Application for Amendment of USNRC Source Materials License SUA-1601, Ross ISR Project

Kendrick Expansion Area, Crook County, Wyoming Docket #40-9091

Environmental Report
Addenda 3.4-L through 3.11-C

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ADDENDUM 3.4-L
GROUNDWATER QUALITY COMPARISON TO STANDARDS

Kendrick Expansion Area
Regional Baseline Monitor Wells
SA Zone Comparison to WDEQ Class of Use

Parameter	Units	WDEQ Class I									
		Standard	5268-12-01SA	5268-21-11SA	5367-34-06SA	5368-12-25SA	5368-24-12SA	5368-31-35SA	5368-33-14SA	5368-41-23SA	5368-43-24SA
General											
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	**0.5**	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	**4**	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	4	1	0	0	4	2	0	0	0
Nitrate (as N)	mg/L	**10**	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	**1**	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**500**	4	0	4	4	4	2	3	4	3
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0
Major Ions											
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**250**	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**250**	0	0	4	0	0	0	0	0	0
Metals											
Aluminum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	**2**	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	**0.75**	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.005**	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**1**	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	**0.3**	0	0	0	3	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**0.015**	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	**0.05**	0	0	1	0	0	0	1	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	**0.002**	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0
Radiological											
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	0	0	0	1	0	0	0	4	4
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0

Pink	Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Regional Baseline Monitor Wells
SA Zone Comparison to WDEQ Class of Use

Parameter	Units	WDEQ Class II									
		Standard	5268-12-01SA	5268-21-11SA	5367-34-06SA	5368-12-25SA	5368-24-12SA	5368-31-35SA	5368-33-14SA	5368-41-23SA	5368-43-24SA
General											
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	---	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**9**	0	1	0	0	4	0	0	0	0
Nitrate (as N)	mg/L	---	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**2000**	0	0	0	0	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0
Major Ions											
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**100**	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**200**	0	0	4	0	0	0	0	1	0
Metals											
Aluminum, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	**0.75**	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.01**	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.02**	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**2**	0	0	0	0	0	0	0	0	0
Radiological											
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	0	0	0	1	0	0	0	4	4
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0

Pink	Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Regional Baseline Monitor Wells
SA Zone Comparison to WDEQ Class of Use

Parameter	Units	WDEQ Class III									
		Standard	5268-12-01SA	5268-21-11SA	5367-34-06SA	5368-12-25SA	5368-24-12SA	5368-31-35SA	5368-33-14SA	5368-41-23SA	5368-43-24SA
General											
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	---	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	4	1	0	0	4	2	0	0	0
Nitrate (as N)	mg/L	**10**	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	**100**	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**5000**	0	0	0	0	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0
Major Ions											
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**2000**	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**3000**	0	0	0	0	0	0	0	0	0
Metals											
Aluminum, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**0.5**	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	**0.00005**	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**25**	0	0	0	0	0	0	0	0	0
Radiological											
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	0	0	0	1	0	0	0	4	4
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0

Pink	Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Regional Baseline Monitor Wells
SA Zone Comparison to EPA MCLs

Parameter	Units	EPA Primary									
		Standard	5268-12-01SA	5268-21-11SA	5367-34-06SA	5368-12-25SA	5368-24-12SA	5368-31-35SA	5368-33-14SA	5368-41-23SA	5368-43-24SA
General											
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	**4**	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	---	0	0	0	0	0	0	0	0	0
Nitrate (as N)	mg/L	**10**	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	**1**	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	---	0	0	0	0	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0
Major Ions											
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0
Chloride	mg/L	---	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	---	0	0	0	0	0	0	0	0	0
Metals											
Aluminum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.01**	4	0	0	0	4	0	0	0	0
Barium, dissolved	mg/L	**2**	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.005**	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**1.3**	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**0.015**	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	**0.002**	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	**0.03**	0	0	0	0	0	0	0	4	4
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Radiological											
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	0	0	0	1	0	0	0	4	4
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0

Pink	Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by EPA's National Primary Drinking Water Regulations

Kendrick Expansion Area
Regional Baseline Monitor Wells
SA Zone Comparison to EPA MCLs

Parameter	Units	EPA Secondary									
		Standard	5268-12-01SA	5268-21-11SA	5367-34-06SA	5368-12-25SA	5368-24-12SA	5368-31-35SA	5368-33-14SA	5368-41-23SA	5368-43-24SA
General											
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	**2**	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	4	1	0	0	4	2	0	0	0
Nitrate (as N)	mg/L	---	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**500**	4	0	4	4	4	2	3	4	3
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0
Major Ions											
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**250**	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**250**	0	0	4	0	0	0	0	0	0
Metals											
Aluminum, dissolved	mg/L	**0.05**	0	1	0	1	0	0	0	0	0
Arsenic, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**1**	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	**0.3**	0	0	0	3	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	**0.05**	0	0	1	0	0	0	1	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0
Radiological											
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	---	0	0	0	0	0	0	0	0	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0

Pink	Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by EPA's National Secondary Drinking Water Regulations

Kendrick Expansion Area
Regional Baseline Monitor Wells
SM Zone Comparison to WDEQ Class of Use

Parameter	Units	WDEQ Class I												
		Standard	5268-12-01SM	5268-21-11SM	5367-34-06SM	5368-12-25SM	5368-24-12SM	5368-31-35SM	5368-32-23SM	5368-33-14SM	5368-41-23SM	5368-41-36SM	5368-43-12SM	5368-43-24SM
General														
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	**0.5**	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	**4**	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	4	4	4	4	4	2	4	4	4	4	4	4
Nitrate (as N)	mg/L	**10**	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**500**	4	4	4	4	4	2	4	4	4	4	4	4
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions														
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**250**	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**250**	4	2	4	0	0	0	0	0	0	0	4	4
Metals														
Aluminum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	**2**	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	**0.75**	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.005**	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	**0.3**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**0.015**	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	**0.002**	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Radiological														
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	0	0	0	0	0	0	0	0	0	0	0	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Regional Baseline Monitor Wells
SM Zone Comparison to WDEQ Class of Use

Parameter	Units	WDEQ Class II												
		Standard	5268-12-01SM	5268-21-11SM	5367-34-06SM	5368-12-25SM	5368-24-12SM	5368-31-35SM	5368-32-23SM	5368-33-14SM	5368-41-23SM	5368-41-36SM	5368-43-12SM	5368-43-24SM
General														
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**9**	4	4	3	4	1	2	4	4	0	4	3	0
Nitrate (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**2000**	0	0	0	0	0	0	0	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions														0
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**100**	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**200**	4	4	4	2	0	2	1	0	4	4	4	4
Metals														
Aluminum, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	**0.75**	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.01**	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.02**	0	0	0	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**2**	0	0	0	0	0	0	0	0	0	0	0	0
Radiological														
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	0	0	0	0	0	0	0	0	0	0	0	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Regional Baseline Monitor Wells
SM Zone Comparison to WDEQ Class of Use

Parameter	Units	WDEQ Class III												
		Standard	5268-12-01SM	5268-21-11SM	5367-34-06SM	5368-12-25SM	5368-24-12SM	5368-31-35SM	5368-32-23SM	5368-33-14SM	5368-41-23SM	5368-41-36SM	5368-43-12SM	5368-43-24SM
General														
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	4	4	4	4	4	2	4	4	4	4	4	4
Nitrate (as N)	mg/L	**10**	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	**100**	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**5000**	0	0	0	0	0	0	0	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions														
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**2000**	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**3000**	0	0	0	0	0	0	0	0	0	0	0	0
Metals														
Aluminum, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**0.5**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	**0.00005**	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**25**	0	0	0	0	0	0	0	0	0	0	0	0
Radiological														
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	0	0	0	0	0	0	0	0	0	0	0	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Regional Baseline Monitor Wells
SM Zone Comparison to EPA MCLs

Parameter	Units	EPA Primary												
		Standard	5268-12-01SM	5268-21-11SM	5367-34-06SM	5368-12-25SM	5368-24-12SM	5368-31-35SM	5368-32-23SM	5368-33-14SM	5368-41-23SM	5368-41-36SM	5368-43-12SM	5368-43-24SM
General														
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	**4**	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	---	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate (as N)	mg/L	**10**	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions														
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Metals														
Aluminum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.01**	4	4	2	0	0	1	0	0	0	0	0	0
Barium, dissolved	mg/L	**2**	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.005**	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**1.3**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**0.015**	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	**0.002**	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	**0.03**	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Radiological														
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	0	0	0	0	0	0	0	0	0	0	0	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by EPA's National Primary Drinking Water Regulations

Kendrick Expansion Area
Regional Baseline Monitor Wells
SM Zone Comparison to EPA MCLs

Parameter	Units	EPA Secondary												
		Standard	5268-12-01SM	5268-21-11SM	5367-34-06SM	5368-12-25SM	5368-24-12SM	5368-31-35SM	5368-32-23SM	5368-33-14SM	5368-41-23SM	5368-41-36SM	5368-43-12SM	5368-43-24SM
General														
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	**2**	0	0	0	0	4	2	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	4	4	4	4	4	2	4	4	4	4	4	4
Nitrate (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**500**	4	4	4	4	4	2	4	4	4	4	4	4
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions														
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**250**	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**250**	4	2	4	0	0	0	0	0	0	0	4	4
Metals														
Aluminum, dissolved	mg/L	**0.05**	0	2	0	3	0	0	0	0	0	4	0	0
Arsenic, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	**0.3**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Radiological														
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by EPA's National Secondary Drinking Water Regulations

Kendrick Expansion Area
Regional Baseline Monitor Wells
OZ Zone Comparison to WDEQ Class of Use

Parameter	Units	WDEQ Class I												
		Standard	5268-12-01OZ	5268-21-11OZ	5367-34-06OZ	5368-12-25OZ	5368-24-12OZ	5368-31-35OZ	5368-32-23OZ	5368-33-14OZ	5368-41-23OZ	5368-41-36OZ	5368-43-12OZ	5368-43-24OZ
General														
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	**0.5**	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	**4**	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	4	4	4	4	4	2	4	4	4	4	4	4
Nitrate (as N)	mg/L	**10**	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**500**	4	4	4	4	4	2	4	4	4	4	4	4
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions														
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**250**	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**250**	0	1	4	0	4	0	0	2	1	4	4	4
Metals														
Aluminum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	**2**	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	**0.75**	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.005**	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	**0.3**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**0.015**	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	**0.002**	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Radiological														
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	1	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	3	4	4	0	4	2	4	4	0	4	4	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Regional Baseline Monitor Wells
OZ Zone Comparison to WDEQ Class of Use

Parameter	Units	WDEQ Class II												
		Standard	5268-12-01OZ	5268-21-11OZ	5367-34-06OZ	5368-12-25OZ	5368-24-12OZ	5368-31-35OZ	5368-32-23OZ	5368-33-14OZ	5368-41-23OZ	5368-41-36OZ	5368-43-12OZ	5368-43-24OZ
General														
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**9**	4	4	0	2	2	1	4	4	0	0	0	3
Nitrate (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**2000**	0	0	0	0	0	0	0	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions														0
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**100**	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**200**	0	4	4	4	4	0	4	4	4	4	4	4
Metals														
Aluminum, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	**0.75**	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.01**	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.02**	0	0	0	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**2**	0	0	0	0	0	0	0	0	0	0	0	0
Radiological														
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	1	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	3	4	4	0	4	2	4	4	0	4	4	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Regional Baseline Monitor Wells
OZ Zone Comparison to WDEQ Class of Use

Parameter	Units	WDEQ Class III												
		Standard	5268-12-01OZ	5268-21-11OZ	5367-34-06OZ	5368-12-25OZ	5368-24-12OZ	5368-31-35OZ	5368-32-23OZ	5368-33-14OZ	5368-41-23OZ	5368-41-36OZ	5368-43-12OZ	5368-43-24OZ
General														
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	4	4	4	4	4	2	4	4	4	4	4	4
Nitrate (as N)	mg/L	**10**	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	**100**	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**5000**	0	0	0	0	0	0	0	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions														
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**2000**	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**3000**	0	0	0	0	0	0	0	0	0	0	0	0
Metals														
Aluminum, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**0.5**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	**0.00005**	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**25**	0	0	0	0	0	0	0	0	0	0	0	0
Radiological														
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	1	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	3	4	4	0	4	2	4	4	0	4	4	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0

Pink	Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Regional Baseline Monitor Wells
OZ Zone Comparison to EPA MCLs

Parameter	Units	EPA Primary												
		Standard	5268-12-01OZ	5268-21-11OZ	5367-34-06OZ	5368-12-25OZ	5368-24-12OZ	5368-31-35OZ	5368-32-23OZ	5368-33-14OZ	5368-41-23OZ	5368-41-36OZ	5368-43-12OZ	5368-43-24OZ
General														
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	**4**	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	---	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate (as N)	mg/L	**10**	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions														
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Metals														
Aluminum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.01**	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	**2**	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.005**	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**1.3**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**0.015**	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	**0.002**	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	**0.03**	0	1	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Radiological														
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	1	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	3	4	4	0	4	2	4	4	0	4	4	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0

Pink	Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by EPA's National Primary Drinking Water Regulations

Kendrick Expansion Area
Regional Baseline Monitor Wells
OZ Zone Comparison to EPA MCLs

Parameter	Units	EPA Secondary												
		Standard	5268-12-01OZ	5268-21-11OZ	5367-34-06OZ	5368-12-25OZ	5368-24-12OZ	5368-31-35OZ	5368-32-23OZ	5368-33-14OZ	5368-41-23OZ	5368-41-36OZ	5368-43-12OZ	5368-43-24OZ
General														
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	**2**	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	4	4	4	4	4	2	4	4	4	4	4	4
Nitrate (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**500**	4	4	4	4	4	2	4	4	4	4	4	4
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions														
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**250**	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**250**	0	1	4	0	4	0	0	2	1	4	4	4
Metals														
Aluminum, dissolved	mg/L	**0.05**	0	2	0	1	0	0	0	0	1	1	0	2
Arsenic, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	**0.3**	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0
Radiological														
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by EPA's National Secondary Drinking Water Regulations

Kendrick Expansion Area
Existing Water Supply Wells
Industrial Well Comparison to WDEQ Class of Use

Parameter	Units	WDEQ Class I						Parameter	Units	WDEQ Class II					
		Standard	P1440W	P150187W	19XX18	22X-19	P72048W			Standard	P1440W	P150187W	19XX18	22X-19	P72048W
General								**General**							
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0
Ammonia (as N)	mg/L	**0.5**	0	0	1	0	1	Ammonia (as N)	mg/L	---	0	0	0	0	0
Fluoride	mg/L	**4**	0	0	0	0	0	Fluoride	mg/L	---	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	Laboratory conductivity	µmhos/cm	---	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	2	1	10	10	1	Laboratory pH	s.u.	**9**	0	1	0	0	0
Nitrate (as N)	mg/L	**10**	0	0	0	0	0	Nitrate (as N)	mg/L	---	0	0	0	0	0
Nitrite (as N)	mg/L	**1**	0	0	0	0	0	Nitrite (as N)	mg/L	---	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	Silica as SiO2	mg/L	---	0	0	0	0	0
Total Dissolved Solids	mg/L	**500**	2	1	13	11	2	Total Dissolved Solids	mg/L	**2000**	0	0	0	0	1
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0
Major Ions								**Major Ions**							
Calcium	mg/L	---	0	0	0	0	0	Calcium	mg/L	---	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	Magnesium	mg/L	---	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	Potassium	mg/L	---	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	Sodium	mg/L	---	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	Bicarbonate	mg/L	---	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	Carbonate	mg/L	---	0	0	0	0	0
Chloride	mg/L	**250**	0	0	0	0	1	Chloride	mg/L	**100**	0	0	0	0	1
Sulfate	mg/L	**250**	0	1	13	11	2	Sulfate	mg/L	**200**	2	1	13	11	2
Metals								**Metals**							
Aluminum, dissolved	mg/L	---	0	0	0	0	0	Aluminum, dissolved	mg/L	**5**	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.05**	0	0	0	0	0	Arsenic, dissolved	mg/L	**0.1**	0	0	0	0	0
Barium, dissolved	mg/L	**2**	0	0	0	0	0	Barium, dissolved	mg/L	---	0	0	0	0	0
Boron, dissolved	mg/L	**0.75**	0	0	0	0	1	Boron, dissolved	mg/L	**0.75**	0	0	0	0	1
Cadmium, dissolved	mg/L	**0.005**	0	0	0	0	0	Cadmium, dissolved	mg/L	**0.01**	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0
Copper, dissolved	mg/L	**1**	0	0	0	0	0	Copper, dissolved	mg/L	**0.2**	0	0	0	0	0
Iron, dissolved	mg/L	**0.3**	0	0	0	0	0	Iron, dissolved	mg/L	**5**	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	Iron, total	mg/L	---	0	0	0	0	0
Lead, dissolved	mg/L	**0.015**	0	0	0	0	0	Lead, dissolved	mg/L	**5**	0	0	0	0	0
Manganese, dissolved	mg/L	**0.05**	0	0	0	0	0	Manganese, dissolved	mg/L	**0.2**	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	Manganese, total	mg/L	---	0	0	0	0	0
Mercury, dissolved	mg/L	**0.002**	0	0	0	0	0	Mercury, dissolved	mg/L	---	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	Mercury, total	mg/L	---	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	Molybdenum, dissolved	mg/L	---	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	Nickel, dissolved	mg/L	**0.2**	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	1	Selenium, dissolved	mg/L	**0.02**	0	0	0	0	1
Silver, dissolved	mg/L	**0.1**	0	0	0	0	0	Silver, dissolved	mg/L	---	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	Uranium, dissolved	mg/L	---	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	Uranium, suspended	mg/L	---	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	Vanadium, dissolved	mg/L	**0.1**	0	0	0	0	0
Zinc, dissolved	mg/L	**5**	0	0	0	0	0	Zinc, dissolved	mg/L	**2**	0	0	0	0	0
Radiological								**Radiological**							
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	Lead 210, dissolved	pCi/L	---	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	Lead 210, suspended	pCi/L	---	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	Polonium 210, dissolved	pCi/L	---	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	Polonium 210, suspended	pCi/L	---	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	13	0	0	Ra-226, dissolved	pCi/L	**5**	0	0	13	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	Ra-226, suspended	pCi/L	---	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	Ra-228, Dissolved	pCi/L	---	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	Th-230, dissolved	pCi/L	---	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	Th-230, suspended	pCi/L	---	0	0	0	0	0
Gross Alpha	pCi/L	**15**	0	0	13	11	0	Gross Alpha	pCi/L	**15**	0	0	13	11	0
Gross Beta	pCi/L	---	0	0	0	0	0	Gross Beta	pCi/L	---	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	Gross Gamma	pCi/L	---	0	0	0	0	0

Pink	Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Existing Water Supply Wells
Industrial Well Comparison to WDEQ Class of Use

Parameter	Units	WDEQ Class III					
		Standard	P1440W	P150187W	19XX18	22X-19	P72048W
General							
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0
Fluoride	mg/L	---	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	2	1	10	10	1
Nitrate (as N)	mg/L	**10**	0	0	0	0	0
Nitrite (as N)	mg/L	**100**	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0
Total Dissolved Solids	mg/L	**5000**	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0
Major Ions							
Calcium	mg/L	---	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0
Chloride	mg/L	**2000**	0	0	0	0	0
Sulfate	mg/L	**3000**	0	0	0	0	0
Metals							
Aluminum, dissolved	mg/L	**5**	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.2**	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0
Boron, dissolved	mg/L	**5**	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.05**	0	0	0	0	0
Chromium, dissolved	mg/L	**0.05**	0	0	0	0	0
Copper, dissolved	mg/L	**0.5**	0	0	0	0	0
Iron, dissolved	mg/L	---	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0
Lead, dissolved	mg/L	**0.1**	0	0	0	0	0
Manganese, dissolved	mg/L	---	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0
Mercury, dissolved	mg/L	**0.00005**	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	1
Silver, dissolved	mg/L	---	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0
Vanadium, dissolved	mg/L	**0.1**	0	0	0	0	0
Zinc, dissolved	mg/L	**25**	0	0	0	0	0
Radiological							
Lead 210, dissolved	pCi/L	---	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	13	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0
Gross Alpha	pCi/L	**15**	0	0	13	11	0
Gross Beta	pCi/L	---	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0

Pink	Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Existing Water Supply Wells
Industrial Well Comparison to EPA MCLs

Parameter	Units	EPA Primary					
		Standard	P1440W	P150187W	19XX18	22X-19	P72048W
General							
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0
Fluoride	mg/L	**4**	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0
Laboratory pH	s.u.	---	0	0	0	0	0
Nitrate (as N)	mg/L	**10**	0	0	0	0	0
Nitrite (as N)	mg/L	**1**	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0
Total Dissolved Solids	mg/L	---	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0
Major Ions							
Calcium	mg/L	---	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0
Chloride	mg/L	---	0	0	0	0	0
Sulfate	mg/L	---	0	0	0	0	0
Metals							
Aluminum, dissolved	mg/L	---	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.01**	0	0	0	0	0
Barium, dissolved	mg/L	**2**	0	0	0	0	0
Boron, dissolved	mg/L	---	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.005**	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0
Copper, dissolved	mg/L	**1.3**	0	0	0	0	0
Iron, dissolved	mg/L	---	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0
Lead, dissolved	mg/L	**0.015**	0	0	0	0	0
Manganese, dissolved	mg/L	---	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0
Mercury, dissolved	mg/L	**0.002**	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	1
Silver, dissolved	mg/L	---	0	0	0	0	0
Uranium, dissolved	mg/L	**0.03**	0	0	13	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0
Zinc, dissolved	mg/L	---	0	0	0	0	0
Radiological							
Lead 210, dissolved	pCi/L	---	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	13	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0
Gross Alpha	pCi/L	**15**	0	0	13	11	0
Gross Beta	pCi/L	---	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0

Parameter	Units	EPA Secondary					
		Standard	P1440W	P150187W	19XX18	22X-19	P72048W
General							
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0
Fluoride	mg/L	**2**	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	2	1	10	10	1
Nitrate (as N)	mg/L	---	0	0	0	0	0
Nitrite (as N)	mg/L	---	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0
Total Dissolved Solids	mg/L	**500**	2	1	13	11	2
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0
Major Ions							
Calcium	mg/L	---	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0
Chloride	mg/L	**250**	0	0	0	0	1
Sulfate	mg/L	**250**	0	1	13	11	2
Metals							
Aluminum, dissolved	mg/L	**0.05**	0	0	0	0	0
Arsenic, dissolved	mg/L	---	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0
Boron, dissolved	mg/L	---	0	0	0	0	0
Cadmium, dissolved	mg/L	---	0	0	0	0	0
Chromium, dissolved	mg/L	---	0	0	0	0	0
Copper, dissolved	mg/L	**1**	0	0	0	0	0
Iron, dissolved	mg/L	**0.3**	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0
Lead, dissolved	mg/L	---	0	0	0	0	0
Manganese, dissolved	mg/L	**0.05**	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0
Mercury, dissolved	mg/L	---	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0
Selenium, dissolved	mg/L	---	0	0	0	0	0
Silver, dissolved	mg/L	**0.1**	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0
Zinc, dissolved	mg/L	**5**	0	0	0	0	0
Radiological							
Lead 210, dissolved	pCi/L	---	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0
Ra-226, dissolved	pCi/L	---	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0
Gross Alpha	pCi/L	---	0	0	0	0	0
Gross Beta	pCi/L	---	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0

Pink	Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by EPA's National Primary Drinking Water Regulations

Kendrick Expansion Area
Existing Water Supply Wells
Domestic Well Comparison to WDEQ Standards

Parameter	Units	WDEQ Class I															
		Standard	P31770W	TDWELL01	P20521W	ARL01	TW01	TW02	HBWELL05	ARH02	DWWELL01	CSWELL01	ABWELL01	P42868W	P61006W	P144030W	P22584P
General																	
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	**0.5**	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0
Fluoride	mg/L	**4**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	0	0	0	0	1	0	0	0	2	1	3	5	1	0	3
Nitrate (as N)	mg/L	**10**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**500**	5	2	0	2	12	11	12	4	13	9	3	5	8	2	3
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions																	
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**250**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**250**	5	1	0	2	12	11	12	4	13	7	0	0	0	0	0
Metals																	
Aluminum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	**0.75**	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.005**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	**0.3**	2	0	0	1	0	0	9	2	9	0	0	0	0	1	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**0.015**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	**0.002**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radiological																	
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	2	1	0	2	0	0	0	4	2	4	0	0	0	2	3
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Existing Water Supply Wells
Domestic Well Comparison to WDEQ Standards

Parameter	Units	WDEQ Class II															
		Standard	P31770W	TDWELL01	P20521W	ARL01	TW01	TW02	HBWELL05	ARH02	DWWELL01	CSWELL01	ABWELL01	P42868W	P61006W	P144030W	P22584P
General																	
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**9**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Nitrate (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**2000**	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions																	
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**100**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**200**	5	1	0	2	12	11	12	4	13	9	2	0	0	0	0
Metals																	
Aluminum, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	**0.75**	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.01**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.02**	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
Silver, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radiological																	
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	2	1	0	2	0	0	0	4	2	4	0	0	0	2	3
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pink	Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Existing Water Supply Wells
Domestic Well Comparison to WDEQ Standards

Parameter	Units	WDEQ Class III															
		Standard	P31770W	TDWELL01	P20521W	ARL01	TW01	TW02	HBWELL05	ARH02	DWWELL01	CSWELL01	ABWELL01	P42868W	P61006W	P144030W	P22584P
General																	
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	0	0	0	0	1	0	0	0	2	1	3	5	1	0	3
Nitrate (as N)	mg/L	**10**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	**100**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**5000**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions																	
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**2000**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**3000**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Metals																	
Aluminum, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**0.5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	**0.00005**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**25**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radiological																	
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	2	1	0	2	0	0	0	4	2	4	0	0	0	2	3
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Existing Water Supply Wells
Domestic Well Comparison to EPA MCLs

Parameter	Units	EPA Primary															
		Standard	P31770W	TDWELL01	P20521W	ARL01	TW01	TW02	HBWELL05	ARH02	DWWELL01	CSWELL01	ABWELL01	P42868W	P61006W	P144030W	P22584P
General																	
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	**4**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate (as N)	mg/L	**10**	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions																	
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Metals																	
Aluminum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.01**	0	0	0	0	0	0	0	0	0	0	3	5	0	0	0
Barium, dissolved	mg/L	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.005**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**1.3**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**0.015**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	**0.002**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	**0.03**	1	0	0	2	0	0	0	4	0	1	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radiological																	
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	2	1	0	2	0	0	0	4	2	4	0	0	0	2	3
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by EPA's National Primary Drinking Water Regulations

Kendrick Expansion Area
Existing Water Supply Wells
Domestic Well Comparison to EPA MCLs

Parameter	Units	EPA Secondary															
		Standard	P31770W	TDWELL01	P20521W	ARL01	TW01	TW02	HBWELL05	ARH02	DWWELL01	CSWELL01	ABWELL01	P42868W	P61006W	P144030W	P22584P
General																	
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	0	0	0	0	1	0	0	0	2	1	3	5	0	1	0
Nitrate (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**500**	4	1	0	2	12	11	12	4	13	9	3	5	9	11	4
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions																	
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**250**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**250**	4	0	0	2	12	11	12	4	13	7	0	0	9	11	4
Metals																	
Aluminum, dissolved	mg/L	**0.05**	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
Arsenic, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	**0.3**	1	0	0	1	0	0	9	2	9	0	0	0	1	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radiological																	
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pink	Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by EPA's National Secondary Drinking Water Regulations

Kendrick Expansion Area
Existing Water Supply Wells
Stock Well Comparison to WDEQ Standards

Parameter	Units	WDEQ Class I																		
		Standard	HBWELL03	HBWELL01	HBWELL04	P22582P	CSWELL03	P22583P	P17177W	SBWELL02	P84665W	P50113W	SBWELL01	P71108W	TWWELL03	P61007W	P50883W	P21128P	P21130P	P58961W
General																				
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	**0.5**	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	**4**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	0	0	0	2	1	1	1	0	0	0	12	0	5	4	0	0	0	1
Nitrate (as N)	mg/L	**10**	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**500**	10	0	10	3	0	1	7	4	9	11	12	10	5	7	0	3	1	1
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions																				
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**250**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**250**	10	0	10	0	0	1	0	0	0	1	0	10	0	0	0	0	0	0
Metals																				
Aluminum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	**0.75**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.005**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	**0.3**	9	1	1	2	6	0	0	1	1	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**0.015**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	**0.05**	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	**0.002**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
Silver, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radiological																				
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	0	0	9	0	0	0	4	0	10	11	0	10	0	0	3	3	0	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Existing Water Supply Wells
Stock Well Comparison to WDEQ Standards

Parameter	Units	WDEQ Class II																		
		Standard	HBWELL03	HBWELL01	HBWELL04	P22582P	CSWELL03	P22583P	P17177W	SBWELL02	P84665W	P50113W	SBWELL01	P71108W	TWWELL03	P61007W	P50883W	P21128P	P21130P	P58961W
General																				
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**9**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**2000**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions																				
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**100**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**200**	10	0	10	0	0	1	0	0	0	6	0	10	3	0	0	0	0	0
Metals																				
Aluminum, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	**0.75**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.01**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	**5**	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.02**	0	0	0	0	0	0	0	0	0	9	0	1	0	0	0	3	0	0
Silver, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radiological																				
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	0	0	9	0	0	0	4	0	10	11	0	10	0	0	3	3	0	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Existing Water Supply Wells
Stock Well Comparison to WDEQ Standards

Parameter	Units	WDEQ Class III																		
		Standard	HBWELL03	HBWELL01	HBWELL04	P22582P	CSWELL03	P22583P	P17177W	SBWELL02	P84665W	P50113W	SBWELL01	P71108W	TWWELL03	P61007W	P50883W	P21128P	P21130P	P58961W
General																				
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	0	0	0	2	1	1	1	0	0	0	12	0	5	4	0	0	0	1
Nitrate (as N)	mg/L	**10**	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	**100**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**5000**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions																				
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**2000**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**3000**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Metals																				
Aluminum, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**0.5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	**0.00005**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
Silver, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**25**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radiological																				
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	0	0	9	0	0	0	4	0	10	11	0	10	0	0	3	3	0	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by WQD, Chapter 8, Table 1

Kendrick Expansion Area
Existing Water Supply Wells
Stock Well Comparison to EPA MCLs

Parameter	Units	EPA Primary																		
		Standard	HBWELL03	HBWELL01	HBWELL04	P22582P	CSWELL03	P22583P	P17177W	SBWELL02	P84665W	P50113W	SBWELL01	P71108W	TWWELL03	P61007W	P50883W	P21128P	P21130P	P58961W
General																				
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	**4**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate (as N)	mg/L	**10**	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions																				
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Metals																				
Aluminum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arsenic, dissolved	mg/L	**0.01**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	**0.005**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**1.3**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	**0.015**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	**0.002**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
Silver, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	**0.03**	0	0	7	0	0	0	0	0	10	11	0	10	0	0	1	3	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radiological																				
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	**15**	0	0	9	0	0	0	4	0	10	11	0	10	0	0	3	3	0	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by EPA's National Primary Drinking Water Regulations

Kendrick Expansion Area
Existing Water Supply Wells
Stock Well Comparison to EPA MCLs

Parameter	Units	EPA Secondary																		
		Standard	HBWELL03	HBWELL01	HBWELL04	P22582P	CSWELL03	P22583P	P17177W	SBWELL02	P84665W	P50113W	SBWELL01	P71108W	TWWELL03	P61007W	P50883W	P21128P	P21130P	P58961W
General																				
Alkalinity (as CaCO3)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fluoride	mg/L	**2**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory conductivity	µmhos/cm	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laboratory pH	s.u.	**8.5**	0	0	0	2	1	1	1	0	0	0	12	0	5	4	0	0	0	1
Nitrate (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nitrate/Nitrite (as N)	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silica as SiO2	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Dissolved Solids	mg/L	**500**	10	0	10	3	0	1	7	4	9	11	12	10	5	7	0	3	1	1
Sodium Adsorption Ratio (SAR)	unitless	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Ions																				
Calcium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Magnesium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Potassium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sodium	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicarbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Carbonate	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chloride	mg/L	**250**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sulfate	mg/L	**250**	10	0	10	0	0	1	0	0	0	1	0	10	0	0	0	0	0	0
Metals																				
Aluminum, dissolved	mg/L	**0.05**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Arsenic, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Barium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Boron, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cadmium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chromium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Copper, dissolved	mg/L	**1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iron, dissolved	mg/L	**0.3**	9	1	1	2	6	0	0	1	1	0	0	0	0	0	0	0	0	0
Iron, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Manganese, dissolved	mg/L	**0.05**	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Manganese, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Mercury, total	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Molybdenum, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nickel, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Selenium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Silver, dissolved	mg/L	**0.1**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Uranium, suspended	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vanadium, dissolved	mg/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Zinc, dissolved	mg/L	**5**	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Radiological																				
Lead 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lead 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Polonium 210, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-226, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ra-228, Dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, dissolved	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Th-230, suspended	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Alpha	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Beta	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gross Gamma	pCi/L	---	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Pink — Indicates the number of baseline samples whose results exceed the underground water class use suitability as defined by EPA's National Secondary Drinking Water Regulations

ADDENDUM 3.4-M
QUALITY ASSURANCE REPORT ON AQUEOUS RESULTS

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1.0 INTRODUCTION

As part of Strata's data quality objectives, as outlined in the Sampling and Analysis Plan for Baseline Radiological Monitoring of the Kendrick Expansion Area approved by WDEQ/LQD on August 6, 2014, collecting representative data that can be used for decision making was imperative. Four primary factors were utilized to evaluate aqueous data quality:

- Precision
- Accuracy
- Completeness
- Comparability

The following quality assurance/quality control (QA/QC) analysis is an extension of the Ross ISR Project QA/QC analysis (Addendum 2.7-L of the Ross TR). The data presented in this analysis was collected between 2011 and 2014 at sites within and near the proposed KEA and Ross ISR Project.

1.1 Precision

Strata collected surface and groundwater duplicate samples throughout the baseline monitoring project. The duplicate analytical results were used for QA/QC evaluation, primarily precision. Precision refers to the agreement between two or more measurements of the same parameter and is evaluated by calculating the relative percent difference (RPD) between the samples.

Duplicate and RPD statistics are summarized in Table 1. Duplicate samples were collected in approximately 6 percent of all baseline monitoring program samples. As shown in Table 1, all of the constituents had at least one duplicate analysis. The RPD statistics indicate that approximately 12 percent of the duplicates exceeded the objective of 10 percent. The majority of these exceedances (approximately 56 percent) were due to comparisons of concentrations near the detection limits. RPD statistics for concentrations measured as less than the detection limit were calculated as half of the detection limit. Complete RPD results are included in Appendix A.

Table 1. Summary of Precision Results

Parameters	Number of Duplicates	Total Number of Valid Samples	Percent Duplicates	Number of RPDs >10%	Percent of RPDs >10%
Alkalinity (as CaCO3)	21	335	6%	0	0%
Aluminum, dissolved	21	333	6%	2	10%
Ammonia (as N)	21	333	6%	3	14%
Arsenic, dissolved	21	333	6%	2	10%
Barium, dissolved	21	333	6%	0	0%
Bicarbonate	21	335	6%	0	0%
Boron, dissolved	21	333	6%	2	10%
Cadmium, dissolved	21	333	6%	0	0%
Calcium	21	333	6%	5	24%
Carbonate	21	333	6%	3	14%
Chloride	21	335	6%	3	14%
Chromium, dissolved	21	333	6%	0	0%
Copper, dissolved	21	333	6%	0	0%
Dissolved oxygen	20	320	6%	5	25%
Fluoride	21	333	6%	3	14%
Gross Alpha	21	333	6%	10	48%
Gross Beta	21	333	6%	14	67%
Iron, dissolved	21	333	6%	2	10%
Iron, total	21	333	6%	7	33%
Laboratory conductivity	21	335	6%	0	0%
Laboratory pH	20	333	6%	0	0%
Pb-210, dissolved	13	156	8%	4	31%
Pb-210, suspended	13	156	8%	5	38%
Lead, dissolved	21	333	6%	0	0%
Magnesium	21	333	6%	2	10%
Manganese, total	21	333	6%	1	5%
Mercury, dissolved	21	331	6%	0	0%
Molybdenum, dissolved	21	333	6%	0	0%
Nickel, dissolved	21	333	6%	0	0%
Nitrate/Nitrite (as N)	21	333	6%	1	5%
Po-210, dissolved	13	156	8%	6	46%
Po-210, suspended	13	156	8%	1	8%
Potassium	21	333	6%	4	19%
Ra-226, dissolved	21	335	6%	5	24%
Ra-226, suspended	13	260	5%	2	15%
Ra-228, dissolved	21	333	6%	7	33%
Selenium, dissolved	21	333	6%	2	10%
Silver, dissolved	21	333	6%	0	0%
Sodium	21	333	6%	0	0%
Sulfate	21	333	6%	0	0%
Th-230, dissolved	13	260	5%	1	8%
Th-230, suspended	13	260	5%	1	8%
Total Dissolved Solids	20	333	6%	0	0%
Total Suspended Solids	1	41	2%	0	0%
Uranium, dissolved	20	335	6%	7	35%
Uranium, suspended	12	260	5%	2	17%
Vanadium, dissolved	20	333	6%	0	0%
Zinc, dissolved	20	333	6%	1	5%

Overall, the RPD statistics indicate that the data collected during the baseline monitoring program are valid.

1.2 Accuracy

Accuracy refers to the agreement between measured and true values. Several types of evaluative methods were utilized to determine accuracy including linear regression analysis comparing field and analytical results and ion balance analysis. Additionally, the contract laboratory completed spikes and laboratory control samples.

Linear regression analysis was completed for field EC and laboratory EC, field turbidity and laboratory turbidity, and measured TDS and calculated TDS. The following summarizes the regression results.

- Field EC versus laboratory EC: R2 = 0.88
- Field turbidity versus laboratory turbidity: R2 = 0.95
- Measured TDS versus calculated TDS: R2 = 0.98

An analysis of the ion balances was completed to ensure the laboratory criteria (SM 1030E) were met. Ten measurements did not meet the designated criteria. Only one sample was collected from the 5268-21-11SA well (1st quarter 2013). The well did not yield sufficient water during the following quarters to enable sample collection. The analytical results for the single sample from this well indicated that the water was not representative of the SA zone (elevated pH and non-typical major ion concentrations) and therefore likely to be residual water from well completion operations. Samples from existing water supply wells 19XX18, P17177W and two samples at 22X-19 did not meet the criteria. During the 3rd quarter of 2011, 19XX18 did not met the criteria; however, concentrations from six other quarters all met the criteria and were found to have comparable concentrations. Samples from 22X-19, during the 4th quarter of 2011 and 1st quarter of 2013, did not meet the ion balance criteria. Five other samples from different quarters met the criteria and had similar concentrations. P17177W did not meet the criteria in the 2nd

quarter of 2011; although, six other samples from the well indicate comparable concentrations that met the criteria. Two grab stations (GS-3 & GS-4), two reservoirs (P4866S & P4869S) and one surface water monitoring station (SW-3) all had samples that did not meet the criteria. The grab stations GS-3 and GS-4 did meet the criteria in the 3rd quarter of 2014. The stations were not sampled again; however, the samples appeared comparable to a nearby reservoir (SCHRES01). Reservoir P514S in the 4th quarter of 2012 did not meet the criteria. Two other samples from the reservoir with relatively high carbonate values may indicate the reason for not meeting the criteria. Reservoir P4869S did not meet the criteria in the 2nd quarter of 2013. Comparably low concentrations in two other samples from the site indicate the possible reason for not meeting the criteria. Surface water monitoring station SW-3 did not meet the criteria in the 1st quarter of 2012; however, comparable concentrations from five other samples met the criteria. Based on the ion balance analysis all data collected was found to be valid.

1.3 Completeness

Completeness is the percent of valid data collected for the project. Section 3.4 of the ER and Section 2.7 of the TR summarizes the surface and groundwater sampling results throughout the baseline monitoring project. All of the samples collected by Strata were deemed valid with the exception of the 5268-21-11SA sample, as previously described.

1.4 Comparability

Comparability refers to the degree (qualitatively) that data from a site can be correlated with data from the same site taken at a different point in time. The following monitoring and management techniques were utilized to maintain a high level of comparability throughout the project:

- Strata utilized the same personnel for all baseline surface and groundwater monitoring.
- All radiological and inorganic chemistry analyses were conducted by the same laboratory (IML, Sheridan, WY)

- All samples were obtained using the same equipment and filtering and preservation was completed in the field.
- Sample preservation techniques.
- Equipment cleaning and decontamination techniques.
- Field instrument calibration and standards; frequency of calibration (logs on file).
- All data collected during the baseline monitoring program were imported into a database. The database was used to conduct validation checks of the data.
- Manual static water levels were used to verify data collected by pressure transducers and data logging equipment installed in the regional baseline monitor wells.

2.0 REFERENCES

Standard Methods for the Examination of Water and Wastewater (SM), 2006, SM 1030, Data Quality.

