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Ru-106	2.24	17.2	28.6	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Ru-106	1.66	20	33.5	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Ru-106	-5.62	20.4	32.5	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Ru-106	4.32	19.2	32.4	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Ru-106	9.99	20.3	35.4	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Ru-106	13.7	19.6	35.5	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Ru-106	-18.5	16.4	24.8	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Ru-106	-11.9	18.9	30.5	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Ru-106	10.9	16.7	30.2	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Sb-124	-0.193	3.2	5.37	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Sb-124	1.12	4.68	8.11	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Sb-124	-0.334	5.2	8.75	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Sb-124	-0.996	5.17	8.35	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Sb-124	-2.62	5.58	8.55	pCi/L	U	No

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Radiological Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
JLS-W1	Environmental	10/15/2009	GW	SA	Sb-124	2.37	5.49	9.77	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Sb-124	-3.5	4.58	6.85	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Sb-124	1.22	4.13	7.43	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Sb-124	0.125	4.43	7.46	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Sb-124	1.53	4.02	7.27	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Sb-124	2.03	5.28	9.47	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Sb-124	-3.23	4.32	6.41	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Sb-125	-0.255	5.28	8.9	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Sb-125	6.67	6.06	10.9	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Sb-125	0.814	5.38	9.17	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Sb-125	0.746	5.68	9.65	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Sb-125	1.79	5.48	9.61	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Sb-125	2.73	6.65	11.5	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Sb-125	-1.96	5.93	9.82	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Sb-125	7.27	7.13	12.8	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Sb-125	1.62	5.84	9.86	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Sb-125	-1.4	5.13	8.33	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Sb-125	4.09	6.37	11.1	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Sb-125	1.24	5.13	8.68	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Sn-113	0.385	2.45	4.21	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Sn-113	0.188	2.72	4.57	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Sn-113	-1.1	2.33	3.79	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Sn-113	0.194	2.74	4.65	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Sn-113	1.23	2.52	4.49	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Sn-113	1.08	3.24	5.58	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Sn-113	-1.29	2.89	4.78	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Sn-113	0.663	3.01	5.19	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Sn-113	-0.614	2.74	4.46	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Sn-113	2.21	2.29	4.1	pCi/L	U	No

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Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
TJ-W6	Environmental	10/14/2009	GW	SA	Sn-113	-1.52	3.05	4.95	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Sn-113	1.47	2.28	4	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Sr-90	0.0399	0.712	1.4	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Sr-90	1.01	1.11	1.86	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Sr-90	0.674	0.863	1.47	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Sr-90	-0.628	0.943	1.83	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Sr-90	-0.497	0.919	1.79	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Sr-90	0.523	1.03	1.81	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Sr-90	0.286	0.851	1.53	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Sr-90	0.167	0.8	1.42	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Sr-90	-0.605	1.06	1.98	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Sr-90	0.694	0.866	1.47	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Sr-90	-0.0177	0.995	1.84	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Sr-90	0.235	0.843	1.52	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Tc-99	6.13	21.4	36.6	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Tc-99	-21.6	18.2	32.7	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Tc-99	-10.1	20.7	36.3	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Tc-99	2.33	21.1	36.2	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Tc-99	-4.14	21.3	37	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Tc-99	-8.5	18.8	32.9	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Tc-99	-3.51	18.8	32.7	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Tc-99	-22.4	18.4	33	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Tc-99	-1.01	20.9	36.1	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Tc-99	-3.77	21	36.4	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Tc-99	-5.2	19	33.2	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Tc-99	3.04	19	32.7	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Th-230	-563	3770	1970	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Th-230	-762	4990	1840	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Th-230	29.5	492	659	pCi/L	U	No

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Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
JLS-W1	Environmental	10/15/2009	GW	SA	Th-230	-160	1710	2350	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Th-230	253	1980	1880	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Th-230	-820	5350	2040	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Th-230	270	1870	1290	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Th-230	767	5010	1890	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Th-234	62.3	122	181	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Th-234	14	74.7	81.7	pCi/L	UJ,D-I	No
EG-SP2	Environmental	10/20/2009	SP	SA	Th-234	26.3	60.4	81.9	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Th-234	33.3	154	246	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Th-234	32.9	64.4	83.6	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Th-234	-69.9	53.9	80.6	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Th-234	39.3	69.6	82.4	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Th-234	16.5	66.3	87.6	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Th-234	-86.9	156	222	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Th-234	133	134	145	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Th-234	27.6	69.4	106	pCi/L	UJ,D-I	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Th-234	-17.1	44.7	72.7	pCi/L	UJ,D-I	No
BC-HM	Environmental	10/21/2009	SW	SA	Tl-208	1.8	3.63	4.32	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Tl-208	-0.754	2.62	4.1	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Tl-208	-1.39	2.83	4.06	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Tl-208	1.01	2.77	4.3	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Tl-208	-0.653	2.88	4.57	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Tl-208	-2.62	2.8	4.19	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Tl-208	-0.78	2.87	4.39	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Tl-208	-2.87	3.14	4.5	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Tl-208	0.812	3.04	4.59	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Tl-208	-1.22	2.19	3.42	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Tl-208	-0.853	2.83	4.3	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Tl-208	0.21	2.46	3.72	pCi/L	U	No

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Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
BC-HM	Environmental	10/21/2009	SW	SA	Total Uranium	0.132	0.008	0.743	ug/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Total Uranium	-0.0493	0.0174	0.743	ug/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Total Uranium	0.39	0.0184	0.743	ug/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Tritium	10		10	TU	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Tritium	11.6		11.6	TU	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Tritium	10		10	TU	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Tritium	10		10	TU	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Tritium	10		10	TU	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	Tritium	11.1		11.1	TU	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Tritium	10		10	TU	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Tritium	10		10	TU	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Tritium	11.1		11.1	TU	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Tritium	10		10	TU	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Tritium	11.4		11.4	TU	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Tritium	11.7		11.7	TU	U	No
BC-HM	Environmental	10/21/2009	SW	SA	U-235	-0.115	17.6	24.6	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	U-235	-0.317	17.2	26.2	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	U-235	7.11	20.2	22.1	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	U-235	7.59	15.1	25.6	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	U-235	8.96	14.1	21.6	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	U-235	-0.694	18.2	30.4	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	U-235	-26.2	20	29.7	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	U-235	13	20.4	30.9	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	U-235	0.464	19.9	27.9	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	U-235	0.46	15.9	24.2	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	U-235	8.67	20.6	31.9	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	U-235	-7.62	14.8	22	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	U-238	62.3	122	181	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	U-238	14	74.7	81.7	pCi/L	UJ,D-I	No

Table 6
Radiological Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
EG-SP2	Environmental	10/20/2009	SP	SA	U-238	26.3	60.4	81.9	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	U-238	33.3	154	246	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	U-238	32.9	64.4	83.6	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	U-238	-69.9	52.8	80.6	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	U-238	39.3	69.4	82.4	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	U-238	16.5	66.2	87.6	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	U-238	-86.9	156	222	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	U-238	133	134	145	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	U-238	27.6	69.3	106	pCi/L	UJ,D-I	No
USGS-BC1	Environmental	10/14/2009	SW	SA	U-238	-17.1	44.6	72.7	pCi/L	UJ,D-I	No
BC-HM	Environmental	10/21/2009	SW	SA	Y-88	-0.404	2.16	3.54	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Y-88	-0.629	2.33	3.64	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Y-88	0.0027	2.42	4.07	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Y-88	-0.739	2.42	3.77	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Y-88	-0.334	2.69	4.39	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Y-88	0.0547	2.61	4.34	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Y-88	0.608	1.97	3.51	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Y-88	2.43	2.54	4.93	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Y-88	0.0945	2.64	4.42	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Y-88	1.27	2.02	3.76	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Y-88	-1.88	2.75	4.17	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Y-88	1.04	2.23	4.04	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Zn-65	-0.99	4.05	6.61	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Zn-65	3.07	4.87	7.71	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Zn-65	-3.6	4.34	6.56	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Zn-65	1.04	5.34	7.9	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Zn-65	-4.13	5.46	8.19	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Zn-65	12.1	7.08	12.3	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Zn-65	-1.93	5.36	7.29	pCi/L	U	No