APPENDIX A

RPD Statistics

Site	Date	Constituent	Units	Sample	Duplicate	RPD
5268-12-01OZ	4/4/2013	Alkalinity (as CaCO3)	mg/l	397	392	1%
5268-12-01OZ	4/4/2013	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
5268-12-01OZ	4/4/2013	Ammonia	mg/l	0.1	0.1	0%
5268-12-01OZ	4/4/2013	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
5268-12-01OZ	4/4/2013	Barium, dissolved	mg/l	<0.5	<0.5	0%
5268-12-01OZ	4/4/2013	Bicarbonate	mg/l	337	336	0%
5268-12-01OZ	4/4/2013	Boron, dissolved	mg/l	0.3	0.3	0%
5268-12-01OZ	4/4/2013	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
5268-12-01OZ	4/4/2013	Calcium	mg/l	2	2	0%
5268-12-01OZ	4/4/2013	Carbonate	mg/l	72	70	3%
5268-12-01OZ	4/4/2013	Chloride	mg/l	3	3	0%
5268-12-01OZ	4/4/2013	Chromium, dissolved	mg/l	<0.01	<0.01	0%
5268-12-01OZ	4/4/2013	Copper, dissolved	mg/l	<0.01	<0.01	0%
5268-12-01OZ	4/4/2013	Dissolved oxygen	mg/l	1.42	1.66	16%
5268-12-01OZ	4/4/2013	Dissolved oxygen, pct	%	13.7	15.9	15%
5268-12-01OZ	4/4/2013	Field Conductivity	umhos/cm	1070	1087	2%
5268-12-01OZ	4/4/2013	Field pH	s.u.	9.56	9.56	0%
5268-12-01OZ	4/4/2013	Field turbidity	NTUs	19.8	14.3	32%
5268-12-01OZ	4/4/2013	Fluoride	mg/l	0.6	0.6	0%
5268-12-01OZ	4/4/2013	Gross Alpha	pCi/l	25.5	20.9	20%
5268-12-01OZ	4/4/2013	Gross Beta	pCi/l	7.1	5.5	25%
5268-12-01OZ	4/4/2013	Gross Gamma	pCi/l	<50	<50	0%
5268-12-01OZ	4/4/2013	Iron, dissolved	mg/l	<0.05	<0.05	0%
5268-12-01OZ	4/4/2013	Iron, total	mg/l	0.37	0.38	3%
5268-12-01OZ	4/4/2013	Laboratory conductivity	umhos/cm	1100	1100	0%
5268-12-01OZ	4/4/2013	Laboratory pH	s.u.	9.5	9.5	0%
5268-12-01OZ	4/4/2013	Lead 210, dissolved	pCi/l	3.3	3.6	9%
5268-12-01OZ	4/4/2013	Lead 210, suspended	pCi/l	<1	<1	0%
5268-12-01OZ	4/4/2013	Lead, dissolved	mg/l	<0.02	<0.02	0%
5268-12-01OZ	4/4/2013	Magnesium	mg/l	<1	<1	0%
5268-12-01OZ	4/4/2013	Manganese, dissolved	mg/l	<0.02	<0.02	0%
5268-12-01OZ	4/4/2013	Manganese, total	mg/l	<0.02	<0.02	0%
5268-12-01OZ	4/4/2013	Mercury	mg/l	<0.001	<0.001	0%
5268-12-01OZ	4/4/2013	Mercury, dissolved	mg/l	<0.001	<0.001	0%
5268-12-01OZ	4/4/2013	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
5268-12-01OZ	4/4/2013	Nickel, dissolved	mg/l	<0.01	<0.01	0%
5268-12-01OZ	4/4/2013	Nitrate	mg/l	<0.1	<0.1	0%
5268-12-01OZ	4/4/2013	Nitrate/Nitrite	mg/l	<0.1	<0.1	0%
5268-12-01OZ	4/4/2013	Nitrite	mg/l	<0.1	<0.1	0%
5268-12-01OZ	4/4/2013	ORP	millivolts	-1	3	400%
5268-12-01OZ	4/4/2013	Polonium 210, dissolved	pCi/l	2.3	2.9	23%
5268-12-01OZ	4/4/2013	Polonium 210, suspended	pCi/l	3.6	2.7	29%
5268-12-01OZ	4/4/2013	Potassium	mg/l	4	4	0%
5268-12-01OZ	4/4/2013	Ra-226, dissolved	pCi/l	0.2	0.2	0%
5268-12-01OZ	4/4/2013	Ra-226, suspended	pCi/l	<0.2	<0.2	0%
5268-12-01OZ	4/4/2013	Ra-228, Dissolved	pCi/l	<1	<1	0%
5268-12-01OZ	4/4/2013	Selenium, dissolved	mg/l	<0.005	<0.005	0%
5268-12-01OZ	4/4/2013	Silica as SiO2	mg/l	7.4	7.4	0%
5268-12-01OZ	4/4/2013	Silver, dissolved	mg/l	<0.003	<0.003	0%
5268-12-01OZ	4/4/2013	Sodium	mg/l	262	265	1%
5268-12-01OZ	4/4/2013	Sodium Adsorption Ratio (SAR)	Unknown	56.5	56.1	1%
5268-12-01OZ	4/4/2013	Sulfate	mg/l	148	148	0%
5268-12-01OZ	4/4/2013	Temperature	Deg C	12.6	12.8	2%
5268-12-01OZ	4/4/2013	Th-230, dissolved	pCi/l	<0.2	<0.2	0%
5268-12-01OZ	4/4/2013	Th-230, suspended	pCi/l	<0.2	<0.2	0%
5268-12-01OZ	4/4/2013	Total Dissolved Solids	mg/l	800	790	1%
5268-12-01OZ	4/4/2013	Total Dissolved Solids (calc)	mg/l	660	660	0%
5268-12-01OZ	4/4/2013	Uranium, dissolved	mg/l	0.0119	0.0104	13%
5268-12-01OZ	4/4/2013	Uranium, suspended	mg/l	<0.0003	<0.0003	0%
5268-12-01OZ	4/4/2013	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
5268-12-01OZ	4/4/2013	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
5368-41-36OZ	3/27/2013	Alkalinity (as CaCO3)	mg/l	486	487	0%
5368-41-36OZ	3/27/2013	Aluminum, dissolved	mg/l	0.4	0.5	22%
5368-41-36OZ	3/27/2013	Ammonia	mg/l	<0.1	<0.1	0%
5368-41-36OZ	3/27/2013	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
5368-41-36OZ	3/27/2013	Barium, dissolved	mg/l	<0.5	<0.5	0%
5368-41-36OZ	3/27/2013	Bicarbonate	mg/l	511	524	3%
5368-41-36OZ	3/27/2013	Boron, dissolved	mg/l	0.4	0.4	0%
5368-41-36OZ	3/27/2013	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
5368-41-36OZ	3/27/2013	Calcium	mg/l	4	4	0%
5368-41-36OZ	3/27/2013	Carbonate	mg/l	41	35	16%
5368-41-36OZ	3/27/2013	Chloride	mg/l	8	8	0%
5368-41-36OZ	3/27/2013	Chromium, dissolved	mg/l	<0.01	<0.01	0%
5368-41-36OZ	3/27/2013	Copper, dissolved	mg/l	<0.01	<0.01	0%
5368-41-36OZ	3/27/2013	Dissolved oxygen	mg/l	1.08	1.03	5%
5368-41-36OZ	3/27/2013	Dissolved oxygen, pct	%	10.5	9.9	6%
5368-41-36OZ	3/27/2013	Field Conductivity	umhos/cm	1546	1531	1%
5368-41-36OZ	3/27/2013	Field pH	s.u.	9.11	9.12	0%
5368-41-36OZ	3/27/2013	Field turbidity	NTUs	284	262	8%
5368-41-36OZ	3/27/2013	Fluoride	mg/l	1.5	1.5	0%
5368-41-36OZ	3/27/2013	Gross Alpha	pCi/l	43.9	39.2	11%
5368-41-36OZ	3/27/2013	Gross Beta	pCi/l	9.8	12.4	23%
5368-41-36OZ	3/27/2013	Gross Gamma	pCi/l	<50	<50	0%
5368-41-36OZ	3/27/2013	Iron, dissolved	mg/l	0.14	0.13	7%
5368-41-36OZ	3/27/2013	Iron, total	mg/l	12.5	13	4%
5368-41-36OZ	3/27/2013	Laboratory conductivity	umhos/cm	1430	1440	1%
5368-41-36OZ	3/27/2013	Laboratory pH	s.u.	8.9	8.9	0%
5368-41-36OZ	3/27/2013	Lead 210, dissolved	pCi/l	4.9	2.8	55%
5368-41-36OZ	3/27/2013	Lead 210, suspended	pCi/l	1.3	1.4	7%
5368-41-36OZ	3/27/2013	Lead, dissolved	mg/l	<0.02	<0.02	0%
5368-41-36OZ	3/27/2013	Magnesium	mg/l	1	1	0%
5368-41-36OZ	3/27/2013	Manganese, dissolved	mg/l	<0.02	<0.02	0%
5368-41-36OZ	3/27/2013	Manganese, total	mg/l	0.19	0.19	0%
5368-41-36OZ	3/27/2013	Mercury	mg/l	<0.001	<0.001	0%
5368-41-36OZ	3/27/2013	Mercury, dissolved	mg/l	<0.001	<0.001	0%
5368-41-36OZ	3/27/2013	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
5368-41-36OZ	3/27/2013	Nickel, dissolved	mg/l	<0.01	<0.01	0%
5368-41-36OZ	3/27/2013	Nitrate	mg/l	<0.1	<0.1	0%
5368-41-36OZ	3/27/2013	Nitrate/Nitrite	mg/l	<0.1	<0.1	0%
5368-41-36OZ	3/27/2013	Nitrite	mg/l	<0.1	<0.1	0%
5368-41-36OZ	3/27/2013	ORP	millivolts	24	14	53%
5368-41-36OZ	3/27/2013	Polonium 210, dissolved	pCi/l	2.6	1.7	42%
5368-41-36OZ	3/27/2013	Polonium 210, suspended	pCi/l	3	3	0%
5368-41-36OZ	3/27/2013	Potassium	mg/l	6	6	0%
5368-41-36OZ	3/27/2013	Ra-226, dissolved	pCi/l	0.3	0.3	0%
5368-41-36OZ	3/27/2013	Ra-226, suspended	pCi/l	<0.2	0.3	100%
5368-41-36OZ	3/27/2013	Ra-228, Dissolved	pCi/l	<1	<1	0%
5368-41-36OZ	3/27/2013	Selenium, dissolved	mg/l	0.006	0.006	0%
5368-41-36OZ	3/27/2013	Silica as SiO2	mg/l	9.5	9.7	2%
5368-41-36OZ	3/27/2013	Silver, dissolved	mg/l	<0.003	<0.003	0%
5368-41-36OZ	3/27/2013	Sodium	mg/l	388	386	1%
5368-41-36OZ	3/27/2013	Sodium Adsorption Ratio (SAR)	Unknown	43.2	43.7	1%
5368-41-36OZ	3/27/2013	Sulfate	mg/l	285	286	0%
5368-41-36OZ	3/27/2013	Temperature	Deg C	12.3	12.2	1%
5368-41-36OZ	3/27/2013	Th-230, dissolved	pCi/l	<0.2	<0.2	0%
5368-41-36OZ	3/27/2013	Th-230, suspended	pCi/l	<0.2	<0.2	0%
5368-41-36OZ	3/27/2013	Total Dissolved Solids	mg/l	1020	1020	0%
5368-41-36OZ	3/27/2013	Total Dissolved Solids (calc)	mg/l	990	990	0%
5368-41-36OZ	3/27/2013	Uranium, dissolved	mg/l	0.0291	0.0249	16%
5368-41-36OZ	3/27/2013	Uranium, suspended	mg/l	<0.0003	0.0004	91%
5368-41-36OZ	3/27/2013	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
5368-41-36OZ	3/27/2013	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
5368-43-24OZ	3/25/2013	Alkalinity (as CaCO3)	mg/l	576	576	0%
5368-43-24OZ	3/25/2013	Aluminum, dissolved	mg/l	0.2	0.1	67%
5368-43-24OZ	3/25/2013	Ammonia	mg/l	<0.1	<0.1	0%
5368-43-24OZ	3/25/2013	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
5368-43-24OZ	3/25/2013	Barium, dissolved	mg/l	<0.5	<0.5	0%
5368-43-24OZ	3/25/2013	Bicarbonate	mg/l	555	558	1%
5368-43-24OZ	3/25/2013	Boron, dissolved	mg/l	0.5	0.5	0%
5368-43-24OZ	3/25/2013	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
5368-43-24OZ	3/25/2013	Calcium	mg/l	3	3	0%
5368-43-24OZ	3/25/2013	Carbonate	mg/l	73	71	3%
5368-43-24OZ	3/25/2013	Chloride	mg/l	5	4	22%
5368-43-24OZ	3/25/2013	Chromium, dissolved	mg/l	<0.01	<0.01	0%
5368-43-24OZ	3/25/2013	Copper, dissolved	mg/l	<0.01	<0.01	0%
5368-43-24OZ	3/25/2013	Dissolved oxygen	mg/l	1.42	1.71	19%
5368-43-24OZ	3/25/2013	Dissolved oxygen, pct	%	13	15.7	19%
5368-43-24OZ	3/25/2013	Field Conductivity	umhos/cm	1827	1831	0%
5368-43-24OZ	3/25/2013	Field pH	s.u.	9.43	9.4	0%
5368-43-24OZ	3/25/2013	Field turbidity	NTUs	108	74.4	37%
5368-43-24OZ	3/25/2013	Fluoride	mg/l	1	1	0%
5368-43-24OZ	3/25/2013	Gross Alpha	pCi/l	<2	2.6	89%
5368-43-24OZ	3/25/2013	Gross Beta	pCi/l	9.3	5.2	57%
5368-43-24OZ	3/25/2013	Gross Gamma	pCi/l	<50	<50	0%
5368-43-24OZ	3/25/2013	Iron, dissolved	mg/l	0.05	<0.05	67%
5368-43-24OZ	3/25/2013	Iron, total	mg/l	1.04	1	4%
5368-43-24OZ	3/25/2013	Laboratory conductivity	umhos/cm	1720	1730	1%
5368-43-24OZ	3/25/2013	Laboratory pH	s.u.	9.2	9.1	1%
5368-43-24OZ	3/25/2013	Lead 210, dissolved	pCi/l	<1	<1	0%
5368-43-24OZ	3/25/2013	Lead 210, suspended	pCi/l	<1	<1	0%
5368-43-24OZ	3/25/2013	Lead, dissolved	mg/l	<0.02	<0.02	0%
5368-43-24OZ	3/25/2013	Magnesium	mg/l	<1	<1	0%
5368-43-24OZ	3/25/2013	Manganese, dissolved	mg/l	<0.02	<0.02	0%
5368-43-24OZ	3/25/2013	Manganese, total	mg/l	<0.02	<0.02	0%
5368-43-24OZ	3/25/2013	Mercury	mg/l	<0.001	<0.001	0%
5368-43-24OZ	3/25/2013	Mercury, dissolved	mg/l	<0.001	<0.001	0%
5368-43-24OZ	3/25/2013	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
5368-43-24OZ	3/25/2013	Nickel, dissolved	mg/l	<0.01	<0.01	0%
5368-43-24OZ	3/25/2013	Nitrate	mg/l	<0.1	<0.1	0%
5368-43-24OZ	3/25/2013	Nitrate/Nitrite	mg/l	<0.1	<0.1	0%
5368-43-24OZ	3/25/2013	Nitrite	mg/l	<0.1	<0.1	0%
5368-43-24OZ	3/25/2013	ORP	millivolts	52	47	10%
5368-43-24OZ	3/25/2013	Polonium 210, dissolved	pCi/l	2.7	1.2	77%
5368-43-24OZ	3/25/2013	Polonium 210, suspended	pCi/l	<1	<1	0%
5368-43-24OZ	3/25/2013	Potassium	mg/l	16	15	6%
5368-43-24OZ	3/25/2013	Ra-226, dissolved	pCi/l	<0.2	<0.2	0%
5368-43-24OZ	3/25/2013	Ra-226, suspended	pCi/l	<0.2	<0.2	0%
5368-43-24OZ	3/25/2013	Ra-228, Dissolved	pCi/l	<1	<1	0%
5368-43-24OZ	3/25/2013	Selenium, dissolved	mg/l	<0.005	0.006	82%
5368-43-24OZ	3/25/2013	Silica as SiO2	mg/l	8.8	8.6	2%
5368-43-24OZ	3/25/2013	Silver, dissolved	mg/l	<0.003	<0.003	0%
5368-43-24OZ	3/25/2013	Sodium	mg/l	479	473	1%
5368-43-24OZ	3/25/2013	Sodium Adsorption Ratio (SAR)	Unknown	77.9	78.5	1%
5368-43-24OZ	3/25/2013	Sulfate	mg/l	383	370	3%
5368-43-24OZ	3/25/2013	Temperature	Deg C	10.4	10.5	1%
5368-43-24OZ	3/25/2013	Th-230, dissolved	pCi/l	<0.2	<0.2	0%
5368-43-24OZ	3/25/2013	Th-230, suspended	pCi/l	<0.2	<0.2	0%
5368-43-24OZ	3/25/2013	Total Dissolved Solids	mg/l	1220	1210	1%
5368-43-24OZ	3/25/2013	Total Dissolved Solids (calc)	mg/l	1240	1220	2%
5368-43-24OZ	3/25/2013	Uranium, dissolved	mg/l	0.0012	0.0011	9%
5368-43-24OZ	3/25/2013	Uranium, suspended	mg/l	<0.0003	<0.0003	0%
5368-43-24OZ	3/25/2013	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
5368-43-24OZ	3/25/2013	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
ABWELL01	6/25/2014	Alkalinity (as CaCO3)	mg/l	651	626	4%
ABWELL01	6/25/2014	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
ABWELL01	6/25/2014	Ammonia	mg/l	<0.1	<0.1	0%
ABWELL01	6/25/2014	Arsenic, dissolved	mg/l	0.03	0.032	6%
ABWELL01	6/25/2014	Barium, dissolved	mg/l	<0.5	<0.5	0%
ABWELL01	6/25/2014	Bicarbonate	mg/l	726	696	4%
ABWELL01	6/25/2014	Boron, dissolved	mg/l	0.3	0.3	0%
ABWELL01	6/25/2014	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
ABWELL01	6/25/2014	Calcium	mg/l	4	3	29%
ABWELL01	6/25/2014	Carbonate	mg/l	33	33	0%
ABWELL01	6/25/2014	Chloride	mg/l	2	2	0%
ABWELL01	6/25/2014	Chromium, dissolved	mg/l	<0.01	<0.01	0%
ABWELL01	6/25/2014	Copper, dissolved	mg/l	<0.01	<0.01	0%
ABWELL01	6/25/2014	Dissolved oxygen	mg/l	2.07	2.07	0%
ABWELL01	6/25/2014	Dissolved oxygen, pct	%	19.7	19.7	0%
ABWELL01	6/25/2014	Field Conductivity	umhos/cm	1605	1605	0%
ABWELL01	6/25/2014	Field pH	s.u.	8.74	8.74	0%
ABWELL01	6/25/2014	Field turbidity	NTUs	0.61	0.61	0%
ABWELL01	6/25/2014	Fluoride	mg/l	0.5	0.4	22%
ABWELL01	6/25/2014	Gross Alpha	pCi/l	2.5	2.4	4%
ABWELL01	6/25/2014	Gross Beta	pCi/l	4.8	4.2	13%
ABWELL01	6/25/2014	Gross Gamma	pCi/l	<50	<50	0%
ABWELL01	6/25/2014	Iron, dissolved	mg/l	<0.05	<0.05	0%
ABWELL01	6/25/2014	Iron, total	mg/l	<0.05	<0.05	0%
ABWELL01	6/25/2014	Laboratory conductivity	umhos/cm	1600	1600	0%
ABWELL01	6/25/2014	Laboratory pH	s.u.	8.7	8.7	0%
ABWELL01	6/25/2014	Lead 210, dissolved	pCi/l	<1	<1	0%
ABWELL01	6/25/2014	Lead 210, suspended	pCi/l	1.1	<1	75%
ABWELL01	6/25/2014	Lead, dissolved	mg/l	<0.02	<0.02	0%
ABWELL01	6/25/2014	Magnesium	mg/l	2	2	0%
ABWELL01	6/25/2014	Manganese, dissolved	mg/l	<0.02	<0.02	0%
ABWELL01	6/25/2014	Manganese, total	mg/l	<0.02	<0.02	0%
ABWELL01	6/25/2014	Mercury	mg/l	<0.001	<0.001	0%
ABWELL01	6/25/2014	Mercury, dissolved	mg/l	<0.001	<0.001	0%
ABWELL01	6/25/2014	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
ABWELL01	6/25/2014	Nickel, dissolved	mg/l	<0.01	<0.01	0%
ABWELL01	6/25/2014	Nitrate	mg/l	<0.1	<0.1	0%
ABWELL01	6/25/2014	Nitrate/Nitrite	mg/l	<0.1	<0.1	0%
ABWELL01	6/25/2014	Nitrite	mg/l	<0.1	<0.1	0%
ABWELL01	6/25/2014	ORP	millivolts	-113	-113	0%
ABWELL01	6/25/2014	Polonium 210, dissolved	pCi/l	<1	<1	0%
ABWELL01	6/25/2014	Polonium 210, suspended	pCi/l	<1	<1	0%
ABWELL01	6/25/2014	Potassium	mg/l	4	4	0%
ABWELL01	6/25/2014	Ra-226, dissolved	pCi/l	<0.2	<0.2	0%
ABWELL01	6/25/2014	Ra-226, suspended	pCi/l	<0.2	<0.2	0%
ABWELL01	6/25/2014	Ra-228, Dissolved	pCi/l	<1	<1	0%
ABWELL01	6/25/2014	Selenium, dissolved	mg/l	<0.005	<0.005	0%
ABWELL01	6/25/2014	Silica as SiO2	mg/l	8.2	8.1	1%
ABWELL01	6/25/2014	Silver, dissolved	mg/l	<0.003	<0.003	0%
ABWELL01	6/25/2014	Sodium	mg/l	398	396	1%
ABWELL01	6/25/2014	Sodium Adsorption Ratio (SAR)	Other	41.9	44.5	6%
ABWELL01	6/25/2014	Sulfate	mg/l	193	194	1%
ABWELL01	6/25/2014	Temperature	Deg C	13	13	0%
ABWELL01	6/25/2014	Th-230, dissolved	pCi/l	<0.2	<0.2	0%
ABWELL01	6/25/2014	Th-230, suspended	pCi/l	<0.2	<0.2	0%
ABWELL01	6/25/2014	Total Dissolved Solids	mg/l	1010	1010	0%
ABWELL01	6/25/2014	Total Dissolved Solids (calc)	mg/l	1000	980	2%
ABWELL01	6/25/2014	Uranium, dissolved	mg/l	<0.0003	<0.0003	0%
ABWELL01	6/25/2014	Uranium, suspended	mg/l	<0.0003	<0.0003	0%
ABWELL01	6/25/2014	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
ABWELL01	6/25/2014	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
ABWELL01	11/13/2012	Alkalinity (as CaCO3)	mg/l	637	626	2%
ABWELL01	11/13/2012	Aluminum, dissolved	meq/L	<0.1	<0.1	0%
ABWELL01	11/13/2012	Ammonia	mg/l	<0.1	<0.1	0%
ABWELL01	11/13/2012	Anion Sum	mg/l	17.07	16.85	1%
ABWELL01	11/13/2012	Arsenic, dissolved	mg/l	0.021	0.02	5%
ABWELL01	11/13/2012	Barium, dissolved	mg/l	<0.5	<0.5	0%
ABWELL01	11/13/2012	Bicarbonate	meq/L	709	693	2%
ABWELL01	11/13/2012	Boron, dissolved	mg/l	0.3	0.3	0%
ABWELL01	11/13/2012	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
ABWELL01	11/13/2012	Calcium	%	4	4	0%
ABWELL01	11/13/2012	Carbonate	mg/l	34	35	3%
ABWELL01	11/13/2012	Cation Sum	mg/l	17.74	17.79	0%
ABWELL01	11/13/2012	Chloride	pCi/l	2	2	0%
ABWELL01	11/13/2012	Chromium, dissolved	pCi/l	<0.01	<0.01	0%
ABWELL01	11/13/2012	Copper, dissolved	mg/l	<0.01	<0.01	0%
ABWELL01	11/13/2012	Dissolved oxygen	mg/l	1.84	1.72	7%
ABWELL01	11/13/2012	Dissolved oxygen, pct	mg/l	16.8	15.8	6%
ABWELL01	11/13/2012	Field Conductivity	mg/l	1588	1564	2%
ABWELL01	11/13/2012	Field pH	pCi/l	8.92	8.94	0%
ABWELL01	11/13/2012	Field turbidity	pCi/l	2.05	1.61	24%
ABWELL01	11/13/2012	Fluoride	pCi/l	0.3	0.3	0%
ABWELL01	11/13/2012	Gross Alpha	pCi/l	3.3	<3	75%
ABWELL01	11/13/2012	Gross Beta	pCi/l	<5	<5	0%
ABWELL01	11/13/2012	Iron, dissolved	mg/l	<0.05	<0.05	0%
ABWELL01	11/13/2012	Iron, total	mg/l	0.09	0.08	12%
ABWELL01	11/13/2012	Laboratory conductivity	pCi/l	1560	1570	1%
ABWELL01	11/13/2012	Laboratory pH	pCi/l	8.7	8.7	0%
ABWELL01	11/13/2012	Lead 210, dissolved	%	1.5	1.1	31%
ABWELL01	11/13/2012	Lead 210, suspended	mg/l	<1	<1	0%
ABWELL01	11/13/2012	Lead, dissolved	mg/l	<0.02	<0.02	0%
ABWELL01	11/13/2012	Magnesium	mg/l	2	2	0%
ABWELL01	11/13/2012	Manganese, total	mg/l	<0.02	<0.02	0%
ABWELL01	11/13/2012	Mercury	mg/l	<0.001	<0.001	0%
ABWELL01	11/13/2012	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
ABWELL01	11/13/2012	Nickel, dissolved	mg/l	<0.01	<0.01	0%
ABWELL01	11/13/2012	Nitrate/Nitrite	mg/l	<0.1	<0.1	0%
ABWELL01	11/13/2012	Polonium 210, dissolved	mg/l	<1	<1	0%
ABWELL01	11/13/2012	Polonium 210, suspended	mg/l	<1	<1	0%
ABWELL01	11/13/2012	Potassium	mg/l	5	5	0%
ABWELL01	11/13/2012	Ra-226, dissolved	mg/l	<0.2	<0.2	0%
ABWELL01	11/13/2012	Ra-226, suspended	mg/l	<0.2	<0.2	0%
ABWELL01	11/13/2012	Ra-228, Dissolved	mg/l	<1	<1	0%
ABWELL01	11/13/2012	Selenium, dissolved	mg/l	<0.005	<0.005	0%
ABWELL01	11/13/2012	Silver, dissolved	mg/l	<0.003	<0.003	0%
ABWELL01	11/13/2012	Sodium	mg/l	397	398	0%
ABWELL01	11/13/2012	Sulfate	mg/l	204	205	0%
ABWELL01	11/13/2012	Temperature	mg/l	9.8	9.9	1%
ABWELL01	11/13/2012	Th-230, dissolved	pCi/l	<0.2	<0.2	0%
ABWELL01	11/13/2012	Th-230, suspended	pCi/l	<0.2	<0.2	0%
ABWELL01	11/13/2012	Total Anion/Cation Balance	umhos/cm	1.94	2.71	33%
ABWELL01	11/13/2012	Total Dissolved Solids	s.u.	1030	1040	1%
ABWELL01	11/13/2012	Total Dissolved Solids (calc)	NTUs	1000	990	1%
ABWELL01	11/13/2012	Uranium, dissolved	umhos/cm	0.0014	0.0015	7%
ABWELL01	11/13/2012	Uranium, suspended	s.u.	<0.0003	<0.0003	0%
ABWELL01	11/13/2012	Vanadium, dissolved	Deg C	<0.02	<0.02	0%
ABWELL01	11/13/2012	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
CSWELL01	3/16/2012	Alkalinity (as CaCO3)	mg/l	665	659	1%
CSWELL01	3/16/2012	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
CSWELL01	3/16/2012	Ammonia	mg/l	0.1	0.1	0%
CSWELL01	3/16/2012	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
CSWELL01	3/16/2012	Barium, dissolved	mg/l	<0.5	<0.5	0%
CSWELL01	3/16/2012	Bicarbonate	mg/l	811	797	2%
CSWELL01	3/16/2012	Boron, dissolved	mg/l	0.4	0.4	0%
CSWELL01	3/16/2012	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
CSWELL01	3/16/2012	Calcium	mg/l	39	41	5%
CSWELL01	3/16/2012	Carbonate	mg/l	<5	<5	0%
CSWELL01	3/16/2012	Chloride	mg/l	12	11	9%
CSWELL01	3/16/2012	Chromium, dissolved	mg/l	<0.01	<0.01	0%
CSWELL01	3/16/2012	Copper, dissolved	mg/l	<0.01	<0.01	0%
CSWELL01	3/16/2012	Dissolved oxygen	mg/l	1.98	1.82	8%
CSWELL01	3/16/2012	Dissolved oxygen, pct	%	17	16	6%
CSWELL01	3/16/2012	Field Conductivity	umhos/cm	3300	3260	1%
CSWELL01	3/16/2012	Field pH	s.u.	8.37	8.39	0%
CSWELL01	3/16/2012	Field turbidity	NTUs	0	0	
CSWELL01	3/16/2012	Fluoride	mg/l	0.4	0.4	0%
CSWELL01	3/16/2012	Gross Alpha	pCi/l	15.3	16.5	8%
CSWELL01	3/16/2012	Gross Beta	pCi/l	12.2	10.4	16%
CSWELL01	3/16/2012	Iron, dissolved	mg/l	<0.05	<0.05	0%
CSWELL01	3/16/2012	Iron, total	mg/l	<0.05	<0.05	0%
CSWELL01	3/16/2012	Laboratory conductivity	umhos/cm	2730	2720	0%
CSWELL01	3/16/2012	Laboratory pH	s.u.	8.3	8.3	0%
CSWELL01	3/16/2012	Lead, dissolved	mg/l	<0.02	<0.02	0%
CSWELL01	3/16/2012	Magnesium	mg/l	29	30	3%
CSWELL01	3/16/2012	Manganese, total	mg/l	0.03	0.03	0%
CSWELL01	3/16/2012	Mercury, dissolved	mg/l	<0.001	<0.001	0%
CSWELL01	3/16/2012	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
CSWELL01	3/16/2012	Nickel, dissolved	mg/l	<0.01	<0.01	0%
CSWELL01	3/16/2012	Nitrate/Nitrite	mg/l	0.6	0.6	0%
CSWELL01	3/16/2012	Potassium	mg/l	11	12	9%
CSWELL01	3/16/2012	Ra-226, dissolved	pCi/l	0.6	0.5	18%
CSWELL01	3/16/2012	Ra-228, Dissolved	pCi/l	1.2	1.7	34%
CSWELL01	3/16/2012	Selenium, dissolved	mg/l	0.006	0.008	29%
CSWELL01	3/16/2012	Silver, dissolved	mg/l	<0.003	<0.003	0%
CSWELL01	3/16/2012	Sodium	mg/l	536	566	5%
CSWELL01	3/16/2012	Sulfate	mg/l	781	756	3%
CSWELL01	3/16/2012	Temperature	Deg C	6.7	7	4%
CSWELL01	3/16/2012	Total Dissolved Solids	mg/l	1850	1840	1%
CSWELL01	3/16/2012	Total Dissolved Solids (calc)	mg/l	1810	1810	0%
CSWELL01	3/16/2012	Uranium, dissolved	mg/l	0.0151	0.0172	13%
CSWELL01	3/16/2012	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
CSWELL01	3/16/2012	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
HBWELL05	3/14/2013	Alkalinity (as CaCO3)	mg/l	559	555	1%
HBWELL05	3/14/2013	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
HBWELL05	3/14/2013	Ammonia	mg/l	<0.1	<0.1	0%
HBWELL05	3/14/2013	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
HBWELL05	3/14/2013	Barium, dissolved	mg/l	<0.5	<0.5	0%
HBWELL05	3/14/2013	Bicarbonate	mg/l	682	677	1%
HBWELL05	3/14/2013	Boron, dissolved	mg/l	0.2	0.2	0%
HBWELL05	3/14/2013	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
HBWELL05	3/14/2013	Calcium	mg/l	79	83	5%
HBWELL05	3/14/2013	Carbonate	mg/l	<5	<5	0%
HBWELL05	3/14/2013	Chloride	mg/l	5	5	0%
HBWELL05	3/14/2013	Chromium, dissolved	mg/l	<0.01	<0.01	0%
HBWELL05	3/14/2013	Copper, dissolved	mg/l	<0.01	<0.01	0%
HBWELL05	3/14/2013	Dissolved oxygen	mg/l	2.94	2.1	33%
HBWELL05	3/14/2013	Dissolved oxygen, pct	%	27.1	18.9	36%
HBWELL05	3/14/2013	Field Conductivity	umhos/cm	1642	1696	3%
HBWELL05	3/14/2013	Field pH	s.u.	7.52	7.47	1%
HBWELL05	3/14/2013	Field turbidity	NTUs	38.3	13.51	96%
HBWELL05	3/14/2013	Fluoride	mg/l	0.2	0.2	0%
HBWELL05	3/14/2013	Gross Alpha	pCi/l	9.1	11.6	24%
HBWELL05	3/14/2013	Gross Beta	pCi/l	11.4	<8	96%
HBWELL05	3/14/2013	Iron, dissolved	mg/l	1.08	0.78	32%
HBWELL05	3/14/2013	Iron, total	mg/l	9.28	2.49	115%
HBWELL05	3/14/2013	Laboratory conductivity	umhos/cm	1690	1680	1%
HBWELL05	3/14/2013	Laboratory pH	s.u.	8.2	8.2	0%
HBWELL05	3/14/2013	Lead 210, dissolved	pCi/l	<1	<1	0%
HBWELL05	3/14/2013	Lead 210, suspended	pCi/l	1.2	<1	82%
HBWELL05	3/14/2013	Lead, dissolved	mg/l	<0.02	<0.02	0%
HBWELL05	3/14/2013	Magnesium	mg/l	35	36	3%
HBWELL05	3/14/2013	Manganese, total	mg/l	0.1	0.1	0%
HBWELL05	3/14/2013	Mercury, dissolved	mg/l	<0.001	<0.001	0%
HBWELL05	3/14/2013	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
HBWELL05	3/14/2013	Nickel, dissolved	mg/l	<0.01	<0.01	0%
HBWELL05	3/14/2013	Nitrate/Nitrite	mg/l	<0.1	<0.1	0%
HBWELL05	3/14/2013	Polonium 210, dissolved	pCi/l	<1	<1	0%
HBWELL05	3/14/2013	Polonium 210, suspended	pCi/l	<1	<1	0%
HBWELL05	3/14/2013	Potassium	mg/l	11	10	10%
HBWELL05	3/14/2013	Ra-226, dissolved	pCi/l	0.3	0.3	0%
HBWELL05	3/14/2013	Ra-226, suspended	pCi/l	0.3	<0.2	100%
HBWELL05	3/14/2013	Ra-228, Dissolved	pCi/l	<1	<1	0%
HBWELL05	3/14/2013	Selenium, dissolved	mg/l	<0.005	<0.005	0%
HBWELL05	3/14/2013	Silver, dissolved	mg/l	<0.003	<0.003	0%
HBWELL05	3/14/2013	Sodium	mg/l	310	305	2%
HBWELL05	3/14/2013	Sulfate	mg/l	398	401	1%
HBWELL05	3/14/2013	Temperature	Deg C	10.4	10.1	3%
HBWELL05	3/14/2013	Th-230, dissolved	pCi/l	<0.2	<0.2	0%
HBWELL05	3/14/2013	Th-230, suspended	pCi/l	<0.2	<0.2	0%
HBWELL05	3/14/2013	Total Dissolved Solids	mg/l	1140	1130	1%
HBWELL05	3/14/2013	Total Dissolved Solids (calc)	mg/l	1170	1170	0%
HBWELL05	3/14/2013	Uranium, dissolved	mg/l	0.0113	0.013	14%
HBWELL05	3/14/2013	Uranium, suspended	mg/l	0.0004	<0.0003	91%
HBWELL05	3/14/2013	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
HBWELL05	3/14/2013	Zinc, dissolved	mg/l	0.01	0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
P17177W	8/15/2012	Alkalinity (as CaCO3)	mg/l	373	371	1%
P17177W	8/15/2012	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
P17177W	8/15/2012	Ammonia	mg/l	<0.1	<0.1	0%
P17177W	8/15/2012	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
P17177W	8/15/2012	Barium, dissolved	mg/l	<0.5	<0.5	0%
P17177W	8/15/2012	Bicarbonate	mg/l	438	437	0%
P17177W	8/15/2012	Boron, dissolved	mg/l	<0.1	<0.1	0%
P17177W	8/15/2012	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
P17177W	8/15/2012	Calcium	mg/l	33	34	3%
P17177W	8/15/2012	Carbonate	mg/l	8	8	0%
P17177W	8/15/2012	Chloride	mg/l	9	9	0%
P17177W	8/15/2012	Chromium, dissolved	mg/l	<0.01	<0.01	0%
P17177W	8/15/2012	Copper, dissolved	mg/l	<0.01	<0.01	0%
P17177W	8/15/2012	Dissolved oxygen	mg/l	1.51	1.2	23%
P17177W	8/15/2012	Dissolved oxygen, pct	%	13.8	10.9	23%
P17177W	8/15/2012	Field Conductivity	umhos/cm	795	787	1%
P17177W	8/15/2012	Field pH	s.u.	8.15	8.18	0%
P17177W	8/15/2012	Field turbidity	NTUs	0	0	#DIV/0!
P17177W	8/15/2012	Fluoride	mg/l	0.2	0.2	0%
P17177W	8/15/2012	Gross Alpha	pCi/l	7.1	7.7	8%
P17177W	8/15/2012	Gross Beta	pCi/l	7.3	5.7	25%
P17177W	8/15/2012	Iron, dissolved	mg/l	<0.05	<0.05	0%
P17177W	8/15/2012	Iron, total	mg/l	<0.05	<0.05	0%
P17177W	8/15/2012	Laboratory conductivity	umhos/cm	801	823	3%
P17177W	8/15/2012	Laboratory pH	s.u.	8.4	8.4	0%
P17177W	8/15/2012	Lead, dissolved	mg/l	<0.02	<0.02	0%
P17177W	8/15/2012	Magnesium	mg/l	10	10	0%
P17177W	8/15/2012	Manganese, total	mg/l	<0.02	<0.02	0%
P17177W	8/15/2012	Mercury, dissolved	mg/l	<0.001	<0.001	0%
P17177W	8/15/2012	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
P17177W	8/15/2012	Nickel, dissolved	mg/l	<0.01	<0.01	0%
P17177W	8/15/2012	Nitrate/Nitrite	mg/l	<0.1	<0.1	0%
P17177W	8/15/2012	Potassium	mg/l	5	5	0%
P17177W	8/15/2012	Ra-226, dissolved	pCi/l	<0.2	<0.2	0%
P17177W	8/15/2012	Ra-228, Dissolved	pCi/l	<1	1.58	104%
P17177W	8/15/2012	Selenium, dissolved	mg/l	<0.005	<0.005	0%
P17177W	8/15/2012	Silver, dissolved	mg/l	<0.003	<0.003	0%
P17177W	8/15/2012	Sodium	mg/l	154	153	1%
P17177W	8/15/2012	Sulfate	mg/l	61	61	0%
P17177W	8/15/2012	Temperature	Deg C	9.9	10.1	2%
P17177W	8/15/2012	Total Dissolved Solids	mg/l	500	490	2%
P17177W	8/15/2012	Total Dissolved Solids (calc)	mg/l	500	500	0%
P17177W	8/15/2012	Uranium, dissolved	mg/l	0.0135	0.0134	1%
P17177W	8/15/2012	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
P17177W	8/15/2012	Zinc, dissolved	mg/l	<0.01	0.02	120%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
P42868W	9/13/2012	Alkalinity (as CaCO3)	mg/l	583	590	1%
P42868W	9/13/2012	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
P42868W	9/13/2012	Ammonia	mg/l	<0.1	<0.1	0%
P42868W	9/13/2012	Arsenic, dissolved	mg/l	0.016	0.017	6%
P42868W	9/13/2012	Barium, dissolved	mg/l	<0.5	<0.5	0%
P42868W	9/13/2012	Bicarbonate	mg/l	637	640	0%
P42868W	9/13/2012	Boron, dissolved	mg/l	0.3	0.3	0%
P42868W	9/13/2012	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
P42868W	9/13/2012	Calcium	mg/l	2	2	0%
P42868W	9/13/2012	Carbonate	mg/l	36	40	11%
P42868W	9/13/2012	Chloride	mg/l	2	2	0%
P42868W	9/13/2012	Chromium, dissolved	mg/l	<0.01	<0.01	0%
P42868W	9/13/2012	Copper, dissolved	mg/l	<0.01	<0.01	0%
P42868W	9/13/2012	Dissolved oxygen	mg/l	1.7	1.61	5%
P42868W	9/13/2012	Dissolved oxygen, pct	%	16.1	15.4	4%
P42868W	9/13/2012	Field Conductivity	umhos/cm	1297	1291	0%
P42868W	9/13/2012	Field pH	s.u.	9.16	9.17	0%
P42868W	9/13/2012	Field turbidity	NTUs	4.1	2.63	44%
P42868W	9/13/2012	Fluoride	mg/l	0.3	0.3	0%
P42868W	9/13/2012	Gross Alpha	pCi/l	<2	<2	0%
P42868W	9/13/2012	Gross Beta	pCi/l	<4	<4	0%
P42868W	9/13/2012	Iron, dissolved	mg/l	<0.05	<0.05	0%
P42868W	9/13/2012	Iron, total	mg/l	0.99	0.2	133%
P42868W	9/13/2012	Laboratory conductivity	umhos/cm	1360	1370	1%
P42868W	9/13/2012	Laboratory pH	s.u.	8.9	8.9	0%
P42868W	9/13/2012	Lead 210, dissolved	pCi/l	<1	<1	0%
P42868W	9/13/2012	Lead 210, suspended	pCi/l	1	<1	67%
P42868W	9/13/2012	Lead, dissolved	mg/l	<0.02	<0.02	0%
P42868W	9/13/2012	Magnesium	mg/l	1	1	0%
P42868W	9/13/2012	Manganese, total	mg/l	<0.02	<0.02	0%
P42868W	9/13/2012	Mercury, dissolved	mg/l	<0.001	<0.001	0%
P42868W	9/13/2012	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
P42868W	9/13/2012	Nickel, dissolved	mg/l	<0.01	<0.01	0%
P42868W	9/13/2012	Nitrate/Nitrite	mg/l	<0.1	<0.1	0%
P42868W	9/13/2012	Polonium 210, dissolved	pCi/l	<1	<1	0%
P42868W	9/13/2012	Polonium 210, suspended	pCi/l	<1	<1	0%
P42868W	9/13/2012	Potassium	mg/l	3	3	0%
P42868W	9/13/2012	Ra-226, dissolved	pCi/l	<0.2	<0.2	0%
P42868W	9/13/2012	Ra-226, suspended	pCi/l	<0.2	<0.2	0%
P42868W	9/13/2012	Ra-228, Dissolved	pCi/l	<1	<1	0%
P42868W	9/13/2012	Selenium, dissolved	mg/l	<0.005	<0.005	0%
P42868W	9/13/2012	Silver, dissolved	mg/l	<0.003	<0.003	0%
P42868W	9/13/2012	Sodium	mg/l	352	356	1%
P42868W	9/13/2012	Sulfate	mg/l	137	139	1%
P42868W	9/13/2012	Temperature	Deg C	11	11.3	3%
P42868W	9/13/2012	Th-230, dissolved	pCi/l	<0.2	<0.2	0%
P42868W	9/13/2012	Th-230, suspended	pCi/l	<0.2	<0.2	0%
P42868W	9/13/2012	Total Dissolved Solids	mg/l	830	840	1%
P42868W	9/13/2012	Total Dissolved Solids (calc)	mg/l	850	860	1%
P42868W	9/13/2012	Uranium, dissolved	mg/l	<0.0003	<0.0003	0%
P42868W	9/13/2012	Uranium, suspended	mg/l	<0.0003	<0.0003	0%
P42868W	9/13/2012	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
P42868W	9/13/2012	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
P50113W	3/14/2012	Alkalinity (as CaCO3)	mg/l	536	525	2%
P50113W	3/14/2012	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
P50113W	3/14/2012	Ammonia	mg/l	<0.1	<0.1	0%
P50113W	3/14/2012	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
P50113W	3/14/2012	Barium, dissolved	mg/l	<0.5	<0.5	0%
P50113W	3/14/2012	Bicarbonate	mg/l	654	640	2%
P50113W	3/14/2012	Boron, dissolved	mg/l	<0.1	<0.1	0%
P50113W	3/14/2012	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
P50113W	3/14/2012	Calcium	mg/l	100	100	0%
P50113W	3/14/2012	Carbonate	mg/l	<5	<5	0%
P50113W	3/14/2012	Chloride	mg/l	42	42	0%
P50113W	3/14/2012	Chromium, dissolved	mg/l	<0.01	<0.01	0%
P50113W	3/14/2012	Copper, dissolved	mg/l	<0.01	<0.01	0%
P50113W	3/14/2012	Dissolved oxygen	mg/l	1.88	1.99	6%
P50113W	3/14/2012	Dissolved oxygen, pct	%	16.4	17.8	8%
P50113W	3/14/2012	Field Conductivity	umhos/cm	1498	1489	1%
P50113W	3/14/2012	Field pH	s.u.	7.75	7.76	0%
P50113W	3/14/2012	Field turbidity	NTUs	0.16	0.08	67%
P50113W	3/14/2012	Fluoride	mg/l	0.2	0.2	0%
P50113W	3/14/2012	Gross Alpha	pCi/l	68.9	82.6	18%
P50113W	3/14/2012	Gross Beta	pCi/l	34.9	37.8	8%
P50113W	3/14/2012	Iron, dissolved	mg/l	<0.05	<0.05	0%
P50113W	3/14/2012	Iron, total	mg/l	<0.05	<0.05	0%
P50113W	3/14/2012	Laboratory conductivity	umhos/cm	1510	1510	0%
P50113W	3/14/2012	Laboratory pH	s.u.	8.3	8.2	1%
P50113W	3/14/2012	Lead, dissolved	mg/l	<0.02	<0.02	0%
P50113W	3/14/2012	Magnesium	mg/l	52	52	0%
P50113W	3/14/2012	Manganese, total	mg/l	0.46	0.46	0%
P50113W	3/14/2012	Mercury, dissolved	mg/l	<0.001	<0.001	0%
P50113W	3/14/2012	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
P50113W	3/14/2012	Nickel, dissolved	mg/l	<0.01	<0.01	0%
P50113W	3/14/2012	Nitrate/Nitrite	mg/l	17	16.8	1%
P50113W	3/14/2012	Potassium	mg/l	7	7	0%
P50113W	3/14/2012	Ra-226, dissolved	pCi/l	0.4	0.4	0%
P50113W	3/14/2012	Ra-228, Dissolved	pCi/l	<1	<1	0%
P50113W	3/14/2012	Selenium, dissolved	mg/l	0.017	0.016	6%
P50113W	3/14/2012	Silver, dissolved	mg/l	<0.003	<0.003	0%
P50113W	3/14/2012	Sodium	mg/l	178	178	0%
P50113W	3/14/2012	Sulfate	mg/l	189	192	2%
P50113W	3/14/2012	Temperature	Deg C	8.2	8.5	4%
P50113W	3/14/2012	Total Dissolved Solids	mg/l	910	1000	9%
P50113W	3/14/2012	Total Dissolved Solids (calc)	mg/l	970	960	1%
P50113W	3/14/2012	Uranium, dissolved	mg/l	0.159	0.146	9%
P50113W	3/14/2012	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
P50113W	3/14/2012	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
P61006W	3/28/2012	Alkalinity (as CaCO3)	mg/l	527	525	0%
P61006W	3/28/2012	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
P61006W	3/28/2012	Ammonia	mg/l	0.1	<0.1	67%
P61006W	3/28/2012	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
P61006W	3/28/2012	Barium, dissolved	mg/l	<0.5	<0.5	0%
P61006W	3/28/2012	Bicarbonate	mg/l	643	641	0%
P61006W	3/28/2012	Boron, dissolved	mg/l	0.1	0.1	0%
P61006W	3/28/2012	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
P61006W	3/28/2012	Calcium	mg/l	20	16	22%
P61006W	3/28/2012	Carbonate	mg/l	<5	<5	0%
P61006W	3/28/2012	Chloride	mg/l	<1	<1	0%
P61006W	3/28/2012	Chromium, dissolved	mg/l	<0.01	<0.01	0%
P61006W	3/28/2012	Copper, dissolved	mg/l	<0.01	<0.01	0%
P61006W	3/28/2012	Dissolved oxygen	mg/l	1.42	1.3	9%
P61006W	3/28/2012	Dissolved oxygen, pct	%	13.3	12.2	9%
P61006W	3/28/2012	Field Conductivity	umhos/cm	994	1031	4%
P61006W	3/28/2012	Field pH	s.u.	8.21	8.35	2%
P61006W	3/28/2012	Field turbidity	NTUs	4	2.55	44%
P61006W	3/28/2012	Fluoride	mg/l	0.1	0.1	0%
P61006W	3/28/2012	Gross Alpha	pCi/l	6.3	7.1	12%
P61006W	3/28/2012	Gross Beta	pCi/l	6.8	9	28%
P61006W	3/28/2012	Iron, dissolved	mg/l	<0.05	<0.05	0%
P61006W	3/28/2012	Iron, total	mg/l	0.38	0.38	0%
P61006W	3/28/2012	Laboratory conductivity	umhos/cm	1100	1120	2%
P61006W	3/28/2012	Laboratory pH	s.u.	8.3	8.3	0%
P61006W	3/28/2012	Lead, dissolved	mg/l	<0.02	<0.02	0%
P61006W	3/28/2012	Magnesium	mg/l	10	8	22%
P61006W	3/28/2012	Manganese, total	mg/l	<0.02	<0.02	0%
P61006W	3/28/2012	Mercury, dissolved	mg/l	<0.001	<0.001	0%
P61006W	3/28/2012	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
P61006W	3/28/2012	Nickel, dissolved	mg/l	<0.01	<0.01	0%
P61006W	3/28/2012	Nitrate/Nitrite	mg/l	<0.1	<0.1	0%
P61006W	3/28/2012	Potassium	mg/l	9	7	25%
P61006W	3/28/2012	Ra-226, dissolved	pCi/l	0.7	0.8	13%
P61006W	3/28/2012	Ra-228, Dissolved	pCi/l	1.7	1.3	27%
P61006W	3/28/2012	Selenium, dissolved	mg/l	<0.005	<0.005	0%
P61006W	3/28/2012	Silver, dissolved	mg/l	<0.003	<0.003	0%
P61006W	3/28/2012	Sodium	mg/l	211	228	8%
P61006W	3/28/2012	Sulfate	mg/l	78	74	5%
P61006W	3/28/2012	Temperature	Deg C	10.4	10.6	2%
P61006W	3/28/2012	Total Dissolved Solids	mg/l	640	650	2%
P61006W	3/28/2012	Total Dissolved Solids (calc)	mg/l	650	650	0%
P61006W	3/28/2012	Uranium, dissolved	mg/l	0.0022	0.002	10%
P61006W	3/28/2012	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
P61006W	3/28/2012	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
P22584P	9/11/2012	Alkalinity (as CaCO3)	mg/l	469	476	1%
P22584P	9/11/2012	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
P22584P	9/11/2012	Ammonia	mg/l	<0.1	<0.1	0%
P22584P	9/11/2012	Arsenic, dissolved	mg/l	0.01	0.009	11%
P22584P	9/11/2012	Barium, dissolved	mg/l	<0.5	<0.5	0%
P22584P	9/11/2012	Bicarbonate	mg/l	469	473	1%
P22584P	9/11/2012	Boron, dissolved	mg/l	<0.1	<0.1	0%
P22584P	9/11/2012	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
P22584P	9/11/2012	Calcium	mg/l	3	3	0%
P22584P	9/11/2012	Carbonate	mg/l	51	53	4%
P22584P	9/11/2012	Chloride	mg/l	8	8	0%
P22584P	9/11/2012	Chromium, dissolved	mg/l	<0.01	<0.01	0%
P22584P	9/11/2012	Copper, dissolved	mg/l	<0.01	<0.01	0%
P22584P	9/11/2012	Dissolved oxygen	mg/l	2.21	2.12	4%
P22584P	9/11/2012	Dissolved oxygen, pct	%	21.1	20.3	4%
P22584P	9/11/2012	Field Conductivity	umhos/cm	1023	1023	0%
P22584P	9/11/2012	Field pH	s.u.	9.72	9.72	0%
P22584P	9/11/2012	Field turbidity	NTUs	1.59	0.65	84%
P22584P	9/11/2012	Fluoride	mg/l	0.3	0.3	0%
P22584P	9/11/2012	Gross Alpha	pCi/l	24.3	23.9	2%
P22584P	9/11/2012	Gross Beta	pCi/l	10	9.4	6%
P22584P	9/11/2012	Iron, dissolved	mg/l	<0.05	<0.05	0%
P22584P	9/11/2012	Iron, total	mg/l	0.32	0.13	84%
P22584P	9/11/2012	Laboratory conductivity	umhos/cm	1040	1070	3%
P22584P	9/11/2012	Laboratory pH	s.u.	9.2	9.2	0%
P22584P	9/11/2012	Lead 210, dissolved	pCi/l	2.1	1.9	10%
P22584P	9/11/2012	Lead 210, suspended	pCi/l	<1	1.3	89%
P22584P	9/11/2012	Lead, dissolved	mg/l	<0.02	<0.02	0%
P22584P	9/11/2012	Magnesium	mg/l	2	1	67%
P22584P	9/11/2012	Manganese, total	mg/l	<0.02	<0.02	0%
P22584P	9/11/2012	Mercury, dissolved	mg/l	<0.001	<0.001	0%
P22584P	9/11/2012	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
P22584P	9/11/2012	Nickel, dissolved	mg/l	<0.01	<0.01	0%
P22584P	9/11/2012	Nitrate/Nitrite	mg/l	0.1	0.1	0%
P22584P	9/11/2012	Polonium 210, dissolved	pCi/l	<1	<1	0%
P22584P	9/11/2012	Polonium 210, suspended	pCi/l	<1	<1	0%
P22584P	9/11/2012	Potassium	mg/l	5	5	0%
P22584P	9/11/2012	Ra-226, dissolved	pCi/l	<0.2	<0.2	0%
P22584P	9/11/2012	Ra-226, suspended	pCi/l	<0.2	<0.2	0%
P22584P	9/11/2012	Ra-228, Dissolved	pCi/l	<1	<1	0%
P22584P	9/11/2012	Selenium, dissolved	mg/l	0.008	0.008	0%
P22584P	9/11/2012	Silver, dissolved	mg/l	<0.003	<0.003	0%
P22584P	9/11/2012	Sodium	mg/l	269	275	2%
P22584P	9/11/2012	Sulfate	mg/l	79	86	8%
P22584P	9/11/2012	Temperature	Deg C	11.5	11.9	3%
P22584P	9/11/2012	Th-230, dissolved	pCi/l	<0.2	<0.2	0%
P22584P	9/11/2012	Th-230, suspended	pCi/l	<0.2	<0.2	0%
P22584P	9/11/2012	Total Dissolved Solids	mg/l	660	680	3%
P22584P	9/11/2012	Total Dissolved Solids (calc)	mg/l	650	660	2%
P22584P	9/11/2012	Uranium, dissolved	mg/l	0.017	0.0162	5%
P22584P	9/11/2012	Uranium, suspended	mg/l	<0.0003	<0.0003	0%
P22584P	9/11/2012	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
P22584P	9/11/2012	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
SBWELL01	3/14/2013	Alkalinity (as CaCO3)	mg/l	541	543	0%
SBWELL01	3/14/2013	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
SBWELL01	3/14/2013	Ammonia	mg/l	<0.1	<0.1	0%
SBWELL01	3/14/2013	Arsenic, dissolved	mg/l	0.007	0.006	15%
SBWELL01	3/14/2013	Barium, dissolved	mg/l	<0.5	<0.5	0%
SBWELL01	3/14/2013	Bicarbonate	mg/l	590	598	1%
SBWELL01	3/14/2013	Boron, dissolved	mg/l	0.1	<0.1	67%
SBWELL01	3/14/2013	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
SBWELL01	3/14/2013	Calcium	mg/l	2	2	0%
SBWELL01	3/14/2013	Carbonate	mg/l	34	32	6%
SBWELL01	3/14/2013	Chloride	mg/l	2	2	0%
SBWELL01	3/14/2013	Chromium, dissolved	mg/l	<0.01	<0.01	0%
SBWELL01	3/14/2013	Copper, dissolved	mg/l	<0.01	<0.01	0%
SBWELL01	3/14/2013	Dissolved oxygen	mg/l	2.27	2.48	9%
SBWELL01	3/14/2013	Dissolved oxygen, pct	%	21.6	22.6	5%
SBWELL01	3/14/2013	Field Conductivity	umhos/cm	1188	1184	0%
SBWELL01	3/14/2013	Field pH	s.u.	8.78	8.77	0%
SBWELL01	3/14/2013	Field turbidity	NTUs	0.25	0.16	44%
SBWELL01	3/14/2013	Fluoride	mg/l	0.1	<0.1	67%
SBWELL01	3/14/2013	Gross Alpha	pCi/l	2.3	<2	79%
SBWELL01	3/14/2013	Gross Beta	pCi/l	4.3	<4	73%
SBWELL01	3/14/2013	Iron, dissolved	mg/l	<0.05	<0.05	0%
SBWELL01	3/14/2013	Iron, total	mg/l	<0.05	<0.05	0%
SBWELL01	3/14/2013	Laboratory conductivity	umhos/cm	1160	1190	3%
SBWELL01	3/14/2013	Laboratory pH	s.u.	8.8	8.8	0%
SBWELL01	3/14/2013	Lead 210, dissolved		2.7	<1	138%
SBWELL01	3/14/2013	Lead 210, suspended	pCi/l	<1	<1	0%
SBWELL01	3/14/2013	Lead, dissolved	mg/l	<0.02	<0.02	0%
SBWELL01	3/14/2013	Magnesium	mg/l	<1	<1	0%
SBWELL01	3/14/2013	Manganese, total	mg/l	<0.02	<0.02	0%
SBWELL01	3/14/2013	Mercury, dissolved	mg/l	<0.001	<0.001	0%
SBWELL01	3/14/2013	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
SBWELL01	3/14/2013	Nickel, dissolved	mg/l	<0.01	<0.01	0%
SBWELL01	3/14/2013	Nitrate/Nitrite	mg/l	0.2	0.1	67%
SBWELL01	3/14/2013	Polonium 210, dissolved	pCi/l	1.5	<1	100%
SBWELL01	3/14/2013	Polonium 210, suspended	pCi/l	<1	<1	0%
SBWELL01	3/14/2013	Potassium	mg/l	3	3	0%
SBWELL01	3/14/2013	Ra-226, dissolved	pCi/l	<0.2	<0.2	0%
SBWELL01	3/14/2013	Ra-226, suspended	pCi/l	<0.2	<0.2	0%
SBWELL01	3/14/2013	Ra-228, Dissolved	pCi/l	<1	<1	0%
SBWELL01	3/14/2013	Selenium, dissolved	mg/l	<0.005	<0.005	0%
SBWELL01	3/14/2013	Silver, dissolved	mg/l	<0.003	<0.003	0%
SBWELL01	3/14/2013	Sodium	mg/l	302	302	0%
SBWELL01	3/14/2013	Sulfate	mg/l	106	110	4%
SBWELL01	3/14/2013	Temperature	Deg C	10	10.6	6%
SBWELL01	3/14/2013	Th-230, dissolved	pCi/l	<0.2	<0.2	0%
SBWELL01	3/14/2013	Th-230, suspended	pCi/l	<0.2	0.3	100%
SBWELL01	3/14/2013	Total Dissolved Solids	mg/l	760	760	0%
SBWELL01	3/14/2013	Total Dissolved Solids (calc)	mg/l	740	750	1%
SBWELL01	3/14/2013	Uranium, dissolved	mg/l	0.0006	0.0007	15%
SBWELL01	3/14/2013	Uranium, suspended	mg/l	<0.0003	<0.0003	0%
SBWELL01	3/14/2013	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
SBWELL01	3/14/2013	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
19XX18	2/16/2011	Alkalinity (as CaCO3)	mg/l	567	569	0%
19XX18	2/16/2011	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
19XX18	2/16/2011	Ammonia	mg/l	0.6	0.5	18%
19XX18	2/16/2011	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
19XX18	2/16/2011	Barium, dissolved	mg/l	<0.5	<0.5	0%
19XX18	2/16/2011	Bicarbonate	mg/l	655	657	0%
19XX18	2/16/2011	Boron, dissolved	mg/l	0.4	0.5	22%
19XX18	2/16/2011	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
19XX18	2/16/2011	Calcium	mg/l	7	8	13%
19XX18	2/16/2011	Carbonate	mg/l	18	19	5%
19XX18	2/16/2011	Chloride	mg/l	6	6	0%
19XX18	2/16/2011	Chromium, dissolved	mg/l	<0.01	<0.01	0%
19XX18	2/16/2011	Copper, dissolved	mg/l	<0.01	<0.01	0%
19XX18	2/16/2011	Field Conductivity	umhos/cm	2870	2990	4%
19XX18	2/16/2011	Field pH	s.u.	8.97	9	0%
19XX18	2/16/2011	Field turbidity	NTUs	0.54	0.25	73%
19XX18	2/16/2011	Fluoride	mg/l	0.5	0.5	0%
19XX18	2/16/2011	Gross Alpha	pCi/l	267	160	50%
19XX18	2/16/2011	Gross Beta	pCi/l	116	48.4	82%
19XX18	2/16/2011	Iron, dissolved	mg/l	<0.05	<0.05	0%
19XX18	2/16/2011	Iron, total	mg/l	0.08	<0.05	105%
19XX18	2/16/2011	Laboratory conductivity	umhos/cm	2220	2220	0%
19XX18	2/16/2011	Laboratory pH	s.u.	8.6	8.6	0%
19XX18	2/16/2011	Lead, dissolved	mg/l	<0.02	<0.02	0%
19XX18	2/16/2011	Magnesium	mg/l	2	2	0%
19XX18	2/16/2011	Manganese, total	mg/l	<0.02	<0.02	0%
19XX18	2/16/2011	Mercury, dissolved	mg/l	<0.001	<0.001	0%
19XX18	2/16/2011	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
19XX18	2/16/2011	Nickel, dissolved	mg/l	<0.01	<0.01	0%
19XX18	2/16/2011	Nitrate/Nitrite	mg/l	<0.1	<0.1	0%
19XX18	2/16/2011	Potassium	mg/l	4	5	22%
19XX18	2/16/2011	Ra-226, dissolved	pCi/l	31.1	32.6	5%
19XX18	2/16/2011	Ra-228, Dissolved	pCi/l	<1	1.7	109%
19XX18	2/16/2011	Selenium, dissolved	mg/l	<0.005	<0.005	0%
19XX18	2/16/2011	Silver, dissolved	mg/l	<0.003	<0.003	0%
19XX18	2/16/2011	Sodium	mg/l	592	593	0%
19XX18	2/16/2011	Sulfate	mg/l	617	616	0%
19XX18	2/16/2011	Temperature	Deg C	12.1	11.7	3%
19XX18	2/16/2011	Total Dissolved Solids	mg/l	1690	1680	1%
19XX18	2/16/2011	Total Dissolved Solids (calc)	mg/l	1530	1730	12%
19XX18	2/16/2011	Uranium, dissolved	mg/l	0.0726	0.0738	2%
19XX18	2/16/2011	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
19XX18	2/16/2011	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
19XX18	5/6/2011	Alkalinity (as CaCO3)	mg/l	536	538	0%
19XX18	5/6/2011	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
19XX18	5/6/2011	Ammonia	mg/l	<0.1	<0.1	0%
19XX18	5/6/2011	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
19XX18	5/6/2011	Barium, dissolved	mg/l	<0.5	<0.5	0%
19XX18	5/6/2011	Bicarbonate	mg/l	607	608	0%
19XX18	5/6/2011	Boron, dissolved	mg/l	0.5	0.5	0%
19XX18	5/6/2011	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
19XX18	5/6/2011	Calcium	mg/l	8	7	13%
19XX18	5/6/2011	Carbonate	mg/l	23	24	4%
19XX18	5/6/2011	Chloride	mg/l	8	8	0%
19XX18	5/6/2011	Chromium, dissolved	mg/l	<0.01	<0.01	0%
19XX18	5/6/2011	Copper, dissolved	mg/l	<0.01	<0.01	0%
19XX18	5/6/2011	Dissolved oxygen	mg/l	3.65	3.62	1%
19XX18	5/6/2011	Dissolved oxygen, pct	%	35.5	34.9	2%
19XX18	5/6/2011	Field Conductivity	umhos/cm	2930	3000	2%
19XX18	5/6/2011	Field pH	s.u.	8.88	8.88	0%
19XX18	5/6/2011	Field turbidity	NTUs	0.49	0.18	93%
19XX18	5/6/2011	Fluoride	mg/l	0.4	0.4	0%
19XX18	5/6/2011	Gross Alpha	pCi/l	190	196	3%
19XX18	5/6/2011	Gross Beta	pCi/l	57.9	59.5	3%
19XX18	5/6/2011	Iron, dissolved	mg/l	<0.05	<0.05	0%
19XX18	5/6/2011	Iron, total	mg/l	<0.05	<0.05	0%
19XX18	5/6/2011	Laboratory conductivity	umhos/cm	2010	2040	1%
19XX18	5/6/2011	Laboratory pH	s.u.	8.6	8.6	0%
19XX18	5/6/2011	Lead 210, dissolved	pCi/l	3.9	4.8	21%
19XX18	5/6/2011	Lead 210, suspended	pCi/l	1.7	1.1	43%
19XX18	5/6/2011	Lead, dissolved	mg/l	<0.02	<0.02	0%
19XX18	5/6/2011	Magnesium	mg/l	3	3	0%
19XX18	5/6/2011	Manganese, total	mg/l	<0.02	<0.02	0%
19XX18	5/6/2011	Mercury, dissolved	mg/l	<0.001	<0.001	0%
19XX18	5/6/2011	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
19XX18	5/6/2011	Nickel, dissolved	mg/l	<0.01	<0.01	0%
19XX18	5/6/2011	Nitrate/Nitrite	mg/l	0.5	0.5	0%
19XX18	5/6/2011	Polonium 210, dissolved	pCi/l	4	5.9	38%
19XX18	5/6/2011	Polonium 210, suspended	pCi/l	<1	<1	0%
19XX18	5/6/2011	Potassium	mg/l	4	4	0%
19XX18	5/6/2011	Ra-226, dissolved	pCi/l	37.1	35.3	5%
19XX18	5/6/2011	Ra-226, suspended	pCi/l	<0.2	<0.2	0%
19XX18	5/6/2011	Ra-228, Dissolved	pCi/l	<1	<1	0%
19XX18	5/6/2011	Selenium, dissolved	mg/l	<0.005	<0.005	0%
19XX18	5/6/2011	Silver, dissolved	mg/l	<0.003	<0.003	0%
19XX18	5/6/2011	Sodium	mg/l	614	590	4%
19XX18	5/6/2011	Sulfate	mg/l	680	682	0%
19XX18	5/6/2011	Temperature	Deg C	11.6	11.3	3%
19XX18	5/6/2011	Th-230, dissolved	pCi/l	<0.2	<0.2	0%
19XX18	5/6/2011	Th-230, suspended	pCi/l	<0.2	<0.2	0%
19XX18	5/6/2011	Total Dissolved Solids	mg/l	1720	1720	0%
19XX18	5/6/2011	Total Dissolved Solids (calc)	mg/l	1640	1620	1%
19XX18	5/6/2011	Uranium, dissolved	mg/l	0.0779	0.0813	4%
19XX18	5/6/2011	Uranium, suspended	mg/l	<0.0003	<0.0003	0%
19XX18	5/6/2011	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
19XX18	5/6/2011	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
HBWELL04	11/21/2011	Alkalinity (as CaCO3)	mg/l	365	364	0%
HBWELL04	11/21/2011	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
HBWELL04	11/21/2011	Ammonia	mg/l	<0.1	<0.1	0%
HBWELL04	11/21/2011	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
HBWELL04	11/21/2011	Barium, dissolved	mg/l	<0.5	<0.5	0%
HBWELL04	11/21/2011	Bicarbonate	mg/l	445	444	0%
HBWELL04	11/21/2011	Boron, dissolved	mg/l	<0.1	<0.1	0%
HBWELL04	11/21/2011	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
HBWELL04	11/21/2011	Calcium	mg/l	189	193	2%
HBWELL04	11/21/2011	Carbonate	mg/l	<5	<5	0%
HBWELL04	11/21/2011	Chloride	mg/l	16	16	0%
HBWELL04	11/21/2011	Chromium, dissolved	mg/l	<0.01	<0.01	0%
HBWELL04	11/21/2011	Copper, dissolved	mg/l	<0.01	<0.01	0%
HBWELL04	11/21/2011	Dissolved oxygen	mg/l	1.53	1.44	6%
HBWELL04	11/21/2011	Dissolved oxygen, pct	%	13.4	12.6	6%
HBWELL04	11/21/2011	Field Conductivity	umhos/cm	1691	1682	1%
HBWELL04	11/21/2011	Field pH	s.u.	7.18	7.2	0%
HBWELL04	11/21/2011	Field turbidity	NTUs	5.46	3.55	42%
HBWELL04	11/21/2011	Fluoride	mg/l	0.2	0.2	0%
HBWELL04	11/21/2011	Gross Alpha	pCi/l	16.6	15.9	4%
HBWELL04	11/21/2011	Gross Beta	pCi/l	10.3	9.7	6%
HBWELL04	11/21/2011	Iron, dissolved	mg/l	<0.05	<0.05	0%
HBWELL04	11/21/2011	Iron, total	mg/l	0.53	0.59	11%
HBWELL04	11/21/2011	Laboratory conductivity	umhos/cm	1630	1620	1%
HBWELL04	11/21/2011	Laboratory pH	s.u.	8.1	8.1	0%
HBWELL04	11/21/2011	Lead, dissolved	mg/l	<0.02	<0.02	0%
HBWELL04	11/21/2011	Magnesium	mg/l	60	60	0%
HBWELL04	11/21/2011	Manganese, total	mg/l	0.07	0.06	15%
HBWELL04	11/21/2011	Mercury, dissolved	mg/l	<0.001	<0.001	0%
HBWELL04	11/21/2011	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
HBWELL04	11/21/2011	Nickel, dissolved	mg/l	<0.01	<0.01	0%
HBWELL04	11/21/2011	Nitrate/Nitrite	mg/l	0.9	0.9	0%
HBWELL04	11/21/2011	Potassium	mg/l	8	8	0%
HBWELL04	11/21/2011	Ra-226, dissolved	pCi/l	0.3	0.2	40%
HBWELL04	11/21/2011	Ra-228, Dissolved	pCi/l	<1	<1	0%
HBWELL04	11/21/2011	Selenium, dissolved	mg/l	<0.005	<0.005	0%
HBWELL04	11/21/2011	Silver, dissolved	mg/l	<0.003	<0.003	0%
HBWELL04	11/21/2011	Sodium	mg/l	132	130	2%
HBWELL04	11/21/2011	Sulfate	mg/l	576	569	1%
HBWELL04	11/21/2011	Temperature	Deg C	8.4	8.7	4%
HBWELL04	11/21/2011	Total Dissolved Solids	mg/l	1260	1260	0%
HBWELL04	11/21/2011	Total Dissolved Solids (calc)	mg/l	1200	1200	0%
HBWELL04	11/21/2011	Uranium, dissolved	mg/l	0.0301	0.0333	10%
HBWELL04	11/21/2011	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
HBWELL04	11/21/2011	Zinc, dissolved	mg/l	0.02	0.02	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
22X-19	11/22/2011	Alkalinity (as CaCO3)	mg/l	470	472	0%
22X-19	11/22/2011	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
22X-19	11/22/2011	Ammonia	mg/l	0.4	0.4	0%
22X-19	11/22/2011	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
22X-19	11/22/2011	Barium, dissolved	mg/l	<0.5	<0.5	0%
22X-19	11/22/2011	Bicarbonate	mg/l	515	523	2%
22X-19	11/22/2011	Boron, dissolved	mg/l	0.4	0.4	0%
22X-19	11/22/2011	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
22X-19	11/22/2011	Calcium	mg/l	6	6	0%
22X-19	11/22/2011	Carbonate	mg/l	29	26	11%
22X-19	11/22/2011	Chloride	mg/l	15	15	0%
22X-19	11/22/2011	Chromium, dissolved	mg/l	<0.01	<0.01	0%
22X-19	11/22/2011	Copper, dissolved	mg/l	<0.01	<0.01	0%
22X-19	11/22/2011	Dissolved oxygen	mg/l	1.64	1.5	9%
22X-19	11/22/2011	Dissolved oxygen, pct	%	15	13.7	9%
22X-19	11/22/2011	Field Conductivity	umhos/cm	2710	2700	0%
22X-19	11/22/2011	Field pH	s.u.	8.69	8.69	0%
22X-19	11/22/2011	Field turbidity	NTUs	0	0	#DIV/0!
22X-19	11/22/2011	Fluoride	mg/l	0.6	0.5	18%
22X-19	11/22/2011	Gross Alpha	pCi/l	30.1	45.3	40%
22X-19	11/22/2011	Gross Beta	pCi/l	8.2	<8	69%
22X-19	11/22/2011	Iron, dissolved	mg/l	<0.05	<0.05	0%
22X-19	11/22/2011	Iron, total	mg/l	<0.05	1.61	194%
22X-19	11/22/2011	Laboratory conductivity	umhos/cm	2110	2100	0%
22X-19	11/22/2011	Laboratory pH	s.u.	8.7	8.7	0%
22X-19	11/22/2011	Lead, dissolved	mg/l	<0.02	<0.02	0%
22X-19	11/22/2011	Magnesium	mg/l	2	2	0%
22X-19	11/22/2011	Manganese, total	mg/l	<0.02	<0.02	0%
22X-19	11/22/2011	Mercury, dissolved	mg/l	<0.001	<0.001	0%
22X-19	11/22/2011	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
22X-19	11/22/2011	Nickel, dissolved	mg/l	<0.01	<0.01	0%
22X-19	11/22/2011	Nitrate/Nitrite	mg/l	<0.1	<0.1	0%
22X-19	11/22/2011	Potassium	mg/l	5	5	0%
22X-19	11/22/2011	Ra-226, dissolved	pCi/l	3.2	2.8	13%
22X-19	11/22/2011	Ra-228, Dissolved	pCi/l	<1	<1	0%
22X-19	11/22/2011	Selenium, dissolved	mg/l	<0.005	<0.005	0%
22X-19	11/22/2011	Silver, dissolved	mg/l	<0.003	<0.003	0%
22X-19	11/22/2011	Sodium	mg/l	508	503	1%
22X-19	11/22/2011	Sulfate	mg/l	501	511	2%
22X-19	11/22/2011	Temperature	Deg C	10.1	9.9	2%
22X-19	11/22/2011	Total Dissolved Solids	mg/l	1450	1460	1%
22X-19	11/22/2011	Total Dissolved Solids (calc)	mg/l	1320	1320	0%
22X-19	11/22/2011	Uranium, dissolved	mg/l	0.0199	0.0191	4%
22X-19	11/22/2011	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
22X-19	11/22/2011	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
P22582P	6/29/2011	Alkalinity (as CaCO3)	mg/l	381	382	0%
P22582P	6/29/2011	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
P22582P	6/29/2011	Ammonia	mg/l	<0.1	<0.1	0%
P22582P	6/29/2011	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
P22582P	6/29/2011	Barium, dissolved	mg/l	<0.5	<0.5	0%
P22582P	6/29/2011	Bicarbonate	mg/l	443	444	0%
P22582P	6/29/2011	Boron, dissolved	mg/l	0.1	0.1	0%
P22582P	6/29/2011	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
P22582P	6/29/2011	Calcium	mg/l	24	22	9%
P22582P	6/29/2011	Carbonate	mg/l	11	11	0%
P22582P	6/29/2011	Chloride	mg/l	6	7	15%
P22582P	6/29/2011	Chromium, dissolved	mg/l	<0.01	<0.01	0%
P22582P	6/29/2011	Copper, dissolved	mg/l	<0.01	<0.01	0%
P22582P	6/29/2011	Dissolved oxygen	mg/l	0.92	0.93	1%
P22582P	6/29/2011	Dissolved oxygen, pct	%	8.7	8.6	1%
P22582P	6/29/2011	Field Conductivity	umhos/cm	851	836	2%
P22582P	6/29/2011	Field pH	s.u.	8.31	8.41	1%
P22582P	6/29/2011	Field turbidity	NTUs	2.89	3.11	7%
P22582P	6/29/2011	Fluoride	mg/l	0.3	0.3	0%
P22582P	6/29/2011	Gross Alpha	pCi/l	3.3	2.2	40%
P22582P	6/29/2011	Gross Beta	pCi/l	5.9	6.7	13%
P22582P	6/29/2011	Iron, dissolved	mg/l	0.8	0.81	1%
P22582P	6/29/2011	Iron, total	mg/l	1.32	1.34	2%
P22582P	6/29/2011	Laboratory conductivity	umhos/cm	895	902	1%
P22582P	6/29/2011	Laboratory pH	s.u.	8.5	8.5	0%
P22582P	6/29/2011	Lead 210, dissolved	pCi/l	1.6	3.3	69%
P22582P	6/29/2011	Lead 210, suspended	pCi/l	<1	<1	0%
P22582P	6/29/2011	Lead, dissolved	mg/l	<0.02	<0.02	0%
P22582P	6/29/2011	Magnesium	mg/l	12	11	9%
P22582P	6/29/2011	Manganese, total	mg/l	0.05	0.05	0%
P22582P	6/29/2011	Mercury, dissolved	mg/l	<0.001	<0.001	0%
P22582P	6/29/2011	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
P22582P	6/29/2011	Nickel, dissolved	mg/l	<0.01	<0.01	0%
P22582P	6/29/2011	Nitrate/Nitrite	mg/l	<0.1	<0.1	0%
P22582P	6/29/2011	Polonium 210, dissolved	pCi/l	<1	2.3	129%
P22582P	6/29/2011	Polonium 210, suspended	pCi/l	<1	<1	0%
P22582P	6/29/2011	Potassium	mg/l	8	7	13%
P22582P	6/29/2011	Ra-226, dissolved	pCi/l	<0.2	<0.2	0%
P22582P	6/29/2011	Ra-226, suspended	pCi/l	<0.2	<0.2	0%
P22582P	6/29/2011	Ra-228, Dissolved	pCi/l	1.6	<1	105%
P22582P	6/29/2011	Selenium, dissolved	mg/l	<0.005	<0.005	0%
P22582P	6/29/2011	Silver, dissolved	mg/l	<0.003	<0.003	0%
P22582P	6/29/2011	Sodium	mg/l	171	160	7%
P22582P	6/29/2011	Sulfate	mg/l	62	60	3%
P22582P	6/29/2011	Temperature	Deg C	10.6	11.2	6%
P22582P	6/29/2011	Th-230, dissolved	pCi/l	<0.2	0.4	120%
P22582P	6/29/2011	Th-230, suspended	pCi/l	<0.2	<0.2	0%
P22582P	6/29/2011	Total Dissolved Solids	mg/l	520	510	2%
P22582P	6/29/2011	Total Dissolved Solids (calc)	mg/l	510	500	2%
P22582P	6/29/2011	Uranium, dissolved	mg/l	0.0035	0.003	15%
P22582P	6/29/2011	Uranium, suspended	mg/l	<0.0003	<0.0003	0%
P22582P	6/29/2011	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
P22582P	6/29/2011	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
TW01	5/5/2011	Alkalinity (as CaCO3)	mg/l	683	682	0%
TW01	5/5/2011	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
TW01	5/5/2011	Ammonia	mg/l	0.1	<0.1	67%
TW01	5/5/2011	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
TW01	5/5/2011	Barium, dissolved	mg/l	<0.5	<0.5	0%
TW01	5/5/2011	Bicarbonate	mg/l	796	794	0%
TW01	5/5/2011	Boron, dissolved	mg/l	0.5	0.5	0%
TW01	5/5/2011	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
TW01	5/5/2011	Calcium	mg/l	9	8	12%
TW01	5/5/2011	Carbonate	mg/l	18	19	5%
TW01	5/5/2011	Chloride	mg/l	6	5	18%
TW01	5/5/2011	Chromium, dissolved	mg/l	<0.01	<0.01	0%
TW01	5/5/2011	Copper, dissolved	mg/l	<0.01	<0.01	0%
TW01	5/5/2011	Dissolved oxygen	mg/l	1.41	1.25	12%
TW01	5/5/2011	Dissolved oxygen, pct	%	12.6	10.7	16%
TW01	5/5/2011	Field Conductivity	umhos/cm	1938	1952	1%
TW01	5/5/2011	Field pH	s.u.	8.56	8.65	1%
TW01	5/5/2011	Field turbidity	NTUs	0.69	0.48	36%
TW01	5/5/2011	Fluoride	mg/l	1	1	0%
TW01	5/5/2011	Gross Alpha	pCi/l	<4	<4	0%
TW01	5/5/2011	Gross Beta	pCi/l	<7	<8	13%
TW01	5/5/2011	Iron, dissolved	mg/l	<0.05	<0.05	0%
TW01	5/5/2011	Iron, total	mg/l	0.07	0.05	33%
TW01	5/5/2011	Laboratory conductivity	umhos/cm	1770	1750	1%
TW01	5/5/2011	Laboratory pH	s.u.	8.5	8.5	0%
TW01	5/5/2011	Lead 210, dissolved	pCi/l	<1	<1	0%
TW01	5/5/2011	Lead 210, suspended	pCi/l	<1	<1	0%
TW01	5/5/2011	Lead, dissolved	mg/l	<0.02	<0.02	0%
TW01	5/5/2011	Magnesium	mg/l	4	4	0%
TW01	5/5/2011	Manganese, total	mg/l	<0.02	<0.02	0%
TW01	5/5/2011	Mercury, dissolved	mg/l	<0.001	<0.001	0%
TW01	5/5/2011	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
TW01	5/5/2011	Nickel, dissolved	mg/l	<0.01	<0.01	0%
TW01	5/5/2011	Nitrate/Nitrite	mg/l	<0.1	<0.1	0%
TW01	5/5/2011	Polonium 210, dissolved	pCi/l	<1	<1	0%
TW01	5/5/2011	Polonium 210, suspended	pCi/l	<1	<1	0%
TW01	5/5/2011	Potassium	mg/l	8	7	13%
TW01	5/5/2011	Ra-226, dissolved	pCi/l	0.3	0.3	0%
TW01	5/5/2011	Ra-226, suspended	pCi/l	<0.2	<0.2	0%
TW01	5/5/2011	Ra-228, Dissolved	pCi/l	<1	<1	0%
TW01	5/5/2011	Selenium, dissolved	mg/l	<0.005	<0.005	0%
TW01	5/5/2011	Silver, dissolved	mg/l	<0.003	<0.003	0%
TW01	5/5/2011	Sodium	mg/l	539	521	3%
TW01	5/5/2011	Sulfate	mg/l	400	391	2%
TW01	5/5/2011	Temperature	Deg C	9.4	8.2	14%
TW01	5/5/2011	Th-230, dissolved	pCi/l	<0.2	<0.2	0%
TW01	5/5/2011	Th-230, suspended	pCi/l	<0.2	<0.2	0%
TW01	5/5/2011	Total Dissolved Solids	mg/l	1390	1380	1%
TW01	5/5/2011	Total Dissolved Solids (calc)	mg/l	1370	1350	1%
TW01	5/5/2011	Uranium, dissolved	mg/l	<0.0003	<0.0003	0%
TW01	5/5/2011	Uranium, suspended	mg/l	<0.0003	<0.0003	0%
TW01	5/5/2011	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
TW01	5/5/2011	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
SW-2	3/15/2012	Alkalinity (as CaCO3)	mg/l	296	306	3%
SW-2	3/15/2012	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
SW-2	3/15/2012	Ammonia	mg/l	<0.1	<0.1	0%
SW-2	3/15/2012	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
SW-2	3/15/2012	Barium, dissolved	mg/l	<0.5	<0.5	0%
SW-2	3/15/2012	Bicarbonate	mg/l	362	373	3%
SW-2	3/15/2012	Boron, dissolved	mg/l	<0.1	<0.1	0%
SW-2	3/15/2012	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
SW-2	3/15/2012	Calcium	mg/l	36	35	3%
SW-2	3/15/2012	Carbonate	mg/l	<5	<5	0%
SW-2	3/15/2012	Chloride	mg/l	11	11	0%
SW-2	3/15/2012	Chromium, dissolved	mg/l	<0.01	<0.01	0%
SW-2	3/15/2012	Copper, dissolved	mg/l	<0.01	<0.01	0%
SW-2	3/15/2012	Dissolved oxygen	mg/l	4.01	4.39	9%
SW-2	3/15/2012	Dissolved oxygen, pct	%	37.3	42.9	14%
SW-2	3/15/2012	Field Conductivity	umhos/cm	801	793	1%
SW-2	3/15/2012	Field pH	s.u.	8.21	8.23	0%
SW-2	3/15/2012	Field turbidity	NTUs	2.82	2.71	4%
SW-2	3/15/2012	Fluoride	mg/l	0.2	0.2	0%
SW-2	3/15/2012	Gross Alpha	pCi/l	7.2	6.6	9%
SW-2	3/15/2012	Gross Beta	pCi/l	10.9	12.5	14%
SW-2	3/15/2012	Iron, dissolved	mg/l	0.37	0.38	3%
SW-2	3/15/2012	Iron, total	mg/l	0.59	0.59	0%
SW-2	3/15/2012	Laboratory conductivity	umhos/cm	825	833	1%
SW-2	3/15/2012	Laboratory pH	s.u.	8.1	8.2	1%
SW-2	3/15/2012	Laboratory turbidity	NTUs	2.4	2.6	8%
SW-2	3/15/2012	Lead, dissolved	mg/l	<0.02	<0.02	0%
SW-2	3/15/2012	Magnesium	mg/l	15	15	0%
SW-2	3/15/2012	Manganese, total	mg/l	0.26	0.26	0%
SW-2	3/15/2012	Mercury, dissolved	mg/l	<0.001	<0.001	0%
SW-2	3/15/2012	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
SW-2	3/15/2012	Nickel, dissolved	mg/l	<0.01	<0.01	0%
SW-2	3/15/2012	Nitrate/Nitrite	mg/l	<0.1	<0.1	0%
SW-2	3/15/2012	ORP	millivolts	167	155	7%
SW-2	3/15/2012	Potassium	mg/l	10	10	0%
SW-2	3/15/2012	Ra-226, dissolved	pCi/l	<0.2	0.2	67%
SW-2	3/15/2012	Ra-228, Dissolved	pCi/l	<1	<1	0%
SW-2	3/15/2012	Selenium, dissolved	mg/l	<0.005	<0.005	0%
SW-2	3/15/2012	Silver, dissolved	mg/l	<0.003	<0.003	0%
SW-2	3/15/2012	Sodium	mg/l	122	118	3%
SW-2	3/15/2012	Sulfate	mg/l	98	100	2%
SW-2	3/15/2012	Temperature	Deg C	10.4	10.4	0%
SW-2	3/15/2012	Total Dissolved Solids	mg/l	500	510	2%
SW-2	3/15/2012	Total Dissolved Solids (calc)	mg/l	470	470	0%
SW-2	3/15/2012	Total Suspended Solids	mg/l	<5	<5	0%
SW-2	3/15/2012	Uranium, dissolved	mg/l	0.0098	0.0098	0%
SW-2	3/15/2012	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
SW-2	3/15/2012	Zinc, dissolved	mg/l	<0.01	<0.01	0%

Site	Date	Constituent	Units	Sample	Duplicate	RPD
GS-1	9/16/2014	Alkalinity (as CaCO3)	mg/l	156	159	2%
GS-1	9/16/2014	Aluminum, dissolved	mg/l	<0.1	<0.1	0%
GS-1	9/16/2014	Ammonia	mg/l	<0.1	<0.1	0%
GS-1	9/16/2014	Arsenic, dissolved	mg/l	<0.005	<0.005	0%
GS-1	9/16/2014	Barium, dissolved	mg/l	<0.5	<0.5	0%
GS-1	9/16/2014	Bicarbonate	mg/l	189	187	1%
GS-1	9/16/2014	Boron, dissolved	mg/l	<0.1	<0.1	0%
GS-1	9/16/2014	Cadmium, dissolved	mg/l	<0.002	<0.002	0%
GS-1	9/16/2014	Calcium	mg/l	55	56	2%
GS-1	9/16/2014	Carbonate	mg/l	<5	<5	0%
GS-1	9/16/2014	Chloride	mg/l	7	7	0%
GS-1	9/16/2014	Chromium, dissolved	mg/l	<0.01	<0.01	0%
GS-1	9/16/2014	Copper, dissolved	mg/l	<0.01	<0.01	0%
GS-1	9/16/2014	Dissolved oxygen	mg/l	8.06	8.05	0%
GS-1	9/16/2014	Dissolved oxygen, pct	%	86.3	86.1	0%
GS-1	9/16/2014	Field Conductivity	umhos/cm	657	653	1%
GS-1	9/16/2014	Field pH	s.u.	8.64	8.64	0%
GS-1	9/16/2014	Field turbidity	NTUs	6.3	6.31	0%
GS-1	9/16/2014	Fluoride	mg/l	0.1	0.1	0%
GS-1	9/16/2014	Gross Alpha	pCi/l	<2	<2	0%
GS-1	9/16/2014	Gross Beta	pCi/l	14.6	15.5	6%
GS-1	9/16/2014	Gross Gamma	pCi/l	<50	<50	0%
GS-1	9/16/2014	Iron, dissolved	mg/l	<0.05	<0.05	0%
GS-1	9/16/2014	Iron, total	mg/l	0.26	0.24	8%
GS-1	9/16/2014	Laboratory conductivity	umhos/cm	705	698	1%
GS-1	9/16/2014	Laboratory pH	s.u.	8.5	8.4	1%
GS-1	9/16/2014	Lead 210, dissolved	pCi/l	<1	<1	0%
GS-1	9/16/2014	Lead 210, suspended	pCi/l	<1	<1	0%
GS-1	9/16/2014	Lead, dissolved	mg/l	<0.02	<0.02	0%
GS-1	9/16/2014	Magnesium	mg/l	25	26	4%
GS-1	9/16/2014	Manganese, dissolved	mg/l	<0.02	<0.02	0%
GS-1	9/16/2014	Manganese, total	mg/l	0.06	0.06	0%
GS-1	9/16/2014	Mercury	mg/l	<0.001	<0.001	0%
GS-1	9/16/2014	Mercury, dissolved	mg/l	<0.001	<0.001	0%
GS-1	9/16/2014	Molybdenum, dissolved	mg/l	<0.02	<0.02	0%
GS-1	9/16/2014	Nickel, dissolved	mg/l	<0.01	<0.01	0%
GS-1	9/16/2014	Nitrate	mg/l	<0.05	<0.05	0%
GS-1	9/16/2014	Nitrate/Nitrite	mg/l	<0.05	<0.05	0%
GS-1	9/16/2014	Nitrite	mg/l	<0.05	<0.05	0%
GS-1	9/16/2014	ORP	millivolts	62	57	8%
GS-1	9/16/2014	Polonium 210, dissolved	pCi/l	<1	<1	0%
GS-1	9/16/2014	Polonium 210, suspended	pCi/l	<1	<1	0%
GS-1	9/16/2014	Potassium	mg/l	14	15	7%
GS-1	9/16/2014	Ra-226, dissolved	pCi/l	<0.2	<0.2	0%
GS-1	9/16/2014	Ra-226, suspended	pCi/l	<0.2	<0.2	0%
GS-1	9/16/2014	Ra-228, Dissolved	pCi/l	<1	1.2	82%
GS-1	9/16/2014	Selenium, dissolved	mg/l	<0.005	<0.005	0%
GS-1	9/16/2014	Silica as SiO2	mg/l	2.7	2.8	4%
GS-1	9/16/2014	Silver, dissolved	mg/l	<0.003	<0.003	0%
GS-1	9/16/2014	Sodium	mg/l	45	43	5%
GS-1	9/16/2014	Sodium Adsorption Ratio (SAR)	Other	1.2	1.2	0%
GS-1	9/16/2014	Sulfate	mg/l	193	192	1%
GS-1	9/16/2014	Temperature	Deg C	17.2	17.7	3%
GS-1	9/16/2014	Th-230, dissolved	pCi/l	<0.2	<0.2	0%
GS-1	9/16/2014	Th-230, suspended	pCi/l	<0.2	<0.2	0%
GS-1	9/16/2014	Total Dissolved Solids	mg/l	480	470	2%
GS-1	9/16/2014	Total Dissolved Solids (calc)	mg/l	430	440	2%
GS-1	9/16/2014	Uranium, dissolved	mg/l	0.0016	0.0016	0%
GS-1	9/16/2014	Uranium, suspended	mg/l	<0.0003	<0.0003	0%
GS-1	9/16/2014	Vanadium, dissolved	mg/l	<0.02	<0.02	0%
GS-1	9/16/2014	Zinc, dissolved	mg/l	<0.01	<0.01	0%

ADDENDUM 3.5-A
VEGETATION STUDY

VEGETATION STUDY

STRATA ENERGY

KENDRICK PROJECT

Prepared by

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December, 2014

VEGETATION

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APPENDICES

MAPS

1.0 LOCATION

Vegetation baseline surveys were completed during the 2013 field season by Intermountain Resources on the Kendrick Project proposed by Peninsula Minerals Ltd, dba Strata Energy Inc. (Strata). This study area is located in northwest Crook County, Wyoming, approximately 25 miles north of Moorcroft. Access to the site is via the D Road. The amendment area encompasses approximately 7,873.7 acres. The amendment area is situated on all or portions of Section 6 of T52N R67W, Sections 1, 2, 11 and 12, T52N R68W, Sections 6, 7, 19, 30 and 31, T53N R67W and Sections 11, 12, 13, 14, 23, 24, 25, 26, 35 and 36, T53N R68W as shown on Map 1.