Table 6
Radiological Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Activity or Concentration	Counting Error	Reporting Limit	Units	Flag	Detected ?
LJS-W3	Environmental	10/15/2009	GW	SA	Zn-65	2.88	5.93	9.23	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Zn-65	-0.714	3.89	6.2	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Zn-65	-0.344	4.56	6.59	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Zn-65	0.00914	5.56	8.15	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Zn-65	-3.72	4.19	6.37	pCi/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Zr-95	0.242	2.92	4.85	pCi/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Zr-95	1.11	3.71	6.46	pCi/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Zr-95	0.703	3.87	6.66	pCi/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Zr-95	-0.413	3.71	6.24	pCi/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Zr-95	-1.1	4.24	6.68	pCi/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Zr-95	-0.662	4.26	7.17	pCi/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Zr-95	4.04	3.58	6.5	pCi/L	U	No
LJS-W3	Environmental	10/15/2009	GW	SA	Zr-95	0.982	4.09	6.89	pCi/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Zr-95	-1.59	4.17	5.99	pCi/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Zr-95	1.92	2.93	5.28	pCi/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Zr-95	-3.29	5.01	6.82	pCi/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Zr-95	1.51	2.98	5.3	pCi/L	U	No

Notes: FB = flowback water; FW = fracing fluids; PW = produced water;SA = primary sample; FD = field duplicate; pCi/L = picoCuries per liter; µg/L = micrograms per liter; pMC = percent modern carbon; TU = tritium units; pCi/g = picoCuries per gram; U = analyte was analyzed but was not detected above the minimum detectable activity (MDA); J = the reported analytical result is estimated; UJ = the analyte was analyzed for but was not detected above the MDA; the reported analytical result is an estimate; MS = outside matrix spike acceptance range; D = result was qualified as estimated because the duplicate error ratio criterion was not met; Y/T = tracer yield recovery outside acceptance range; MS = matrix spike recovery outside acceptance range; I = indeterminant result bias; L = likely low result bias; H = likely high result bias.

Table 7
Major Cation and Total Metal Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BC-HM	Environmental	10/21/2009	SW	SA	Arsenic	0.5	2	µg/L	J,SQL-I	Yes
CK-W5	Environmental	10/14/2009	GW	SA	Arsenic	3.5	2	µg/L		Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Arsenic	3.3	2	µg/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Arsenic	4.5	2	µg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Arsenic	2.8	2	µg/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Arsenic	3.7	2	µg/L		Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Arsenic	4	2	µg/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Arsenic	1.2	2	µg/L	J,SQL-I	Yes
MC-S3	Environmental	10/20/2009	SW	SA	Arsenic	1.5	2	µg/L	J,SQL	Yes
RS-W4	Environmental	10/21/2009	GW	SA	Arsenic	5.7	2	µg/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Arsenic	2.8	2	µg/L		Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Arsenic	1.2	2	µg/L	J,SQL-I	Yes
BC-HM	Environmental	10/21/2009	SW	SA	Barium	16	100	µg/L	J,SQL-I	Yes
CK-W5	Environmental	10/14/2009	GW	SA	Barium	71	100	µg/L	J,SQL-I	Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Barium	60	100	µg/L	J,SQL-I	Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Barium	150	100	µg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Barium	45	100	µg/L	J,SQL-I	Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Barium	90	100	µg/L	J,SQL-I	Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Barium	110	100	µg/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Barium	42	100	µg/L	J,SQL-I	Yes
MC-S3	Environmental	10/20/2009	SW	SA	Barium	42	100	µg/L	J,SQL-I	Yes
RS-W4	Environmental	10/21/2009	GW	SA	Barium	51	100	µg/L	J,SQL-I	Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Barium	51	100	µg/L	J,SQL-I	Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Barium	33	100	µg/L	J,SQL-I	Yes
BC-HM	Environmental	10/21/2009	SW	SA	Boron	3.3	100	µg/L	J,SQL,MB-L	Yes
CK-W5	Environmental	10/14/2009	GW	SA	Boron	68	100	µg/L	J,SQL-I	Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Boron	240	100	µg/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Boron	61	100	µg/L	J,SQL-I	Yes

Table 7
Major Cation and Total Metal Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
HC-S2	Environmental	10/20/2009	SP	SA	Boron	41	100	µg/L	J,SQL-I	Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Boron	95	100	µg/L	J,SQL-I	Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Boron	40	100	µg/L	J,SQL-I	Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Boron	120	100	µg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Boron	110	100	µg/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Boron	13	100	µg/L	J,SQL,MB-L	Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Boron	7.4	100	µg/L	J,SQL,MB,CCB-L	Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Boron	16	100	µg/L	J,SQL,MB,CCB-L	Yes
BC-HM	Environmental	10/21/2009	SW	SA	Calcium	12000	1000	µg/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Calcium	40000	1000	µg/L		Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Calcium	66000	1000	µg/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Calcium	35000	1000	µg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Calcium	34000	1000	µg/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Calcium	35000	1000	µg/L		Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Calcium	31000	1000	µg/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Calcium	72000	1000	µg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Calcium	67000	1000	µg/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Calcium	31000	1000	µg/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Calcium	49000	1000	µg/L		Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Calcium	25000	1000	µg/L		Yes
BC-HM	Environmental	10/21/2009	SW	SA	Iron	89	100	µg/L	J,SQL-I	Yes
CK-W5	Environmental	10/14/2009	GW	SA	Iron	70	100	µg/L	J,SQL-I	Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Iron	310	100	µg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Iron	130	100	µg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Iron	56	100	µg/L	J,SQL-I	Yes
RS-W4	Environmental	10/21/2009	GW	SA	Iron	60	100	µg/L	J,SQL-I	Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Iron	140	100	µg/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Lithium	17	10	µg/L		Yes

Table 7
Major Cation and Total Metal Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
EG-SP2	Environmental	10/20/2009	SP	SA	Lithium	23	10	µg/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Lithium	12	10	µg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Lithium	5.8	10	µg/L	J,SQL-I	Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Lithium	10	10	µg/L		Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Lithium	5.7	10	µg/L	J,SQL-I	Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Lithium	28	10	µg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Lithium	19	10	µg/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Lithium	4	10	µg/L	J,SQL-I	Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Lithium	3.2	10	µg/L	J,SQL-I	Yes
BC-HM	Environmental	10/21/2009	SW	SA	Magnesium	2300	1000	µg/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Magnesium	37000	1000	µg/L		Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Magnesium	29000	1000	µg/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Magnesium	31000	1000	µg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Magnesium	8300	1000	µg/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Magnesium	34000	1000	µg/L		Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Magnesium	44000	1000	µg/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Magnesium	50000	1000	µg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Magnesium	49000	1000	µg/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Magnesium	12000	1000	µg/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Magnesium	13000	1000	µg/L		Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Magnesium	8900	1000	µg/L		Yes
BC-HM	Environmental	10/21/2009	SW	SA	Manganese	1.5	2	µg/L	J,SQL-I	Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Manganese	9	2	µg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Manganese	6.8	2	µg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Manganese	3.9	2	µg/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Manganese	7.9	2	µg/L		Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Manganese	12	2	µg/L		Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Mercury	0.01	0.2	µg/L	J,SQL	Yes

Table 7
Major Cation and Total Metal Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
RS-W4	Environmental	10/21/2009	GW	SA	Mercury	0.0095	0.2	µg/L	J,SQL-I	Yes
BC-HM	Environmental	10/21/2009	SW	SA	Potassium	740	1000	µg/L	J,SQL,MB,CCB-L	Yes
CK-W5	Environmental	10/14/2009	GW	SA	Potassium	1500	1000	µg/L		Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Potassium	950	1000	µg/L	J,SQL-I	Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Potassium	1800	1000	µg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Potassium	1300	1000	µg/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Potassium	1000	1000	µg/L		Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Potassium	6400	1000	µg/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Potassium	700	1000	µg/L	J,SQL,MB,CCB-L	Yes
MC-S3	Environmental	10/20/2009	SW	SA	Potassium	3100	1000	µg/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Potassium	2500	1000	µg/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Potassium	460	1000	µg/L	J,SQL,MB,CCB-L	Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Potassium	1000	1000	µg/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Selenium	1.1	1	µg/L		Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Selenium	0.51	1	µg/L	J,SQL	Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Selenium	2.2	1	µg/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Selenium	0.33	1	µg/L	J,SQL-I	Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Selenium	1.1	1	µg/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Selenium	2.6	1	µg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Selenium	5.1	1	µg/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Selenium	0.19	1	µg/L	J,SQL-I	Yes
BC-HM	Environmental	10/21/2009	SW	SA	Sodium	2700	1000	µg/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Sodium	58000	1000	µg/L		Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Sodium	44000	1000	µg/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Sodium	37000	1000	µg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Sodium	12000	1000	µg/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Sodium	49000	1000	µg/L		Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Sodium	31000	1000	µg/L		Yes

Table 7
Major Cation and Total Metal Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
LH96-SP4	Environmental	10/15/2009	SP	SA	Sodium	44000	1000	µg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Sodium	81000	1000	µg/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Sodium	9900	1000	µg/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Sodium	7500	1000	µg/L		Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Sodium	9900	1000	µg/L		Yes
BC-HM	Environmental	10/21/2009	SW	SA	Strontium	53	10	µg/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Strontium	750	10	µg/L		Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Strontium	870	10	µg/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Strontium	700	10	µg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Strontium	260	10	µg/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Strontium	670	10	µg/L		Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Strontium	540	10	µg/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Strontium	980	10	µg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Strontium	910	10	µg/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Strontium	210	10	µg/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Strontium	350	10	µg/L		Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Strontium	200	10	µg/L		Yes
BC-HM	Environmental	10/21/2009	SW	SA	Uranium	0.24	0.1	µg/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Uranium	6.4	0.1	µg/L		Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Uranium	1.9	0.1	µg/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Uranium	4.5	0.1	µg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Uranium	0.89	0.1	µg/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Uranium	3.9	0.1	µg/L		Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Uranium	7.3	0.1	µg/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Uranium	3.6	0.1	µg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Uranium	4.6	0.1	µg/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Uranium	0.055	0.1	µg/L	J,SQL-I	Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Uranium	0.82	0.1	µg/L		Yes

Table 7
Major Cation and Total Metal Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
USGS-BC1	Environmental	10/14/2009	SW	SA	Uranium	0.65	0.1	µg/L		Yes
BC-HM	Environmental	10/21/2009	SW	SA	Cadmium	0.3	0.3	µg/L	U,MB,CCB-I	No
CK-W5	Environmental	10/14/2009	GW	SA	Cadmium	0.3	0.3	µg/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Cadmium	0.3	0.3	µg/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Cadmium	0.3	0.3	µg/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Cadmium	0.3	0.3	µg/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Cadmium	0.3	0.3	µg/L	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	Cadmium	0.3	0.3	µg/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Cadmium	0.3	0.3	µg/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Cadmium	0.3	0.3	µg/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Cadmium	0.3	0.3	µg/L	U,MB,CCB-I	No
TJ-W6	Environmental	10/14/2009	GW	SA	Cadmium	0.3	0.3	µg/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Cadmium	0.3	0.3	µg/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Chromium	10	10	µg/L	U,MB,CCB-I	No
CK-W5	Environmental	10/14/2009	GW	SA	Chromium	10	10	µg/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Chromium	10	10	µg/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Chromium	10	10	µg/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Chromium	10	10	µg/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Chromium	10	10	µg/L	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	Chromium	10	10	µg/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Chromium	10	10	µg/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Chromium	10	10	µg/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Chromium	10	10	µg/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Chromium	10	10	µg/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Chromium	10	10	µg/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Iron	100	100	µg/L	U,CCB-I	No
JLS-W1	Environmental	10/15/2009	GW	SA	Iron	100	100	µg/L	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	Iron	100	100	µg/L	U,CCB-I	No

Table 7
Major Cation and Total Metal Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
LH96-SP4	Environmental	10/15/2009	SP	SA	Iron	100	100	µg/L	U,CCB-I	No
TJ-W6	Environmental	10/14/2009	GW	SA	Iron	100	100	µg/L	U,CCB-I	No
BC-HM	Environmental	10/21/2009	SW	SA	Lead	0.5	0.5	µg/L	U,CCB-I	No
CK-W5	Environmental	10/14/2009	GW	SA	Lead	0.5	0.5	µg/L	U,MB,CCB-I	No
EG-SP2	Environmental	10/20/2009	SP	SA	Lead	0.5	0.5	µg/L	U,MB,CCB-I	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Lead	0.5	0.5	µg/L	U,MB,CCB-I	No
HC-S2	Environmental	10/20/2009	SP	SA	Lead	0.5	0.5	µg/L	U,MB,CCB-I	No
JLS-W1	Environmental	10/15/2009	GW	SA	Lead	0.5	0.5	µg/L	U,MB,CCB-I	No
JLS-W3	Environmental	10/15/2009	GW	SA	Lead	0.5	0.5	µg/L	U,MB,CCB-I	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Lead	0.5	0.5	µg/L	U,MB,CCB-I	No
MC-S3	Environmental	10/20/2009	SW	SA	Lead	0.5	0.5	µg/L	U,MB,CCB-I	No
RS-W4	Environmental	10/21/2009	GW	SA	Lead	0.5	0.5	µg/L	U,CCB-I	No
TJ-W6	Environmental	10/14/2009	GW	SA	Lead	0.5	0.5	µg/L	U,MB,CCB-I	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Lead	0.5	0.5	µg/L	U,MB,CCB-I	No
BC-HM	Environmental	10/21/2009	SW	SA	Lithium	10	10	µg/L	UJ,MB,CCB-L	No
RS-W4	Environmental	10/21/2009	GW	SA	Lithium	10	10	µg/L	UJ,MB,CCB-L	No
CK-W5	Environmental	10/14/2009	GW	SA	Manganese	2	2	µg/L	U,MB-I	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Manganese	2	2	µg/L	U,MB-I	No
JLS-W1	Environmental	10/15/2009	GW	SA	Manganese	2	2	µg/L	U,MB,CCB-I	No
JLS-W3	Environmental	10/15/2009	GW	SA	Manganese	2	2	µg/L	U,MB-I	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Manganese	2	2	µg/L	U,MB,CCB-I	No
TJ-W6	Environmental	10/14/2009	GW	SA	Manganese	2	2	µg/L	U,MB-I	No
BC-HM	Environmental	10/21/2009	SW	SA	Mercury	0.2	0.2	µg/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Mercury	0.2	0.2	µg/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Mercury	0.2	0.2	µg/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Mercury	0.2	0.2	µg/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Mercury	0.2	0.2	µg/L	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	Mercury	0.2	0.2	µg/L	U	No