2.0 METHODS

Plant community types and map units within the study area were mapped during field surveys in 2009-2010 and 2013 and included one quarter mile beyond the amendment boundary. The plant community and map unit types were delineated based on topographical locations and plant species dominating the vegetation. Aerial photography from 2012 and 2014 was used to map and verify pre-existing disturbance areas and current plant community types. Photographs were taken of each vegetation type found within the study area. A detailed species list of plants observed within each plant community type within the study area is included in Appendix A.

The Upland Grassland, Sagebrush Shrubland, Pastureland, Hayland and Wooded Draw were the major vegetation types identified within the permit area. Additional map units found within the permit area included Reservoir/Stockpond, Wetland and Disturbed Land. The Hayland and Disturbed Land map units were not required to be sampled in this study. The Wetland and Reservoir/Stockpond map units were inventoried using US Corps of Engineers criteria and are described in Addendum 3.4-F. The cover samplings for the Upland Grassland, Sagebrush

Shrubland, Pastureland and Wooded Draw community types were completed from July 13 through July 17 of 2013. The extended reference area concept will be used for final bond release studies as discussed later in this report. The random sample sites were selected using two sets of computer generated random numbers, one set corresponding to the x axis of a grid and the other corresponding to the y axis. Grids are always orientated North/South and East/West to avoid bias. Sample site grid intervals were no more than 65 meters on the ground. The grid intersections represented the prospective sample points and were located in the field using aerial photography and topographic maps. Sampling sites were randomly located with cover transects situated in random compass directions (from a random numbers table, 0° to 359°) from this point. If a transect ran out of the vegetation type sampled then a new random compass direction (from a random numbers table, 0° to 180°) was selected, at the point the transect left the type, that returned the transect back into the currently sampled vegetation type without overlapping the current transect. Vegetation and ground cover class data were collected from these 50 meter transects with a vertical pin (one meter long by 1/8 inch around and sharpened to a point) dropped by hand at one meter intervals for 50 data points per transect. The first hit encountered from each pin drop was recorded for data analysis. Sample adequacy followed WDEQ-LQD Guideline No. 2. Production and shrub density data were not required as approved by the WDEQ-LQD.

Trees present within the amendment area were inventoried. The tree data collected on the amendment area included numbers, locations, and sizes (DBH – Diameter at Breast Height in inches and height of each tree in feet). Surveys were also completed for the Ute ladies-tresses orchid (*Spiranthes diluvialis*) as discussed in the results section of this report. The sampling plan for this vegetation study was presented to the WDEQ-LQD and approved by that agency. That approved sampling plan is included in Appendix D of this report.

3.0 RESULTS

3.1 Plant Community Types / Map Units

Surveys of the study area identified eight vegetation or other map units of which four were sampled for vegetative and total ground cover under this study. The plant community types observed and sampled for vegetative and total ground cover were the Upland Grassland, Sagebrush Shrubland, Pastureland and Wooded Draw. The other map units within the amendment area included Hayland, Reservoir/Stockpond, Wetland and Disturbed Land, but these map units were not sampled for vegetative or total ground cover. Table 1 provides the acreages for each plant community or map unit type within the study area and proposed amendment area. A list of plant species observed during the 2013 study is included in Appendix A and Appendix B shows photographs of the plant community/map unit types. Vegetation cover descriptions for the Upland Grassland, Sagebrush Shrubland, Pastureland and Wooded Draw types are based on the cover data presented in Section 3.3 of this report.

Upland Grassland (G)

The Upland Grassland plant community type occurs on approximately 4,430.3 acres or 56.3 percent of the amendment area. The perennial grass life form dominated this type in terms of cover. The most dominant individual species recorded was needleandthread (*Stipa comata*) followed by blue grama (*Bouteloua gracilis*), western wheatgrass (*Agropyron smithii*), threadleaf sedge (*Carex filifolia*), prairie sandreed (*Calamovilfa longifolia*) and little bluestem (*Schizachyrium scoparium*). The Upland Grassland type is found throughout the permit area on relatively flat to steep slopes with generally shallow sandy to sandy loam and loamy soils.

Table 1. Vegetation or Map Unit Type Acreages for the Kendrick Project Area, 2013.

Vegetation or Map Unit Type	Amendment Area Acres	Amendment Area Percentage of Area
Upland Grassland (G)	4,430.3	56.3
Sagebrush Shrubland (S)	2,407.3	30.5
Pastureland (P)	518.1	6.6
Hayland (H)	202.5	2.6
Reservoir/Stockpond (R)	37.6	0.5
Wetland (W)	47.9	0.6
Wooded Draw (T)	36.5	0.5
Disturbed Land (D)	193.5	2.4
Total	**7,873.7**	**100.0**

Sagebrush Shrubland (S)

The Sagebrush Shrubland vegetation type occupies approximately 2,407.3 acres or 30.5 percent of the entire amendment area. This type is dominated by the perennial grass and shrub life forms. The most common individual species recorded on this type was big sagebrush (*Artemisia tridentata*) followed by western wheatgrass, blue grama, needleandthread, yellow sweetclover (*Melilotus officinalis*) and silverleaf scurfpea (*Psoralea argophylla*). This vegetation type is found throughout the study area and occurs on relatively flat to gentle slopes within a variety of soil types from shallow to moderately deep, primarily loams.

Pastureland (P)

The Pastureland vegetation type (approximately 518.1 acres or about 6.6 percent of the amendment area) was mapped primarily in the central portion of the study area. This type was dominated by perennial grass species. The most dominant plant species recorded was crested wheatgrass (*Agropyron cristatum*). Other common plant species recorded on this type were smooth brome (*Bromus inermis*), bulbous bluegrass (*Poa bulbosa*), yellow sweetclover and alfalfa (*Medicago sativa*). This vegetation type is found on relatively flat to gently sloping areas with moderately deep, sandy loam to loamy soils. The Pasturelands within the permit area are primarily grazed by cattle but may also be hayed.

Wooded Draw (T)

The Wooded Draw vegetation type comprised approximately 36.5 acres or about 0.5 percent of the amendment area. Dominant woody species are plains cottonwood (*Populus deltoides*), boxelder maple (*Acer negundo*), peachleaf willow (*Salix amygdaloides*), snowberry (*Symphoricarpos occidentalis*), hawthorn (*Crataegus chrysocarpa*) and silver sagebrush (*Artemisia*

cana). Common understory species are smooth brome, Kentucky bluegrass (*Poa pratensis*), common timothy (*Phleum pratense*), and Canada thistle (*Cirsium arvense*). The Wooded Draw type is found in several stands within ephemeral drainages and will not be disturbed by mining activities. Soils are generally loamy and moderately deep to deep.

Hayland (H)

This map unit is dominated by the perennial forb and grass life forms. The most dominant species observed were alfalfa (*Medicago sativa*), smooth brome and crested wheatgrass. This plant community type is found on relatively flat to gently sloping areas with moderately deep, sandy loam to loamy soils. This vegetation type occupies about 202.5 acres or 2.6 percent of the amendment area. These Haylands are generally harvested every year in late June or July and may be grazed following harvest.

Reservoir/Stockpond (R)

The Reservoir/Stockpond map unit consisted of approximately 37.6 acres or about 0.5 percent of the amendment area. All of these reservoir/stockponds have been created by earthen dikes and larger sites may contain water all year. Several smaller stockponds exist within the permit area also but may not hold water throughout the entire summer.

Wetland (W)

This map unit occupies approximately 47.9 acres or about 0.6 percent of the amendment area. This map unit is found throughout the amendment area but is primarily associated with Good Lad Creek, Deadman Creek, Little Missouri River, Thompson Creek, Cabin Creek and their tributaries. Topography is relatively flat with shallow to deep soils underlain by sand or gravel which allows for natural subirrigation on some sites. Mapping was based on aerial photography and

surveying completed by Intermountain Resources. A complete description of wetland attributes is detailed in the Aquatic Resources Inventory (Addendum 3.4-F).

Disturbed Lands (D)

This map unit consists primarily of past oil and gas development related disturbance and existing roads. Mapping was based on aerial photography and surveying completed by Intermountain Resources. These sites are generally lacking vegetation and topsoil. This map unit occupies approximately 193.5 acres or about 2.4 percent of the amendment area.

3.2 Extended Reference Area

The extended reference area concept for final bond release will be used for lands disturbed by mining activities in this amendment area. The extended reference area will consist of all undisturbed lands within the entire Kendrick Amendment and Ross Permit area and may be delineated by individual plant community types. Due to the nature of solution mining proposed for this site, sufficient acreage of each plant community type within the entire new permit area will remain undisturbed for use as extended reference area(s).

3.3 Cover Data

Cover data was collected on the Kendrick Project Amendment Area from July 13 through July 17, 2013. The Upland Grassland, Sagebrush Shrubland, Pastureland and Wooded Draw plant community/habitat types were sampled. Cover sampling was not required on the other map units as agreed upon with the WDEQ-LQD. Twenty cover samples were collected on the Upland Grassland type and the Sagebrush Shrubland while 21 samples were collected on the Pastureland and 10 samples were collected on the Wooded Draw types in 2013. Table 2 provides the results of the

cover sampling for the four plant community types inventoried in 2013 and Appendix C contains the computer generated field data sheets.

3.4 Statistical Evaluations

Statistical evaluations were made on the total perennial plant cover, total vegetation cover and total ground cover data for each of the vegetation types surveyed. Sample adequacy was met based on LQD Guideline No. 2 for all parameters as shown in Table 3.

3.5 Species Diversity

Table 4 shows the diversity of plant species encountered in cover sampling for each vegetation type sampled on the Kendrick Project in 2013. The Upland Grassland vegetation type exhibited the highest total number of individual plant species recorded in cover transects during the 2013 survey followed by the Sagebrush Shrubland, Pastureland and Wooded Draw vegetation types. The Upland Grassland and Sagebrush Shrubland types both exhibited the highest number of species with greater than 2% relative cover followed by the Wooded Draw and Pastureland types.

Table 2. Absolute and Relative Percent Vegetation Cover Data for the Kendrick Project Area by Vegetation Type, 2013.*

	Vegetation Type							
	Upland Grassland		**Sagebrush Shrubland**		**Pastureland**		**Wooded Draw**	
Life Form / Species	% Cover	Relative Cover	% Cover	Relative Cover	% Cover	Relative Cover	% Cover	Relative Cover
Perennial Grass								
Agropyron cristatum	0.3	0.4	0.1	0.1	22.6	35.8	2.8	3.0
Agropyron dasystachyum	0.4	0.6	0.2	0.3	-	-	-	-
*Agropyron repens***	-	-	-	-	-	-	0.2	0.2
Agropyron intermedium	-	-	-	-	1.1	1.8	-	-
Agropyron smithii	6.9	10.1	9.7	13.3	1.2	2.0	2.4	2.5
Agropyron spicatum	0.5	0.7	0.4	0.5	-	-	-	-
Agropyron trachycaulum	-	-	0.1	0.1	-	-	-	-
Agrostis stolonifera	-	-	-	-	-	-	1.4	1.5
Aristida purpurea	0.4	0.6	0.6	0.8	0.6	0.9	-	-
Bouteloua curtipendula	1.7	2.5	-	-	-	-	-	-
Bouteloua gracilis	9.5	13.9	8.8	12.0	0.5	0.8	-	-
Bromus inermis	-	-	0.3	0.4	21.8	34.6	24.2	25.6
Buchloe dactyloides	2.0	2.9	2.2	3.0	0.4	0.6	-	-
Calamovilfa longifolia	2.9	4.2	-	-	-	-	-	-
Elymus junceus	-	-	-	-	0.2	0.3	-	-
Hordeum jubatum	-	-	-	-	-	-	0.8	0.8
Koeleria macrantha	1.8	2.6	2.5	3.4	0.1	0.2	-	-
Muhlenbergia richardsonis	0.3	0.4	0.1	0.1	-	-	-	-
Phleum pratense	-	-	-	-	-	-	13.2	14.0
Poa bulbosa	1.2	1.8	1.5	2.0	2.0	3.2	-	-
Poa pratensis	0.8	1.2	1.0	1.4	0.1	0.2	15.0	15.9
Poa secunda	1.8	2.6	1.2	1.6	0.6	0.9	-	-
Schizachyrium scoparium	2.7	3.9	-	-	0.1	0.2	-	-
Sporobolus cryptandrus	1.1	1.6	-	-	-	-	-	-
Stipa comata	11.0	16.1	5.4	7.4	1.0	1.7	-	-
Stipa viridula	1.7	2.5	1.7	2.3	-	-	2.4	2.5
Subtotal	47.0	68.6	35.8	48.9	52.3	82.9	62.4	66.1
Grasslike								
Carex filifolia	4.1	6.0	1.3	1.8	0.2	0.3	-	-
Carex pensylvanica	1.0	1.5	0.9	1.2	-	-	-	-
Carex praegracilis	-	-	-	-	-	-	0.8	0.8
Carex stenophylla	0.4	0.6	0.2	0.3	-	-	-	-
Equisetum laevigatum	-	-	-	-	-	-	0.2	0.2
Subtotal	5.5	8.0	2.4	3.3	0.2	0.3	1.0	1.1
Perennial Forb								
Achillea millefolium	0.5	0.7	2.6	3.6	0.1	0.2	0.2	0.2
Antennaria rosea	0.7	1.0	0.8	1.1	0.2	0.3	-	-
Arenaria hookeri	0.2	0.3	0.1	0.1	-	-	-	-
Artemisia dracunculus	-	-	0.2	0.3	-	-	-	-
Asclepias speciosa	-	-	-	-	-	-	0.2	0.2
Aster falcatus	0.3	0.4	0.2	0.3	-	-	0.2	0.2
Astragalus adsurgens	-	-	0.1	0.1	-	-	-	-
*Astragalus bisulcatus****	0.1	0.1	0.1	0.1	-	-	-	-
Astragalus purshii	0.3	0.4	0.1	0.1	-	-	-	-
Besseya wyomingensis	0.1	0.1	0.1	0.1	-	-	-	-
Cerastium arvense	0.4	0.6	-	-	-	-	-	-
*Cirsium arvense***	0.2	0.3	0.4	0.5	-	-	3.8	4.0
*Convolvulus arvensis***	-	-	-	-	1.4	2.3	-	-
Dalea candida	0.1	0.1	0.2	0.3	0.1	0.2	-	-

Table 2. Absolute and Relative Percent Vegetation Cover Data (Continued).

	Vegetation Type							
	Upland Grassland		**Sagebrush Shrubland**		**Pastureland**		**Wooded Draw**	
Life Form / Species	% Cover	Relative Cover	% Cover	Relative Cover	% Cover	Relative Cover	% Cover	Relative Cover
Perennial Forb (Cont.)								
Dalea purpurea	0.1	0.1	-	-	-	-	-	-
Echinacea angustifolia	0.5	0.7	-	-	-	-	-	-
*Euphorbia esula***	-	-	-	-	-	-	2.0	2.1
Galium boreale	0.1	0.1	-	-	-	-	0.2	0.2
Gaura coccinea	0.7	1.0	0.2	0.3	0.4	0.6	0.2	0.2
Glycyrrhiza lepidota	-	-	-	-	-	-	0.2	0.2
Grindelia squarrosa	-	-	0.2	0.3	-	-	-	-
Haplopappus spinulosus	0.1	0.1	0.1	0.1	-	-	-	-
Helianthus maximiliani	-	-	-	-	-	-	1.4	1.5
Heterotheca villosa	0.3	0.4	0.1	0.1	-	-	-	-
Hymenoxys acaulis	0.2	0.3	-	-	-	-	-	-
Lactuca puchella	-	-	-	-	-	-	0.2	0.2
Liatris punctata	0.3	0.4	0.1	0.1	-	-	-	-
Lupinus argentea	0.5	0.7	0.3	0.4	-	-	0.2	0.2
Lupinus sericeus	0.1	0.1	0.4	0.5	-	-	-	-
Lygodesmia juncea	0.5	0.7	-	-	0.1	0.2	-	-
Medicago sativa	0.1	0.1	0.1	0.1	1.8	2.9	-	-
Melilotus officinalis	0.6	0.9	4.2	5.7	2.0	3.2	-	-
Mentha arvensis	-	-	-	-	-	-	0.4	0.4
Monarda fistulosa	-	-	0.1	0.1	-	-	0.4	0.4
Oxytropis lambertii	0.3	0.4	0.3	0.4	-	-	-	-
Oxytropis sericea	0.4	0.6	-	-	-	-	-	-
Oxytropis spp.	-	-	0.2	0.3	-	-	-	-
Penstemon glaber	0.3	0.4	0.1	0.1	0.1	0.2	-	-
Phlox hoodii	0.8	1.2	0.2	0.3	0.1	0.2	-	-
Psoralea argophylla	2.2	3.2	3.8	5.2	0.6	0.9	-	-
Ratibida columnifera	0.4	0.6	0.3	0.4	0.4	0.6	-	-
Sphaeralcea coccinea	0.3	0.4	0.8	1.1	0.2	0.3	-	-
Taraxacum officinale	0.3	0.4	1.3	1.8	0.7	1.1	0.2	0.2
Thermopsis rhombifolia	0.4	0.6	-	-	-	-	-	-
Tragopogon dubius	0.2	0.3	0.1	0.1	-	-	-	-
Vicia americana	0.1	0.1	0.9	1.2	0.2	0.3	-	-
Urtica dioica	-	-	-	-	-	-	0.8	0.8
Subtotal	12.7	18.5	18.7	25.5	8.3	13.1	10.6	11.2
Subshrub								
Artemisia frigida	0.7	1.0	-	-	0.4	0.6	-	-
Artemisia ludoviciana	0.8	1.2	0.1	0.1	-	-	1.4	1.5
Gutierrezia sarothrae	0.1	0.1	0.1	0.1	-	-	-	-
Subtotal	1.6	2.3	0.2	0.3	0.4	0.6	1.4	1.5
Shrub								
Artemisia cana	0.1	0.1	1.6	2.2	-	-	0.4	0.4
Artemisia tridentata	-	-	10.7	14.6	0.1	0.2	-	-
Ribes spp.	-	-	-	-	-	-	0.2	0.2
Rosa woodsii	0.1	0.1	-	-	-	-	0.2	0.2
Symphoricarpos occidentalis	-	-	-	-	-	-	14.4	15.3
Subtotal	0.2	0.3	12.3	16.8	0.1	0.2	15.2	16.1

Table 2. Absolute and Relative Percent Vegetation Cover Data (Continued).

	Vegetation Type							
	Upland Grassland		**Sagebrush Shrubland**		**Pastureland**		**Wooded Draw**	
Life Form / Species	% Cover	Relative Cover	% Cover	Relative Cover	% Cover	Relative Cover	% Cover	Relative Cover
Succulent								
Opuntia polyacantha	0.2	0.3	0.2	0.3	-	-	-	-
Total Perennials	**67.2**	**98.1**	**69.6**	**95.1**	**61.2**	**97.1**	**90.6**	**96.0**
Annual Grass								
Bromus japonicus	0.5	0.7	1.1	1.5	-	-	1.4	1.5
Bromus tectorum	0.2	0.3	0.8	1.1	-	-	1.4	1.5
Vulpia octoflora	-	-	0.1	0.1	-	-	-	-
Subtotal	0.7	1.0	2.0	2.7	-	-	2.8	3.0
Annual Forb								
Alyssum alyssoides	0.2	0.3	0.1	0.1	-	-	-	-
Alyssum desertorum	0.3	0.4	0.5	0.7	0.5	0.8	-	-
Camelina microcarpa	-	-	-	-	-	-	0.2	0.2
Collomia linearis	-	-	0.1	0.1	-	-	-	-
Descurainia pinnata	-	-	0.1	0.1	-	-	-	-
Filago arvensis	-	-	0.1	0.1	-	-	-	-
Kochia scoparia	-	-	-	-	0.1	0.2	-	-
Lotus unifoliolatus	-	-	-	-	0.1	0.2	-	-
Lupinus pusillus	-	-	0.1	0.1	-	-	-	-
Medicago lupulina	-	-	-	-	0.1	0.2	0.6	0.6
Orthocarpus luteus	0.1	0.1	0.4	0.5	-	-	-	-
Plantago patagonica	-	-	0.2	0.3	-	-	-	-
Polygonum aviculare	-	-	-	-	1.0	1.7	-	-
Xanthium strumarium	-	-	-	-	-	-	0.2	0.2
Subtotal	0.6	0.9	1.6	2.2	1.8	2.9	1.0	1.1
Total Annuals	**1.3**	**1.9**	**3.6**	**4.9**	**1.8**	**2.9**	**3.8**	**4.0**
Total Vegetation Cover	68.5	100.0	73.2	100.0	63.0	100.0	94.4	100.0
Lichen	0.8	-	1.9	-	-	-	-	-
Litter	19.8	-	17.4	-	32.2	-	5.2	-
Rock	-	-	-	-	-	-	-	-
Total Ground Cover	89.1	-	92.5		95.2	-	99.6	-
Bare Ground	10.9	-	7.5		4.8	-	0.4	-

* = Subtotal and totals may not be exact due to computer rounding
** = State listed noxious weeds
*** = Selenium indicator species
% Cover = Percent absolute cover

Table 3 Statistical Evaluations for the Vegetation Cover Data Collected on the Kendrick Project Area, 2013.

Plant Community Type	$\overline{X}$	s-1	N	Nmin
	Parameters			
Upland Grassland (G)				
Total Perennial Cover	67.2	5.78	20	3
Total Vegetation Cover	68.5	5.90	20	3
Total Ground Cover	89.1	4.70	20	1
Sagebrush Shrubland (S)				
Total Perennial Cover	69.6	6.70	20	3
Total Vegetation Cover	73.2	6.72	20	3
Total Ground Cover	92.5	2.74	20	1
Pastureland (P)				
Total Perennial Cover	61.2	14.60	21	16
Total Vegetation Cover	63.0	13.58	21	13
Total Ground Cover	95.2	4.56	21	1
Wooded Draw (T)				
Total Perennial Cover	90.6	7.84	10	3
Total Vegetation Cover	94.4	4.20	10	1
Total Ground Cover	99.6	0.84	10	1

$\overline{X}$ = Mean
s-1 = Sample Standard Deviation
N = Number of Samples
Nmin = Minimum Number of Samples Needed to Meet Sample Adequacy

Sample Adequacy Formula

$$Nmin = \frac{(Sz)^2}{(\bar{X}d)^2}$$

$\overline{X}$ = Mean
S = Sample Standard Deviation
z = 1.645
d = 0.1

Table 4 Number of Plant Species Recorded in Cover Data for Each Vegetation Type Sampled on the Kendrick Project in 2013.

	Plant Community Type							
	Upland Grassland		Sagebrush Shrubland		Pastureland		Wooded Draw	
	Total	> 2% Relative Cover	Total	> 2% Relative Cover	Total	> 2% Relative Cover	Total	> 2% Relative Cover
PERENNIALS								
Grass	18	10	16	7	14	4	9	6
Grasslike	3	1	3	0	1	0	2	0
Forb	34	1	31	3	15	3	15	2
Subshrub	3	0	2	0	1	0	1	0
Full Shrub	2	0	2	2	1	0	4	1
Succulent	1	0	1	0	0	0	0	0
Subtotal	61	12	55	12	32	7	31	9
ANNUALS								
Grass	2	0	3	0	0	0	2	0
Forb	3	0	8	0	5	0	3	0
Subtotal	5	0	11	0	5	0	5	0
ALL TOTAL	**66**	**12**	**66**	**12**	**37**	**7**	**36**	**9**

3.6 Threatened, Endangered and Species of Concern

There were no threatened or endangered plant species encountered within the amendment area during the 2013 surveys. Habitat for the Ute ladies'-tresses orchid (*Spiranthes diluvialis*) was encountered in the wetlands within the amendment area. These wetlands were found primarily along Good Lad Creek, Deadman Creek, Little Missouri River, Thompson Creek, Cabin Creek and their tributaries. These wetland habitats were surveyed on August 5, 6, 7 and 8 of 2013 but no Ute ladies'-tresses were observed.

No rare or sensitive plant species of concern as listed by state agencies, federal agencies or the Wyoming Natural Diversity Data Base were found on the study area.

3.7 Noxious Weeds

Several species of designated and prohibited noxious weeds listed by the Wyoming Weed and Pest Control Act were identified on the amendment area. These species included field bindweed (*Convolvulus arvensis*), Quackgrass (*Agropyron repens*), Canada thistle (*Cirsium arvense*), hounds tongue (*Cynoglossum officinale*), leafy spurge (*Euphorbia esula*), common burdock (*Arctium minus*), Scotch thistle (*Onopordum acanthium*), Russian olive (*Eleagnus angustifolia*) and skeletonleaf bursage (*Ambrosia tomentosa*). These species may be common in small localities, especially along ephemeral drainages and wetlands, but were not abundant throughout the area.

Selenium indicator species identified on the amendment area in 2013 included two-grooved milkvetch (*Astragalus bisulcatus*), woody aster (*Xylorhiza glabriuscula*) and Stemmy goldenweed (*Haplopappus multicaulis*). These selenium indicator species were not abundant on the amendment area. Little larkspur (*Delphinium bicolor*), locoweed (*Oxytropis sericea* and *Oxytropis lambertii*) and meadow deathcamus (*Zigadenus venenosus*) were poisonous plants commonly

observed on the area in limited amounts. Cheatgrass (*Bromus tectorum*) and bulbous bluegrass, although not state listed noxious weeds were abundant on some sites within the amendment area.

3.8 Trees

A survey of the trees within the amendment area shows that nine species of trees were present and included plains cottonwood (*Populus deltoides*), boxelder maple (*Acer negundo*), Russian olive (*Elaeagnus angustifolia*), peachleaf willow (*Salix amygdaloides*), Siberian elm (*Ulmus pumila*), Rocky Mountain juniper (*Juniperus scopulorum*), hawthorn (*Crataegus chrysocarpa*), green ash (*Fraxinus pennslyvanica*) and white poplar (*Populus alba*). Table 5 shows the results of the tree survey within the amendment area in 2013. The tree survey was summarized for the entire amendment area as well as for each Quarter Quarter of each Section that trees were located in. The hawthorn was the most common tree species recorded (Table 5) on the amendment area followed by the boxelder maple, peachleaf willow, plains cottonwood, Siberian elm, Russian olive, Rocky Mountain juniper, white poplar and green ash. The average height calculated for the hawthorn for the entire amendment area was 10.3 feet and exhibited an average DBH (Diameter at breast height) of 4.6 inches. The average height calculated for the boxelder maple for the entire amendment area was 21.9 feet and exhibited an average DBH of 10.4 inches. The average height calculated for the peachleaf willow for the entire amendment area was 22.4 feet and exhibited an average DBH of 9.4 inches. The plains cottonwood averaged a height of 46.6 feet and an average DBH of 23.7 inches for the entire amendment area. The average height calculated for the Siberian elm for the entire amendment area was 25.2 feet and exhibited an average DBH of 7.4 inches. The Russian olive averaged a height of 10.0 feet and an average DBH of 2.2 inches for the entire amendment area. The average height calculated for the Rocky Mountain juniper for the entire amendment area was 20.5 feet and exhibited an average DBH of 9.5 inches. The white poplar

Table 5 Summary by Section and Quarter/Quarter for Trees Located on the Kendrick Project Area, 2013.

	Area					
	T52N R67W	T52N R68W				
Species	NWNW4 Sec. 6	SWSW4 Sec. 1	SWNE4 Sec. 2	SESW4 Sec. 2	NESW4 Sec. 2	SENE4 Sec. 2
Plains cottonwood						
N	1	-	-	-	-	-
DBH	18.0	-	-	-	-	-
H	55.0	-	-	-	-	-
Boxelder maple						
N	-	-	12	2	25	2
DBH	-	-	17.8	12.0	10.7	21.0
H	-	-	18.8	20.0	18.0	27.5
Russian olive						
N	-	7	-	-	8	-
DBH	-	2.0	-	-	2.0	-
H	-	10.0	-	-	10.0	-
Peachleaf willow						
N	-	1	-	-	-	-
DBH	-	8.0	-	-	-	-
H	-	19.0	-	-	-	-
Siberian elm						
N	-	-	-	-	-	-
DBH	-	-	-	-	-	-
H	-	-	-	-	-	-
Rocky Mountain juniper						
N	-	-	-	-	-	-
DBH	-	-	-	-	-	-
H	-	-	-	-	-	-
Hawthorn						
N	-	-	-	-	-	1
DBH	-	-	-	-	-	5.0
H	-	-	-	-	-	10.0
Green ash						
N	-	-	-	-	-	-
DBH	-	-	-	-	-	-
H	-	-	-	-	-	-
White poplar						
N	-	-	-	-	-	-
DBH	-	-	-	-	-	-
H	-	-	-	-	-	-
Tree Total / Area	**1**	**56**	**12**	**2**	**33**	**3**

Table 5 Summary by Section and Quarter/Quarter for Trees Located on the Kendrick Project Area, 2013 (Continued).

	Area						
	T52N R68W				T53N R67W		
Species	NENW4 Sec. 2	NWNE4 Sec. 11	NENW4 Sec. 12	SENW4 Sec. 12	NWNW4 Sec. 6	NWSW4 Sec. 6	NWSE4 Sec. 6
Plains cottonwood							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Boxelder maple							
N	6	1	-	24	5	8	4
DBH	13.7	0.0	-	8.4	13.4	4.4	3.8
H	16.7	6.0	-	15.0	28.0	16.3	13.8
Russian olive							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Peachleaf willow							
N	-	-	-	-	-	1	-
DBH	-	-	-	-	-	10.0	-
H	-	-	-	-	-	25.0	-
Siberian elm							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Rocky Mountain juniper							
N	-	-	1	1	2	-	-
DBH	-	-	9.0	9.0	13.0	-	-
H	-	-	23.0	24.0	27.5	-	-
Hawthorn							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Green ash							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
White poplar							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Tree Total / Area	**6**	**1**	**1**	**25**	**7**	**9**	**4**

Table 5 Summary by Section and Quarter/Quarter for Trees Located on the Kendrick Project Area, 2013 (Continued).

Species	Area						
	T53N R67W		T53N R68W				
	NWNW4 Sec. 19	NENW4 Sec. 31	SWSE4 Sec 11	SWNW4 Sec 12	NWSW4 Sec. 13	SWNW4 Sec. 13	NWSE4 & NESE4 Sec. 14
Plains cottonwood							
N	1	3	-	8	-	-	8
DBH	8.0	37.3	-	24.0	-	-	26.5
H	17.0	66.7	-	66.3	-	-	43.9
Boxelder maple							
N	1	-	-	-	6	7	52
DBH	6.0	-	-	-	10.2	12.7	8.8
H	18.0	-	-	-	20.8	25.0	21.0
Russian olive							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Peachleaf willow							
N	-	-	1	2	-	6	2
DBH	-	-	18.0	13.0	-	15.2	19.5
H	-	-	20.0	37.5	-	27.5	32.0
Siberian elm							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Rocky Mountain juniper							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Hawthorn							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Green ash							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
White poplar							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Tree Total / Area	**2**	**3**	**1**	**10**	**6**	**13**	**62**

Table 5 Summary by Section and Quarter/Quarter for Trees Located on the Kendrick Project Area, 2013 (Continued).

Species	NWSE4 & NESW4 Sec. 14	NESW4 Sec. 14	SENW4 Sec. 14	SESW4 Sec. 14	NWSE4 Sec. 14	SESE4 Sec. 14	SWNE4 Sec. 14
				Area			
				T53N R68W			
Plains cottonwood							
N	11	-	4	10	-	-	1
DBH	25.2	-	25.0	13.1	-	-	20.0
H	41.1	-	76.3	51.5	-	-	50.0
Boxelder maple							
N	75	25	10	-	-	-	-
DBH	8.3	10.6	8.7	-	-	-	-
H	20.3	25.6	20.5	-	-	-	-
Russian olive							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Peachleaf willow							
N	31	-	3	6	-	-	-
DBH	2.5	-	12.0	8.5	-	-	-
H	9.8	-	30.0	24.2	-	-	-
Siberian elm							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Rocky Mountain juniper							
N	-	-	-	-	-	1	-
DBH	-	-	-	-	-	6.0	-
H	-	-		-	-	15.0	-
			-				
Hawthorn							
N	14	-	-	-	-	-	-
DBH	3.3	-	-	-	-	-	-
H	15.6	-	-	-	-	-	-
Green ash							
N	-	-	-	-	1	-	-
DBH	-	-	-	-	3.0	-	-
H	-	-	-	-	10.0	-	-
White poplar							
N	-	-	-	-	3	-	-
DBH	-	-	-	-	7.7	-	-
H	-	-	-	-	25.0	-	-
Tree Total / Area	**131**	**25**	**17**	**16**	**4**	**1**	**1**

Table 5 Summary by Section and Quarter/Quarter for Trees Located on the Kendrick Project Area, 2013 (Continued).

Species	SENE4, NESE4 & SWNW4 Sec. 14	NESW4 Sec. 14	SWSE4 Sec. 23	NESE4 Sec. 23	SWSE4 Sec. 23	SESW4 & NENW4 Sec. 23	SWNW4, SENW4 & SESW4 Sec. 19
				Area T53N R68W			
Plains cottonwood							
N	2	1	-	-	-	-	42
DBH	47.0	35.0	-	-	-	-	23.0
H	80.0	60.0	-	-	-	-	37.8
Boxelder maple							
N	39	54	-	1	-	22	52
DBH	11.2	10.7	-	8.0	-	12.9	7.6
H	21.6	26.4	-	21.0	-	26.1	19.3
Russian olive							
N	1	-	-	-	-	-	-
DBH	4.0	-	-	-	-	-	-
H	10.0	-	-	-	-	-	-
Peachleaf willow							
N	7	-	-	-	-	5	57
DBH	25.6	-	-	-	-	10.6	8.8
H	40.7	-	-	-	-	23.0	24.5
Siberian elm							
N	-	1	-	-	-	-	-
DBH	-	10.0	-	-	-	-	-
H	-	20.0	-	-	-	-	-
Rocky Mountain juniper							
N	-	-	-	-	-	-	2
DBH	-	-	-	-	-	-	7.0
H	-	-	-	-	-	-	18.5
Hawthorn							
N	71	16	2	1	3	87	-
DBH	4.6	5.0	4.0	4.0	5.7	4.8	-
H	10.6	10.0	9.5	10.0	13.3	10.0	-
Green ash							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
White poplar							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Tree Total / Area	**120**	**72**	**2**	**2**	**3**	**114**	**153**

Table 5 Summary by Section and Quarter/Quarter for Trees Located on the Kendrick Project Area, 2013 (Continued).

Species	SESE4 & NESE4 Sec. 25	NESE4 Sec. 25	NENW4 Sec. 25	NWSE4 Sec. 25	NWSW4 Sec. 25	SWNW4 Sec. 25	NWNE4 Sec. 26
				Area			
				T53N R68W			
Plains cottonwood							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Boxelder maple							
N	6	-	-	-	-	1	2
DBH	16.3	-	-	-	-	11.0	14.5
H	45.8	-	-	-	-	20.0	22.5
Russian olive							
N	-	2	-	-	-	-	-
DBH	-	3.0	-	-	-	-	-
H	-	10.0	-	-	-	-	-
Peachleaf willow							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Siberian elm							
N	61	-	-	-	2	-	-
DBH	7.1	-	-	-	14.5	-	-
H	25.2	-	-	-	27.5	-	-
Rocky Mountain juniper							
N	1	-	-	1	-	-	-
DBH	6.0	-	-	5.0	-	-	-
H	20.0	-		12.0	-	-	-
			-				
Hawthorn							
N	-	24	-	-	-	38	43
DBH	-	3.1	-	-	-	5.5	5.0
H	-	11.0	-	-	-	11.3	10.0
Green ash							
N	-	1	1	-	-	-	-
DBH	-	4.0	5.0	-	-	-	-
H	-	16.0	17.0	-	-	-	-
White poplar							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Tree Total / Area	**68**	**27**	**1**	**1**	**2**	**39**	**45**

Table 5 Summary by Section and Quarter/Quarter for Trees Located on the Kendrick Project Area, 2013 (Continued).

				Area T53N R68W			
Species	NWNE4 Sec. 26	NWSE4 Sec. 26	SWSE4 Sec. 26	NESE4 Sec. 26	SESE4 Sec. 26	NENE4 Sec. 26	SESE4 Sec. 26
Plains cottonwood							
N	-	-	-	-	-	-	1
DBH	-	-	-	-	-	-	45.0
H	-	-	-	-	-	-	80.0
Boxelder maple							
N	6	9	2	41	8	1	-
DBH	9.7	14.7	14.0	13.3	17.3	17.0	-
H	21.7	26.7	30.0	23.5	22.5	25.0	-
Russian olive							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Peachleaf willow							
N	-	-	-	-	-	-	1
DBH	-	-	-	-	-	-	28.0
H	-	-	-	-	-	-	35.0
Siberian elm							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Rocky Mountain juniper							
N	2	-	-	-	1	-	-
DBH	13.0	-	-	-	13.0	-	-
H	20.0	-		-	20.0	-	-
			-				
Hawthorn							
N	296	193	94	22	53	2	11
DBH	4.6	4.6	4.0	4.5	5.0	3.0	5.0
H	10.0	10.0	10.0	10.0	12.5	5.0	10.0
Green ash							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
White poplar							
N	-	-	-	-	-	-	-
DBH	-	-	-	-	-	-	-
H	-	-	-	-	-	-	-
Tree Total / Area	**304**	**202**	**96**	**63**	**62**	**3**	**13**

Table 5 Summary by Section and Quarter/Quarter for Trees Located on the Kendrick Project Area, 2013 (Continued).

	T53N R68W			Area
Species	NESE4 Sec. 35	NWNE4 Sec. 35	SENW4, NESW4 & SESW4 Sec. 35	ALL TREES IN STUDY AREA TOTAL
Plains cottonwood				
N	1	1	1	**96**
DBH	16.0	17.0	27.0	**23.7**
H	27.0	30.0	50.0	**46.6**
Boxelder maple				
N	-	7	-	**516**
DBH	-	12.1	-	**10.4**
H	-	22.9	-	**21.9**
Russian olive				
N	-	-	-	**18**
DBH	-	-	-	**2.2**
H	-	-	-	**10.0**
Peachleaf willow				
N	4	-	1	**128**
DBH	17.0	-	12.0	**9.4**
H	26.3	-	30.0	**22.4**
Siberian elm				
N	-	-	-	**64**
DBH	-	-	-	**7.4**
H	-	-	-	**25.2**
Rocky Mountain juniper				
N	-	-	-	**12**
DBH	-	-	-	**9.5**
H	-	-	-	**20.5**
Hawthorn				
N	4	19	3	**997**
DBH	2.3	5.0	6.0	**4.6**
H	8.3	10.0	10.0	**10.3**
Green ash				
N	-	-	-	**3**
DBH	-	-	-	**4.0**
H	-	-	-	**14.3**
White poplar				
N	-	-	-	**3**
DBH	-	-	-	**7.7**
H	-	-	-	**25.0**
Tree Total / Area	**9**	**27**	**5**	**1,837**

N = Number of Trees.
DBH = Diameter at Breast Height (of tree) in inches.
H = Height (of tree) in feet.

averaged a height of 25.0 feet and an average DBH of 7.7 inches for the entire amendment area. The average height calculated for the green ash for the entire amendment area was 14.3 feet and exhibited an average DBH of 4.0 inches. Due to the nature of solution mining proposed for the amendment area, no trees should be removed by the operation.

4.0 IMPACTS AND MITIGATION

Operations will disturb several of the vegetation plant communities within the amendment area. Some of these impacts will be long term such as the plant facilities while other temporary disturbances will be short term.

Disturbances related to well field, pipeline and road construction will occur primarily in the Upland Grassland and Sagebrush Shrubland vegetation types. Only a minor amount of disturbance may occur in other vegetation map units within the amendment area. Temporary disturbances will be reclaimed as soon as possible following completion of construction which will reduce the amount of impacts and disturbed lands. Permanent surface features will remain for the life of mine.

Seed mixtures used in reclamation are presented in the Reclamation Plan. Native plant species will be seeded on the native vegetation types affected. These species are selected based on the ability of establishment and their values in supporting the post mine land uses of wildlife habitat and livestock grazing.

5.0 SUMMARY

The Kendrick Project Amendment Area shows a high diversity of plant species with needleandthread, blue grama, western wheatgrass, threadleaf sedge and prairie sandreed being the dominant species observed on the native Upland Grassland type. The Sagebrush Shrubland vegetation type was dominated by big sagebrush followed by western wheatgrass, blue grama,

needleandthread and yellow sweetclover. On the Pastureland type, which has been cultivated and seeded in the past, crested wheatgrass, smooth brome, yellow sweetclover, bulbous bluegrass and alfalfa were the dominants. The Wooded Draw type was dominated by smooth brome, Kentucky bluegrass, western snowberry, common timothy and Canada thistle. Trees were only common in small localized sites within the amendment area.

Cover data was collected on the Upland Grassland, Sagebrush Shrubland, Pastureland and Wooded Draw plant community/habitat types. All cover data met the required sample adequacy.

Noxious weeds and poisonous plants were common in localized areas. Selenium indicator plant species were uncommon and a few poisonous plants were present. No T&E plants were identified within the amendment area.

6.0 SOURCES

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- International Environmental Consultants, Inc. 1980. Baseline Vegetation Studies for the Sundance Project, Crook County, Wyoming. Prepared for Nuclear Dynamics, Inc. Casper, Wyoming.

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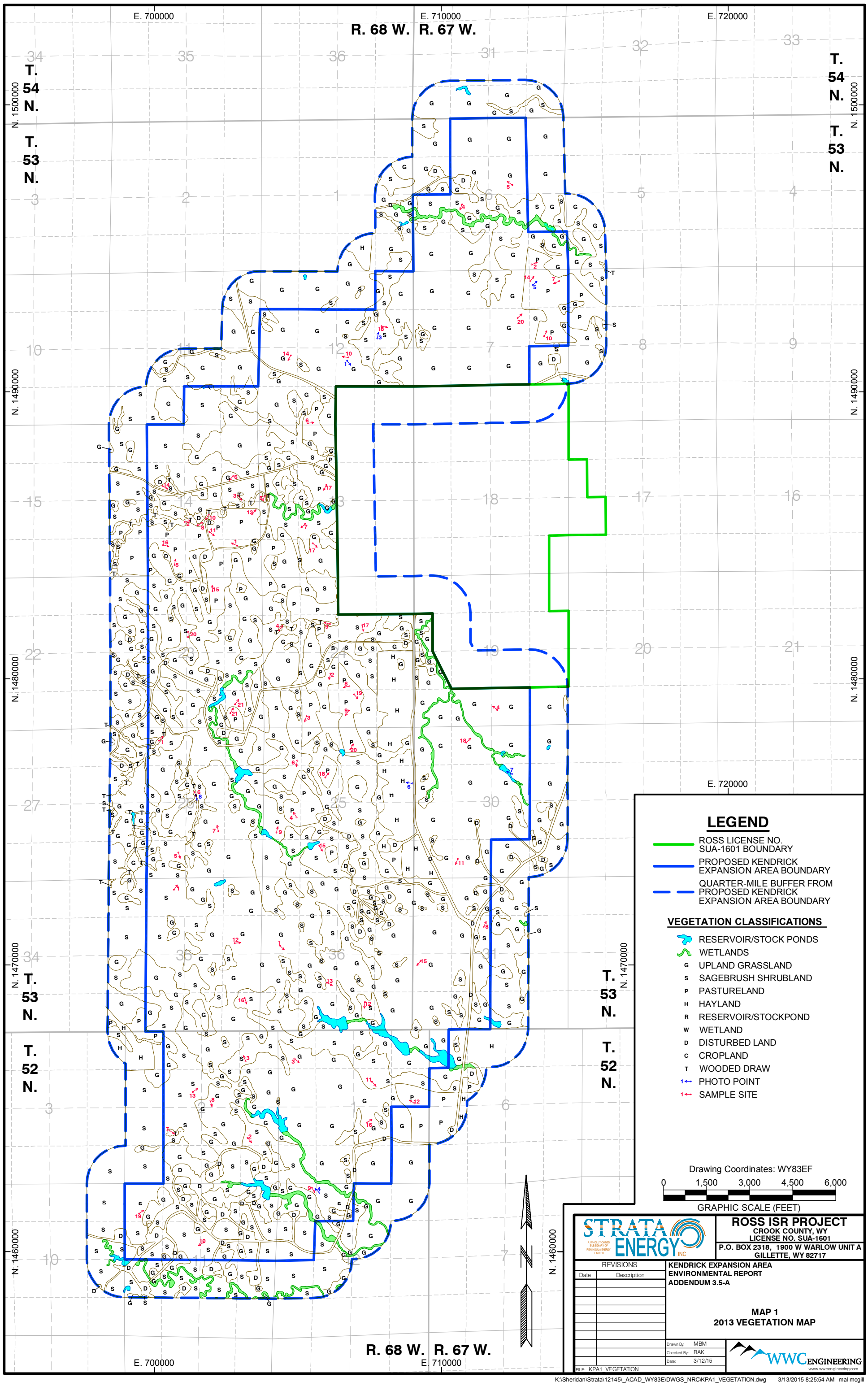
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N. 1500000
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N. 1480000
N. 1470000
N. 1460000
LEGEND
ROSS LICENSE NO. SUA-1601 BOUNDARY
PROPOSED KENDRICK EXPANSION AREA BOUNDARY
QUARTER-MILE BUFFER FROM PROPOSED KENDRICK EXPANSION AREA BOUNDARY
VEGETATION CLASSIFICATIONS
RESERVOIR/STOCK PONDS
WETLANDS
G UPLAND GRASSLAND
S SAGEBRUSH SHRUBLAND
P PASTURELAND
H HAYLAND
R RESERVOIR/STOCKPOND
W WETLAND
D DISTURBED LAND
C CROPLAND
T WOODED DRAW
PHOTO POINT
SAMPLE SITE
Drawing Coordinates: WY83EF
0 1,500 3,000 4,500 6,000
GRAPHIC SCALE (FEET)
STRATA ENERGY INC
ROSS ISR PROJECT
CROOK COUNTY, WY
LICENSE NO. SUA-1601
P.O. BOX 2318, 1900 W WARLOW UNIT A
GILLETTE, WY 82717
REVISIONS
Date
Description
KENDRICK EXPANSION AREA
ENVIRONMENTAL REPORT
ADDENDUM 3.5-A
MAP 1
2013 VEGETATION MAP
Drawn By: MBM
Checked By: BAK
Date: 3/12/15
FILE: KPA1 VEGETATION
WWC ENGINEERING
www.wwcengineering.com
K:\Sheridan\Strata\12145_ACAD_WY83E\DWGS_NRC\KPA1_VEGETATION.dwg 3/13/2015 8:25:54 AM mal mcgill

Appendix A

Plant Species List

List of Plant Species Recorded on the Kendrick Project in 2013.

Code	Scientific Name	Common Name
	PERENNIAL GRASS	
AGCR	*Agropyron cristatum*	Crested wheatgrass
AGDA	*Agropyron dasystachyum* *(Elymus lanceolatus)*	Thickspike wheatgrass
AGEL	*Agropyron elongatum* *(Elymus elongates)*	Tall wheatgrass
AGIN	*Agropyron intermedium* *(Elymus hispidus)*	Intermediate wheatgrass
AGRE	*Agropyron repens* *(Elymus repens)*	Quackgrass
AGSM	*Agropyron smithii* *(Elymus smithii)*	Western wheatgrass
AGSP	*Agropyron spicatum* *(Elymus spicatus)*	Bluebunch wheatgrass
AGTR	*Agropyron trachycaulum* *(Elymus trachycaulus)*	Slender wheatgrass
AGSC	*Agrostis scabra*	Winter bent
AGST	*Agrostis stolonifera*	Redtop bent
ALAR	*Alopecurus arundinaceus*	Reed foxtail
ARPU	*Aristida purpurea*	Threeawn
BOCU	*Bouteloua curtipendula*	Side oats grama
BOGR	*Bouteloua gracilis*	Blue grama
BRIN	*Bromus inermis*	Smooth brome
BRMA	*Bromus marginatus*	Mountain brome
BUDA	*Buchloe dactyloides*	Buffalograss
CALO	*Calamovilfa longifolia*	Prairie sandreed
CAMO	*Calamagrosits montanensis*	Plains reedgrass
DAGL	*Dactylus glomeratus*	Orchardgrass
DAUN	*Danthonia unispicata*	Onespike danthonia
DISP	*Distichlis spicata*	Inland saltgrass
ELCA	*Elymus canadensis*	Canada wildrye
ELCI	*Elymus cinereus*	Basin wildrye
ELJU	*Elymus junceus*	Russian wildrye
HOBR	*Hordeum brachyantherum*	Meadow barley
HOJU	*Hordeum jubatum*	Foxtail barley
KOMA	*Koeleria macrantha*	Prairie junegrass
MUAS	*Muhlenbergia asperifolia*	Alkali muhly
MUCU	*Muhlenbergia cuspidata*	Stoneyhills muhly
MURI	*Muhlenbergia richardsonis*	Mat muhly
ORHY	*Oryzopsis hymenoides*	Indian ricegrass

List of Plant Species Continued.

Code	Scientific Name	Common Name
	PERENNIAL GRASS (Continued)	
PHAR	*Phalaris arundinacea*	Reed canarygrass
PHPR	*Phleum pratense*	Common timothy
POAM	*Poa ampla*	Big bluegrass
POBU	*Poa bulbosa*	Bulbous bluegrass
POIN	*Poa interior*	Interior bluegrass
POJU	*Poa juncifolia*	Alkali bluegrass
POPR	*Poa pratensis*	Kentucky bluegrass
POSE	*Poa secunda*	Sandberg bluegrass
POA	*Poa* spp.	Bluegrass
PUNU	*Puccinellia nuttalliana*	Nuttall alkaligrass
SCPA	*Schedonnardus paniculatus*	Tumblegrass
SCSC	*Schizachyrium scoparium*	Little bluestem
SIHY	*Sitanion hystrix*	Bottlebrush squirreltail
SPAI	*Sporobolus airoides*	Alkali sacaton
SPCR	*Sporobolus cryptandrus*	Sand dropseed
SPGR	*Spartina gracilis*	Alkali cordgrass
SPPE	*Spartina pectinata*	Prairie cordgrass
STCO	*Stipa comata*	Needleandthread
STVI	*Stipa viridula*	Green needlegrass
	GRASSLIKE	
CAR	*Carex* spp.	Sedge
CAFI	*Carex filifolia*	Threadleaf sedge
CANE	*Carex nebrascensis*	Nebraska sedge
CAPE	*Carex pensylvanica*	Sun sedge
CAPR	*Carex praegracilis*	Fieldclustered sedge
CAST	*Carex stenophylla*	Needleleaf sedge
ELAC	*Eleocharis acicularis*	Slender spikerush
ELPA	*Eleocharis palustris*	Creeping spikerush
EQLA	*Equisetum laevigatum*	Horsetail
JUBA	*Juncus balticus*	Baltic rush
JUIN	*Juncus interior*	Inland rush
JUTE	*Juncus tenuis*	Poverty rush
JUTO	*Juncus torreyi*	Torrey rush
SCAC	*Scirpus acutus* *(Schoenoplectus acutus)*	Tule bulrush
SCMA	*Scirpus maritimus* *(Bolboschoenus maritimus)*	Bulrush

List of Plant Species Continued.

Code	Scientific Name	Common Name
	GRASSLIKE (Continued)	
SCPU	*Scirpus pungens* *(Schoenoplectus pungens)*	Bulrush
SCVA	*Scirpus validus* *(Schoenoplectus tabernaemontani)*	Bulrush
TYLA	*Typha latifolia*	Cattail
	PERENNIAL FORB	
ABFR	*Abronia fragrans*	Snowball sandverbena
ACMI	*Achillea millefolium*	Western yarrow
AGGL	*Agoseris glauca*	False dandelion
ALTE	*Allium textile*	Prairie onion
AMPS	*Ambrosia psilostachya*	Ragweed
AMTO	*Ambrosia tomentosa*	Skeletonleaf bursage
ANDI	*Antennaria dimorpha*	Low pussytoes
ANRO	*Antennaria rosea*	Rose pussytoes
ARDR	*Artemisia dracunculus*	Tarragon
ARHO	*Arenaria hookeri*	Hooker sandwort
ARHOL	*Arabis holboellii*	Holboell rockcress
ARFU	*Arnica fulgens*	Orange arnica
ASSP	*Asclepias speciosa*	Showy milkweed
ASAS	*Aster ascendens*	Western aster
ASER	*Aster ericoides*	Heath aster
ASFA	*Aster falcatus*	Whiteprairie aster
ASAD	*Astragalus adsurgens* *(Astragalus laxmanii)*	Standing milkvetch
ASBI	*Astragalus bisulcatus*	Twogroved milkvetch
ASMI	*Astragalus missouriensis*	Missouri milkvetch
ASPU	*Astragalus purshii*	Pursh milkvetch
ASSPA	*Astragalus spatulatus*	Spoonleaf milkvetch
BEWY	*Besseya wyomingensis*	Wyoming kittentails
CANU	*Calochortus nuttallii*	Mariposa lily
CARO	*Campanula rotundifolia*	Harebell
CANUT	*Carduus nutans*	Musk thistle
CASES	*Castilleja sessiflora*	Largeflowered paintbrush
CASU	*Castilleja sulphurea*	Sulphur paintbrush
CEAR	*Cerastium arvense*	Field cerastium
CIAR	*Cirsium arvense*	Canada thistle
CICA	*Cirsium canescens*	Platte thistle
CIUN	*Cirsium undulatum*	Wavyleaf thistle
CIVU	*Cirsium vulgare*	Bull thistle

List of Plant Species Continued.

Code	Scientific Name	Common Name
	PERENNIAL FORB (Continued)	
COUM	*Comandra umbellata*	Bastardtoadflax
COAR	*Convolvulus arvensis*	Field bindweed
CRAC	*Crepis acuminata*	Tapertip hawksbeard
CYAC	*Cymopterus acaulis*	Stemless springparsley
CYMO	*Cymopterus montanus*	Mountain springparsley
DACA	*Dalea candida*	White prairieclover
DAPU	*Dalea purpurea*	Purple prairieclover
DEBI	*Dephinium bicolor*	Little larkspur
ECAN	*Echinacea angustifolia*	Blacksamson echinacea
EPCI	*Epilobium ciliatum*	Fringed willowherb
ERAS	*Erysimum asperum*	Plains wallflower
EROC	*Erigeron ochroleucus*	Buff fleabane
ERPU	*Erigeron pumilus*	Low fleabane
EUES	*Euphorbia esula*	Leafy spurge
GABO	*Galium boreale*	Northern bedstraw
GACO	*Gaura coccinea*	Scarlet gaura
GETR	*Geum triflorum*	Prairie smoke
GLLE	*Glycyrrhiza lepidota*	American licorice
GRSQ	*Grindelia squarrosa*	Curlycup gumweed
HAMU	*Haplopappus multicaulis*	Stemmy goldenweed
HASP	*Haplopappus spinulosus*	Ironplant goldenweed
HEMA	*Helianthus maximiliana*	Maximilian sunflower
HEPA	*Helianthus pauciflorus*	Stiff sunflower
HELA	*Heracleum lanatum*	Cow parsnip
HEVI	*Heterotheca villosa*	Golden aster
HYAC	*Hymenoxis acaulis*	Stemless actinea
HYPO	*Hymenopappus polycephalus*	Manyhead hymenopappus
IPCO	*Ipomopsis congesta*	Ipomopsis
IVAX	*Iva axillaris*	Povertyweed
LAPU	*Lactuca puchella*	Chickory lettuce
LASE	*Lactuca serriola*	Prickly lettuce
LELU	*Lesquerella ludoviciana*	Bladderpod
LEMO	*Leucocrinum montanum*	Starlily
LERE	*Lewisia rediviva*	Bitterroot
LILE	*Linum lewisii*	Lewis flax
LIPU	*Liatris punctata*	Gay feather
LIIN	*Lithospermum incisum*	Narrowleaf gromwell
LIRU	*Lithospermum ruderale*	Wayside gromwell
LIPA	*Lithophragma parviflorum*	Woodland star

List of Plant Species Continued.

Code	Scientific Name	Common Name
	PERENNIAL FORB (Continued)	
LOFO	*Lomatium foeniculum*	Hairyseed Lomatium
LOOR	*Lomation orientale*	Idaho biscuitroot
LUAR	*Lupinus argenteus*	Silvery lupine
LUSE	*Lupinus sericeus*	Lupine
LYJU	*Lygodesmia juncea*	Skeleton plant
MAVU	*Marrubium vulgare*	Horehound
MACA	*Machaeranthera canescens*	Hoary aster
MAGR	*Machaeranthera grindelioides*	Nuttall goldenweed
MESA	*Medicago sativa*	Alfalfa
MEAL	*Melilotus albus*	White sweetclover
MEOF	*Melilotus officinalis*	Yellow sweetclover
MEAR	*Mentha arvensis*	Field mint
MELA	*Mertensia lanceolata*	Bluebell
MINU	*Microseris nutans*	Nodding microseris
MOFI	*Monarda fistulosa*	Horsemint
MUDI	*Musineon divaricatum*	Musineon
OECE	*Oenothera cespitosa*	Gumbo lily
OECO	*Oenothera coronopifolia*	Crownleaf eveningprimrose
ONAC	*Onopordum acanthium*	Scotch thistle
ORFA	*Orobanche fasciculata*	Cancer root
OXLA	*Oxytropis lambertii*	Locoweed
OXSE	*Oxytropis sericea*	Silky loco
PEAL	*Penstemon albidus*	White penstemon
PEGL	*Penstemon glaber*	Smooth beardtongue
PHHO	*Phlox hoodii*	Hoods phlox
PHLI	*Physalis virginiana*	Virginia groundcherry
PIOP	*Picradeniopsis oppositifolia*	Bahia
POAR	*Potentilla arguta*	Tall cinquefoil
POGR	*Potentilla gracilis*	Cinquefoil
PLMA	*Plantago major*	Common plantain
PSAR	*Psoralea argophylla (Pediomelum argophyllum)*	Silverleaf scurfpea
PSES	*Psoralea esculenta*	Indian breadroot
PSTE	*Psoralea tenuiflora (Psoralidium tenuiflorum)*	Slimflower Scurfpea
RACY	*Ranunculus cymbalaria*	Alkali buttercup
RACO	*Ratibida columnifera*	Prairie coneflower
RUCR	*Rumex crispus*	Curly dock
RUSA	*Rumex salicifolius*	Willowleaf dock

List of Plant Species Continued.

Code	Scientific Name	Common Name
	PERENNIAL FORB (Continued)	
SACU	*Sagitaria cuneata*	Arrowhead
SELA	*Sedum lanceolatum*	Stonecrop
SEDA	*Selaginella densa*	Little club moss
SIDR	*Silene drummondii*	Drummond campion
SOMI	*Solidago missouriensis*	Missouri goldenrod
SOMO	*Solidago mollis*	Velvety goldenrod
SPCO	*Sphaeralcea coccinea*	Scarlet globemallow
TAOF	*Taraxacum officinale*	Dandelion
THRH	*Thermopsis rhombifolia*	Prairie thermopsis
TRDU	*Tragopogon dubius*	Yellow salsify
TRI	*Trifolium* spp.	Clover
URDI	*Urtica dioica*	Stinging nettle
VEBR	*Verbena bracteata*	Bigtract verbena
VIAM	*Vicia americana*	American vetch
XYGL	*Xylorhiza glabriuscula*	Woody aster
ZIVE	*Zigadenus venenosus*	Death camas
	SUBSHRUB	
ARFR	*Artemisia frigida*	Fringed sagewort
ARLU	*Artemisia ludoviciana*	Louisiana sagewort
ERMI	*Eriogonum microthecum*	Slender wildbuckwheat
ERPA	*Eriogonum pauciflorum*	Wildbuckwheat
GUSA	*Gutierrezia sarothrae*	Broom snakeweed
LEPU	*Leptodactylon pungens*	Pricklygilia
YUGL	*Yucca glauca*	Small soapweed
	SHRUB	
ARCA	*Artemisia cana*	Silver sagebrush
ARTR	*Artemisia tridentata*	Big sagebrush
CHNA	*Chrysothamnus nauseosus*	Rubber rabbitbrush
CHVI	*Chrisothamnus viscidiflorus*	Douglas rabbitbrush
JUCO	*Juniperus communis*	Common juniper
PRVI	*Prunus virginiana*	Chokecherry
RHTR	*Rhus trilobata*	Skunkbush sumac
RIAU	*Ribes aureum*	Golden current
RIB	*Ribes* spp.	Current
ROWO	*Rosa woodsii*	Woods rose
SAVE	*Sarcobatus vermiculatus*	Black greasewood
SHAR	*Shepherdia argentea*	Silver buffaloberry
SYOC	*Symphoricarpos occidentalis*	Western snowberry

List of Plant Species Continued.

Code	Scientific Name	Common Name
	SUCCULENT	
OPPO	*Opuntia polyacantha*	Prickly pear
PESI	*Pediocactus simpsonii*	Barrel cactus
	TREE	
ACNE	*Acer negundo*	Boxelder maple
CRCH	*Crataegus chrysocarpa*	Hawthorn
ELAN	*Eleagnus angustifolia*	Russian olive
FRPE	*Fraxinus pennsylvanica*	Green Ash
JUSC	*Juniperus scopulorum*	Rocky Mountain juniper
POAL	*Populus alba*	White poplar
PODE	*Populus deltoides*	Plains cottonwood
SAAM	*Salix amygdaloides*	Peachleaf willow
ULPU	*Ulmus pumila*	Siberian elm
	ANNUAL GRASS	
ALCA	*Alopecurus carolinianus*	Carolina foxtail
BESY	*Beckmania syzigachne*	American sloughgrass
BRCO	*Bromus commutatus*	Hairy brome
BRJA	*Bromus japonicus*	Japanese chess
BRTE	*Bromus tectorum*	Cheatgrass
ECCR	*Echinochloa crusgalli*	Barnyardgrass
ERTR	*Eremopyrum triticeum*	Falsewheatgrass
PACA	*Panicum capillare*	Witchgrass panic
POMO	*Polypogon monspeliensis*	Annual rabbitsfoot grass
VUOC	*Vulpia octoflora*	Sixweeksgrass
	ANNUAL FORB	
ALAL	*Alyssum alyssoides*	Pale alyssum
ALDE	*Alyssum desertorum*	Desert alyssum
AMBL	*Amaranthus blitoides*	Prostrate pigweed
AMRE	*Amaranthus retroflexus*	Redroot pigweed
ARMI	*Arctium minus*	Burdock
ATAR	*Atriplex argentea*	Silvery orache
CAMI	*Camelina microcarpa*	Smallseed falseflax
CAPU	*Capsella bursa-pastoris*	Sheperd's purse
CHAL	*Chenopodium album*	Goosefoot
CHFR	*Chenopodium femontii*	Fremont goosefoot
CHTE	*Chorispora tenella*	Blue mustard

List of Plant Species Continued.

Code	Scientific Name	Common Name
	ANNUAL FORB (Continued)	
CLSE	*Cleome serrulata*	Rocky Mountain beeplant
COLI	*Collomia linearis*	Collomia
COCA	*Conyza canadensis*	Canada horseweed
CYOF	*Cynoglossum officinale*	Houndstongue
DEPI	*Descurainia pinnata*	Pinnate tansymustard
DESO	*Descurainia sophia*	Flixweed
EUGL	*Euphorbia glytosperma*	Ridgeseed spurge
FIAR	*Filago arvensis*	Filago
HEHI	*Hedeoma hispida*	False pennyroyal
HEAN	*Helianthus annuus*	Annual sunflower
IVXA	*Iva xanthifolia*	Marsh-elder
KOSC	*Kochia scoparia*	Summer cypress
LARE	*Lappula redowskii*	Bluebur stickseed
LEDE	*Lepidium densiflorum*	Prairie pepperweed
LEPE	*Lepidium perfoliatum*	Clasping pepperweed
LOUN	*Lotus unifoliolatus*	American bird's-foot trefoil
LUPU	*Lupinus pusillus*	Low lupine
MANE	*Malva neglecta*	Common mallow
MELU	*Medicago lupulina*	Black medic
OEAL	*Oenothera albicaulis*	Evening primrose
ORLU	*Orthocarpus luteus*	Owl Clover
PHLI	*Phacelia linearis*	Bluebell phacelia
PLPA	*Plantago patagonica*	Wooly plantain
POAV	*Polygonum aviculare*	Prostrate knotweed
POLA	*Polygonum lapathifolium*	Curlythumb knotweed
RATE	*Ranunculus testicularis*	Testiculate buttercup
SAKA	*Salsola kali*	Russian thistle
SIAL	*Sisymbrium altissimum*	Tumbling hedge mustard
THAR	*Thlaspi arvensis*	Field pennycress
VIVI	*Vicia villosa*	Winter vetch
XAST	*Xanthium strumarium*	Cocklebur

Appendix B

Photographs

Photo 1. Upland Grassland Vegetation Type on the Kendrick Project Area in July of 2013.

Photo 2. Upland Grassland Vegetation Type on the Kendrick Project Area in July of 2013.

Photo 3. Sagebrush Shrubland Vegetation Type on the Kendrick Project Area in July of 2013.

Photo 4. Sagebrush Shrubland Vegetation Type on the Kendrick Project Area in July of 2013.

Photo 5. Pastureland Map Unit on the Kendrick Project Area in July of 2013.

Photo 6. Hayland Map Unit on the Kendrick Project Area in July of 2013.

Photo 7. Wetland and Reservoir/Stockpond Map Units on the Kendrick Project Area in July of 2013.

Photo 8. Wooded Draw Map Unit on the Kendrick Project Area in July of 2013.

Appendix C

Computer Generated Field Data Sheets

Table of Contents

Kendrick Project
UPLAND GRASSLAND
Cover Data (7/15-17/2013)

	Transect														
Life Form / Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Perennial Grass															
Agropyron cristatum	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0
Agropyron dasystachyum	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
Agropyron smithii	0	9	4	1	6	4	1	6	8	7	0	3	1	0	8
Agropyron spicatum	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0
Aristida purpurea	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Bouteloua curtipendula	2	0	0	2	1	4	0	0	0	5	0	0	3	0	0
Bouteloua gracilis	2	7	1	4	5	6	3	7	10	1	7	12	5	1	1
Buchloe dactyloides	0	0	1	0	0	0	0	0	9	0	2	0	0	0	0
Calamovilfa longifolia	1	0	0	5	5	0	0	0	0	1	0	0	7	7	3
Koeleria macrantha	0	0	1	0	2	0	1	3	0	1	0	1	2	2	1
Muhlenbergia richardsonis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Poa bulbosa	0	0	0	0	1	0	0	0	0	0	5	0	0	0	3
Poa pratensis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Poa secunda	3	1	0	0	1	0	3	0	1	0	1	2	1	2	0
Schizachyrium scoparium	6	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Sporobolus cryptandrus	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0
Stipa comata	6	2	5	10	5	1	12	3	0	8	10	4	3	10	3
Stipa viridula	0	0	0	0	2	0	0	2	1	0	0	0	0	0	8
Grass-like															
Carex filifolia	8	0	4	0	0	3	1	2	0	1	2	4	0	0	0
Carex pensylvanica	0	0	0	2	1	0	0	0	0	2	0	0	3	0	0
Carex stenophylla	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0
Perennial Forb															
Achillea millefolium	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0
Antennaria rosea	2	0	0	2	0	0	1	0	1	0	0	0	0	1	0
Arenaria hookeri	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Aster falcatus	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0
Astragalus bisulcatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Astragalus purshii	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Besseya wyomingensis	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Cerastium arvense	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0
Cirsium arvense	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
Dalea candida	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dalea purpurea	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Echinacea angustifolia	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Galium boreale	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Gaura coccinea	1	1	0	0	0	0	1	0	0	0	0	0	1	0	1
Haplopappus spinulosus	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Heterotheca villosa	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
Hymenoxys acaulis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Liatris punctata	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0

Kendrick Project
UPLAND GRASSLAND
Cover Data (7/15-17/2013)

	Transect														
Life Form / Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Lupinus argentea	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0
Lupinus sericeus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lygodesmia juncea	1	0	0	0	1	0	0	0	0	1	1	0	0	0	0
Medicago sativa	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Melilotus officinalis	0	3	0	0	0	0	0	0	3	0	0	0	0	0	0
Oxytropis lambertii	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Oxytropis sericea	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Penstemon glaber	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phlox hoodii	1	0	0	1	1	0	0	0	0	1	1	0	0	2	0
Psoralea argophylla	0	0	1	2	3	0	0	2	0	5	2	0	4	0	2
Ratibida columnifera	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Sphaeralcea coccinea	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0
Taraxacum officinale	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Thermopsis rhombifolia	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0
Tragopogon dubius	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
Vicia americana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Subshrub															
Artemisia frigida	0	0	1	0	0	0	1	1	0	1	1	0	0	0	0
Artemisia ludoviciana	0	0	3	0	0	0	1	1	0	0	0	0	0	1	2
Gutierrezia sarothrae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Shrub															
Artemisia cana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rosa woodsii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Succulent															
Opuntia polyacantha	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Total Perennials	**34**	**31**	**32**	**36**	**38**	**29**	**33**	**33**	**35**	**35**	**34**	**27**	**32**	**33**	**40**
Annual Grass															
Bromus japonicus	0	0	0	2	0	0	0	1	0	0	0	0	1	1	0
Bromus tectorum	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Annual Forb															
Alyssum alyssoides	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0
Alyssum desertorum	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Orthocarpus luteus	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Total Annuals	**0**	**0**	**0**	**2**	**0**	**1**	**0**	**2**	**1**	**1**	**0**	**0**	**3**	**1**	**0**

Kendrick Project
UPLAND GRASSLAND
Cover Data (7/15-17/2013)

	Transect														
Life Form / Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total Veg Cover	34	31	32	38	38	30	33	35	36	36	34	27	35	34	40
Lichens	0	0	0	0	0	2	0	0	1	0	3	1	0	0	0
Litter	9	18	15	5	10	8	9	9	9	10	7	14	10	9	6
Bare Ground	7	1	3	7	2	10	8	6	4	4	6	8	5	7	4
Total Ground Cover	43	49	47	43	48	40	42	44	46	46	44	42	45	43	46

Kendrick Project
UPLAND GRASSLAND
Cover Data (7/15-17/2013)

Life Form / Species	Transect 16	17	18	20	21	Total	Mean	% Cover	Relative Cover
Perennial Grass									
Agropyron cristatum	0	0	0	0	0	3	0.2	0.3	0.4
Agropyron dasystachyum	2	0	0	0	0	4	0.2	0.4	0.6
Agropyron smithii	4	1	0	4	2	69	3.5	6.9	10.1
Agropyron spicatum	0	0	0	0	0	5	0.3	0.5	0.7
Aristida purpurea	3	0	0	0	0	4	0.2	0.4	0.6
Bouteloua curtipendula	0	0	0	0	0	17	0.9	1.7	2.5
Bouteloua gracilis	6	0	2	6	9	95	4.8	9.5	13.9
Buchloe dactyloides	8	0	0	0	0	20	1.0	2.0	2.9
Calamovilfa longifolia	0	0	0	0	0	29	1.5	2.9	4.2
Koeleria macrantha	0	1	0	2	1	18	0.9	1.8	2.6
Muhlenbergia richardsonis	3	0	0	0	0	3	0.2	0.3	0.4
Poa bulbosa	2	0	1	0	0	12	0.6	1.2	1.8
Poa pratensis	0	0	0	0	0	8	0.4	0.8	1.2
Poa secunda	0	0	0	3	0	18	0.9	1.8	2.6
Schizachyrium scoparium	0	17	0	0	2	27	1.4	2.7	3.9
Sporobolus cryptandrus	0	2	0	0	0	11	0.6	1.1	1.6
Stipa comata	0	2	13	7	6	110	5.5	11.0	16.1
Stipa viridula	0	1	3	0	0	17	0.9	1.7	2.5
Grass-like									
Carex filifolia	1	1	1	4	9	41	2.1	4.1	6.0
Carex pensylvanica	0	0	0	2	0	10	0.5	1.0	1.5
Carex stenophylla	0	1	0	0	0	4	0.2	0.4	0.6
Perennial Forb									
Achillea millefolium	0	0	0	0	0	5	0.3	0.5	0.7
Antennaria rosea	0	0	0	0	0	7	0.4	0.7	1.0
Arenaria hookeri	0	0	0	0	0	2	0.1	0.2	0.3
Aster falcatus	0	0	0	0	0	3	0.2	0.3	0.4
Astragalus bisulcatus	1	0	0	0	0	1	0.1	0.1	0.1
Astragalus purshii	0	0	0	0	2	3	0.2	0.3	0.4
Besseya wyomingensis	0	0	0	0	0	1	0.1	0.1	0.1
Cerastium arvense	0	0	0	1	0	4	0.2	0.4	0.6
Cirsium arvense	0	0	0	0	0	2	0.1	0.2	0.3
Dalea candida	1	0	0	0	0	1	0.1	0.1	0.1
Dalea purpurea	0	0	0	0	0	1	0.1	0.1	0.1
Echinacea angustifolia	0	0	2	1	0	5	0.3	0.5	0.7
Galium boreale	0	0	0	0	0	1	0.1	0.1	0.1
Gaura coccinea	0	0	1	1	0	7	0.4	0.7	1.0
Haplopappus spinulosus	0	0	0	0	0	1	0.1	0.1	0.1
Heterotheca villosa	0	0	1	0	0	3	0.2	0.3	0.4
Hymenoxys acaulis	0	0	2	0	0	2	0.1	0.2	0.3
Liatris punctata	0	1	0	0	1	3	0.2	0.3	0.4

Kendrick Project
UPLAND GRASSLAND
Cover Data (7/15-17/2013)

Life Form / Species	Transect 16	17	18	20	21	Total	Mean	% Cover	Relative Cover
Lupinus argentea	0	1	0	0	0	5	0.3	0.5	0.7
Lupinus sericeus	0	0	1	0	0	1	0.1	0.1	0.1
Lygodesmia juncea	0	1	0	0	0	5	0.3	0.5	0.7
Medicago sativa	0	0	0	0	0	1	0.1	0.1	0.1
Melilotus officinalis	0	0	0	0	0	6	0.3	0.6	0.9
Oxytropis lambertii	0	0	2	0	0	3	0.2	0.3	0.4
Oxytropis sericea	0	0	3	0	0	4	0.2	0.4	0.6
Penstemon glaber	0	1	0	0	1	3	0.2	0.3	0.4
Phlox hoodii	0	0	1	0	0	8	0.4	0.8	1.2
Psoralea argophylla	0	0	1	0	0	22	1.1	2.2	3.2
Ratibida columnifera	1	0	1	0	0	4	0.2	0.4	0.6
Sphaeralcea coccinea	0	0	0	0	0	3	0.2	0.3	0.4
Taraxacum officinale	0	1	0	0	0	3	0.2	0.3	0.4
Thermopsis rhombifolia	0	0	0	0	1	4	0.2	0.4	0.6
Tragopogon dubius	0	0	0	0	0	2	0.1	0.2	0.3
Vicia americana	1	0	0	0	0	1	0.1	0.1	0.1
Subshrub									
Artemisia frigida	0	0	0	1	1	7	0.4	0.7	1.0
Artemisia ludoviciana	0	0	0	0	0	8	0.4	0.8	1.2
Gutierrezia sarothrae	1	0	0	0	0	1	0.1	0.1	0.1
Shrub									
Artemisia cana	0	1	0	0	0	1	0.1	0.1	0.1
Rosa woodsii	0	1	0	0	0	1	0.1	0.1	0.1
Succulent									
Opuntia polyacantha	0	0	1	0	0	2	0.1	0.2	0.3
Total Perennials	**34**	**33**	**36**	**32**	**35**	**672**	**33.6**	**67.2**	**98.1**
Annual Grass									
Bromus japonicus	0	0	0	0	0	5	0.3	0.5	0.7
Bromus tectorum	0	0	0	0	0	2	0.1	0.2	0.3
Annual Forb									
Alyssum alyssoides	0	0	0	0	0	2	0.1	0.2	0.3
Alyssum desertorum	0	2	0	0	0	3	0.2	0.3	0.4
Orthocarpus luteus	0	0	0	0	0	1	0.1	0.1	0.1
Total Annuals	**0**	**2**	**0**	**0**	**0**	**13**	**0.7**	**1.3**	**1.9**

S-1	Nmin
2.89	3

Kendrick Project
UPLAND GRASSLAND
Cover Data (7/15-17/2013)

Life Form / Species	Transect 16	17	18	20	21	Total	Mean	% Cover	Relative Cover S-1	Nmin
Total Veg Cover	34	35	36	32	35	685	34.3	68.5	2.95	3
Lichens	0	0	1	0	0	8	0.4	0.8		
Litter	7	11	9	14	9	198	9.9	19.8		
Bare Ground	9	4	4	4	6	109	5.5	10.9		
									S-1	Nmin
Total Ground Cover	41	46	46	46	44	891	44.6	89.1	2.35	1

Kendrick Project
SAGEBRUSH SHRUBLAND
Cover Data (7/13-17/2013)

	Transect														
Life Form / Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Perennial Grass															
Agropyron cristatum	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Agropyron dasystachyum	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Agropyron smithii	5	7	7	3	9	5	6	5	4	5	2	2	4	5	7
Agropyron spicatum	0	0	0	0	0	2	0	0	0	0	1	0	0	1	0
Agropyron trachycaulum	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Aristida purpurea	0	0	2	0	0	0	0	0	0	1	0	0	0	0	1
Bouteloua gracilis	5	4	1	10	3	6	5	3	2	4	1	9	8	1	4
Bromus inermis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Buchloe dactyloides	1	1	0	5	0	0	0	0	0	3	0	1	0	0	0
Koeleria macrantha	1	1	1	1	2	2	0	1	1	1	1	0	4	2	1
Muhlenbergia richardsonis	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Poa bulbosa	0	0	0	0	0	0	0	6	3	1	1	0	0	0	0
Poa pratensis	0	0	0	2	0	0	1	0	2	0	0	0	0	5	0
Poa secunda	1	2	0	0	1	0	1	1	1	0	1	1	0	0	0
Stipa comata	7	4	4	4	3	4	0	1	1	1	1	2	2	6	4
Stipa viridula	0	1	0	2	0	0	2	1	1	2	1	0	3	0	0
Grass-like															
Carex filifolia	0	0	1	0	0	3	0	0	0	1	4	0	2	0	0
Carex pensylvanica	0	0	0	0	0	0	0	4	0	0	1	0	2	0	0
Carex stenophylla	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0
Perennial Forb															
Achillea millefolium	0	1	4	1	3	0	4	1	4	0	2	1	1	0	2
Antennaria rosea	0	0	0	0	1	0	0	2	0	0	2	0	0	0	1
Artemisia dracunculus	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Arenaria hookeri	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aster falcatus	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Astragalus adsurgens	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Astragalus bisulcatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Astragalus purshii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Besseya wyomingensis	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Cerastium arvense	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0
Dalea candida	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gaura coccinea	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0
Grindelia squarrosa	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Haplopappus spinulosus	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Heterotheca villosa	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Liatris punctata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lupinus argentea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lupinus sericeus	0	0	0	1	0	0	0	0	0	2	0	1	0	0	0
Medicago sativa	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Melilotus officinalis	0	3	0	0	0	6	4	2	4	5	0	2	1	1	2

Kendrick Project
SAGEBRUSH SHRUBLAND
Cover Data (7/13-17/2013)

	Transect														
Life Form / Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Monarda fistulosa	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Oxytropis lambertii	0	0	0	0	0	0	0	0	0	0	1	0	2	0	0
Oxytropis spp.	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Penstemon glaber	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Phlox hoodii	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Psoralea argophylla	1	4	4	2	3	0	0	1	4	1	1	5	1	0	0
Ratibida columnifera	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0
Sphaeralcea coccinea	1	1	1	0	0	0	2	0	0	0	0	0	1	1	0
Taraxacum officinale	2	1	0	0	2	0	1	0	0	0	0	0	2	2	0
Tragopogon dubius	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Vicia americana	0	0	0	0	1	1	0	0	3	1	0	0	0	0	0
Subshrub															
Artemisia ludoviciana	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Gutierrezia sarothrae	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Shrub															
Artemisia cana	0	0	0	6	1	0	2	0	0	0	0	0	0	3	0
Artemisia tridentata	11	3	7	0	4	5	2	7	4	9	7	8	2	3	7
Succulent															
Opuntia polyacantha	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
Total Perennials	**38**	**35**	**32**	**38**	**39**	**35**	**32**	**39**	**35**	**39**	**30**	**35**	**37**	**33**	**32**
Annual Grass															
Bromus japonicus	0	0	0	0	0	0	1	0	1	0	0	2	1	2	0
Bromus tectorum	2	3	1	0	1	0	0	0	0	0	0	0	0	0	0
Vulpia octoflora	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Annual Forb															
Alyssum alyssoides	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Alyssum desertorum	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1
Collomia linearis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Descurainia pinnata	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Filago arvensis	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Lupinus pusillus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Orthocarpus luteus	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Plantago patagonica	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
Total Annuals	**2**	**3**	**3**	**0**	**1**	**1**	**1**	**1**	**2**	**0**	**1**	**4**	**1**	**3**	**1**

Kendrick Project
SAGEBRUSH SHRUBLAND
Cover Data (7/13-17/2013)

	Transect														
Life Form / Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total Veg Cover	40	38	35	38	40	36	33	40	37	39	31	39	38	36	33
Lichens	0	0	0	0	0	1	0	0	0	0	2	0	1	11	1
Litter	7	8	12	8	8	9	14	8	10	8	11	7	6	0	9
Bare Ground	3	4	3	4	2	4	3	2	3	3	6	4	5	3	7
Total Ground Cover	47	46	47	46	48	46	47	48	47	47	44	46	45	47	43

Kendrick Project
SAGEBRUSH SHRUBLAND
Cover Data (7/13-17/2013)

Life Form / Species	Transect 16	17	18	19	20	Total	Mean	% Cover	Relative Cover
Perennial Grass									
Agropyron cristatum	0	0	0	0	0	1	0.1	0.1	0.1
Agropyron dasystachyum	0	0	0	0	1	2	0.1	0.2	0.3
Agropyron smithii	6	3	7	2	3	97	4.9	9.7	13.3
Agropyron spicatum	0	0	0	0	0	4	0.2	0.4	0.5
Agropyron trachycaulum	0	0	0	0	0	1	0.1	0.1	0.1
Aristida purpurea	0	1	0	0	1	6	0.3	0.6	0.8
Bouteloua gracilis	7	6	4	3	2	88	4.4	8.8	12.0
Bromus inermis	0	0	0	0	3	3	0.2	0.3	0.4
Buchloe dactyloides	4	0	5	2	0	22	1.1	2.2	3.0
Koeleria macrantha	2	2	1	0	1	25	1.3	2.5	3.4
Muhlenbergia richardsonis	0	0	0	0	0	1	0.1	0.1	0.1
Poa bulbosa	0	0	0	4	0	15	0.8	1.5	2.0
Poa pratensis	0	0	0	0	0	10	0.5	1.0	1.4
Poa secunda	1	1	0	0	1	12	0.6	1.2	1.6
Stipa comata	2	4	1	0	3	54	2.7	5.4	7.4
Stipa viridula	0	0	2	1	1	17	0.9	1.7	2.3
Grass-like									
Carex filifolia	0	0	0	0	2	13	0.7	1.3	1.8
Carex pensylvanica	0	0	1	1	0	9	0.5	0.9	1.2
Carex stenophylla	0	0	0	0	0	2	0.1	0.2	0.3
Perennial Forb									
Achillea millefolium	1	0	0	0	1	26	1.3	2.6	3.6
Antennaria rosea	2	0	0	0	0	8	0.4	0.8	1.1
Artemisia dracunculus	0	0	0	0	1	2	0.1	0.2	0.3
Arenaria hookeri	0	0	0	0	0	1	0.1	0.1	0.1
Aster falcatus	0	0	0	0	0	2	0.1	0.2	0.3
Astragalus adsurgens	0	0	0	0	0	1	0.1	0.1	0.1
Astragalus bisulcatus	0	0	0	0	0	1	0.1	0.1	0.1
Astragalus purshii	0	0	0	0	0	1	0.1	0.1	0.1
Besseya wyomingensis	0	0	0	0	0	1	0.1	0.1	0.1
Cerastium arvense	0	0	1	0	0	4	0.2	0.4	0.5
Dalea candida	1	0	0	0	1	2	0.1	0.2	0.3
Gaura coccinea	0	0	0	0	0	2	0.1	0.2	0.3
Grindelia squarrosa	1	0	0	0	0	2	0.1	0.2	0.3
Haplopappus spinulosus	0	0	0	0	0	1	0.1	0.1	0.1
Heterotheca villosa	0	0	0	0	0	1	0.1	0.1	0.1
Liatris punctata	0	1	0	0	0	1	0.1	0.1	0.1
Lupinus argentea	0	3	0	0	0	3	0.2	0.3	0.4
Lupinus sericeus	0	0	0	0	0	4	0.2	0.4	0.5
Medicago sativa	0	0	0	0	0	1	0.1	0.1	0.1
Melilotus officinalis	0	0	0	12	0	42	2.1	4.2	5.7

Kendrick Project
SAGEBRUSH SHRUBLAND
Cover Data (7/13-17/2013)

Life Form / Species	Transect 16	17	18	19	20	Total	Mean	% Cover	Relative Cover
Monarda fistulosa	0	0	0	0	0	1	0.1	0.1	0.1
Oxytropis lambertii	0	0	0	0	0	3	0.2	0.3	0.4
Oxytropis spp.	0	0	0	0	0	2	0.1	0.2	0.3
Penstemon glaber	0	0	0	0	0	1	0.1	0.1	0.1
Phlox hoodii	0	0	0	0	0	2	0.1	0.2	0.3
Psoralea argophylla	2	4	2	2	1	38	1.9	3.8	5.2
Ratibida columnifera	0	1	0	0	0	3	0.2	0.3	0.4
Sphaeralcea coccinea	0	0	0	1	0	8	0.4	0.8	1.1
Taraxacum officinale	1	1	0	0	1	13	0.7	1.3	1.8
Tragopogon dubius	0	0	0	0	0	1	0.1	0.1	0.1
Vicia americana	0	0	3	0	0	9	0.5	0.9	1.2
Subshrub									
Artemisia ludoviciana	0	0	0	0	0	1	0.1	0.1	0.1
Gutierrezia sarothrae	0	0	0	0	0	1	0.1	0.1	0.1
Shrub									
Artemisia cana	0	0	0	0	4	16	0.8	1.6	2.2
Artemisia tridentata	4	7	3	12	2	107	5.4	10.7	14.6
Succulent									
Opuntia polyacantha	0	0	0	0	0	2	0.1	0.2	0.3
Total Perennials	**34**	**34**	**30**	**40**	**29**	**696**	**34.8**	**69.6**	**95.1**
Annual Grass									
Bromus japonicus	0	0	0	3	1	11	0.6	1.1	1.5
Bromus tectorum	1	0	0	0	0	8	0.4	0.8	1.1
Vulpia octoflora	0	0	0	0	0	1	0.1	0.1	0.1
Annual Forb									
Alyssum alyssoides	0	0	0	0	0	1	0.1	0.1	0.1
Alyssum desertorum	0	1	0	0	1	5	0.3	0.5	0.7
Collomia linearis	0	0	0	1	0	1	0.1	0.1	0.1
Descurainia pinnata	0	0	0	0	0	1	0.1	0.1	0.1
Filago arvensis	0	0	0	0	0	1	0.1	0.1	0.1
Lupinus pusillus	1	0	0	0	0	1	0.1	0.1	0.1
Orthocarpus luteus	0	0	1	0	2	4	0.2	0.4	0.5
Plantago patagonica	0	0	0	0	0	2	0.1	0.2	0.3
Total Annuals	**2**	**1**	**1**	**4**	**4**	**36**	**1.8**	**3.6**	**4.9**

S-1	Nmin
3.35	3

Kendrick Project
SAGEBRUSH SHRUBLAND
Cover Data (7/13-17/2013)

Life Form / Species	Transect 16	17	18	19	20	Total	Mean	% Cover	Relative Cover S-1	Nmin
Total Veg Cover	36	35	31	44	33	732	36.6	73.2	3.36	3
Lichens	1	0	1	0	1	19	1.0	1.9		
Litter	9	11	12	4	13	174	8.7	17.4		
Bare Ground	4	4	6	2	3	75	3.8	7.5		
									S-1	Nmin
Total Ground Cover	46	46	44	48	47	925	46.3	92.5	1.37	1

Kendrick Project
PASTURELAND
Cover Data (7/13-17/2013)

Life Form / Species	Transect 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Perennial Grass															
Agropyron cristatum	0	31	12	27	0	0	27	13	13	17	21	26	1	23	0
Agropyron intermedium	0	2	0	1	0	3	2	0	0	4	0	0	0	0	0
Agropyron smithii	0	0	1	0	0	0	0	2	1	0	0	0	0	0	1
Aristida purpurea	0	0	0	0	0	0	0	0	3	0	0	3	0	0	0
Bouteloua gracilis	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Bromus inermis	19	3	4	0	28	22	0	0	0	5	0	0	37	4	20
Buchloe dactyloides	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0
Elymus junceus	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0
Koeleria macrantha	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Poa bulbosa	0	3	0	0	0	0	5	0	0	3	1	3	2	4	0
Poa pratensis	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Poa secunda	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0
Schizachyrium scoparium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stipa comata	1	0	0	0	0	0	0	4	1	0	0	0	0	0	0
Grasslike															
Carex filifolia	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Perennial Forb															
Achillea millefolium	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Antennaria rosea	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0
Convolvulus arvensis	0	0	0	6	0	0	0	5	0	0	0	2	0	0	0
Dalea candida	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Gaura coccinea	0	0	0	0	0	0	0	2	1	0	0	1	0	0	0
Lygodesmia juncea	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Medicago sativa	2	0	0	1	0	1	0	0	0	0	10	0	0	0	4
Melilotus officinalis	0	0	3	0	0	0	4	1	0	0	0	1	0	7	0
Penstemon glaber	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phlox hoodii	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Psoralea argophylla	0	2	0	0	0	0	0	0	0	2	0	1	0	0	0
Ratibida columnifera	1	0	0	0	0	0	0	2	1	0	0	0	0	0	0
Sphaeralcea coccinea	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Taraxacum officinale	0	0	2	0	0	0	0	1	0	0	0	0	0	1	0
Vicia americana	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Subshrub															
Artemisia frigida	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0
Shrub															
Artemisia tridentata	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Total Perennials	**27**	**43**	**32**	**35**	**28**	**26**	**39**	**31**	**22**	**33**	**33**	**40**	**42**	**39**	**25**