Table 7
Major Cation and Total Metal Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
LH96-SP4	Environmental	10/15/2009	SP	SA	Mercury	0.2	0.2	µg/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Mercury	0.2	0.2	µg/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Mercury	0.2	0.2	µg/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Mercury	0.2	0.2	µg/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Selenium	1	1	µg/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Selenium	1	1	µg/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Selenium	1	1	µg/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Selenium	1	1	µg/L	U	No

Notes: FB = flowback water; FW = fracing fluids; PW = produced water; SA = primary sample; FD = field duplicate; µg/L = micrograms per liter; mg/L = milligrams per liter; U = analyte was analyzed but was not detected above the reporting limit; J = the reported analytical result is estimated; UJ = the analyte was analyzed for but was not detected above the reporting limit; the reported analytical result is an estimate; SQL = result is below the standard quantitation limit but above than the method detection limit; MB = analyte detected in method blank; CCB = analyte detected in continuing calibration blank; MS = outside matrix spike acceptance range; DL = serial dilution analysis results were outside evaluation criterion; PDS = post-digestion spike recovery outside acceptance range; I = indeterminant result bias; L = likely low result bias; H = likely high result bias.

Table 8
Major and Minor Anion and pH Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
BC-HM	Environmental	10/21/2009	SW	SA	Ammonia (as N)	0.039	0.1	mg/L	J,SQL-I	Yes
RS-W4	Environmental	10/21/2009	GW	SA	Ammonia (as N)	0.046	0.1	mg/L	J,SQL-I	Yes
BC-HM	Environmental	10/21/2009	SW	SA	Bicarbonate (as $CaCO_3$)	50	10	mg/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Bicarbonate (as $CaCO_3$)	360	20	mg/L		Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Bicarbonate (as $CaCO_3$)	320	20	mg/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Bicarbonate (as $CaCO_3$)	280	20	mg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Bicarbonate (as $CaCO_3$)	150	20	mg/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Bicarbonate (as $CaCO_3$)	340	20	mg/L		Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Bicarbonate (as $CaCO_3$)	330	20	mg/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Bicarbonate (as $CaCO_3$)	380	20	mg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Bicarbonate (as $CaCO_3$)	330	20	mg/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Bicarbonate (as $CaCO_3$)	150	10	mg/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Bicarbonate (as $CaCO_3$)	200	20	mg/L		Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Bicarbonate (as $CaCO_3$)	120	20	mg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Bromide	0.15	0.2	mg/L	J,SQL-I	Yes
BC-HM	Environmental	10/21/2009	SW	SA	Chloride	0.51	0.2	mg/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Chloride	3.2	0.2	mg/L		Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Chloride	3	0.2	mg/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Chloride	5.3	0.2	mg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Chloride	1.8	0.2	mg/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Chloride	2.7	0.2	mg/L		Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Chloride	3.1	0.2	mg/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Chloride	2.7	0.2	mg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Chloride	22	2	mg/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Chloride	0.69	0.2	mg/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Chloride	0.85	0.2	mg/L		Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Chloride	0.85	0.2	mg/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Fluoride	0.32	0.1	mg/L		Yes

Table 8
Major and Minor Anion and pH Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
EG-SP2	Environmental	10/20/2009	SP	SA	Fluoride	0.46	0.1	mg/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Fluoride	0.26	0.1	mg/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Fluoride	0.24	0.1	mg/L		Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Fluoride	0.37	0.1	mg/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Fluoride	0.4	0.1	mg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Fluoride	0.35	0.1	mg/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Fluoride	0.17	0.1	mg/L		Yes
BC-HM	Environmental	10/21/2009	SW	SA	Nitrate/Nitrite (as N)	0.056	0.01	mg/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Nitrate/Nitrite (as N)	0.44	0.01	mg/L		Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Nitrate/Nitrite (as N)	0.097	0.01	mg/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Nitrate/Nitrite (as N)	1.1	0.01	mg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Nitrate/Nitrite (as N)	0.27	0.01	mg/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Nitrate/Nitrite (as N)	0.99	0.01	mg/L		Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Nitrate/Nitrite (as N)	0.76	0.01	mg/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Nitrate/Nitrite (as N)	0.55	0.01	mg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Nitrate/Nitrite (as N)	1.5	0.05	mg/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Nitrate/Nitrite (as N)	0.021	0.01	mg/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Nitrate/Nitrite (as N)	0.35	0.01	mg/L		Yes
BC-HM	Environmental	10/21/2009	SW	SA	pH	8.1	0.1	pH	J,HT-I	Yes
CK-W5	Environmental	10/14/2009	GW	SA	pH	7.81	0.1	pH	J,HT-I	Yes
EG-SP2	Environmental	10/20/2009	SP	SA	pH	8.32	0.1	pH	J,HT-I	Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	pH	8	0.1	pH	J,HT-I	Yes
HC-S2	Environmental	10/20/2009	SP	SA	pH	8.33	0.1	pH	J,HT-I	Yes
JLS-W1	Environmental	10/15/2009	GW	SA	pH	7.9	0.1	pH	J,HT-I	Yes
JLS-W3	Environmental	10/15/2009	GW	SA	pH	7.96	0.1	pH	J,HT-I	Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	pH	7.63	0.1	pH	J,HT-I	Yes
MC-S3	Environmental	10/20/2009	SW	SA	pH	8.43	0.1	pH	J,HT-I	Yes
RS-W4	Environmental	10/21/2009	GW	SA	pH	8.52	0.1	pH	J,HT-I	Yes

Table 8
Major and Minor Anion and pH Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
TJ-W6	Environmental	10/14/2009	GW	SA	pH	7.76	0.1	pH	J,HT-I	Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	pH	8.16	0.1	pH	J,HT-I	Yes
BC-HM	Environmental	10/21/2009	SW	SA	Sulfate	3.7	1	mg/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Sulfate	56	1	mg/L		Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Sulfate	76	1	mg/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Sulfate	26	1	mg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Sulfate	14	1	mg/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Sulfate	27	1	mg/L		Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Sulfate	28	1	mg/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Sulfate	110	10	mg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Sulfate	210	10	mg/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Sulfate	4.7	1	mg/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Sulfate	12	1	mg/L		Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Sulfate	18	1	mg/L		Yes
BC-HM	Environmental	10/21/2009	SW	SA	Total Alkalinity (as $CaCO_3$)	50	10	mg/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Total Alkalinity (as $CaCO_3$)	360	20	mg/L		Yes
EG-SP2	Environmental	10/20/2009	SP	SA	Total Alkalinity (as $CaCO_3$)	330	20	mg/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Total Alkalinity (as $CaCO_3$)	280	20	mg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Total Alkalinity (as $CaCO_3$)	150	20	mg/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Total Alkalinity (as $CaCO_3$)	340	20	mg/L		Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Total Alkalinity (as $CaCO_3$)	330	20	mg/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Total Alkalinity (as $CaCO_3$)	380	20	mg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Total Alkalinity (as $CaCO_3$)	340	20	mg/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Total Alkalinity (as $CaCO_3$)	160	10	mg/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Total Alkalinity (as $CaCO_3$)	200	20	mg/L		Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Total Alkalinity (as $CaCO_3$)	120	20	mg/L		Yes
BC-HM	Environmental	10/21/2009	SW	SA	Total Dissolved Solids	77	20	mg/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Total Dissolved Solids	450	20	mg/L		Yes

Table 8
Major and Minor Anion and pH Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
EG-SP2	Environmental	10/20/2009	SP	SA	Total Dissolved Solids	440	20	mg/L		Yes
GVS-SP1	Environmental	10/20/2009	SP	SA	Total Dissolved Solids	340	20	mg/L		Yes
HC-S2	Environmental	10/20/2009	SP	SA	Total Dissolved Solids	180	20	mg/L		Yes
JLS-W1	Environmental	10/15/2009	GW	SA	Total Dissolved Solids	390	20	mg/L		Yes
JLS-W3	Environmental	10/15/2009	GW	SA	Total Dissolved Solids	370	20	mg/L		Yes
LH96-SP4	Environmental	10/15/2009	SP	SA	Total Dissolved Solids	550	20	mg/L		Yes
MC-S3	Environmental	10/20/2009	SW	SA	Total Dissolved Solids	690	20	mg/L		Yes
RS-W4	Environmental	10/21/2009	GW	SA	Total Dissolved Solids	190	20	mg/L		Yes
TJ-W6	Environmental	10/14/2009	GW	SA	Total Dissolved Solids	240	20	mg/L		Yes
USGS-BC1	Environmental	10/14/2009	SW	SA	Total Dissolved Solids	170	20	mg/L		Yes
CK-W5	Environmental	10/14/2009	GW	SA	Ammonia (as N)	0.1	0.1	mg/L	UJ,CCB-L	No
EG-SP2	Environmental	10/20/2009	SP	SA	Ammonia (as N)	0.1	0.1	mg/L	U,CCB-I	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Ammonia (as N)	0.1	0.1	mg/L	U,CCB-I	No
HC-S2	Environmental	10/20/2009	SP	SA	Ammonia (as N)	0.1	0.1	mg/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Ammonia (as N)	0.1	0.1	mg/L	UJ,CCB-L	No
JLS-W3	Environmental	10/15/2009	GW	SA	Ammonia (as N)	0.1	0.1	mg/L	UJ,CCB-L	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Ammonia (as N)	0.1	0.1	mg/L	UJ,CCB-L	No
MC-S3	Environmental	10/20/2009	SW	SA	Ammonia (as N)	0.1	0.1	mg/L	U,CCB-I	No
TJ-W6	Environmental	10/14/2009	GW	SA	Ammonia (as N)	0.1	0.1	mg/L	UJ,CCB-L	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Ammonia (as N)	0.1	0.1	mg/L	UJ,CCB-L	No
BC-HM	Environmental	10/21/2009	SW	SA	Bromide	0.2	0.2	mg/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Bromide	0.2	0.2	mg/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Bromide	0.2	0.2	mg/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Bromide	0.2	0.2	mg/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Bromide	0.2	0.2	mg/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Bromide	0.2	0.2	mg/L	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	Bromide	0.2	0.2	mg/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Bromide	0.2	0.2	mg/L	U	No

Table 8
Major and Minor Anion and pH Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
RS-W4	Environmental	10/21/2009	GW	SA	Bromide	0.2	0.2	mg/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Bromide	0.2	0.2	mg/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Bromide	0.2	0.2	mg/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Carbonate (as $CaCO_3$)	10	10	mg/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Carbonate (as $CaCO_3$)	20	20	mg/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Carbonate (as $CaCO_3$)	20	20	mg/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Carbonate (as $CaCO_3$)	20	20	mg/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Carbonate (as $CaCO_3$)	20	20	mg/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Carbonate (as $CaCO_3$)	20	20	mg/L	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	Carbonate (as $CaCO_3$)	20	20	mg/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Carbonate (as $CaCO_3$)	20	20	mg/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Carbonate (as $CaCO_3$)	20	20	mg/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Carbonate (as $CaCO_3$)	10	10	mg/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Carbonate (as $CaCO_3$)	20	20	mg/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Carbonate (as $CaCO_3$)	20	20	mg/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Fluoride	0.1	0.1	mg/L	U,CCB-I	No
HC-S2	Environmental	10/20/2009	SP	SA	Fluoride	0.17	0.17	mg/L	U,CCB-I	No
RS-W4	Environmental	10/21/2009	GW	SA	Fluoride	0.14	0.14	mg/L	U,CCB-I	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Fluoride	0.12	0.12	mg/L	U,CCB-I	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Nitrate/Nitrite (as N)	0.01	0.01	mg/L	U	No

Notes: FB = flowback water; FW = fracing fluids; PW = produced water; SA = primary sample; FD = field duplicate; µg/L = micrograms per liter; mg/L = milligrams per liter; U = analyte was analyzed but was not detected above the reporting limit; J = the reported analytical result is estimated; UJ = the analyte was analyzed for but was not detected above the reporting limit; the reported analytical result is an estimate; HT = sample exceeded holding time (see data validation report for further explanation); SQL = result is below the standard quantitation limit but above than the method detection limit; MB = analyte detected in method blank; CCB = analyte detected in continuing calibration blank; MS = outside matrix spike acceptance range; I = indeterminant result bias; H = likely high result bias; L = likely low result bias.

Table 9
Gasoline, Diesel, and Motor Oil Organics Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
TJ-W6	Environmental	10/14/2009	GW	SA	Diesel Range Organics	0.039	0.094	mg/L	J,SQL-I	Yes
BC-HM	Environmental	10/21/2009	SW	SA	Benzene	1	1	µg/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Benzene	1	1	µg/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Benzene	1	1	µg/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Benzene	1	1	µg/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Benzene	1	1	µg/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Benzene	1	1	µg/L	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	Benzene	1	1	µg/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Benzene	1	1	µg/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Benzene	1	1	µg/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Benzene	1	1	µg/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Benzene	1	1	µg/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Benzene	1	1	µg/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Diesel Range Organics	0.095	0.095	mg/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Diesel Range Organics	0.094	0.094	mg/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Diesel Range Organics	0.094	0.094	mg/L	U,J,MB-I	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Diesel Range Organics	0.094	0.094	mg/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Diesel Range Organics	0.095	0.095	mg/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Diesel Range Organics	0.094	0.094	mg/L	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	Diesel Range Organics	0.094	0.094	mg/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Diesel Range Organics	0.094	0.094	mg/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Diesel Range Organics	0.095	0.095	mg/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Diesel Range Organics	0.094	0.094	mg/L	U,J,MB-I	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Diesel Range Organics	0.094	0.094	mg/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Dissolved Methane	1	1	µg/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Dissolved Methane	1	1	µg/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Dissolved Methane	1	1	µg/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Dissolved Methane	1	1	µg/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Dissolved Methane	1	1	µg/L	U	No

Table 9
Gasoline, Diesel, and Motor Oil Organics Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
JLS-W1	Environmental	10/15/2009	GW	SA	Dissolved Methane	1	1	µg/L	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	Dissolved Methane	1	1	µg/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Dissolved Methane	1	1	µg/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Dissolved Methane	1	1	µg/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Dissolved Methane	1	1	µg/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Dissolved Methane	1	1	µg/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Dissolved Methane	1	1	µg/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Ethylbenzene	1	1	µg/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Ethylbenzene	1	1	µg/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Ethylbenzene	1	1	µg/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Ethylbenzene	1	1	µg/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Ethylbenzene	1	1	µg/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Ethylbenzene	1	1	µg/L	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	Ethylbenzene	1	1	µg/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Ethylbenzene	1	1	µg/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Ethylbenzene	1	1	µg/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Ethylbenzene	1	1	µg/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Ethylbenzene	1	1	µg/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Ethylbenzene	1	1	µg/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Gasoline Range Organics	0.1	0.1	mg/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Gasoline Range Organics	0.1	0.1	mg/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Gasoline Range Organics	0.1	0.1	mg/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Gasoline Range Organics	0.1	0.1	mg/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Gasoline Range Organics	0.1	0.1	mg/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Gasoline Range Organics	0.1	0.1	mg/L	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	Gasoline Range Organics	0.1	0.1	mg/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Gasoline Range Organics	0.1	0.1	mg/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Gasoline Range Organics	0.1	0.1	mg/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Gasoline Range Organics	0.1	0.1	mg/L	U	No