Kendrick Project
PASTURELAND
Cover Data (7/13-17/2013)

	Transect														
Life Form / Species	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Annual Forb															
Alyssum desertorum	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0
Kochia scoparia	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lotus unifoliolatus	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Medicago lupulina	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Polygonum aviculare	0	0	1	0	0	0	0	0	4	0	0	0	0	0	0
Total Annuals	**1**	**0**	**1**	**0**	**0**	**1**	**1**	**2**	**4**	**0**	**0**	**0**	**0**	**1**	**0**
Total Veg Cover	28	43	33	35	28	27	40	33	26	33	33	40	42	40	25
Litter	21	5	16	15	22	19	6	14	18	11	17	8	8	4	25
Bare Ground	1	2	1	0	0	4	4	3	6	6	0	2	0	6	0
Total Ground Cover	49	48	49	50	50	46	46	47	44	44	50	48	50	44	50

Kendrick Project
PASTURELAND
Cover Data (7/13-17/2013)

Life Form / Species	Transect 16	17	18	19	20	21	Total	Mean	% Cover	Relative Cover	S-1	Nmin
Perennial Grass												
Agropyron cristatum	0	0	1	14	11	0	237	11.3	22.6	35.8		
Agropyron intermedium	0	0	0	0	0	0	12	0.6	1.1	1.8		
Agropyron smithii	0	0	3	2	0	3	13	0.6	1.2	2.0		
Aristida purpurea	0	0	0	0	0	0	6	0.3	0.6	0.9		
Bouteloua gracilis	0	0	0	0	3	0	5	0.2	0.5	0.8		
Bromus inermis	27	19	20	0	4	17	229	10.9	21.8	34.6		
Buchloe dactyloides	0	0	1	0	0	0	4	0.2	0.4	0.6		
Elymus junceus	0	0	0	0	0	0	2	0.1	0.2	0.3		
Koeleria macrantha	0	0	0	0	0	0	1	0.0	0.1	0.2		
Poa bulbosa	0	0	0	0	0	0	21	1.0	2.0	3.2		
Poa pratensis	0	0	0	0	0	0	1	0.0	0.1	0.2		
Poa secunda	0	0	1	1	1	0	6	0.3	0.6	0.9		
Schizachyrium scoparium	0	0	0	0	0	1	1	0.0	0.1	0.2		
Stipa comata	0	0	1	0	1	3	11	0.5	1.0	1.7		
Grasslike												
Carex filifolia	0	0	0	0	0	0	2	0.1	0.2	0.3		
Perennial Forb												
Achillea millefolium	0	0	0	0	0	0	1	0.0	0.1	0.2		
Antennaria rosea	0	0	0	0	0	0	2	0.1	0.2	0.3		
Convolvulus arvensis	0	0	0	0	2	0	15	0.7	1.4	2.3		
Dalea candida	0	0	0	0	0	0	1	0.0	0.1	0.2		
Gaura coccinea	0	0	0	0	0	0	4	0.2	0.4	0.6		
Lygodesmia juncea	0	0	0	0	0	0	1	0.0	0.1	0.2		
Medicago sativa	1	0	0	0	0	0	19	0.9	1.8	2.9		
Melilotus officinalis	0	0	3	0	2	0	21	1.0	2.0	3.2		
Penstemon glaber	0	0	0	0	0	0	1	0.0	0.1	0.2		
Phlox hoodii	0	0	0	0	0	0	1	0.0	0.1	0.2		
Psoralea argophylla	0	0	0	0	0	1	6	0.3	0.6	0.9		
Ratibida columnifera	0	0	0	0	0	0	4	0.2	0.4	0.6		
Sphaeralcea coccinea	0	0	0	1	0	0	2	0.1	0.2	0.3		
Taraxacum officinale	0	0	1	0	2	0	7	0.3	0.7	1.1		
Vicia americana	0	0	0	0	0	0	2	0.1	0.2	0.3		
Subshrub												
Artemisia frigida	0	0	1	0	0	0	4	0.2	0.4	0.6		
Shrub												
Artemisia tridentata	0	0	0	0	0	0	1	0.0	0.1	0.2		
Total Perennials	**28**	**19**	**32**	**18**	**26**	**25**	**643**	**30.6**	**61.2**	**97.1**	7.30	16

Kendrick Project
PASTURELAND
Cover Data (7/13-17/2013)

Life Form / Species	Transect 16	17	18	19	20	21	Total	Mean	% Cover	Relative Cover
Annual Forb										
Alyssum desertorum	0	0	0	1	0	1	5	0.2	0.5	0.8
Kochia scoparia	0	0	0	0	0	0	1	0.0	0.1	0.2
Lotus unifoliolatus	0	0	0	0	0	0	1	0.0	0.1	0.2
Medicago lupulina	0	0	0	0	0	0	1	0.0	0.1	0.2
Polygonum aviculare	0	0	0	2	4	0	11	0.5	1.0	1.7
Total Annuals	**0**	**0**	**0**	**3**	**4**	**1**	**19**	**0.9**	**1.8**	**2.9**

										S-1	Nmin
Total Veg Cover	28	19	32	21	30	26	662	31.5	63.0	6.79	13
Litter	22	29	15	23	19	21	338	16.1	32.2		
Bare Ground	0	2	3	6	1	3	50	2.4	4.8		
										S-1	Nmin
Total Ground Cover	50	48	47	44	49	47	1000	47.6	95.2	2.28	1

Kendrick Project
WOODED DRAW
Cover Data (7/13-17/2013)

Life Form / Species	Transect 1	2	3	4	5	6	7	8	9	10	Total	Mean	% Cover	Relative Cover	S-1	Nmin
Perennial Grass																
Agropyron cristatum	0	14	0	0	0	0	0	0	0	0	14	1.4	2.8	3.0		
Agropyron repens	0	0	0	0	0	0	0	0	0	1	1	0.1	0.2	0.2		
Agropyron smithii	3	0	1	1	0	3	0	0	4	0	12	1.2	2.4	2.5		
Agrostis stolonifera	0	0	0	0	0	0	0	0	7	0	7	0.7	1.4	1.5		
Bromus inermis	0	21	11	0	17	0	3	41	6	22	121	12.1	24.2	25.6		
Hordeum jubatum	0	2	0	0	0	0	0	0	0	2	4	0.4	0.8	0.8		
Phleum pratense	13	1	0	8	3	9	16	0	15	1	66	6.6	13.2	14.0		
Poa pratensis	13	3	9	14	7	11	6	0	10	2	75	7.5	15.0	15.9		
Stipa viridula	6	0	5	0	0	1	0	0	0	0	12	1.2	2.4	2.5		
Grasslike																
Carex praegracilis	0	0	0	0	0	0	0	3	0	1	4	0.4	0.8	0.8		
Equisetum laevigatum	0	0	0	1	0	0	0	0	0	0	1	0.1	0.2	0.2		
Perennial Forb																
Achillea millefolium	0	0	0	0	0	0	0	0	1	0	1	0.1	0.2	0.2		
Asclepias speciosa	0	0	0	0	0	0	0	0	0	1	1	0.1	0.2	0.2		
Aster falcatus	0	0	0	0	0	0	0	0	1	0	1	0.1	0.2	0.2		
Cirsium arvense	0	0	0	0	5	0	4	4	0	6	19	1.9	3.8	4.0		
Euphorbia esula	0	1	6	0	0	0	1	2	0	0	10	1.0	2.0	2.1		
Galium boreale	0	0	0	0	0	0	1	0	0	0	1	0.1	0.2	0.2		
Gaura coccinea	0	0	1	0	0	0	0	0	0	0	1	0.1	0.2	0.2		
Glycyrrhiza lepidota	0	0	0	0	0	0	0	0	0	1	1	0.1	0.2	0.2		
Helianthus maximiliani	0	0	1	0	0	6	0	0	0	0	7	0.7	1.4	1.5		
Lactuca puchella	0	0	0	0	0	0	1	0	0	0	1	0.1	0.2	0.2		
Lupinus argenteus	0	0	0	0	0	1	0	0	0	0	1	0.1	0.2	0.2		
Mentha arvensis	0	0	0	0	2	0	0	0	0	0	2	0.2	0.4	0.4		
Monarda fistulosa	0	0	0	0	0	2	0	0	0	0	2	0.2	0.4	0.4		
Taraxacum officinale	0	0	0	0	0	0	0	0	1	0	1	0.1	0.2	0.2		
Urtica dioica	0	0	0	0	0	0	4	0	0	0	4	0.4	0.8	0.8		
Subshrub																
Artemisia ludoviciana	3	0	2	2	0	0	0	0	0	0	7	0.7	1.4	1.5		
Shrub																
Artemisia cana	0	0	0	0	1	1	0	0	0	0	2	0.2	0.4	0.4		
Ribes spp.	0	0	0	0	0	0	1	0	0	0	1	0.1	0.2	0.2		
Rosa woodsii	0	0	0	0	0	0	1	0	0	0	1	0.1	0.2	0.2		
Symphoricarpos occidentalis	6	7	11	9	12	8	8	0	0	11	72	7.2	14.4	15.3		
Total Perennials	**44**	**49**	**47**	**35**	**47**	**42**	**46**	**50**	**45**	**48**	**453**	**45.3**	**90.6**	**96.0**	4.32	3

Kendrick Project
WOODED DRAW
Cover Data (7/13-17/2013)

Life Form / Species	Transect 1	2	3	4	5	6	7	8	9	10	Total	Mean	% Cover	Relative Cover
Annual Grass														
Bromus japonicus	0	0	0	6	1	0	0	0	0	0	7	0.7	1.4	1.5
Bromus tectorum	3	0	0	0	0	1	3	0	0	0	7	0.7	1.4	1.5
Annual Forb														
Camelina microcarpa	0	0	0	1	0	0	0	0	0	0	1	0.1	0.2	0.2
Medicago lupulina	0	0	0	0	0	2	0	0	1	0	3	0.3	0.6	0.6
Xanthium strumarium	0	0	0	1	0	0	0	0	0	0	1	0.1	0.2	0.2
Total Annuals	**3**	**0**	**0**	**8**	**1**	**3**	**3**	**0**	**1**	**0**	**19**	**1.9**	**3.8**	**4.0**
Total Veg Cover	47	49	47	43	48	45	49	50	46	48	472	47.2	94.4	S-1: 2.10, Nmin: 1
Litter	2	1	3	7	2	4	1	0	4	2	26	2.6	5.2	
Bare Ground	1	0	0	0	0	1	0	0	0	0	2	0.2	0.4	
Total Ground Cover	49	50	50	50	50	49	50	50	50	50	498	49.8	99.6	S-1: 0.42, Nmin: 1

Appendix D

Sampling Plan

Intermountain Resources
Permit Preparation • Baseline Inventories • Wildlife • Wetlands • Vegetation • Soils
P.O. Box 1589 • Laramie, Wyoming 82073 (307) 745-3803

February 11, 2013

Stacy Page
WDEQ-LQD District III
2100 West 5th Street
Sheridan, WY 82801

RE: Strata Energy Ross ISR Permit No. 802 Kendrick Amendment Baseline Vegetation Sampling Plan

Dear Ms. Page,

Enclosed is the proposed vegetation sampling plan for the Kendrick Amendment to the Ross ISR Permit No. 802 area. This plan is provided for your review and comment.

Feel free to contact me if you have any questions.

Sincerely,

Jim Orpet

Jim Orpet

Cc: Ben Schiffer, WWCEngineering

2013 Strata Energy - Ross ISR Project Permit No. 802
Kendrick Amendment Area
Appendix D-8 Vegetation Baseline Inventory Sampling Plan

INTRODUCTION

This study plan is proposed to sample vegetation on approximately 7,890.1 acres in western Crook County Wyoming for an amendment to the Ross ISR Project Permit No. 802. The proposed amendment area is shown on the enclosed map labeled Attachment No. 1. This amendment is identified as the Kendrick Amendment Area. The vegetation baseline sampling will be conducted with the expectation that the Extended Reference Area (EXREFA) concept will be utilized during revegetation success evaluations. Discussion pertaining to the EXREFA commitment will be presented in the Reclamation Plan.

Intermountain Resources in accordance with this study plan will complete vegetation inventories on this area during the 2013 growing season. Vegetation type mapping and plant species surveys (plant species list) were initiated in the fall of 2012 and will continue into September of 2013. The actual vegetation cover sampling will be completed between the beginning of June and the end of July of 2013. All vegetation sampling, once started, will be completed within a three week period. This plan proposes to complete the vegetation sampling under the extended reference area concept. As discussed in this proposal, quantitative sampling will only be conducted for cover as required.

SAMPLING PLAN

1) Mapping

Vegetation mapping for the proposed amendment area was initiated in October of 2012 using high quality aerial photography. Additional mapping will be completed in 2013 as needed to revise existing mapping and will include a one quarter mile buffer surrounding the proposed amendment boundary. This sampling plan proposes a quarter mile buffer for mapping rather a half mile buffer since the ore bodies have been identified and the current amendment area boundary provides a significant buffer surrounding those ore bodies. Access is also limited on adjacent lands. All mapping, photo locations and sample transect locations will be shown on the map submitted with the Appendix D-8 Vegetation Baseline report.

2) Species List

The study area will be surveyed monthly during the growing season of April through September to develop a representative plant species list. The species list will be presented by species (common/scientific names) and life-forms with a notation of the vegetation types in which each species was present. Plants species of concern will be identified where found.

3) **Sample Site Location and Numbers**

All sample sites will be located randomly. The random sample sites will be selected using two sets of computer generated random numbers, one set corresponding to the x axis of a grid and the other corresponding to the y axis. Grids are always oriented North/South and East/West to avoid bias. Sample site grid intervals will be no more than 65 meters on the ground. The grid intersections will represent the prospective sample points and will be located in the field using aerial photography, topographic maps or GPS. Transect directions will be located using random compass directions. The minimum and maximum sample numbers are shown in Attachment No. 3.

4) **Percent (%) Cover Data**

Cover data will be collected using 50-meter line transects with a meter-long pin dropped at one meter intervals for 50 points per transect. The tape used for the cover transect will be pulled tight over the vegetation. The sampling device will be a meter long pin (1/8 inch diameter straight rod sharpened to a point) dropped vertically at each meter mark along the 50 meter tape. The pin is dropped vertically with the point of the pin beginning at each meter mark and gravity ensures the pin drops straight down. Data will be recorded by plant species and ground cover class (lichens, litter, rock, bare ground). The minimum and maximum numbers of samples collected will correspond to LQD Guideline No. 2 (2012 Revision) or as otherwise agreed upon in this plan with the WDEQ-LQD.

Sample adequacy will be determined using the formula presented in LQD Guideline No. 2, 2012 revision. Since this is a baseline study used for description purposes, sample adequacy will be computed using the absolute vegetation cover data and sample standard deviation value calculations for the sums inclusive of all plant species (perennials, annuals, subshrubs, shrubs, etc.). Sample adequacy will not be required for total ground cover.

The absolute vegetation cover data will be presented in the report by plant species and by life-form in a tabular format. The ground cover data for each category will also be presented in the table. Computerized field data will be included in the report and will also present the data by species, life-form and ground cover class for each transect sampled.

5) **Photographs**

Photographs will be taken of each vegetation type and map unit. The photographs will be included in the report and photo locations and directions will be included on the report maps.

6) **Herbaceous Production Data**

Production data is not required for non-coal mines and will not be collected for this amendment area.

7) **Shrub Density Data**

Shrub density data is not required for non-coal mines and will not be collected for this amendment area. The site is not within a sage-grouse core area.

8) **Wetlands**

Wetland acreages will be separated from the other vegetation types and will be evaluated following the Corps wetland inventory methodology. The wetland report is separate from the vegetation report and will be submitted in Appendix D-10. Wetland descriptions will also be provided in Appendix D-8.

9) **Trees**

Trees are present within the amendment area and will be inventoried. The species, numbers, locations and sizes (DBH and Height) will be determined and presented in the report.

10) **Weedy Species**

Known and observed concentrations of State of Wyoming Department of Agriculture listed Prohibited and Restricted Noxious (Designated) Weed species will be shown on a map and described by species. Any sensitive species or selenium indicator species observed will also be reported.

11) **Threatened or Endangered and Sensitive Species**

The Ute ladies'-tresses orchid is the only currently listed plant species with habitat present within the proposed amendment area. Surveys will be completed for this species using the methods currently recommended by the USFWS. The results of those surveys will be described in Appendix D8. The sensitive species lists will be reviewed to determine if known occurrence or habitat for any of those species exist within the amendment area. Individual species inventories will be conducted during the species list development with emphasis on within areas of suspected disturbance. The results of those surveys will also be described in Appendix D8.

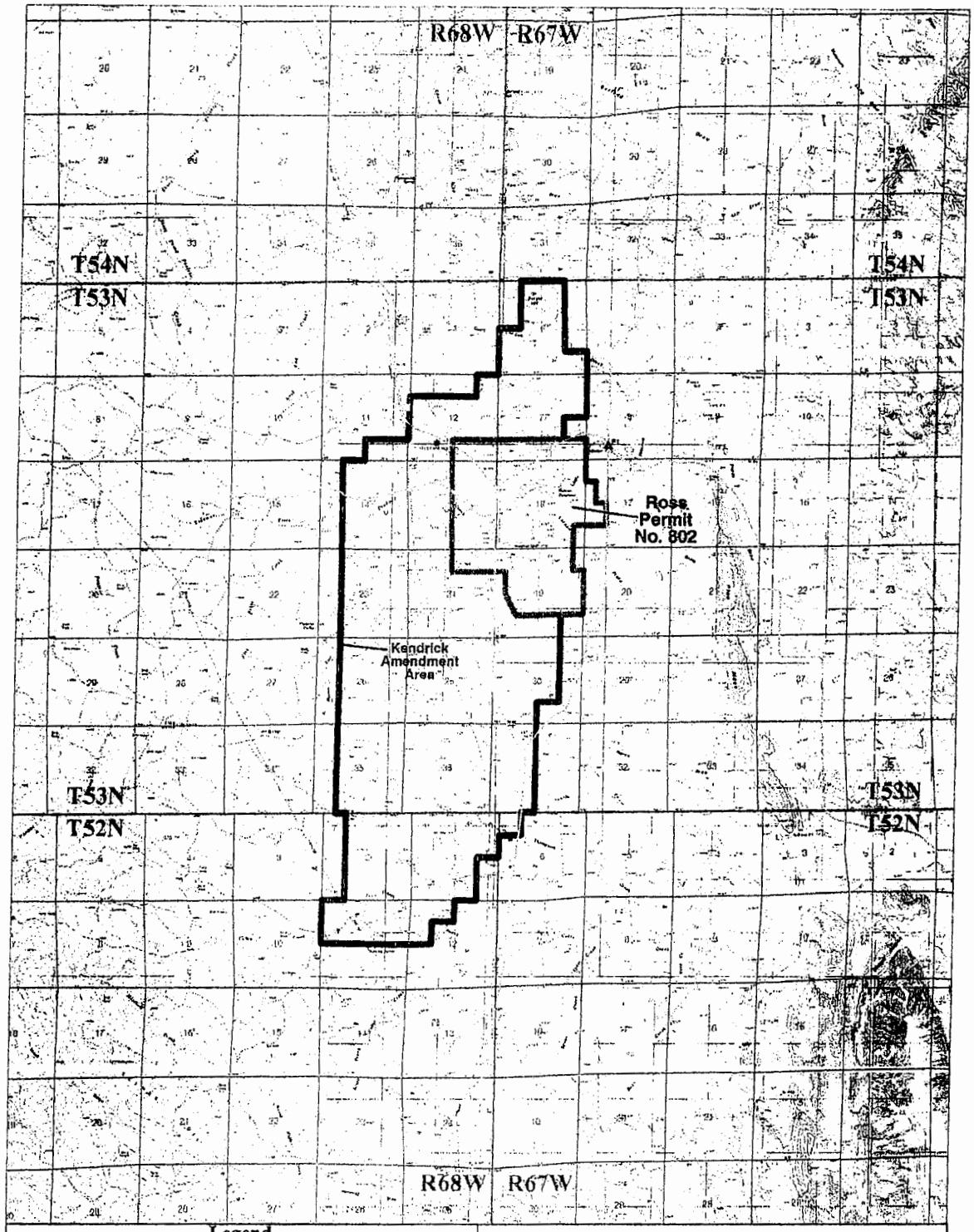
REPORTING

This vegetation study will be paginated so as to be independent of all other permit document sections. The report format will follow the format outlined in LQD Guideline No.2.

2013 Strata Energy – Permit No. 802 Kendrick Amendment Sampling Plan Approval

This Sampling Plan is Approved By:

For LQD	For Strata Energy



Legend

Original Ross Permit No. 802 Boundary

Kendrick Proposed Permit Boundary

Attachment No. 1

ROSS ISR PERMIT No. 802

Proposed Kendrick Amendment Area Boundary

Scale: 1" = 8000'	Vegetation
Drawn By: MBM (WWC) / RET (IR)	

Attachment No. 2. Strata Energy – Permit No. 802 Kendrick Amendment Vegetation Types and Estimated Acreages

Vegetation Type	Acreage	Percent
G - Upland Grassland	4445.1	56.3
S - Sagebrush Shrubland	2403.7	30.4
P - Pastureland	503.0	6.4
H - Hayland	204.2	2.6
D - Disturbed Land	196.1	2.5
W - Wetland	52.7	0.7
R – Reservoir/Stockpond	48.8	0.6
T - Wooded Draw	36.5	0.5
Total	7,890.1	100.0

Attachment No. 3. Sample Numbers and Sample Adequacy for the Permit No. 802 Kendrick Amendment Vegetation Sampling – 2013

Vegetation Type	Acreage	Cover	Production	Shrub Density
Upland Grassland	4445.1	20 min, 50 max	none	none
Sagebrush Shrubland	2403.7	20 min, 50 max	none	none
Pastureland	503.0	20 min, 50 max	none	none
Hayland	204.2	None*	none	none
Disturbed Land	196.1	None*	none	none
Wetland	52.7	None*	none	none
Reservoir/Stockpond	48,8	None*	none	none
Wooded Draw	36.5	10 Total	none	none

* Sampling is not required for the Hayland, Reservoir/Stockpond or Disturbed Land Types. Wetlands will be inventoried and described using the Corps wetland criteria as required.

Sample Adequacy Determination

Sample adequacy will be determined using the formula presented in LQD Draft Guideline No. 2, December 12, 2012. Since this is a baseline study used for description purposes, sample adequacy will be computed using the absolute vegetation cover data and sample standard deviation value calculations for the sums inclusive of all plant species. Sample adequacy is not required for total ground cover.

Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Matthew H. Mead, Governor

Todd Parfitt, Director

March 6, 2013

Mr. Jim Orpet
Intermountain Resources
P.O. Box 1589
Laramie, WY 82073

RE: Kendrick Amendment Vegetation Sampling Plan, Ross ISR Permit No. 802, TFN 5 3/387

Dear Jim:

I have found your revised sampling plan submitted on February 13, 2013 to be acceptable. I added a note at the end that I will be receiving the mapped communities during the spring field visit. Please call me in May to set up a field visit.

Sincerely,

Stacy Page

Stacy Page

sp\

attachment.

XC: Cheyenne w/ attachment

2100 West 5th Street • SHERIDAN, WY 82801
(307) 673-9337 • FAX (307) 672-2213

ADDENDUM 3.5-B
WILDLIFE INVENTORY

WILDLIFE INVENTORY

STRATA ENERGY

KENDRICK AMENDMENT

Prepared by

Intermountain Resources
P.O. Box 1589
Laramie, WY 82073
307-745-3803

December, 2014

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WILDLIFE INVENTORY

1.0 Description of the Study Area

Intermountain Resources completed wildlife surveys on the Kendrick Amendment to Permit No. 802 proposed by Peninsula Minerals Ltd, dba Strata Energy Inc. (Strata) in 2013. Surveys were completed as required by state and federal agencies. This study was completed to permit additional lands for an in-situ uranium mine.

The study area is located in Crook County, Wyoming about 25 miles north of the town of Moorcroft. The amendment area is situated within all or portions of Section 6 of T52N, R67W, Sections 1, 2, 11 and 12, T52N, R68W, Sections 6, 7, 19, 30 and 31, T53N, R67W and Sections 11, 12, 13, 14, 23, 24, 25, 26, 35 and 36, T53N, R68W. This area is shown on Map 1. The wildlife study area includes the amendment area and one to two mile perimeter for selected species.

The amendment area is under primarily private ownership, but some state of Wyoming lands exist within the site. Intermittent waters, including Good Lad Creek, Deadman Creek, Little Missouri River, Thompson Creek, Cabin Creek and their tributaries, exist within the amendment area. Several other ephemeral water sources (reservoirs/stockponds) are also located within the amendment area.

1.1 Agencies Consulted

Field surveys and reporting specific to this project were completed by Intermountain Resources personnel. Agencies contacted included the Wyoming Game and Fish Department (WG&FD), the Wyoming Department of Environmental Quality-Land Quality Division (WDEQ-LQD) and the United States Fish and Wildlife Service (USFWS). Written correspondence with some of the agencies is provided in Appendix C.

2.0 Habitat Description

The amendment area is predominantly upland grassland and sagebrush shrubland with some pastureland, hayland, reservoir/stockpond, wetland, wooded draw and disturbed land habitats. Table 1 provides acreages by habitat type for the amendment area while the habitat locations are shown on the maps in the vegetation study (Addendum 3.5-A) of this amendment. No cliffs or perennial streams exist within the amendment area.

The Upland Grassland plant community type occurs on approximately 4,430.3 acres or 56.3 percent of the amendment area. The perennial grass life form dominated this type in terms of cover. The most dominant individual species recorded was needleandthread followed by blue grama, western wheatgrass, threadleaf sedge, prairie sandreed and little bluestem. A variety of forbs are also present within this habitat type. The upland grassland type is found throughout the amendment area on relatively flat to steep slopes with generally shallow sandy to sandy loam and loamy soils.

The Sagebrush Shrubland vegetation type occupies approximately 2,407.3 acres or 30.5 percent of the entire amendment area. This type is dominated by the perennial grass and shrub life forms. The most common individual species recorded on this type was big sagebrush followed by western wheatgrass, blue grama, needleandthread, yellow sweetclover and silverleaf scurfpea. This vegetation type is found throughout the study area and occurs on relatively flat to gentle slopes within a variety of soil types from shallow to moderately deep, primarily loams.

The Pastureland vegetation type (approximately 518.1 acres or about 6.6 percent of the amendment area) was mapped primarily in the central portion of the study area. This type was dominated by perennial grass species. The most dominant plant species recorded was crested wheatgrass. Other common plant species recorded on this type were smooth brome, bulbous

Table 1. Habitat Types and Acreages for the Kendrick Project Amendment Area.

Habitat Unit	Amendment Area Acres	Amendment Area Percent
Upland Grassland (G)	4,430.3	56.3
Sagebrush Shrubland (S)	2,407.3	30.5
Pastureland (P)	518.1	6.6
Hayland (H)	202.5	2.6
Reservoir/Stockpond (R)	37.6	0.5
Wetland (W)	47.9	0.6
Wooded Draw (T)	36.5	0.5
Disturbed Land (D)	193.5	2.4
Total	**7,873.7**	**100.0**

bluegrass, yellow sweetclover and alfalfa. This vegetation type is found on relatively flat to gently sloping areas with moderately deep, sandy loam to loamy soils. The Pasturelands within the amendment area are primarily grazed by cattle but may also be hayed.

The wooded draw vegetation type comprised approximately 36.5 acres or about 0.5 percent of the amendment area. Dominant woody species are plains cottonwood, boxelder maple, peachleaf willow, snowberry, hawthorn and silver sagebrush. Common understory species are smooth brome, Kentucky bluegrass, common timothy, and Canada thistle. The wooded draw type is found in several stands within ephemeral drainages and will not be disturbed by mining activities. Soils are generally loamy and moderately deep to deep.

The hayland habitat type is dominated by the perennial forb and grass life forms. The most dominant species observed were alfalfa, smooth brome and crested wheatgrass. This plant community type is found on relatively flat to gently sloping areas with moderately deep, sandy loam to loamy soils. This vegetation type occupies about 202.5 acres or 2.6 percent of the amendment area. These haylands are generally harvested every year in late June or July and may be grazed following harvest.

The reservoir/stockpond map unit consisted of approximately 37.6 acres or about 0.5 percent of the amendment area. All of these reservoir/stockponds have been created by earthen dikes and larger sites may contain water all year. Several smaller stockponds exist within the amendment area also but may not hold water throughout the entire summer.

The wetland habitat type occupies approximately 47.9 acres or about 0.6 percent of the amendment area. This map unit is found throughout the amendment area but is primarily associated with Good Lad Creek, Deadman Creek, Little Missouri River, Thompson Creek, Cabin Creek and their tributaries. Topography is relatively flat with shallow to deep soils

underlain by sand or gravel in some areas which allows for natural subirrigation. Mapping was based on aerial photography and surveying completed by Intermountain Resources. A complete description of wetland attributes is detailed in the aquatic resources inventory (Addendum 3.4-F).

The disturbed habitat type consists primarily of past oil and gas development related disturbance and existing roads. Mapping was based on aerial photography and surveying completed by Intermountain Resources. These sites are generally lacking vegetation and topsoil. This map unit occupies approximately 193.5 acres or about 2.4 percent of the amendment area.

3.0 Species List

A list of wildlife species, with common and scientific names, that may potentially occur on the amendment area or within several miles is provided in Appendix A. All species that were actually observed on the amendment or adjacent areas are indicated on the list with an asterisk. The observations recorded are based on 2009-2013 field surveys and computer printouts from the WG&FD wildlife observation system. Other studies completed in the area were also used for compilation of the species list.

4.0 Methods

File searches and field surveys were the basis of data collection for this inventory. These methods are described in the following section.

4.1 File Searches

File searches were the primary sources of agency data collection for this study. These searches included applicable independent publications, BLM sources, Wyoming Natural Diversity data base, USFWS, WG&FD Publications, and the WG&FD computerized Wildlife Observation System.

4.2 Field Surveys

The 2013 field surveys covered the entire amendment area and a one to two mile perimeter for selected species as access allowed. These surveys were designed to locate any proposed, candidate or T&E species, including habitat for those species (i.e. prairie dog towns, nest sites, roosts, leks etc.), Migratory Birds of Conservation Concern, document raptor nest sites and record any wildlife species or their sign observed. Surveys were completed by traversing the area and suitable habitats in a four-wheel drive vehicle, ATV or on foot. Specific survey methods for individual species or groups of species are included in the results sections for those species. The sampling plan submitted to the WG&FD and USFWS is provided in Appendix B. Two sage-grouse leks have been documented within two miles of the amendment area.

5.0 Results

The following sections provide the results of the file searches and field inventories. Map 1 shows the amendment area location and selected wildlife information. Appendix A provides a list of common names and scientific names for wildlife species that have been observed or which have the potential for occurring in the study area. Appendix B contains the wildlife sampling plan submitted to the WG&FD and USFWS. Appendix C includes correspondence with state and federal agencies.

5.1 Big Game

Specific surveys for big game animals were not required by the WG&FD for this amendment area in 2013. Mule deer, pronghorn and white-tailed deer were the only big game species recorded on the study area in 2013 based on records kept from opportunistic observations. Mule deer and pronghorn were common but not abundant on the study area. Mule

deer had an affinity for the sagebrush shrubland habitats while pronghorn were observed in the sagebrush shrubland and upland grassland habitats. Mule deer and pronghorn frequented haylands and cultivated lands in the spring and fall. The white-tailed deer was not very abundant and was observed in the riparian habitats as well as the cultivated fields on the amendment area in 2013.

Mule deer, pronghorn, white-tailed deer and elk were the big game animals recorded for the study area by the WG&FD. The WG&FD observations conclude that mule deer and pronghorn are the most common species in the area. Mule deer utilized all habitats, pronghorn were most common on sagebrush and upland grassland habitats, the white-tailed deer typically used the riparian areas and the elk used sagebrush and upland grassland habitats.

Mule deer use of the area as determined by the WG&FD is yearlong and winter/yearlong. Pronghorn use was classified by the WG&FD as yearlong. The white-tailed deer use was classified by the WG&FD as primarily out of normal range with some yearlong use. The amendment area is out of the normal use range for elk. No crucial winter ranges have been delineated on the amendment or adjacent areas.

The study area is located primarily within the WG&FD Powder River Mule Deer Herd Unit, the North Black Hills Pronghorn Herd Unit and the Thunder Basin white-tailed deer herd unit. The mine amendment area is not within a specific elk herd unit but is included in elk hunt area 129.

5.2 Upland Game Birds

The mourning dove, wild turkey, sharp-tailed grouse and sage-grouse were the only upland game bird species observed on the study area in 2013. The mourning dove is a common summer resident and undoubtedly breed and nest in the area. Mourning doves were recorded

using the area during the spring and summer months in various habitat types. Wild turkeys were commonly observed in pine habitats within two miles east of the amendment area. Wild turkeys were also uncommonly observed around ranch facilities in the study area. Marginal habitat is present on the amendment area for the wild turkey.

Sharp-tailed grouse and sage-grouse strutting ground surveys were conducted for the amendment area and two mile perimeter on April 6, 27 and May 8 of 2013. Surveys were conducted by surveying all suitable habitat at dawn using a four-wheel drive vehicle and ATV. Searches were conducted for new strutting grounds during all survey dates while previously identified strutting grounds were surveyed on April 6, 27 and May 8 of 2013. The amendment area is not located within a designated sage-grouse core breeding area. Two sage-grouse strutting grounds are known to occur within two miles of the amendment area and their locations are shown on the attached map. The Oshoto Lek (Sections 28 and 29 T53N, R67W) and the Cap'n Bob Lek (Section 32, T53N, R67W) were identified from the WG&FD sage-grouse database. No other sage-grouse leks were identified during the 2013 surveys. Details of sage-grouse strutting activities for these leks is summarized in Table 2. Ground surveys of the Oshoto and Cap'n Bob leks were conducted on April 6, 27 and May 8 of 2013. On the Cap'n Bob Lek a total of one male was observed on April 6, one male was recorded on this lek on April 27 and no sage-grouse were recorded on May 8 during the 2013 surveys. One male sage-grouse was observed on the Oshoto Lek during the April 6 survey date and two males were observed at this site on the May 8 of 2013 survey date but no sage-grouse were observed at this site during the April 27 survey. No broods or brood rearing areas were identified during the 2013 field surveys. No sage-grouse wintering areas were identified within the amendment area during the

Table 2. Kendrick Project Sage-grouse Lek Activity Summary.

	Sage-grouse Lek Data *	
	C-Oshoto	
	SWSE4 Sec. 28 T53N, R67W	C-Cap'n Bob
Year/Date	SENW4 Sec. 29 T53N, R67W	SESW4 Sec. 32 T53N, R67W
1985	6 males	-
1986	nc	-
1987	nc	-
1988		
4/18	0	-
4/22	0	-
1989	nc	-
1990	nc	-
1991	0	-
1992	nc	-
1993	nc	-
1994	0	-
1995	nc	-
1996	nc	-
1997	0	-
1998	nc	-
1999	nc	-
2000		
4/12	0	-
2001		
4/18	5 males	-
2002	nc	-
2003	nc	-
2004		
4/17	2 males	-

Table 2. Kendrick Project Sage-grouse Activity Summary (Continued).

	Sage-grouse Lek Data	
	C-Oshoto	
	SWSE4 Sec. 28 T53N, R67W	C-Cap'n Bob
Year/Date	SENW4 Sec. 29 T53N, R67W	SESW4 Sec. 32 T53N, R67W
2005	nc	-
2006	nc	-
2007		
4/7	0	10 males
4/16	0	10 males
2008	nc	nc
2009	nc	nc
2010		
4/14	0	2 males, 1 female
4/28	0	2 males
2011	nc	nc
2012		
4/11	3 males	0
4/26	4 males	1 male
2013		
4/6	1 male	1 male
4/27	0	1 male
5/8	2 males	0

* Past sage-grouse data obtained from the WG&FD.
nc – not checked

2013 surveys. Sharp-tailed grouse were recorded on the area during the 2013 surveys and are considered yearlong residents in the area. Two sharp-tailed grouse dancing grounds were identified on or within two miles of the amendment area. These sharp-tailed grouse dancing ground locations are shown on Map 1. One sharp-tailed grouse strutting ground is located in the SESE4 of Section 34 of T53N, R68W and had 22 birds present at this site on April 27 and 19 sharp-tailed grouse on May 8 of 2013. The other sharp-tailed grouse strutting ground is located in the NESE4 of Section 5 T52N, R67W and 13 birds were observed there on May 8 of 2013.

5.3 Waterfowl and Shorebirds

Only small ponds, intermittent and ephemeral water are found within the amendment area. These small waterbodies provide primarily seasonal and limited habitat for waterfowl and shorebirds. The waterbodies present in the area consist of small reservoir/stockponds and intermittent/ephemeral streams which are fed by spring or storm water run-off. Some perennial springs and seeps are also present. The majority of the water birds were observed during spring migration when most of the waterbodies present contained water. The most common species observed were the Canada goose, mallard, widgeon, gadwall, pintail, blue-winged teal and American coot. As the smaller waterbodies dried up the water birds either left the area or moved to the Oshoto Reservoir, which is adjacent to this amendment area, or other sites where water was still present. Several waterfowl broods were observed on the area in 2013 but the site does not appear to be a major waterfowl production area. The species list in Appendix A provides all the waterfowl and shorebirds identified on the area.

5.4 Raptors

Raptor nest searches were conducted on the ground over suitable habitats from February through September of 2013. A total of 18 intact nest sites were recorded on the study area in 2013 as shown on Map 1 and Table 3. The only raptor species recorded nesting on the amendment area in 2013 was the red-tailed hawk. The ferruginous hawk, Swainson's hawk and great horned owl had been recorded nesting on the area in prior years. Other species of raptors observed in the area during 2013 include the golden eagle, bald eagle, Cooper's hawk, northern harrier, rough-legged hawk, American kestrel, short-eared owl and osprey. The northern harrier, short-eared owl and American kestrel may have nested on the amendment area in 2013, but due to the nature and location of their nests, those possible sites remained undetected during the breeding season. The golden eagle, great horned owl and Cooper's hawk nest in the region but no nest sites were located within one to two miles of the amendment area. The bald eagle, osprey and rough-legged hawk are migrants to the area.

A detailed summary of nesting raptor species, nest sites, activity and nest production for the 2013 study is exhibited in Table 3.

5.5 Passerine Birds

Specific surveys for passerine bird species were conducted in 2013 on this study area. These surveys consisted of walking 1000 meter by 100 meter belt transects and counting all bird species heard or seen within that transect. The passerine bird surveys were completed twice on the three major habitat types, first on May 29 and again on June 12 of 2013. Surveys were conducted between ½ hour prior to sunrise and 9:30 AM. The passerine bird transects covered during the 2013 surveys are shown on the attached map and included the upland grassland,

Table 3. Kendrick Amendment Raptor Production Summary for Nests Located Within One to Two Miles of the Amendment Area in 2013.

Species / Nest No.	Legal Description	Nest Substrate/ Condition	Survey Year 2013
Ferruginous Hawk			
FH1a	SENE4 Sec. 12 T53N, R68W	Hilltop Fair	I
FH1b	SWNW4 Sec. 7 T53N, R67W	Hilltop Poor	ALT
FH1c	NESW4 Sec. 7 T53N, R67W	Power pole D-N	--
FH1d	SWNE4 Sec. 7 T53N, R67W	Hilltop Good	--
FH2a	NWNW4 Sec. 12 T53N, R68W	Hilltop Good	I
FH2b	SWNW4 Sec. 12 T53N, R68W	Hilltop D-N	D-N
FH2c	SENW4 Sec. 12 T53N, R68W	Hilltop Good	ALT
FH2d	NENE4 Sec. 11 T53N, R68W	Hilltop Fair	I
	TOTAL	5 intact nests	0,0,0
RT - Red-tailed Hawk			
RT1	SENW4 Sec. 24 T53N, R68W	Cottonwood Good	A,0,0
RT2a	NESE4 Sec. 14 T53N, R68W	Cottonwood D-N	--
RT2b	NESE4 Sec. 14 T53N, R68W	Cottonwood Good	I
RT3	NWSW4 Sec. 8 T53N, R67W	Cottonwood Good	A,2^{+},2
RT4	SENW4 Sec. 25 T53N, R68W	Hawthorne Fair	I
RT5	SENW4 Sec. 14 T53N, R68W	Cottonwood Fair	I
RT6	NENW4 Sec. 5 T53N, R67W	Cottonwood D-N	D-N

Table 3. Kendrick Amendment Raptor Production (Continued).

Species / Nest No.	Legal Description	Nest Substrate/ Condition	Survey Year 2013
RT7	SESE4 Sec. 26 T53N, R68W	Cottonwood Poor	I
RT8	NWSE4 Sec. 26 T53N, R68W	Cottonwood Poor	I
RT9	NWNE4 Sec. 6 T52N, R67W	Cottonwood Good	A,?,?
RT10	SWSW4 Sec. 1 T53N, R68W	Cottonwood Fair	I
RT11	SWNW4 Sec. 7 T52N, R67W	Willow Good	A,3,3
	TOTAL	10 intact nests	4,5,5
SH - Swainson's Hawk			
SH1	SWNE4 Sec. 13 T53N, R68W	Boxelder Maple Good	I
	TOTAL	1 intact nest	0,0,0
GH – Great Horned Owl			
GH-1	SENE4 Sec. 24 T53N, R68W	Cottonwood Good	RT1
GH-2	NWSE4 Sec. 2 T53N, R68W	Hawthorn Fair	I
GH-3	SENW4 Sec. 14 T53N, R68W	Cottonwood Fair	I
	TOTAL	3 intact nests	0,0,0
Total Nesting Success	**18 total intact nests**		**4,5,5**

Legend

A,2,2 - Active, two young hatched, two fledged
D-N - Nest destroyed by natural causes
A,?,? - Active, undetermined, undetermined
I - Inactive
ALT - Alternate nest site for same pair
? - Undetermined due to lack of access.

sagebrush shrubland and pastureland habitat types. The results of the passerine bird transect surveys are shown in Table 4. All such species observed during the course of other field work or by other sources are also documented with an asterisk on the species list in Appendix A. The amendment area and adjacent lands have the potential habitats to support a good diversity of passerine species. The most common species observed on the amendment area overall were the western meadowlark, lark bunting, vesper sparrow, Brewers sparrow, grasshopper sparrow and horned lark. In the pastureland type the western meadowlark was the most common species observed followed by the yellow-headed blackbird, lark bunting, vesper sparrow, grasshopper sparrow, and horned lark. The western meadowlark was the most common bird species recorded in the sagebrush shrubland followed by the Brewer's sparrow, lark bunting, vesper sparrow and Brewer's blackbird. In the upland grassland type the lark bunting was the most common species observed followed by the western meadowlark, vesper sparrow, grasshopper sparrow, horned lark, red-winged blackbird and killdeer.

5.6 Other Mammals

Specific surveys for other mammals (i.e. small mammal trapping, lagomorph surveys, and predator surveys) were not conducted in 2013. All mammal species, or their sign, observed during the course of other field work were recorded and are documented with an asterisk on the species list in Appendix A. Other mammal species recorded by the WG&FD for the study area are also included. A total of 23 mammal species, other than big game, have been documented on or within several miles of the amendment area. The amendment area and one mile perimeter were searched for prairie dog towns but no prairie dog towns were observed. However, a black-tailed prairie dog town is known to exist over two miles northeast of the amendment area.

Table 4. Bird Species Observed During Passerine Bird Belt Transect Surveys Completed on the Kendrick Project Amendment Area, 2013.

	Habitat Type/Survey Period					
	Pastureland		Sagebrush Shrubland		Upland Grassland	
Species	May	June	May	June	May	June
Western Meadowlark	10	8	11	8	6	11
Lark Bunting	4	2	3	5	21	2
Vesper Sparrow	3	3	5	2	2	5
Brewer's Sparrow	0	0	6	7	0	0
Grasshopper Sparrow	4	2	1	1	0	4
Horned Lark	2	4	0	0	0	2
Brewers Blackbird	0	2	4	1	0	0
Yellow-headed Blackbird	4	3	0	0	0	0
Red-winged Blackbird	0	0	1	1	0	2
Common Grackle	4	0	0	0	0	0
Killdeer	0	0	0	0	0	2
Cliff Swallow	0	1	0	0	0	0
Red-tailed Hawk	0	0	0	0	1	0

The white-tailed jackrabbit and cottontail rabbit were the most common mammal species observed. The coyote, red fox, raccoon, striped skunk and bobcat were the mammalian predators observed in 2013.

All site visits included surveys for the swift fox. These swift fox surveys were generally conducted during early morning and evening hours when this species is more active. Daylight surveys included the investigation of potential den sites. Night surveys were conducted in conjunction with other night time wildlife surveys. No swift fox were recorded on the area during the 2013 wildlife surveys and no records of prior swift fox observations in the area were found.

5.7 Migratory Birds of Conservation Concern

Field surveys were completed in February through September of 2013 for USFWS migratory bird species of conservation concern. This was accomplished by searching all suitable or potentially suitable habitats and recording any species encountered. Breeding bird surveys were also conducted as discussed in Section 5.5 of this report. Discussions here will concentrate on species based on the USFWS list in 2013 (IPAC, 2013). These species are provided in Table 5.