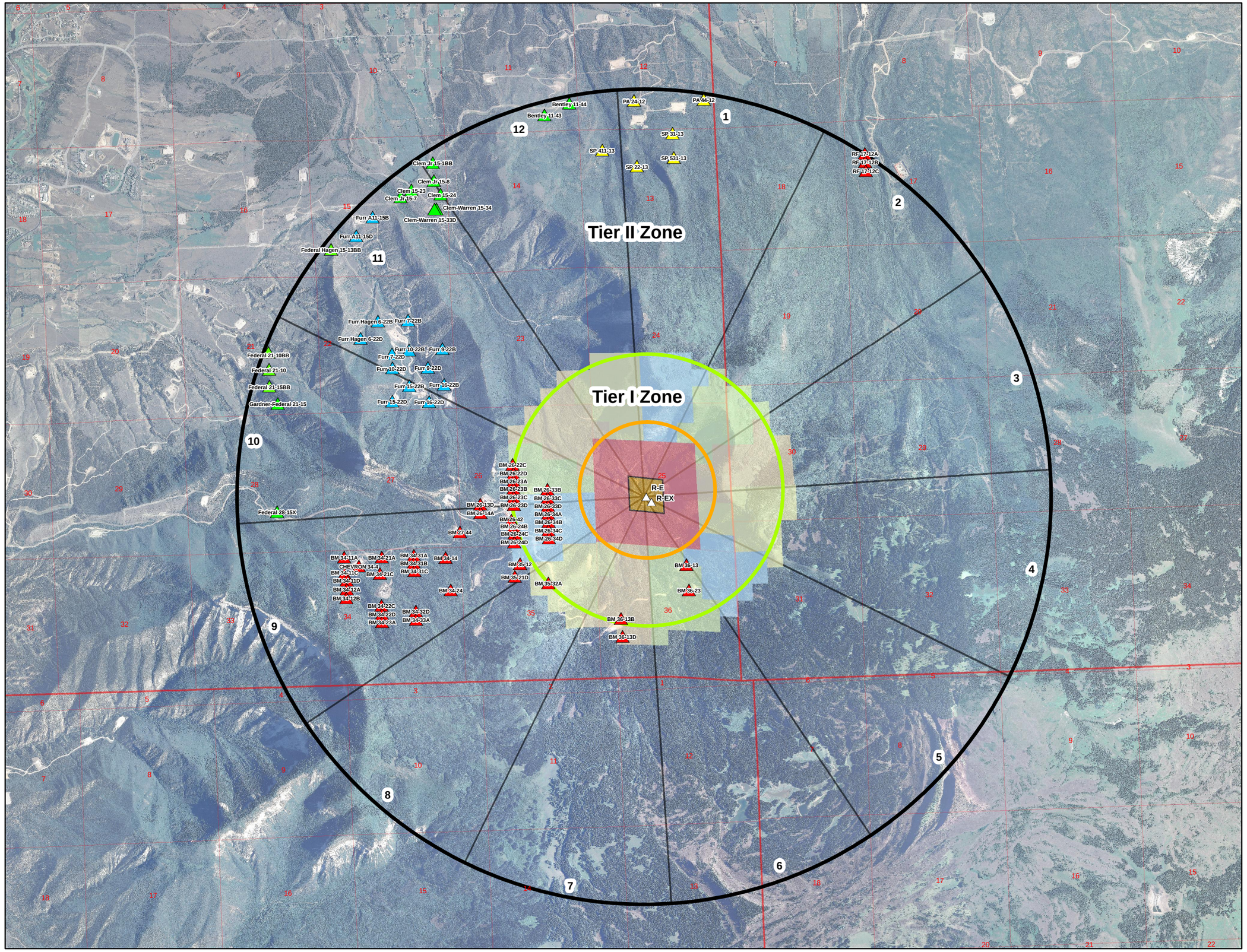
Table 9
Gasoline, Diesel, and Motor Oil Organics Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
TJ-W6	Environmental	10/14/2009	GW	SA	Gasoline Range Organics	0.1	0.1	mg/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Gasoline Range Organics	0.1	0.1	mg/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	M+P-Xylene	1	1	µg/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	M+P-Xylene	1	1	µg/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	M+P-Xylene	1	1	µg/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	M+P-Xylene	1	1	µg/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	M+P-Xylene	1	1	µg/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	M+P-Xylene	1	1	µg/L	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	M+P-Xylene	1	1	µg/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	M+P-Xylene	1	1	µg/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	M+P-Xylene	1	1	µg/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	M+P-Xylene	1	1	µg/L	J,SQL-I	No
TJ-W6	Environmental	10/14/2009	GW	SA	M+P-Xylene	1	1	µg/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	M+P-Xylene	1	1	µg/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Motor Oil Range Organics	0.095	0.095	mg/L	U,J,MB-I	No
CK-W5	Environmental	10/14/2009	GW	SA	Motor Oil Range Organics	0.094	0.094	mg/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Motor Oil Range Organics	0.094	0.094	mg/L	U,J,MB-I	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Motor Oil Range Organics	0.094	0.094	mg/L	U,J,MB-I	No
HC-S2	Environmental	10/20/2009	SP	SA	Motor Oil Range Organics	0.095	0.095	mg/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Motor Oil Range Organics	0.094	0.094	mg/L	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	Motor Oil Range Organics	0.094	0.094	mg/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Motor Oil Range Organics	0.094	0.094	mg/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Motor Oil Range Organics	0.095	0.095	mg/L	U,J,MB-I	No
RS-W4	Environmental	10/21/2009	GW	SA	Motor Oil Range Organics	0.094	0.094	mg/L	U,J,MB-I	No
TJ-W6	Environmental	10/14/2009	GW	SA	Motor Oil Range Organics	0.094	0.094	mg/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Motor Oil Range Organics	0.094	0.094	mg/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	O-Xylene	1	1	µg/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	O-Xylene	1	1	µg/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	O-Xylene	1	1	µg/L	U	No

Table 9
Gasoline, Diesel, and Motor Oil Organics Results - Surface Water and Groundwater

Well Number	Well Type	Sample Date	Medium	Sample Type	Parameter	Concentration	Reporting Limit	Units	Flag	Detected ?
GVS-SP1	Environmental	10/20/2009	SP	SA	O-Xylene	1	1	µg/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	O-Xylene	1	1	µg/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	O-Xylene	1	1	µg/L	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	O-Xylene	1	1	µg/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	O-Xylene	1	1	µg/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	O-Xylene	1	1	µg/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	O-Xylene	1	1	µg/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	O-Xylene	1	1	µg/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	O-Xylene	1	1	µg/L	U	No
BC-HM	Environmental	10/21/2009	SW	SA	Toluene	1	1	µg/L	U	No
CK-W5	Environmental	10/14/2009	GW	SA	Toluene	1	1	µg/L	U	No
EG-SP2	Environmental	10/20/2009	SP	SA	Toluene	1	1	µg/L	U	No
GVS-SP1	Environmental	10/20/2009	SP	SA	Toluene	1	1	µg/L	U	No
HC-S2	Environmental	10/20/2009	SP	SA	Toluene	1	1	µg/L	U	No
JLS-W1	Environmental	10/15/2009	GW	SA	Toluene	1	1	µg/L	U	No
JLS-W3	Environmental	10/15/2009	GW	SA	Toluene	1	1	µg/L	U	No
LH96-SP4	Environmental	10/15/2009	SP	SA	Toluene	1	1	µg/L	U	No
MC-S3	Environmental	10/20/2009	SW	SA	Toluene	1	1	µg/L	U	No
RS-W4	Environmental	10/21/2009	GW	SA	Toluene	1	1	µg/L	U	No
TJ-W6	Environmental	10/14/2009	GW	SA	Toluene	1	1	µg/L	U	No
USGS-BC1	Environmental	10/14/2009	SW	SA	Toluene	1	1	µg/L	U	No

Notes: PW = produced water; SA = primary sample; FD = field duplicate; µg/L = micrograms per liter; mg/L = milligrams per liter; U = analyte was analyzed but was not detected above the reporting limit; J = the reported analytical result is estimated; UJ = the analyte was analyzed for but was not detected above the reporting limit; the reported analytical result is an estimate; B = analyte detected in associated method blank as well as the sample; D = fuel pattern resembles diesel; G = fuel pattern resembles gasoline; H = fuel pattern was in the heavier end of the retention time window; L = fuel pattern was in the lighter end of the retention time window; M = fuel pattern resembles motor oil; Z = fuel pattern did not resemble typical petroleum hydrocarbon patterns (e.g., gasoline, JP4, JP8, diesel, mineral spirits, motor oil, Stoddard solvent, or bunker C); P = sample did not meet preservation requirement of temperature, pH, and/or headspace (see data validation report for further explanation); SQL = sample result is below the sample quantitation limit but above the method detection limit; MS = matrix spike is outside acceptance range; MB = analyte detected in method blank; I = indeterminant result bias; H = likely high result bias; L = likely low result bias.



Legend

- Existing Noble Gas Well
- Existing EnCana Gas Well
- Existing Williams Gas Well
- Existing Laramie Gas Well
- Project Rulison Well
- COGCC Half- Mile Radius
- 1 Mile Radius Tier I Zone
- 3 Mile Radius Tier II Zone
- Project Rulison Lot 11
- 100 *Noble-Williams 2009 Voluntary Drilling Moratorium*
- 1 *Tier I Sector 1*
- 2 *Tier I Sector 2*
- 3 *Tier I Sector 3*
- 4 *Tier I Sector 4*
- 5 *Tier I Sector 5*
- 6 *Tier I Sector 6*
- 7 *Tier I Sector 7*
- 8 *Tier I Sector 8*
- 9 *Tier I Sector 9*
- 10 *Tier I Sector 10*
- 11 *Tier I Sector 11*
- 12 *Tier I Sector 12*
- Township-Range-Section
- Monitoring Sectors

N

0 0.5 1

Miles

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Figure 1
Gas Well Locations
Fourth Quarter 2009
Project Rulison Area
Garfield County, Colorado

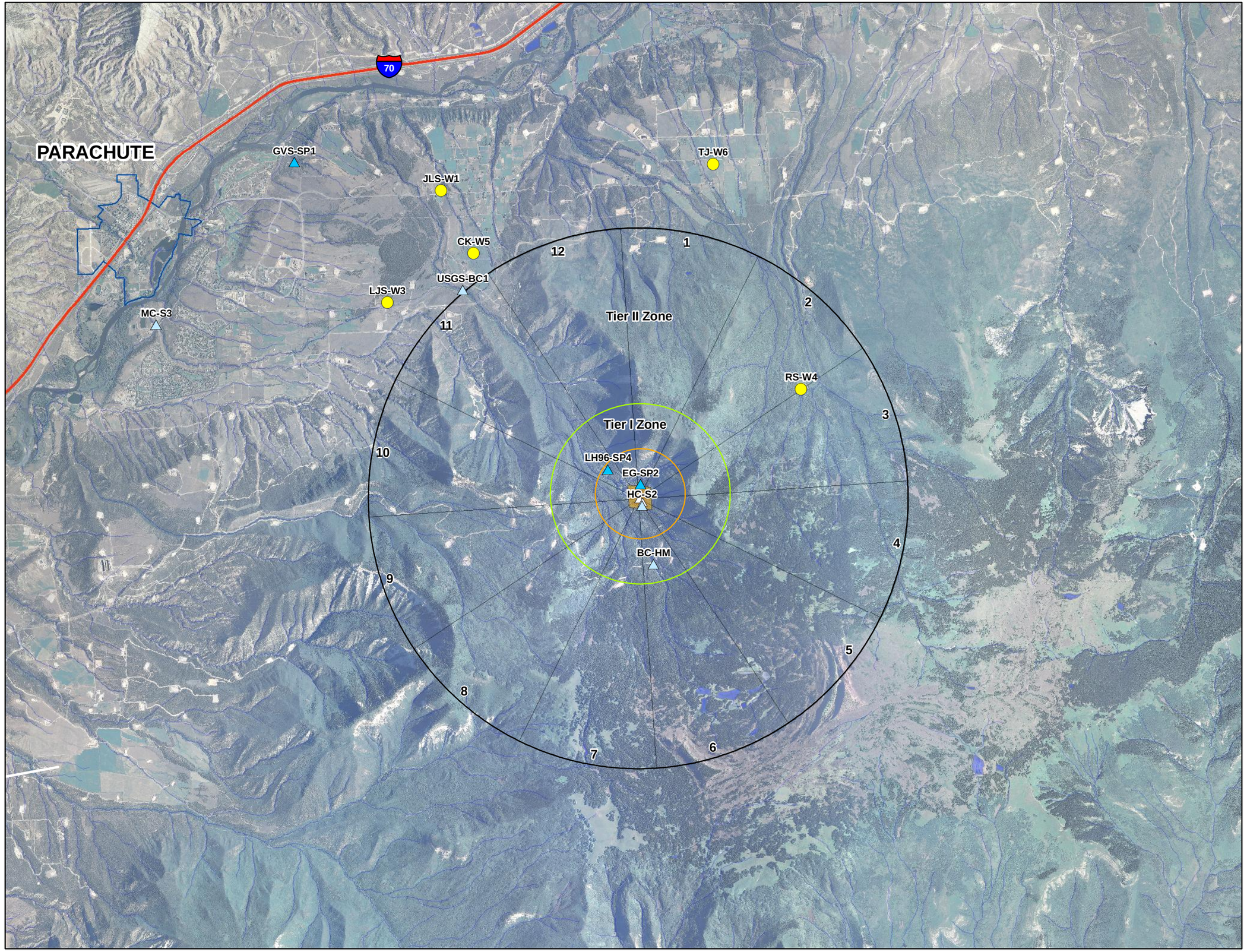

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Figure 2
2009 Environmental Sample Locations
Project Rulison Area
Garfield County, Colorado