Species of conservation concern observed on the study area in 2013 and prior years include the bald eagle, Brewer's sparrow, ferruginous hawk, golden eagle, grasshopper sparrow, greater sage-grouse, loggerhead shrike, McCown's longspur, prairie falcon, sage thrasher, short-eared owl, Swainson's hawk and upland sandpiper. The ferruginous hawk and Swainson's hawk have been documented nesting on the study area in prior years but active nest sites for these species were not documented in 2013. The Brewer's sparrow, grasshopper sparrow, greater

Table 5. USFWS Migratory Bird Species of Conservation Concern in Crook County, Wyoming.*

Species/Habitat	Expected Occurrence on Project Area	Observed in Prior Years	Observed in 2013
American Bittern Wetlands	Uncommon Migrant	No	No
Bald Eagle Montane riparian, plains/basin riparian	Occasional Migrant	Yes	Yes
Black-billed Cuckoo Deciduous and mixed coniferous forests, cottonwood riparian, urban areas	Uncommon Breeder	No	No
Brewer's Sparrow Shrub-steppe, Mountain-foothills Shrub	Common Breeder	Yes	Yes
Burrowing Owl Shortgrass prairie, prairie dog towns	Uncommon Breeder	No	No
Cassin's Finch Coniferous forests, urban areas	Not Expected	No	No
Dickcissel Eastern great plains grasslands	Rare Breeder	No	No
Ferruginous Hawk Shrub-steppe, Shortgrass Prairie	Common Breeder	Yes	Yes
Golden Eagle Most all habitats	Common Yearlong	Yes	Yes
Grasshopper Sparrow Shrublands, grasslands, agricultural	Common Breeder	Yes	Yes
Greater Sage-grouse Shrub-steppe	Common Yearlong	Yes	Yes
Lewis's Woodpecker Ponderosa pine savannah, pine juniper, other coniferous forests, aspen, cottonwood-riparian, below 8,500 feet	Not Expected	No	No
Loggerhead Shrike Pine-juniper, woodland-chaparral, basin-prairie and mountain-foothills shrublands	Occasional Breeder	Yes	Yes
Long-Billed Curlew Sagebrush-grasslands; eastern great plains, great basin-foothills, mountain foothills, and wet-moist meadow grasslands; irrigated native meadows; with aquatic areas nearby. Also other agricultural areas and shorelines.	Uncommon Breeder	No	No

Table 5. USFWS Migratory Bird Species (Continued).

Species/Habitat	Expected Occurrence on Project Area	Observed in Prior Years	Observed in 2013
Marbled Godwit Wet-moist meadows, marshes, aquatic areas, shorelines, irrigated meadows	Uncommon Migrant	No	No
McCown's Longspur Eastern great plains and great basin foothills grasslands, basin-prairie shrublands, agricultural areas	Common Breeder	Yes	Yes
Mountain Plover Shortgrass Prairie, Shrub-steppe	Uncommon Breeder	No	No
Pinyon Jay Pine-juniper, woodland-chaparral	Uncommon Transient	No	No
Prairie Falcon Cliffs, all habitats	Common Transient	Yes	Yes
Red-headed Woodpecker Cottonwood-riparian, ponderosa pine savannah	Uncommon Breeder	No	No
Sage Thrasher Basin prairie and mountain foothill shrub	Common Breeder	Yes	Yes
Short-eared owl Basin-prairie shrublands, grasslands, marshes, irrigated native meadows, below 7,000 feet	Uncommon Breeder	Yes	Yes
Sprague's Pipit Eastern great plains grasslands	Rare Breeder	No	No
Swainson's Hawk Most habitats below 9,000 feet with open areas for foraging	Common Breeder	Yes	Yes
Upland Sandpiper Eastern great plains grasslands, dryland grass pastures	Uncommon Breeder	Yes	Yes
Williamson's Sapsucker Coniferous forests, aspen	Not Expected	No	No

* Based on USFWS Information, Planning and Conservation System (IPAC), 2013.

sage-grouse, loggerhead shrike, McCown's longspur, sage thrasher, short-eared owl and upland sandpiper have most likely nested on the study area in favorable years. The golden eagle and prairie falcon have only been observed as transients in the area and no nests have been documented on the site. The bald eagle is a migrant and winter resident but does not nest in the area.

The American bittern, burrowing owl, Dickcissel, long-billed curlew, mountain plover and red-headed woodpecker have some habitat in the area but have not been documented on the site. The Cassin's finch, Lewis's woodpecker, marbled godwit, pinyon jay, Sprague's pipit and Williamson's sapsucker have not been documented in the study area either. Habitat for these six species is either not present in the amendment area, or is very poor, so they would not be expected to nest on the site.

5.8 Threatened or Endangered Species (T&E) and Proposed or Candidate Species

As of December, 2013 the USFWS has listed two individual wildlife species and one individual plant species for Crook County, Wyoming. The wildlife species listed are the sage-grouse (Candidate) and northern long-eared bat (Proposed). The plant species listed is the threatened Ute Ladies'-tresses (*Spiranthes diluvialis*). T&E species and other wildlife species surveys were conducted during February through September of 2013. One former T&E (bald eagle) and one candidate (sage-grouse) wildlife species were observed during those surveys.

The bald eagle (a former T&E species) was observed on the study area during February of 2013. This species was removed from the T&E list in July of 2007 but is still discussed in this section for informative purposes. Potential nesting and roosting habitat (large trees) is present, but very limited, on the study area. Bald eagle roosts or concentration areas were not observed

during the 2013 (February) roost surveys. The bald eagle appears to be a transient on the site for foraging in the winter or during migration.

Prairie dog towns provide habitat for black-footed ferrets. No prairie dog towns were observed on the study area or within one mile as presented in Section 5.6. Black-footed ferret surveys are currently not required for black-tailed prairie dog towns statewide (USFWS, 2004).

The sage-grouse was listed as a candidate species in 2010. Two leks have been recorded within several miles of the amendment area. The sage-grouse was not recorded within the amendment area in 2013 but was observed infrequently within one to two miles. More discussion on this species was presented previously in the upland game bird Section 5.2 of this report. The amendment area is not located within a designated sage-grouse core area or connectivity area.

The northern long-eared bat has not been documented in the study area. The coniferous forests or mixed deciduous forests required by this species are not found within the amendment area. However, suitable habitats exist several miles east of the Kendrick amendment area.

No T&E plant species were recorded on the amendment area during the 2013 surveys. The T&E plant species surveys conducted on the amendment area are discussed in Addendum 3.5-A.

5.9 Reptiles and Amphibians

Specific surveys for reptiles and amphibians were conducted for this project. Two frog species were recorded during vocalization surveys and during other field surveys. These frog species included the leopard frog and the chorus frog. During walking surveys along shorelines and riparian areas in August and September of 2013 the leopard frog appeared to be quite common (almost 600 individual adults counted). During spring vocalization surveys the chorus

frog appeared to be the most common frog species and the leopard frog appeared to be uncommon. Other reptiles and amphibian species observed were the tiger salamander, common snapping turtle, painted turtle, short-horned lizard, sagebrush lizard, prairie rattlesnake, bull snake, garter snake and yellow-belly racer. A listing of potentially occurring reptile and amphibian species and observations from the 2013 surveys or from other sources are documented in Appendix A.

5.10 Fish

Fish species were not encountered in any of the waterbodies within the amendment area during 2013. The waterbodies present on the site consist primarily of ephemeral streams and reservoirs/stockponds that tend to dry up during the summer months. Waterbodies within the amendment area are not considered as viable sport fisheries.

6.0 Impacts

The major contiguous block disturbance within the amendment area will be the construction of well fields, roads and pipelines. These disturbances will affect primarily upland grassland and sagebrush shrubland habitats. Many of these disturbances will be temporary and short-term since they may be reclaimed immediately following installation.

Crucial or critical wildlife habitats have not been documented on the amendment or adjacent areas so will not be affected. A few big game animals may be displaced during mining activities but based on the limited disturbance and animal densities these numbers would be insignificant.

Habitat for waterfowl and shorebirds is limited to the Good Lad Creek, Deadman Creek, Little Missouri River, Thompson Creek, Cabin Creek and their tributaries and several

reservoir/stock ponds within the amendment area. These habitats will not be disturbed by mining so habitat for waterfowl, shorebirds, fish, amphibians and other species with an affinity for water or wetlands should not be affected.

Impacts to sage-grouse should be minimal, if at all. The reason low impacts are expected is this species does not frequent the area and the site does not contain an abundance of contiguous suitable sagebrush shrubland habitat. Suitable habitat is present east of the amendment area but there is the potential for this species to be transient on the project site.

Raptor species may be affected by mining activities or by altered prey abundance due to removal of vegetation and soils. Raptor nest sites could be impacted by the location of the well fields or facilities. A total of about 18 currently known intact nest sites exist within the amendment area and adjacent lands. Raptor nest impacts will be mitigated through avoiding activities in these areas during the breeding season or moving nests when impacts are unavoidable.

Other bird, mammal, reptile or amphibian species may be displaced from areas where vegetation and soils are removed. Displacement or impacts could also occur from increased human activity in the area.

Currently several raptor species of conservation concern may be impacted by this operation. The ferruginous hawk and Swainson's hawk have intact nest sites on or adjacent to the amendment area, but were not productive within the site area during 2013. Other USFWS species of conservation concern which probably nest in suitable habitats on the amendment area include the Brewer's sparrow, grasshopper sparrow, loggerhead shrike, McCown's longspur, sage thrasher, short-eared owl and upland sandpiper. There is also the potential for the sage-grouse, burrowing owl, long-billed curlew, dickcissel and golden eagle to nest on the site. Even

if they do not nest on the amendment area these species may be impacted as transients. Mountain plovers have not been recorded in the area and only a minor amount of sparsely vegetated habitat is present in the amendment area so this species should not be affected. Due to the small size of this project all impacts to migratory bird species of conservation concern would be minor and should not affect overall populations.

T&E or other species of concern should not be greatly impacted by this operation. The bald eagle (a former T&E species) is only a winter transient and migrant through the area and should not be adversely affected by this project. There were no active or historic prairie dog towns existing on or within one mile of the amendment area so potential habitat for black-footed ferrets is not present. The northern long-eared bat (Proposed species) has not been recorded, and does not have habitat, within the amendment area. The sage-grouse (Candidate species) has been recorded on the amendment area in the past but does not appear to frequent the area. The Ute ladies'-tresses orchid was not recorded along any of the wetland portions of the amendment area.

7.0 Mitigation and Monitoring

Impacted wildlife habitats will be mitigated following disturbance by establishing vegetation in accordance with the approved seeding and reclamation plan. Fences, if needed, will be constructed to the required WG&FD standards. Raptor nests will be protected or relocated. New powerlines will be constructed in accordance with the Avian Power Line Interaction Committee (APLIC), 2006, "Suggested Practices for Avian Protection on Power Lines: The state of the Art in 2006." All ponds with toxic water will be covered or otherwise protected to prevent wildlife use. Controlled speed limits will be implemented to reduce wildlife/vehicle collisions. Employees will be educated about wildlife protection, sensitive

species and game laws through use of applicable publications and during safety meetings. The implementation of all of the above commitments will help alleviate impacts to wildlife.

Wildlife monitoring may be completed for game birds, raptors, species of concern, T&E and proposed or candidate species as required by the USFWS and/or WG&FD.

8.0 Conclusion

This report provides wildlife baseline data for the Strata Kendrick Project Amendment area. Investigated were big game, game birds, raptors, migratory birds of conservation concern, threatened or endangered species, proposed or candidate species, reptiles and amphibians, and fish. One proposed species, the northern long-eared bat, one candidate species, the sage-grouse and two threatened or endangered species, the black-footed ferret and Ute ladies'-tresses orchid, have habitat within the region, locally or seasonally. However the amendment area itself only contains preferred habitat for the sage-grouse and the Ute ladies-tresses orchid. The bald eagle (a former T&E species) has been observed on site but is only a transient or migrant to the area. The Ute ladies'-tresses orchid was not observed in 2013 during specific surveys conducted on the amendment area for this plant species. The sage-grouse has been observed infrequently on and within two miles of the amendment area and the northern long-eared bat has not been recorded on the area. The limited amount of disturbance projected by this mining operation will have minimal impacts on most wildlife species. No crucial big game winter ranges or critical endangered species habitats will be affected. Wildlife monitoring will be implemented as required but is not projected at this time.

9.0 References

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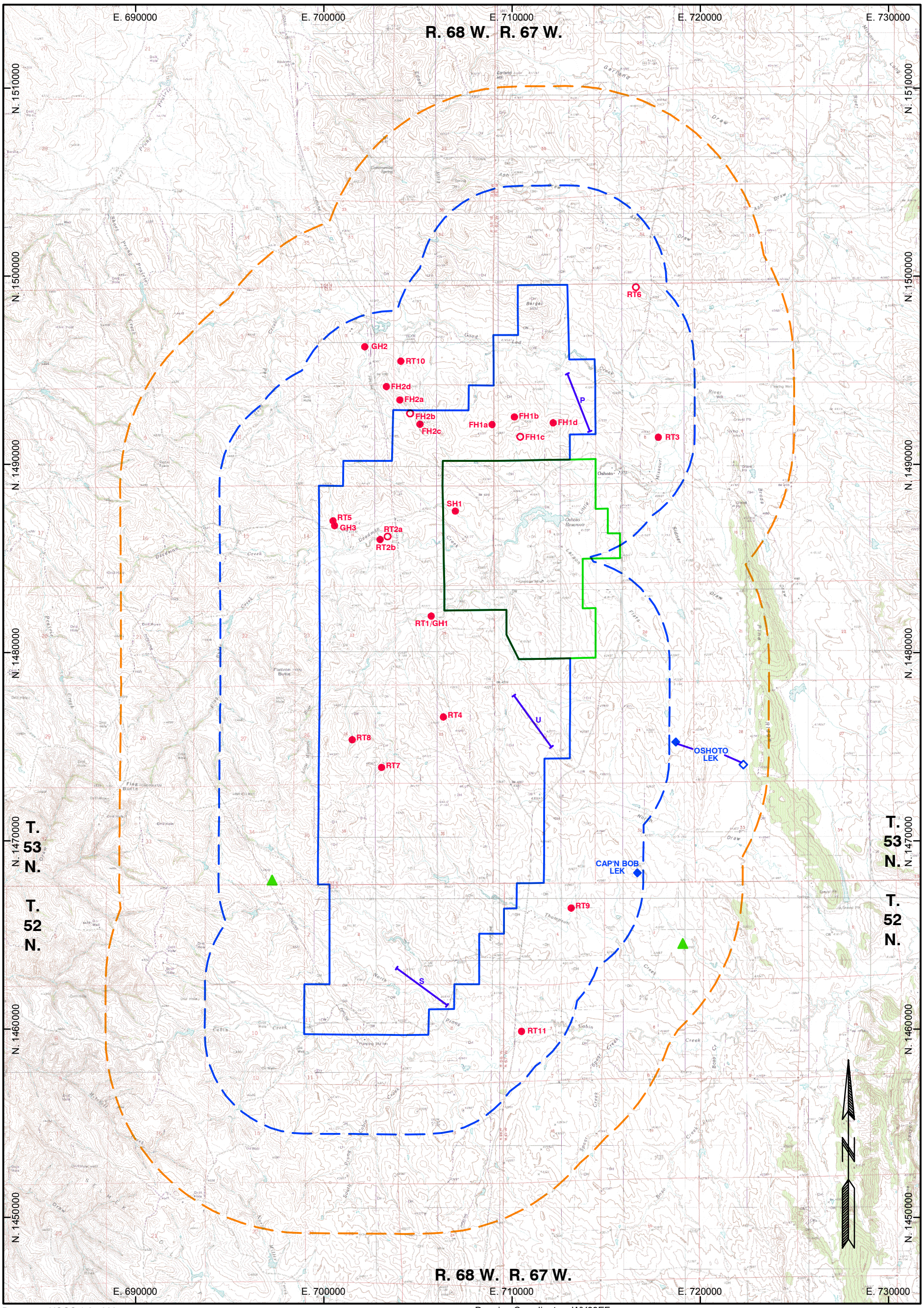


Basemap: USGS 1:24,000
Brislawn School, Garland Hill, Flag Butte, Oshoto, Rozet NE, and Edith Creek

0 2,500 5,000 7,500 10,000
GRAPHIC SCALE (FEET)

Drawing Coordinates: WY83EF

LEGEND

- ROSS LICENSE NO. SUA-1601 BOUNDARY
- PROPOSED KENDRICK EXPANSION AREA BOUNDARY
- ONE-MILE BUFFER FROM PROPOSED KENDRICK EXPANSION AREA BOUNDARY
- TWO-MILE BUFFER FROM PROPOSED KENDRICK EXPANSION AREA BOUNDARY
- RAPTOR NEST - INTACT
- RAPTOR NEST - NO LONGER INTACT

RAPTOR DESIGNATIONS
FH FERRUGINOUS HAWK
RT RED-TAILED HAWK
SH SWAINSON'S HAWK
GH GREAT HORNED OWL

- SAGE-GROUSE LEK SITE - ACTIVE IN 2010
- SAGE-GROUSE LEK SITE - INACTIVE IN 2010
- SHARP-TAILED GROUSE DANCING GROUND

BREEDING BIRD TRANSECTS
U UPLAND GRASSLAND
S SAGEBRUSH SHRUBLAND
P PASTURELAND / HAYLAND

STRATA ENERGY INC
A WHOLLY-OWNED SUBSIDIARY OF PENINSULA ENERGY LIMITED

ROSS ISR PROJECT
CROOK COUNTY, WY
LICENSE NO. SUA-1601
P.O. BOX 2318, 1900 W WARLOW UNIT A
GILLETTE, WY 82717

REVISIONS	
Date	Description

KENDRICK EXPANSION AREA
ENVIRONMENTAL REPORT
ADDENDUM 3.5-B

MAP 1
WILDLIFE INVENTORY

Drawn By: MBM
Checked By: BJS
Date: 2/27/15
FILE: KPA1 WILDLIFE

WWC ENGINEERING
www.wwcengineering.com

K:\Sheridan\Strata\12145_ACAD_WY83E\DWGS_NRC\KPA1_WILDLIFE.dwg 2/27/2015 10:59:16 AM mal mcgill

Appendix A

Wildlife Species List

Appendix A. List of wildlife species with the potential of occurring on or within several miles of the Kendrick Project Area.

Common Name	Scientific Name	Observed in the Area
INSECTIVORES	INSECTIVORA	
Masked Shrew	Sorex cinereus	
Hayden's Shrew	Sorex haydeni	
Merriam's Shrew	Sorex merriami	
Vagrant Shrew	Sorex vagrans	
BATS	CHIROPTERA	
Long-eared Myotis	Myotis evotis	
Northern Long-eared Bat	Myotis septentrionalis	
Little Brown Myotis	Myotis lucifugus	
Long-legged Myotis	Myotis volans	
Hoary Bat	Lasiurus cinereus	
Silver-haired Bat	Lasionycteris noctivagans	
Big Brown Bat	Eptesicus fuscus	
LAGOMORPHS	LAGOMORPHA	
Desert Cottontail	Sylvilagus audubonii	*
Mountain Cottontail	Sylvilagus nuttallii	
Black-tailed Jackrabbit	Lepus californicus	*
White-tailed Jackrabbit	Lepus townsendii	*
RODENTS	RODENTIA	
Least Chipmunk	Tamias minimus	*
Yellow-bellied Marmot	Marmota flaviventris	
Thirteen-lined Ground Squirrel	Spermophilus tridecemlineatus	*
Black-tailed Prairie Dog	Cynomys ludovicianus	*
Eastern Fox Squirrel	Sciurus niger	*
Red Squirrel	Tamiasciurus hudsonicus	
Northern Pocket Gopher	Thomomys talpoides	*
Plains Pocket Gopher	Geomys bursarius	
Olive-backed Pocket Mouse	Perognathus fasciatus	
Silky Pocket Mouse	Perognathus flavus	
Hispid Pocket Mouse	Chaetodipus hispidus	
Ord's Kangaroo Rat	Dipodomys ordii	*
Beaver	Castor canadensis	*
Western Harvest Mouse	Reithrodontomys megalotis	
Plains Harvest Mouse	Reithrodontomys montanus	
White-footed Mouse	Peromyscus leucopus	

Appendix A. Wildlife species – mammal species (Continued).

Common Name	Scientific Name	Observed in the Area
Deer Mouse	Peromyscus maniculatus	*
Northern Grasshopper Mouse	Onychomys leucogaster	
Bushy-tailed Woodrat	Neotoma cinerea	*
Long-tailed Vole	Microtus longicaudus	
Prairie Vole	Microtus ochrogaster	*
Meadow Vole	Microtus pennsylvanicus	
Sagebrush Vole	Lemmiscus curtatus	
Muskrat	Ondatra zibethicus	*
Norway Rat	Rattus norvegicus	
House Mouse	Mus musculus	
Meadow Jumping Mouse	Zapus hudsonius	
Western Jumping Mouse	Zapus princeps	
Porcupine	Erethizon dorsatum	*
CARNIVORES	CARNIVORA	
Coyote	Canis latrans	*
Swift Fox	Vulpes velox	
Red Fox	Vulpes vulpes	*
Gray Fox	Urocyon cinereoargenteus	
Black Bear	Ursus americanus	
Raccoon	Procyon lotor	*
Short-tailed Weasel	Mustela erminea	
Long-tailed Weasel	Mustela frenata	*
Black-footed Ferret	Mustela nigripes	
Mink	Mustela vison	
Badger	Taxidea taxus	*
Eastern Spotted Skunk	Spilogale putorius	
Striped Skunk	Mephitis mephitis	*
Mountain Lion	Felis concolor	*
Bobcat	Felis rufus	*
EVEN-TOED UNGULATES	ARTIODACTYLA	
American Elk	Cervus elaphus	*
Mule Deer	Odocoileus hemionus	*
White-tailed Deer	Odocoileus virginianus	*
Pronghorn	Antilocapra americana	*

Appendix A. Wildlife species – bird species (Continued).

Common Name	Scientific Name	Observed in the Area
WATERFOWL	ANSERIFORMES	
Snow Goose	Chen caerulescens	
Canada Goose	Branta canadensis	*
Trumpeter Swan	Cygnus buccinator	*
Tundra Swan	Cygnus columbianus	*
Wood Duck	Aix sponsa	
Gadwall	Anas strepera	*
American Wigeon	Anas americana	*
Mallard	Anas platyrhynchos	*
Blue-winged Teal	Anas discors	*
Cinnamon Teal	Anas cyanoptera	*
Green-winged Teal	Anas crecca	*
Northern Shoveler	Anas clypeata	*
Northern Pintail	Anas acuta	*
Canvasback	Aythya valisineria	*
Redhead	Aythya americana	*
Ring-necked Duck	Aythya collaris	*
Lesser Scaup	Aythya affinis	*
Bufflehead	Bucephala albeola	*
Common Goldeneye	Bucephala clangula	*
Common Merganser	Mergus merganser	*
Ruddy Duck	Oxyura jamaicensis	*
GALLINACEOUS BIRDS	GALLIFORMES	
Gray Partridge	Perdix perdix	
Greater Sage-grouse	Centrocercus urophasianus	*
Sharp-tailed grouse	Tympanuchus phasianellus	*
Turkey	Meleagris gallopavo	*
GREBES	PODICIPEDIFORMES	
Pied-billed Grebe	Podilymbus podiceps	*
Horned Grebe	Podiceps auritus	*
Eared Grebe	Podiceps nigricollis	*
Western Grebe	Aechmophorus occidentalis	*
PELICANS	PELICANIFORMES	
White Pelican	Pelecanus erythrorhynchos	*
Double-crested Cormorant	Phalacrocorax auritus	*
American Bittern	Botaurus lentiiginosus	

Appendix A. Wildlife species – bird species (Continued).

Common Name	Scientific Name	Observed in the Area
HERONS	CICONIFORMES	
Great Blue Heron	Ardea herodias	*
Green Heron	Butorides striatus	
Black-crowned Night-Heron	Nycticorax nycticorax	
White-faced Ibis	Plegadis chihi	
VULTURES, HAWKS AND FALCONS	FALCONIFORMES	
Turkey Vulture	Cathartes aura	*
Osprey	Pandion haliaetus	*
Bald Eagle	Haliaeetus leucocephalus	*
Northern Harrier	Circus cyaneus	*
Sharp-shinned Hawk	Accipiter striatus	*
Cooper's Hawk	Accipiter cooperii	*
Northern Goshawk	Accipiter gentilis	
Swainson's Hawk	Buteo swainsoni	*
Red-tailed Hawk	Buteo jamaicensis	*
Ferruginous Hawk	Buteo regalis	*
Rough-legged Hawk	Buteo lagopus	*
Golden Eagle	Aquila chrysaetos	*
American Kestrel	Falco sparverius	*
Merlin	Falco columbarius	
Gyrfalcon	Falco rusticolus	
Peregrine Falcon	Falco peregrinus	
Prairie Falcon	Falco mexicanus	*
CRANES AND RAILS	GRUIFORMES	
Sora Rail	Porzana Carolina	*
American Coot	Fulica americana	*
Sandhill Crane	Grus canadensis	
SHOREBIRDS	CHARADRIIFORMES	
Semipalmated Plover	Charadrius semipalmatus	
Killdeer	Charadrius vociferus	*
Mountain Plover	Charadrius montanus	
Black-necked Stilt	Himantopus mexicanus	
American Avocet	Recurvirostra americana	*
Greater Yellowlegs	Tringa melanoleuca	
Lesser Yellowlegs	Tringa flavipes	

Appendix A. Wildlife species – bird species (Continued).

Common Name	Scientific Name	Observed in the Area
Solitary Sandpiper	Tringa solitaria	
Willet	Catoptrophorus semipalmatus	*
Spotted Sandpiper	Actitis macularia	*
Upland Sandpiper	Bartramia longicauda	*
Whimbrel	Numenius phaeopus	
Long-billed Curlew	Numenius americanus	
Semipalmated Sandpiper	Calidris pusilla	
Western Sandpiper	Calidris mauri	
Least Sandpiper	Calidris minutilla	
Baird's Sandpiper	Calidris bairdii	
Pectoral Sandpiper	Calidris melanotos	
Long-billed Dowitcher	Limnodromus scolopaceus	
Wilson's Snipe	Gallinago delicata	*
Wilson's Phalarope	Phalaropus tricolor	*
Red-necked Phalarope	Phalaropus lobatus	
Franklin's Gull	Larus pipixcan	
Bonaparte's Gull	Larus philladelphia	
Ring-billed Gull	Larus delawarensis	
California Gull	Larus californicus	*
Herring Gull	Larus argentatus	*
Common Tern	Sterna hirundo	
Forster's Tern	Sterna forsteri	
Black Tern	Chlidonias niger	*
PIGEONS AND DOVES	COLUMBIFORMES	
Rock Pigeon	Columba livia	*
Eurasian Collard-dove	Streptopelia decaocto	
Mourning Dove	Zenaida macroura	*
CUCKOOS	CUCULIFORMES	
Black-billed Cuckoo	Coccyzus erythropthalmus	
Yellow-billed Cuckoo	Coccyzus americanus	
OWLS	STRIGIFORMES	
Barn Owl	Tyto alba	
Eastern Screech-Owl	Megascops asio	
Great Horned Owl	Bubo virginianus	*
Burrowing Owl	Athene cunicularia	
Long-eared Owl	Asio otus	

Appendix A. Wildlife species – bird species (Continued).

Common Name	Scientific Name	Observed in the Area
Short-eared Owl	Asio flammeus	*
Northern Saw-whet Owl	Aegolius acadicus	
GOATSUCKERS	CAPRIMULGIFORMES	
Common Nighthawk	Chordeiles minor	*
Common Poorwill	Phalaenoptilus nuttallii	
SWIFTS	APODIFORMES	
Chimney Swift	Chaetura pelagica	
White-throated Swift	Aeronautes saxatalis	
HUMMINGBIRDS	APODIFORMES	
Broad-tailed Hummingbird	Selasphorus platycercus	
Rufous Hummingbird	Selasphorus rufus	
KINGFISHERS	CORACIIFORMES	
Belted Kingfisher	Ceryle alcyon	*
WOODPECKERS	PICIFORMES	
Lewis's Woodpecker	Melanerpes lewis	
Red-headed Woodpecker	Melanerpes erythrocephalus	
Red-naped Sapsucker	Sphyrapicus varius	
Downy Woodpecker	Picoides pubescens	
Hairy Woodpecker	Picoides villosus	*
Northern Flicker	Colaptes auratus	*
PERCHING BIRDS	PASSERIFORMES	
FLYCATCHERS	TYRANNIDAE	
Western Wood-Pewee	Contopus sordidulus	*
Willow Flycatcher	Empidonax traillii	
Least Flycatcher	Empidonax minimus	
Cordilleran Flycatcher	Empidonax occidentalis	
Say's Phoebe	Sayornis saya	*
Cassin's Kingbird	Tyrannus vociferous	
Western Kingbird	Tyrannus verticalis	*
Eastern Kingbird	Tyrannus tyrannus	*

Appendix A. Wildlife species – bird species (Continued).

Common Name	Scientific Name	Observed in the Area
SHRIKES	LANIIDAE	
Northern Shrike	Lanius excubitor	
Loggerhead Shrike	Lanius ludovicianus	*
VIREOS	VIREONIDAE	
Solitary Vireo	Vireo solitarius	
Warbling Vireo	Vireo gilvus	
Red-eyed Vireo	Vireo olivaceus	
JAYS AND CROWS	CORVIDAE	
Gray Jay	Perisoreus Canadensis	
Blue jay	Cyanocitta cristata	*
Pinyon Jay	Gymnorhinus cyanocephalus	
Clark's nutcracker	Nicifraga columbiana	
Black-billed Magpie	Pica pica	*
American Crow	Corvus brachyrhynchos	*
Common Raven	Corvus corax	*
LARKS	ALAUDIDAE	
Horned Lark	Eremophila alpestris	*
SWALLOWS	HIRUDINIDAE	
Tree Swallow	Tachyceneta bicolor	*
Violet-green Swallow	Tachycineta thalassina	*
Northern Rough-winged Swallow	Stelgidopteryx serripennis	*
Bank Swallow	Riparia riparia	*
Cliff Swallow	Hirundo pyrrhonota	*
Barn Swallow	Hirundo rustica	*
CHICKADEES	PARIDAE	
Black-capped Chickadee	Parus atricapillus	*
Mountain Chickadee	Parus gambeli	
NUTHATCHES	SITTIDAE	
Red-breasted Nuthatch	Sitta canadensis	*
White-breasted Nuthatch	Sitta carolinensis	
Pygmy Nuthatch	Sitta pygmaea	

Appendix A. Wildlife species - bird species (Continued).

Common Name	Scientific Name	Observed in the Area
WRENS	TROGLODYTIDAE	
Rock Wren	Salpinctes obsoletus	*
House Wren	Troglodytes aedon	*
THRUSHES, SOLITARES, AND BLUEBIRDS	TURIDAE	
Golden-crowned Kinglet	Regulus satrapa	
Ruby-crowned Kinglet	Regulus calendula	
Mountain Bluebird	Sialia currucoides	*
Townsend's Solitaire	Myadestes townsendii	
Veery	Cartharus fuscens	
Swainson's Thrush	Catharus ustulatus	
Hermit Thrush	Catharus gattatus	
American Robin	Turdus migratorius	*
MOCKINGBIRDS AND THRASHERS	MIMIDAE	
Gray Catbird	Dumetalla carolinensis	
Northern Mockingbird	Mimus polyglottos	
Sage Thrasher	Oreoscoptes montanus	*
Brown Thrasher	Toxostoma rufum	*
STARLINGS	STURNIDAE	
European Starling	Sturnus vulgaris	*
PIPITS AND WAGTAILS	MOTACILLIDAE	
American Pipit	Anthus rubescens	
WAXWINGS	BOMBYCILLIDAE	
Bohemian Waxwing	Bombycilla garrulus	
Cedar Waxwing	Bombycilla cedrorum	
WARBLERS	PARULIDAE	
Orange-crowned Warbler	Vermivora celata	*
Yellow Warbler	Dendroica petechia	*
Chestnut-sided Warbler	Dendroica pensylvanica	
Yellow-rumped Warbler	Dendroica coronata	*
Townsend’s Warbler	Dendroica townsendi	
Black-and-white Warbler	Mniotilta varia	

Appendix A. Wildlife species - bird species (Continued).

Common Name	Scientific Name	Observed in the Area
American Redstart	Setophaga ruticilla	
Northern Waterthrush	Seiurus noveboracensis	
MacGillivray's Warbler	Oporornis tolmiei	
Common Yellowthroat	Geothlypis trichas	*
Wilson's Warbler	Wilsonia pusilla	*
Yellow-breasted Chat	Icteria virens	
TANAGERS	THRAUPIDAE	
Western Tanager	Piranga ludoviciana	
TOWHEES	FRINGILLIDAE	
Green-tailed Towhee	Pipilo chlorurus	
Spotted Towhee	Pipilo maculatus	*
SPARROWS	FRINGILLIDAE	
American Tree Sparrow	Spizella arborea	
Chipping Sparrow	Spizella passerina	*
Clay-colored Sparrow	Spizella pallida	
SPARROWS	FRINGILLIDAE	
Brewer's Sparrow	Spizella breweri	*
Field Sparrow	Spizella pusilla	
Vesper Sparrow	Pooecetes gramineus	*
Lark Sparrow	Chondestes grammacus	*
Lark Bunting	Calamospiza melanocorys	*
Savannah Sparrow	Passerculus sandwichensis	
Grasshopper Sparrow	Ammodramus savannarum	*
Fox Sparrow	Passerella iliaca	
Song Sparrow	Melospiza melodia	
Lincoln's Sparrow	Melospiza lincolnii	
White-throated Sparrow	Zonotrichia albicollis	
Harris' Sparrow	Zonotrichia querula	
White-crowned Sparrow	Zonotrichia leucophrys	
Dark-eyed Junco	Junco hyemalis	*
LONGSPURS	FRINGILLIDAE	
McCown's Longspur	Calcarius mccownii	*
Lapland Longspur	Calcarius lapponicus	

Appendix A. Wildlife species - bird species (Continued).

Common Name	Scientific Name	Observed in the Area
Chestnut-collared Longspur	Calcarius ornatus	
Snow Bunting	Plectrophenax nivalis	
GROSBEAKS AND BUNTINGS	FRINGILLIDAE	
Rose-breasted Grosbeak	Pheucticus ludovicianus	
Black-headed Grosbeak	Pheucticus meloncephalus	
Lazuli Bunting	Passerina amoena	
Indigo Bunting	Passerina cyanea	
CROSSBILLS	FRINGILLIDAE	
Dickcissel	Spiza Americana	
Red Crossbill	Loxia curvirostra	
BLACKBIRDS, ORIOLES AND COWBIRDS	ICTERIDAE	
Bobolink	Dolichonyz oryzivorus	
Red-winged Blackbird	Agelaius phoeniceus	*
Western Meadowlark	Sturnella neglecta	*
Yellow-headed Blackbird	Xanthocephalus xanthocephalus	*
Brewer's Blackbird	Euphagus cyanocephalus	*
Common Grackle	Quiscalus quiscula	*
Brown-headed Cowbird	Molothrus ater	*
Bullock's Oriole	Icterus bullockii	*
ROSY FINCHES, FINCHES AND REDPOLLS	FRINGILLIDAE	
Gray-crowned Rosy Finch	Leucosticte tephrocotis	
Cassin's Finch	Carpodacus cassinii	
House Finch	Carpodacus mexicanus	*
Common Redpoll	Carduelis flammea	
Pine Siskin	Carduelis pinus	*
American Goldfinch	Carduelis tristis	
Evening Grosbeak	Coccothraustes vespertinus	
WEAVER FINCHES	PLOCEIDAE	
House sparrow	Passer domesticus	*

Appendix A. Wildlife species – reptile and amphibian species (Continued).

Common Name	Scientific Name	Observed in Area
SALAMANDERS	AMBYSTOMATIDAE	
Tiger Salamander	Ambystoma tigrinum	*
SPADEFOOTS	PELOBATIDAE	
Plains Spadefoot	Scaphiopus bombifrons	
TOADS	BUFONIDAE	
Great Plains Toad	Bufo cognatus	
Woodhouse's Toad	Bufo woodhousei woodhousei	
TREE FROGS	HYLINDAE	
Boreal Chorus Frog	Pseudaris triseriata maculate	*
TRUE FROGS	RANIDAE	
Bullfrog	Rana catesbeiana	
Northern Leopard Frog	Rana pipiens	*
SNAPPING TURTLES	CHELYDRIDAE	
Common Snapping Turtle	Chelydra serpentina serpentina	*
BOX TURTLES	TESTUDINIDAE	
Western Painted Turtle	Chrysemys picta belli	*
SPINEY LIZARDS	IGUANIDAE	
Eastern Short-horned Lizard	Phrynosoma douglassi brevirostre	*
Northern Sagebrush Lizard	Sceloporus graciosus graciosus	*
PIT VIPERS	CROTALIDAE	
Prairie Rattlesnake	Crotalus viridis viridis	*
COLUBRID SNAKES	COLUBRIDAE	
Plains Hognose Snake	Heterondon nasicus nasicus	
Bullsnake	Pituophis melanoleucas sayi	*
Wandering Garter Snake	Thamnophis elegans vagrans	*
Eastern Yellowbelly Racer	Coluber constrictor flaviventris	*

Appendix A. Wildlife species – fish species (Continued).

Common Name	Scientific Name	Observed in Area
MINNOWS	CYPRINIDAE	
Common Carp	Cyprinus carpio	
Golden Shiner	Notemigonus crysoleucas	
Plains Minnow	Hybognathus placitus	
Fathead Minnow	Pimephales promelas	
BULLHEAD CATFISHES	ICTALURIDAE	
Black Bullhead	Ameiurus melas	*
SUNFISH	CENTRARCHIDAE	
Green Sunfish	Lepomis cyanellus	*
Bluegill	Lepomis macrochirus	*
SUCKERS	CATOSTOMIDEA	
White Sucker	Catastomus commersoni	*

Appendix B

Wildlife Sampling Plan

2013 Strata Energy – Ross ISR Uranium Mine Permit No. 802
Proposed Kendrick Amendment Area
Appendix D9 Wildlife Baseline Inventory Sampling Plan

RE: Previous Correspondence for Ross Permit No. 802 under ES-61411/WY10CPA0108

Background

Wildlife inventories were completed for the current Ross ISR Permit No. 802 in 2009 and 2010. Additional wildlife surveys were completed on the area in 2012. In 2009-2010 specific surveys were completed for upland game birds, nesting raptors, breeding birds, threatened or endangered (T&E) species, migratory birds of high federal interest (MBHFI), amphibians and Oshoto Reservoir was surveyed for fish. Opportunistic observations and habitat affinities were noted for all other classes of wildlife including big game, waterfowl, shorebirds, passerine birds, predators, small mammals, lagomorphs and reptiles. The Ross ISR Permit No. 802 and surrounding lands were surveyed in 2012 primarily for sage-grouse, raptor nests, T&E and MBHFI. The current Ross ISR Permit No. 802 area and proposed Kendrick Amendment Area are shown on the map included with this plan.

Habitat Mapping and Descriptions

Wildlife habitats will be mapped and defined as required with data included in Appendix D9. Any habitat information presented in Appendix D8 for this area will also be referenced in Appendix D9. Surveys already completed indicate that upland grassland is the major habitat type. Some sagebrush shrubland habitats are present also but in lesser amounts. Other habitats present are wetlands along ephemeral or intermittent streams/reservoirs, pastureland/hayland and wooded draws. Prior disturbance is present on the site from oil and gas development activities and county roads. No crucial or critical habitats are currently known to exist within the area.

Habitat Affinity

Habitat affinities for wildlife species on the area will be determined by seasonal data to be collected for each class of wildlife discussed in the following sections.

Big Game

Specific big game surveys will not be required for this amendment area. A review of WGFD information indicates that no crucial big game ranges are present. Incidental field observations of big game species will be recorded for the habitat affinity analyses.

Upland Game Birds

Lek surveys for sage-grouse and sharp-tailed grouse will be completed during the late March to early May period. Surveys will be conducted for the current permit area, amendment area and two mile perimeter. A search of WGFD records indicates the site is not within a core area and no sage-grouse leks are present within the current permit area or within the proposed amendment area. This may be due to the lack of extensive sagebrush shrublands within the general area. However, the Oshoto Lek and the Cap'n Bob Lek are located about one mile to the east of the amendment area as shown on the attached map. These leks were surveyed in 2010 and again in 2012 and they will also be surveyed under this sampling plan in 2013. If additional sage-grouse leks are found within two miles of the permit/amendment area then a total of three counts will be made for each lek discovered if seasonal timing allows. Sage-grouse brood surveys will not be required as past surveys completed for the mining industry indicated they provided very little data.

Raptors

Raptor nest surveys will be conducted during the breeding season and during all survey periods beginning in February of 2013 and will follow WGFD and USFWS protocols. Surveys will include the permit/amendment area and one mile perimeter. Nest activity and production surveys will be completed in March through July.

Waterfowl and Shorebirds

The amendment area contains several small stock ponds/reservoirs and ephemeral or intermittent drainages. Some of these areas may contain water during the waterfowl migration or breeding season. Opportunistic observations will be made during the various surveys for other species (game birds, raptors, T&E, MBHFI, etc.) to document use of the area by waterbirds.

Passerine Birds

The USFW has requested breeding bird surveys as a method of identifying Migratory Birds of High Federal Interest that may inhabit the area. These surveys will consist of belt transects 1000 meters long by 100 meters wide. At least one belt transect will be located within each of the major habitat types. The width and length of transects will have to be adjusted for the wetland/reservoir habitats. Each transect will be surveyed twice, approximately two weeks apart, between May 15 and June 15. The transects will be surveyed by walking the centerline and recording each bird observed or heard within 50 meters on either side of the observer. The surveys will be completed between ½ hour prior to sunrise and 9:30AM. All species of passerine or other bird species observed during other surveys will also be recorded.

Other Mammals – Predators, Small Mammals, Lagomorphs

Surveys will be completed for the presence of swift fox and den sites as requested by the WGFD. Black-tailed prairie dog towns will also be mapped if present. No specific surveys are proposed for other predators or small mammals. However, all species of mammals observed during other surveys will be recorded.

Threatened or Endangered Species

The surveys required by the USFWS will be completed for T&E species that have the potential for inhabiting the area. At this time the USFWS Ecological Services Office in Cheyenne, Wyoming does not include any T&E wildlife on their list of species that occur or may be affected by projects located in Crook County but the greater sage-grouse is currently designated as a candidate for listing. Surveys will be conducted for the greater sage-grouse as described in the section of this plan on upland game birds. The USFWS list for Crook County includes one threatened plant species, the Ute Ladies'-tresses orchid. The proposed Kendrick Amendment area contains potential habitat for the Ute Ladies'-tresses orchid so surveys for that plant species will be completed with the vegetation surveys in accordance with USFWS guidelines.

Migratory Birds of High Federal Interest (MBHFI)

MBHFI surveys will be completed as required for species that have habitat present on the permit area. Additional MBHFI surveys will be completed as the breeding bird surveys presented in a previous section for passerine birds. Bald eagle roost surveys will be conducted during January or February. Mountain plover surveys will be conducted if suitable habitats are present. Any other MBHFI species observed during the course of other field surveys conducted in the area will also be recorded.

Reptiles and Amphibians

Aural surveys and egg mass surveys completed in 2010 on the Ross ISR Permit No. 802 provided very little data on the presence of the leopard frog. However the surveys conducted by walking suitable wetland and other aquatic sites in mid to late summer resulted in over 500 individual leopard frogs counted. Therefore the latter method will be used for leopard frog surveys in 2013. Any amphibians or reptiles observed or heard during other surveys completed on the area will also be documented.

Fish and Benthic Invertebrates

The proposed Kendrick Amendment area does not contain any perennial streams or large reservoirs that would support fisheries. Therefore specific aquatic surveys will not be conducted due to the lack of suitable waters that would support viable fisheries, lack of perennial streams and the fact there will be minimal to no disturbance of aquatic habitats from this project.

Species List

A wildlife species list will be prepared for the Kendrick Amendment area. This list will include species actually observed in the area and species with the potential to occur within the area.

Wetlands

Wetland surveys will be completed by others as directed by the Corps and will be included in Appendix D10 as required.

Appendix C

Correspondence

United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
5353 Yellowstone Road, Suite 308A
Cheyenne, Wyoming 82009

In Reply Refer To:
06E13000/WY10CPA0108a

MAR 11 2013

Mr. Jim Orpet
Intermountain Resources
P.O. Box 1589
Laramie, Wyoming 82073

Dear Mr. Orpet:

Thank you for your letter of February 8, 2013, received in our office on February 11, with the enclosed wildlife sampling plan (Wildlife Plan) for the Kendrick Amendment (Amendment) to the Strata Energy Ross In-Situ Recovery (Ross ISR) Uranium Project (WDEQ-LQD Permit No. 802). The Amendment area, located north of Moorcroft, Wyoming in T52-53N, R67-68W, adds an additional 7,890.1 acres, both private and State land, to the Ross ISR Uranium Project. Our office previously reviewed the Ross ISR Uranium Project Wildlife Plan in a letter dated April 14, 2010, referenced ES 61411/WY10CPA0108. Intermountain Resources requests that the U.S. Fish and Wildlife Service (Service) review and approve the Wildlife Plan for the Amendment area and provide any additional information and concerns.