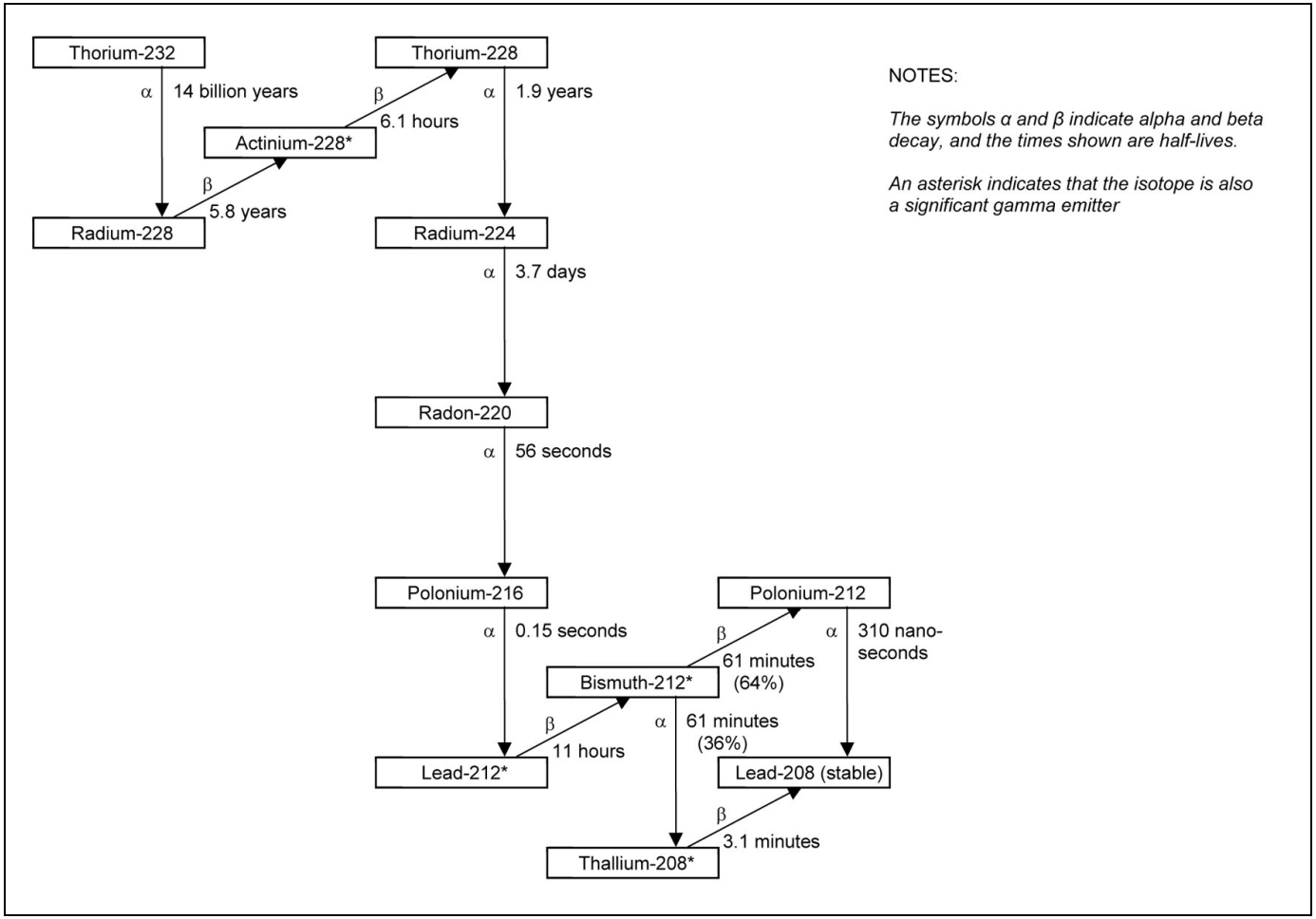

Figure 3. Thorium-232 (Th-232) Decay Series (modified from ANL 2005).

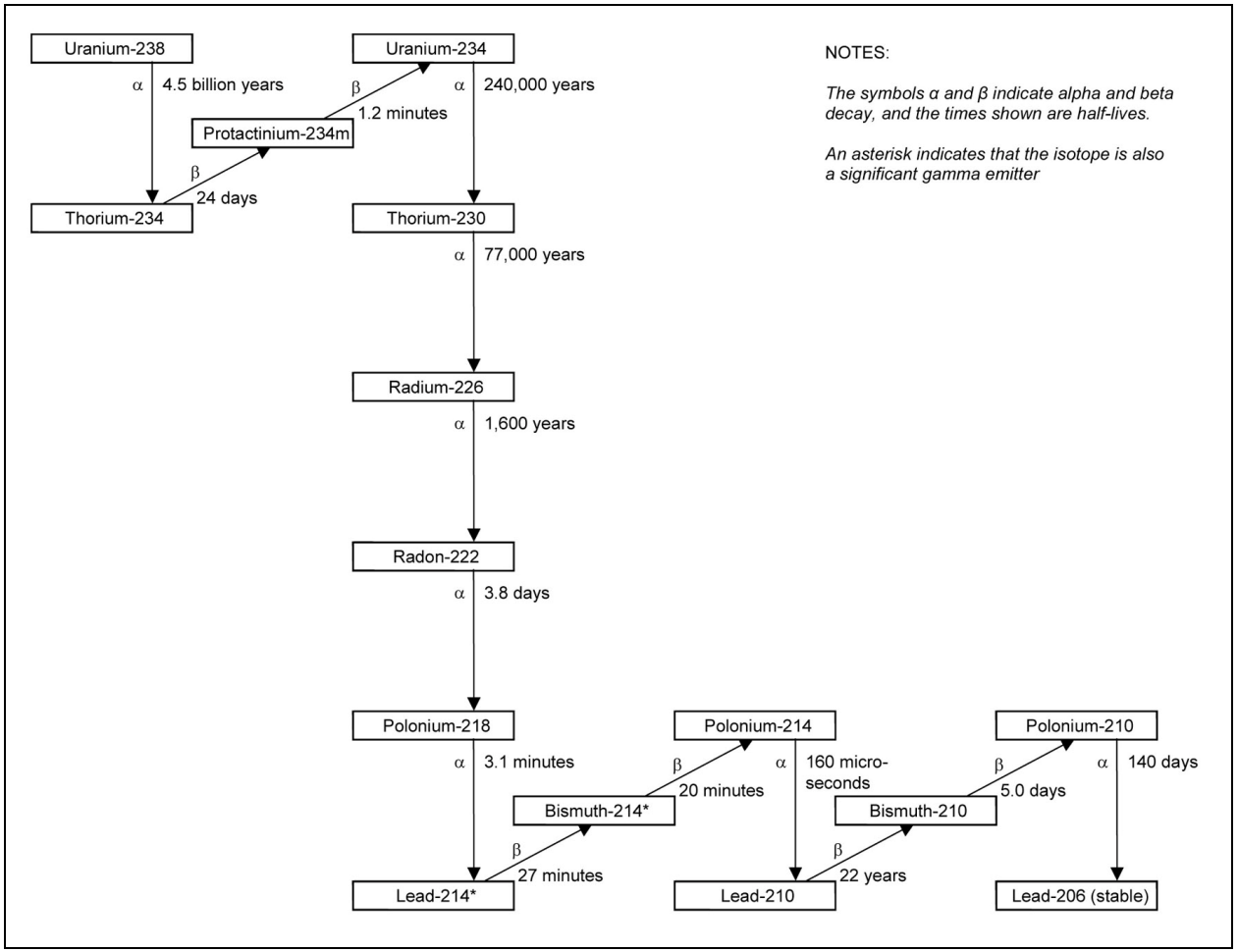

Figure 4. Uranium-238 (U-238) Decay Series (modified from ANL 2005).

APPENDIX A

LABORATORY DATA PACKAGES
(Appendix on Compact Disk)

APPENDIX B

DATA VALIDATION REPORTS
(Appendix on Compact Disk)

APPENDIX C

FIELD SAMPLING FORMS
(Appendix on Compact Disk)