The Amendment Wildlife Plan states that wildlife inventories were completed for the Ross ISR Uranium Project in 2009 and 2010. Additional surveys were completed in the area in 2012. In 2009-2010, surveys were completed for upland game birds, nesting raptors, breeding birds, threatened and endangered (T&E) species, migratory birds of high federal interest (MBHFI), and amphibians. The Oshoto Reservoir was surveyed for fish. The Ross ISR Uranium Project area and surrounding lands (generally a 1-mile buffer) were surveyed in 2012 for greater sage-grouse (*Centrocercus urophasianus*), raptor nests, T&E species, and MBHFI.

The Service finds the proposed Amendment Wildlife Plan satisfactory. In the Wildlife Plan, Intermountain Resources proposes to conduct greater sage-grouse lek surveys in 2013. The Amendment area is not in a greater sage-grouse core area. Raptor nest surveys will be conducted during the nesting season beginning February 2013 and will include the Amendment area and a 1-mile perimeter. Nest activity and production surveys will be completed in March through July. Breeding bird surveys for MBHFI will be conducted between May 15 and June 15. Black-tailed prairie dog (*Cynomys ludovicianus*) towns will be mapped if present. Surveys for Ute Ladies'-

tresses (*Spiranthes diluvialis*) will be conducted in accordance with Service guidelines. Bald eagle (*Haliaeetus leucocephalus*) roost surveys will be completed in January or February. Mountain plover (*Charadrius montanus*) surveys will be completed where suitable habitats are present.

You have requested any other information that we have for this area. Please refer to our April 14, 2010 letter (ES-61411/WY10CPA0108) for more information on species that may occur in the area. Also, please note that the Service has transitioned to a new online program to deliver species lists: the Information, Planning, and Conservation (IPaC) system. To obtain a current list of endangered, threatened, proposed, and candidate species and their designated and proposed critical habitat that occur in or may be affected by actions associated with your proposed project, please visit our website at http://ecos.fws.gov/ipac/. This website will provide you with an immediate response to your species list request. The response will also include information regarding other Service trust authorities.

We appreciate your efforts to ensure the conservation of endangered, threatened, and candidate species and migratory birds. If you have questions regarding this letter or your responsibilities under the ESA and/or other authorities or resources described above, please contact Pauline Schuette of my office at the letterhead address or phone (307) 684-1069.

Sincerely,

For R. Mark Sattelberg
Field Supervisor
Wyoming Field Office

cc: WDEQ-LQD, Program Supervisor, Sheridan, WY (M. Rogaczewski)
WGFD, Non-game Coordinator, Lander, WY (B. Oakleaf)
WGFD, Statewide Habitat Protection Coordinator, Cheyenne, WY (M. Flanderka)

WYOMING GAME AND FISH DEPARTMENT

5400 Bishop Blvd. Cheyenne, WY 82006

Phone: (307) 777-4600 Fax: (307) 777-4699

wgfd.wyo.gov

March 7, 2013

WER 12050
Intermountain Resources
2013 Strata Energy-Ross ISR Uranium Mine Permit No. 802
Proposed Kendrick Amendment Area
Appendix D9 Wildlife Baseline Inventory Sampling Plan
Crook County

Jim Orpet
Intermountain Resources
PO Box 1589
Laramie, WY 82073

Dear Mr. Orpet:

The staff of the Wyoming Game and Fish Department has reviewed the 2013 Strata Energy-Ross ISR Uranium Mine Permit No. 802 Proposed Kendrick Amendment Area Appendix D9 Wildlife Baseline Inventory Sampling Plan in Crook County. We offer the following comments for your consideration.

Terrestrial Considerations:

The wildlife sampling plan provided is appropriate for this site. Specific considerations have been provided in previous letters and conversations pertaining to this project. We have no additional recommendations at this time and look forward to reviewing the wildlife survey reports as they become available.

Aquatic Considerations:

We support the monitoring of any amphibians and reptiles observed or heard during other surveys completed on the area will also be documented.

"Conserving Wildlife - Serving People"

Thank you for the opportunity to comment. If you have any questions or concerns, please contact Zack Walker, Statewide Herpetological Coordinator, at 307-473-3406, Paul Mavrakis, Sheridan Region Fisheries Supervisor, at 307-672-7418 Ext. 236, or Scott Gamo, Staff Terrestrial Biologist, at 307-777-4509.

Sincerely,

for John Emmerich
Deputy Director

JE/mf/gb

cc: USFWS
Paul Mavrakis, Sheridan Region
Zack Walker, Casper Region
Erika Peckham, Sheridan Region
Lynn Jahnke, Sheridan Region

ADDENDUM 3.6-A
LONG-TERM REPRESENTATIVENESS OF THE ROSS METEOROLOGICAL STATION

Data Sources

Strata Energy has collected over four years of hourly meteorological data at its Ross ISR Project site (IML 2014a). For the purposes of this analysis, the four-year period is treated as the baseline period. For comparing long-term meteorological conditions to short-term conditions, hourly data from the Eagle Butte Mine (IML 2014b) were used. Eagle Butte was selected due to several factors:

1. Proximity to the Ross site (30 miles to the west), similar elevation and similar rolling terrain
2. Longest period of record within a 50-mile radius, with hourly data available in electronic form
3. Highest data recovery within a 50-mile radius, for the entire period of record (98.5% recovery for joint wind speed and wind direction)
4. Low instrument thresholds and high data resolution compared to National Weather Service stations; complies with EPA's Meteorological Monitoring Guidance for Regulatory Modeling Applications (EPA 2000)

Other sites considered for this analysis include the Dry Fork Mine, the Buckskin Mine and the Gillette airport. All three are located roughly 25 to 30 miles west of the Ross site. Meteorological data recovery at the Dry Fork Mine was lower than at Eagle Butte. The meteorological station at the Buckskin Mine was moved several miles in 2006, resulting in a shift in wind patterns due to topographic differences between the old and new sites. The NWS weather station at Gillette has only 15 years of electronic data, and wind direction resolution is extremely coarse at 10°. Since each of the 16 wind direction classes spans 22.5°, the categorization of wind direction data from Gillette is subject to considerable discretization error.

The short-term period is defined as 2010 through 2013 (coincident with the Ross data), and the long-term period is defined as 1995 through 2009. These non-overlapping time periods assure sample independence. Hourly wind speed, wind direction and atmospheric stability class data are categorized to form short and long-term frequency distributions. Wind speeds are divided into 6 classes (plus a 7th calm class), wind directions are divided into 16 classes (plus a 17th calm class), and atmospheric stability is divided into 6 classes. All three classification schemes correspond directly to the MILDOS STAR distribution. The statistical tests enumerated above, are employed to determine if there is a significant difference between the short and long-term distributions of classified Eagle Butte data.

Several sources cite 15 to 20 years as appropriate to represent long-term meteorological data. A publication from the U.S. Air Force Climatology Center (Coffin 1996) states, "As the [period of record] expands, maintaining homogeneity of the data becomes more difficult. Climatological statistics obtained from too long a period may not be representative of contemporary conditions."

Graphical Methods

Histograms, scatterplots and wind roses provide a visual demonstration of the similarities between short and long-term meteorological data at the Eagle Butte Mine (EBM). Figure 1 compares the 4-year (2010-2013) and 15-year (1995-2009) wind frequency distributions. It can be seen that both wind speed and wind direction frequencies are distributed similarly over the two time periods.

Figure 1 – EBM Long-Term and Short-Term Wind Frequency Distributions

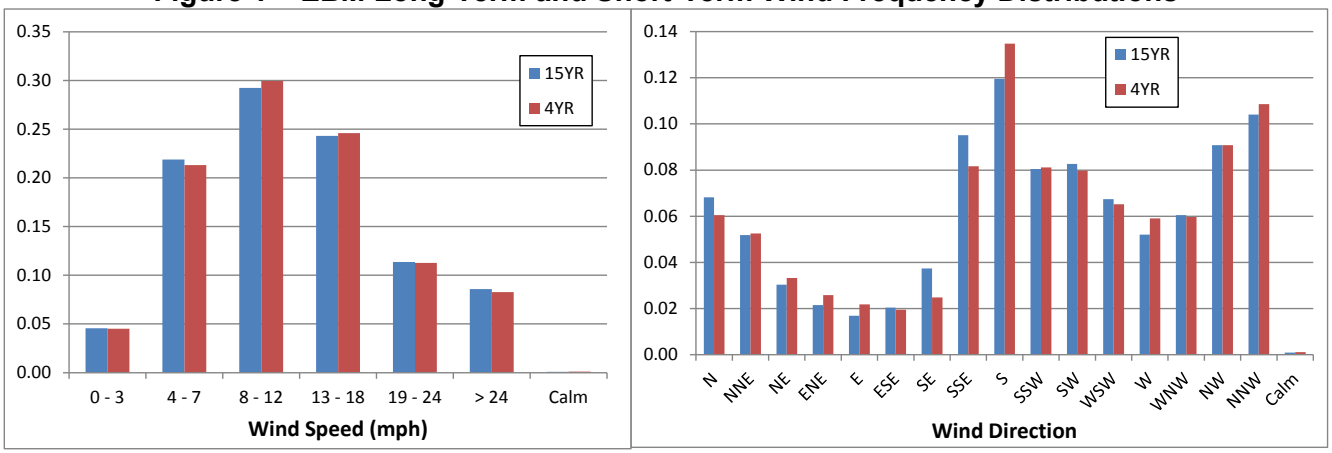


Figure 2 shows the wind roses from Eagle Butte for the same periods. The wind rose provides a polar graph of the joint distribution of wind speed and wind direction frequencies.

Figure 2 – EBM Long-Term and Short-Term Wind Roses

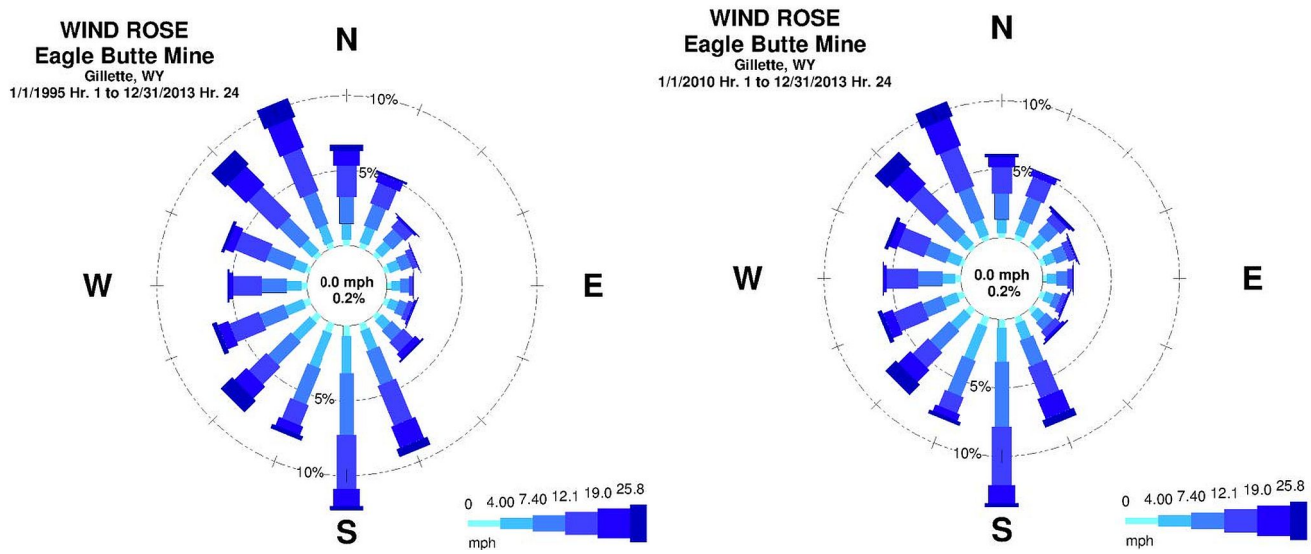


Figure 3 graphs the short-term vs. long-term wind frequencies, demonstrating close correlation between the two wind speed distributions and between the two wind direction distributions. In this instance, the right-most point on the wind speed graph corresponds to the 8-12 mph category, which accounts for 29.9% of the hourly wind speeds from 2010 through 2013 (y-axis), and 29.2% of the hourly wind speeds over the previous 15 years (x-axis). The other points correspond to the remaining 6 wind speed categories. The wind direction graph plots the 17 direction categories in similar fashion.

Figure 3 – EBM Long-Term and Short-Term Wind Speed and Direction Scatterplots

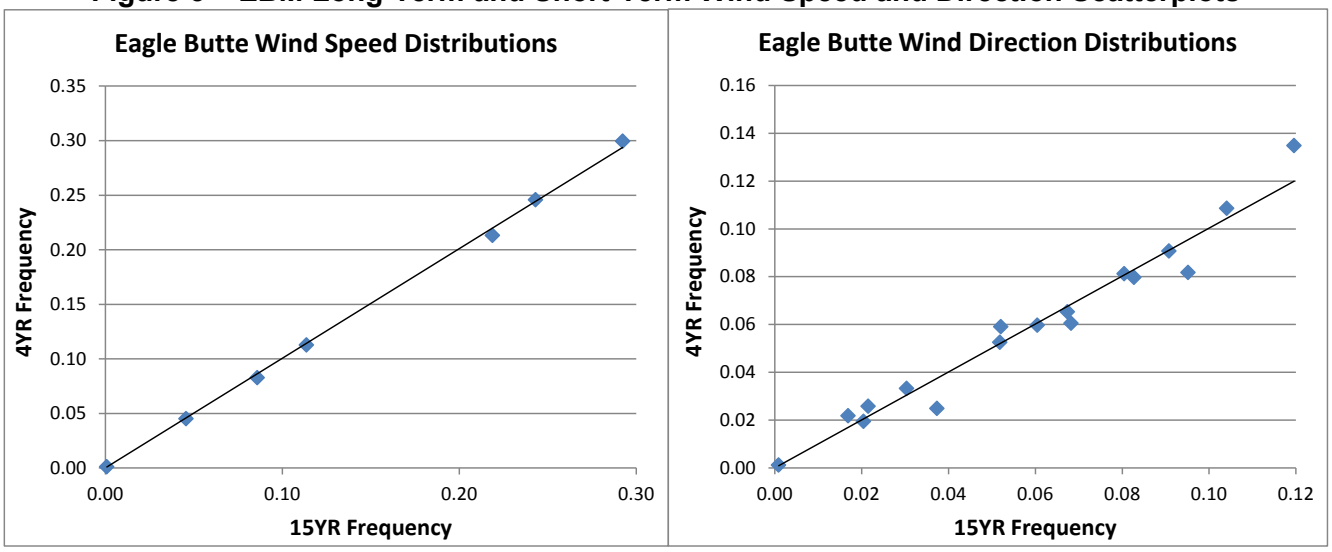


Figure 4 graphs the short-term vs. long-term joint wind speed and direction frequencies, once again demonstrating close correlation between the two periods for each of the 97 joint categories. Figure 4 substantiates the similarity between wind roses in Figure 2.

Figure 4 – EBM Long-Term and Short-Term Joint Wind Speed and Direction Scatterplot

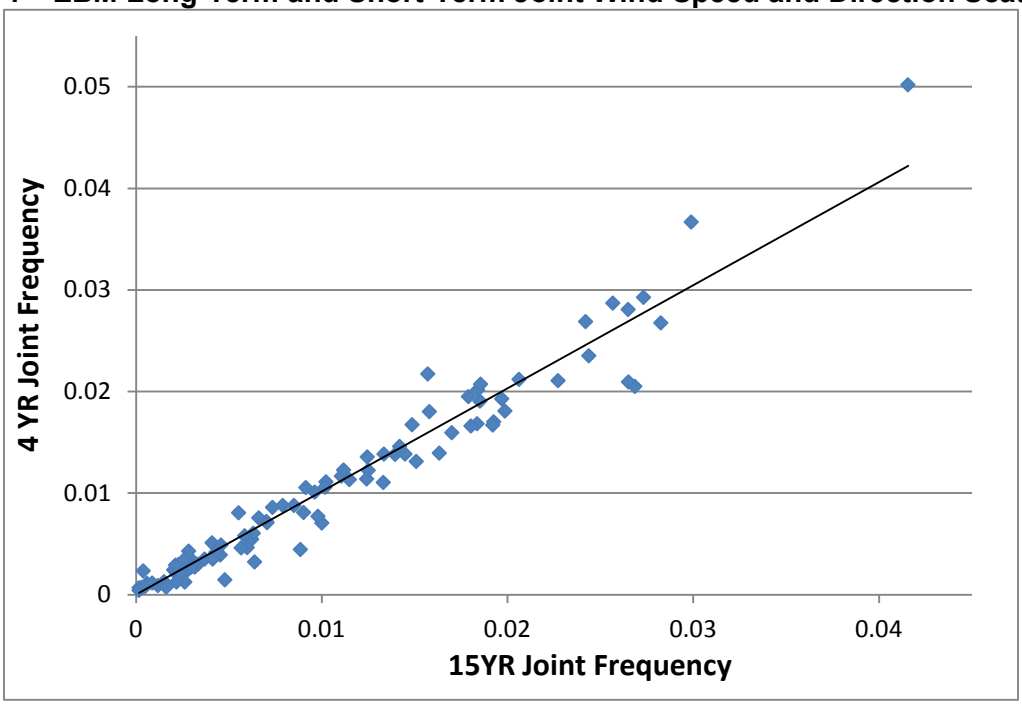
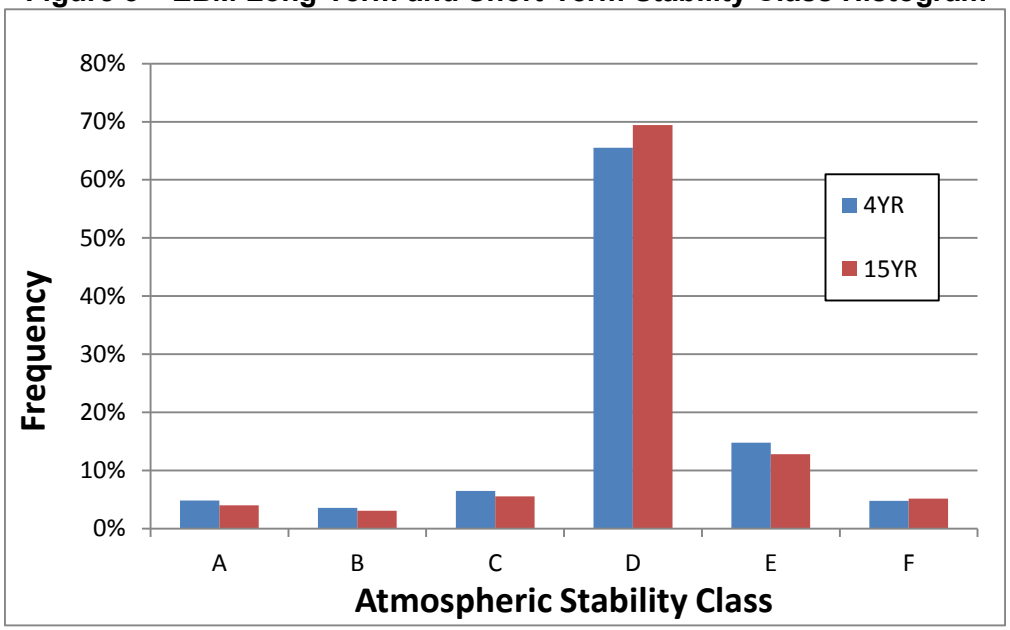


Figure 5 shows the histogram for short and long-term atmospheric stability class distributions at Eagle Butte. The stability classes were assigned according to the σ_θ method (EPA 2000). Both periods are dominated by stability class D, representing neutral to slightly unstable conditions.

Figure 5 – EBM Long-Term and Short-Term Stability Class Histogram



Application of the Chi-Square (χ^2) Test

The χ^2 test can be used to evaluate the null hypothesis (H_0) that two frequency distributions are similar. In this analysis, the χ^2 test regards long-term values as the expected counts, and short-term (baseline period) values as the observed counts. Table 1 shows the resulting analysis of wind speeds at Eagle Butte. The calculated χ^2 value of 4.81 is less than the 95% confidence statistic for 6 degrees of freedom (12.59). Thus, we cannot reject H_0, which states that the short-term wind speed distribution comes from the same population as (i.e., is representative of) the long-term distribution. The phi coefficient, which adjusts the χ^2 result for large sample sizes, is 0.02. This confirms the similarity between the two wind speed distributions. An analysis of categorized cloud cover by the U.S. Air Force established a critical phi coefficient of 0.20, below which "a large degree of similarity" between distributions is indicated (Lowther 1991).

Table 1 – χ^2 Test for Annual Wind Speed Distributions

Wind Speeds - Eagle Butte LT/ST Frequency x 8,760				
mph	15Yr WS	4Yr WS	$(LT-ST)^2/LT$	Chi-Square
0 - 3	399	395	0.038	4.81
4 - 7	1916	1867	1.251	$\chi^2_{0.95}(6) = 12.59$
8 - 12	2560	2623	1.529	**Can't reject H_o**
13 - 18	2129	2154	0.279	p-value = 0.569
19 - 24	996	987	0.074	Min Count = 8
> 24	752	724	1.019	Phi-value = 0.02
Calm	8	10	0.615	**Confirm**

Table 2 shows a similar test for 15-year vs. 4-year wind directions at Eagle Butte. The calculated χ^2 value of 113 is more than the 95% confidence statistic for 16 degrees of freedom (26.30), so we

initially reject the null hypothesis (H_0) that the short-term wind direction distribution comes from the same population as the long-term distribution. The phi coefficient of 0.11, however, suggests a strong similarity between the two wind direction distributions.

Table 2 – χ^2 Test for Annual Wind Direction Distributions

Wind Directions - Eagle Butte LT/ST Frequency x 8,760				
Direction	15Yr WD	4Yr WD	$(LT-ST)^2/LT$	Chi-Square
N	598	530	7.672	113.06
NNE	454	460	0.092	$\chi^2_{0.95}(16) = 26.30$
NE	266	291	2.385	**Reject H_o**
ENE	188	226	7.543	p-value = 0.000
E	148	191	12.264	Min Count = 8
ESE	179	171	0.371	Phi-value = 0.11
SE	327	217	36.836	**Adj: Do Not Reject**
SSE	833	716	16.629	
S	1047	1181	17.081	
SSW	705	711	0.060	
SW	724	698	0.930	
WSW	590	571	0.596	
W	456	517	8.184	
WNW	530	523	0.084	
NW	795	795	0.000	
NNW	912	951	1.723	
Calm	8	10	0.615	

Table 3 shows the χ^2 test for short and long-term atmospheric stability class distributions. The χ^2 statistic on the left, based on conversion of relative frequencies to percentages, indicates non-rejection of H_0. On the right, after converting frequencies to annual hours the χ^2 statistic indicates rejection of H_0. But when adjusted for the larger sample size the phi coefficient of 0.11 is less than 0.20 and therefore shows the distributions to be similar. The phi coefficient is independent of the choice of sample size and therefore offers a more reliable measure of similarity.

Table 3 – χ^2 Test for Stability Class Distributions at EBM

Convert Relative Frequencies to Percent					Convert Relative Frequencies to Annual Hours				
Class	15YR	4YR	$(ST-LT)^2/LT$	Chi-Square	Class	15YR	4YR	$(ST-LT)^2/LT$	Chi-Square
A	3.99	4.84	0.18	0.97	A	350	424	15.70	84.60
B	3.08	3.58	0.08	$\chi^2_{0.95}(5) = 11.07$	B	270	313	7.04	$\chi^2_{0.95}(5) = 11.07$
C	5.55	6.50	0.16	**Can't Reject H_o**	C	486	569	14.14	**Reject H_o**
D	69.41	65.51	0.22	p-value = 0.965	D	6081	5739	19.20	p-value = 0.000
E	12.82	14.78	0.30	Min Count = 3	E	1123	1295	26.37	Min Count = 2
F	5.14	4.79	0.02	**Phi-value = 0.10**	F	450	419	2.14	**Phi-value = 0.10**

The χ^2 test results above indicate insufficient evidence to infer a statistical difference between short and long-term wind speed, wind direction, and atmospheric stability class distributions. This is not

always the case. Even when corrected for large samples, the χ^2 test generally infers a significant difference between wind frequency distributions from different sites.

Application of the Student's T-Test

The two-sample t-test can be used to assess similarity between two frequency distributions, if those distributions are expanded to form year-to-year frequencies within each individual data category. The two-sample t-test is applied separately to each wind speed, wind direction, and stability class. This scenario requires 7 t-tests for wind speeds (6 speed classes plus a "calm" class), 17 t-tests for wind directions (16 directions plus "calm"), and 6 t-tests for stability classes. A demonstration of representativeness between frequency distributions is conclusive if each of the 30 tests fails to reject the null hypothesis that the short and long-term data populations are different. For any given category, the first sample in each test consists of annual frequencies over the long term (15 frequencies). The second sample consists of annual frequencies for the same category over the short term (4 frequencies).

There are 17 degrees of freedom in each comparison (15 + 4 - 2). The critical value $T_{(0.95,17)}$ is 2.11. This forms the 95% confidence level in a two-tailed t-test, that the short-term sample comes from a different population than the long-term sample (i.e., it is not representative). Any t-statistic between negative 2.11 and positive 2.11 (or p-value > 0.05) signifies that insufficient evidence exists, at the 95% confidence level, to justify a conclusion that the two samples are statistically different.

Table 4 presents the results of individual t-tests performed on wind speed categories at Eagle Butte, using a pooled standard deviation S_p. The long-term wind data span 15 years, from 1995 through 2009. The baseline period spans 4 years, from 2010 through 2013. The p-values for each wind speed class are much greater than 0.05, indicating insufficient evidence to conclude a difference between the short-term and long-term wind speed data.

Table 4 – EBM 15-Yr vs. 4-Yr Relative Wind Speed Frequencies and t-test Results

Speed (mph)	15YR Mean	15YR Stdev	4YR Mean	4YR Stdev	Stdev-Pooled	T-Statistic	P-Value
0 - 3	0.0456	0.0058	0.0451	0.0035	0.0055	0.14	0.887
4 - 7	0.2187	0.0137	0.2131	0.0206	0.0152	0.65	0.522
8 - 12	0.2923	0.0125	0.2994	0.0050	0.0115	-1.10	0.287
13 - 18	0.2431	0.0087	0.2458	0.0143	0.0099	-0.50	0.624
19 - 24	0.1137	0.0088	0.1127	0.0050	0.0083	0.21	0.836
> 24	0.0858	0.0108	0.0826	0.0074	0.0103	0.55	0.593
Calm	0.0009	0.0006	0.0011	0.0012	0.0008	-0.58	0.572

Table 5 presents the results of individual t-tests performed on wind direction categories for the same periods at Eagle Butte, using a pooled standard deviation S_p. Again, the p-values for each wind direction class are much greater than 0.05, indicating insufficient evidence to conclude a difference between the short-term and long-term wind direction data.

Table 5 – EBM 15-Yr vs. 4-Yr Relative Wind Direction Frequencies and t-test Results

Wind Direction	15YR Mean	15YR Stdev	4YR Mean	4YR Stdev	Stdev-Pooled	T-Statistic	P-Value
N	0.0682	0.0125	0.0605	0.0101	0.0121	1.13	0.274
NNE	0.0518	0.0201	0.0526	0.0047	0.0184	-0.07	0.944
NE	0.0303	0.0111	0.0332	0.0019	0.0101	-0.51	0.619
ENE	0.0215	0.0086	0.0258	0.0098	0.0089	-0.86	0.401
E	0.0169	0.0047	0.0218	0.0129	0.0069	-1.26	0.227
ESE	0.0204	0.0097	0.0195	0.0065	0.0092	0.18	0.859
SE	0.0373	0.0191	0.0248	0.0060	0.0175	1.27	0.222
SSE	0.0951	0.0375	0.0817	0.0183	0.0348	0.69	0.503
S	0.1196	0.0399	0.1348	0.0170	0.0369	-0.74	0.473
SSW	0.0804	0.0158	0.0812	0.0095	0.0149	-0.09	0.931
SW	0.0827	0.0151	0.0797	0.0122	0.0147	0.36	0.724
WSW	0.0674	0.0098	0.0652	0.0098	0.0098	0.39	0.704
W	0.0521	0.0093	0.0590	0.0044	0.0087	-1.43	0.172
WNW	0.0605	0.0100	0.0597	0.0045	0.0092	0.15	0.885
NW	0.0908	0.0166	0.0908	0.0076	0.0154	0.00	0.997
NNW	0.1041	0.0221	0.1086	0.0235	0.0223	-0.36	0.724
Calm	0.0009	0.0006	0.0011	0.0012	0.0008	-0.58	0.572

The t-test is performed on wind frequency distributions in the literature of meteorological statistics. Brooks and Carruthers (Brooks 1978, p. 66) offer an example that seeks to determine whether the frequency of occurrence of gale-force winds over a 3-year period is the same as the frequency of gale-force winds over a previous 9-year period. A two-sample t-test is used to demonstrate a significant difference between the two frequencies. This approach is equivalent to the above analysis, except that Brooks and Carruthers applied it to only one wind speed category. It is significant to note that inter-site comparisons using the class-wise, two-sample t-test typically show significant differences for a majority of the wind speed and direction categories.

Application of Linear Correlation and Linear Regression

The following discussion combines linear correlation and regression since they yield closely related statistics. Under the assumptions applied to wind frequency distributions the Pearson's correlation coefficient R is equal, or very nearly equal to the square root of the linear regression coefficient of determination R^2. While linear regression has not been commonly employed to demonstrate the degree of similarity between two meteorological frequency distributions, linear correlation coefficients have (Coffin 1996).

A correlation coefficient is merely a mathematical expression of the "correspondence" between two distributions (Brooks 1978). In the present application, the short and long-term data distributions both approximate a third variable, the true long-term distribution. If any two relative frequency distributions of a categorized meteorological parameter are linearly correlated, they are also substantially equivalent since the frequencies sum to 1 for both distributions. And if they are equivalent, then either they both represent the true long term distribution, or neither does.

Figure 6 illustrates the linear association between short and long-term wind speed frequencies at Eagle Butte. The hourly data for each distribution fall into one of 7 categories. The graph illustrates the degree to which the 4-year frequencies match the 15-year frequencies. The R^2 value of 0.999 confirms a very strong linear relationship, and the slope of 1.005 indicates substantial equivalence between short and long-term frequencies. A p-value of zero leaves little doubt that this relationship is significant.

Figure 6 – EBM Short and Long-Term Wind Speed Frequency Distributions

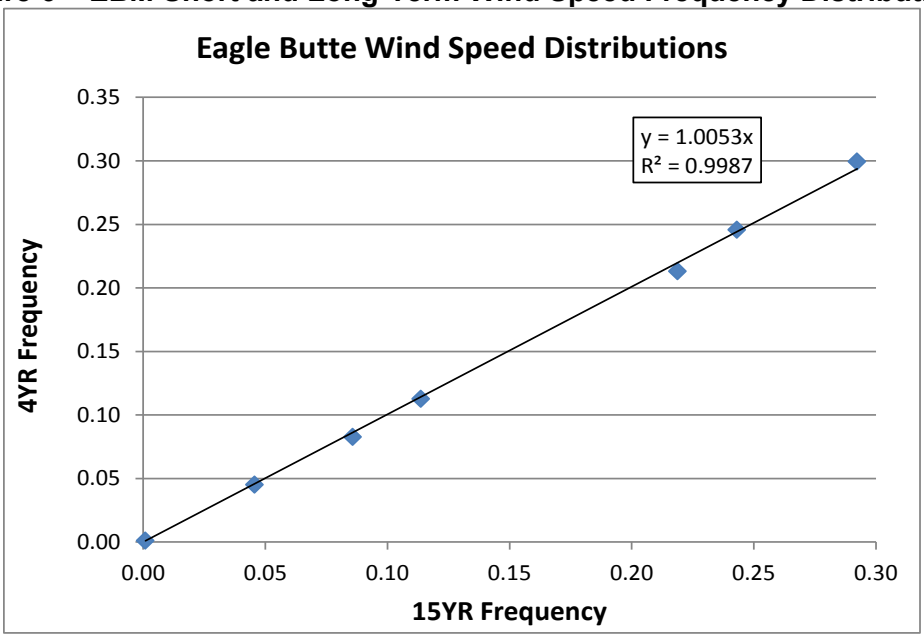
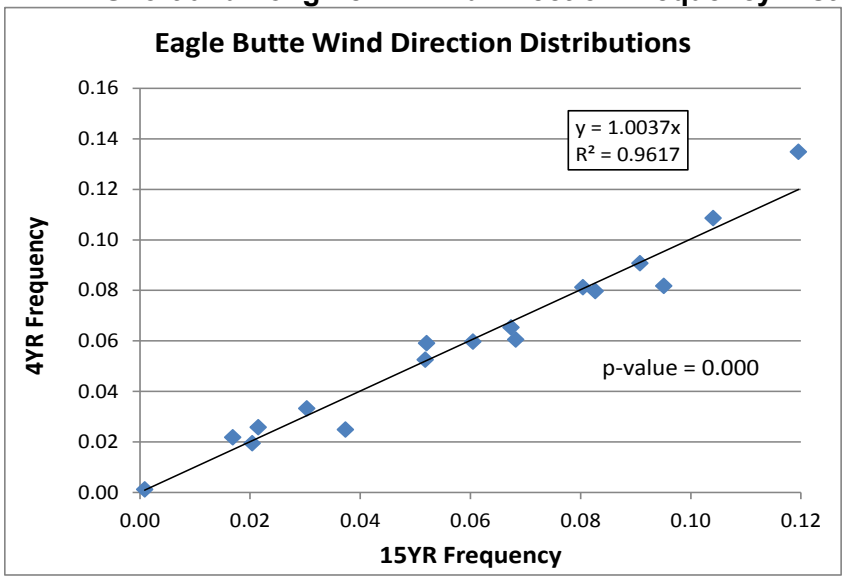


Figure 7 illustrates the linear association between short and long-term wind direction frequencies at Eagle Butte. The hourly data for each distribution fall into one of 17 categories. The graph illustrates the degree to which the 4-year frequencies match the 15-year frequencies. The R^2 value of 0.962 confirms a strong linear relationship, and a p-value of zero leaves little doubt that this relationship is significant.

Figure 7 – EBM Short and Long-Term Wind Direction Frequency Distributions



The MILDOS model accepts meteorological inputs in the form of joint wind speed, wind direction and stability class frequency distributions, also known as STAR distributions. An important subset of the STAR distribution is the two-way wind classification, which categorizes hourly wind data by both speed and direction. Hypothesis testing is generally unworkable in comparing joint wind speed and direction frequencies because the wind data are partitioned into too many categories. In general, the number of categories in hypothesis testing should not exceed $5*\log_{10}(N)$, where N is the sample size (Brooks 1978). For a one-year sample of hourly averages (N = 8,760) the maximum number of categories would be 20. This limit is consistent with 7 wind speed classes or 17 wind directions, but not with 97 joint frequency categories.

Joint wind speed and direction distributions are amenable to linear regression or correlation. Analyzing these two-way distributions can strengthen the case for long-term representativeness of baseline wind data. The joint analysis offers a more rigorous comparison between short and long-term wind frequency distributions, than individual speed and direction analyses. This comparison also offers the best quantitative measure of the similarity between the associated wind roses (see Figure 2 and Figure 4).

Figure 8 shows the linear relationship between short and long-term joint frequencies at Eagle Butte. The hourly data for each distribution fall into one of 97 categories. The graph illustrates the degree to which the 4-year joint frequencies match the 15-year frequencies. The R^2 value of 0.951 confirms a strong linear relationship, and the slope of 1.015 indicates substantial equivalence between short and long-term frequencies. A p-value of zero leaves little doubt that this relationship is significant.

Figure 9 graphs the short-term joint frequency distribution from the Dry Fork Mine against the long-term joint frequency distribution from Eagle Butte. The contrast to Figure 8 illustrates how effectively linear regression discriminates between similar and dissimilar wind regimes. Since Dry Fork is less than five miles east of Eagle Butte, Figure 9 also illustrates how sensitive wind patterns are to local terrain.

Figure 8 – EBM Short and Long-Term Joint Frequency Distributions

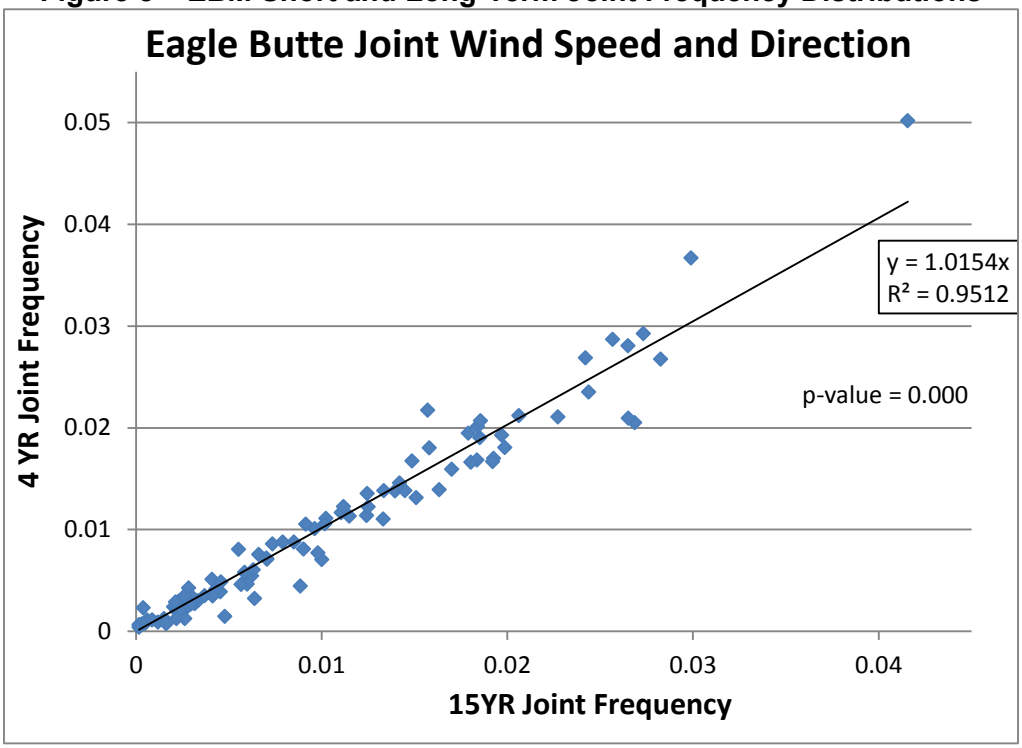
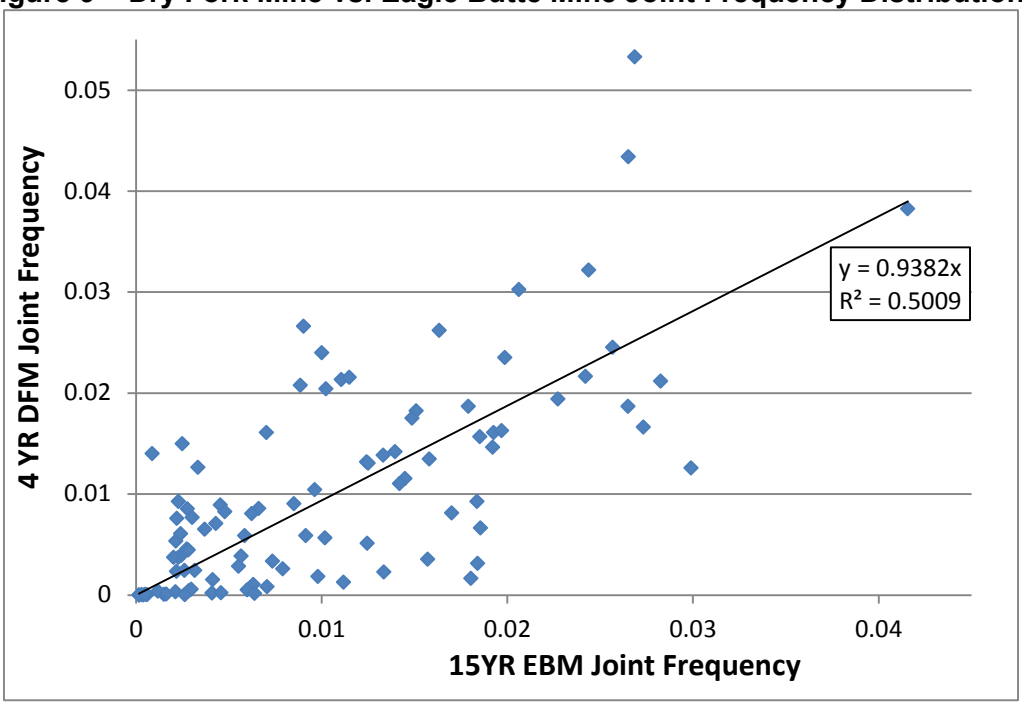


Figure 9 – Dry Fork Mine vs. Eagle Butte Mine Joint Frequency Distributions



Conclusion

In fulfillment of NRC guidelines, the combination of visual evidence, linear correlation and hypothesis testing provides a comprehensive demonstration of long-term representativeness of baseline meteorological data at the Ross ISR Project. For the Eagle Butte Mine site, the most recent 4 years of hourly wind data are statistically no different than the previously recorded 15 years of data. This conclusion is supported by graphical analyses and by three statistical tests, which have been jointly applied by others to categorize meteorological data (Lowther 1991):

1. χ^2 test (with the phi coefficient to adjust for large sample size)
2. The Student's t-test
3. Linear correlation coefficient R (or coefficient of determination R^2)

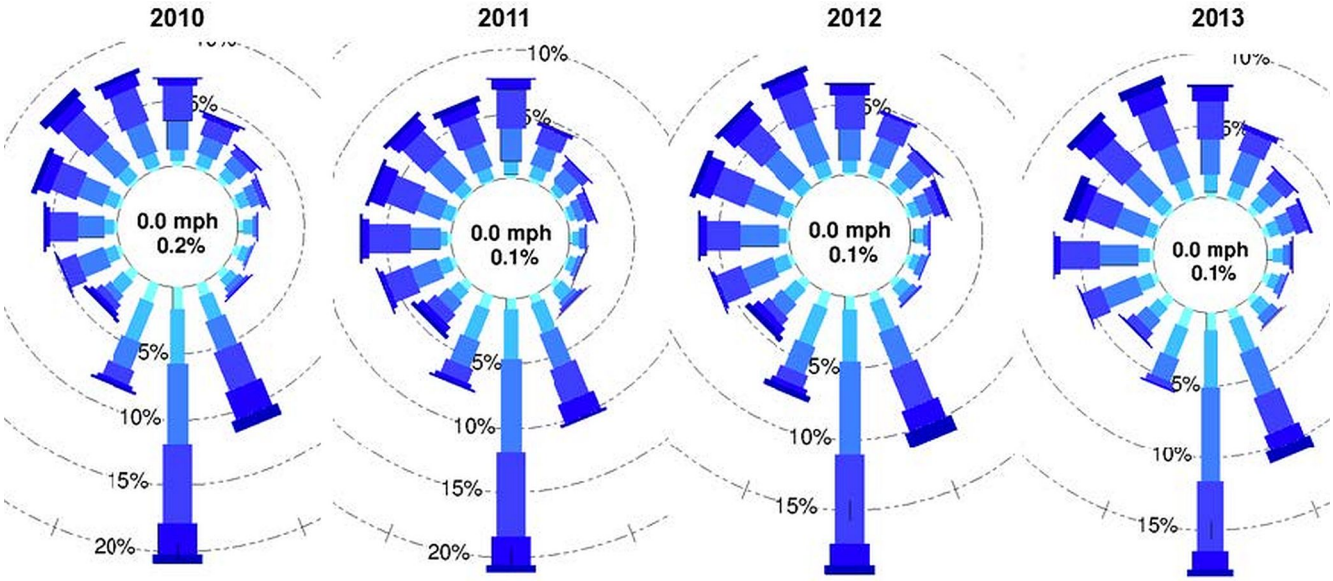
Table 6 summarizes the test results for the Eagle Butte site. For wind speed, wind direction, joint frequency and stability class distributions, all relevant statistical tests infer the absence of a significant difference between short and long term data.

Table 6 – Summary of Statistical Analysis of Frequency Distributions at EBM

15-Yr vs. 4-Yr Frequency Distributions	Statistical Method							Overall Conclusion
	χ^2 at 8,760 hrs.	Ø-Coeff.	Adjusted χ^2 Result	t-test min. p-value	t-test Results	Linear Regress. R^2	p-value for R^2	
Wind Speed	4.8	0.11	Similarity	0.287	No statistical difference	0.999	0.000	No statistical difference
Wind Direction	113	0.02	Similarity	0.172	No statistical difference	0.962	0.000	No statistical difference
Joint Wind Speed and Wind Direction	N/A	N/A	N/A	N/A	N/A	0.951	0.000	No statistical difference
Atmospheric Stability Class	84.6	0.10	Similarity	N/A	N/A	0.999	0.000	No statistical difference

Eagle Butte is considered representative of the Ross site due to its proximity, similar elevation, comparable terrain, and susceptibility to the same regional climatological factors. With four years of hourly data now available from the Ross site, it is also possible to examine on-site temporal trends in wind data. Figure 10 compares the annual wind roses at Ross for these four years.

Figure 10 – Ross Yearly Wind Roses



While the wind roses show small variations from year to year, the dominant wind pattern has persisted throughout the monitoring period. Given this on-site evidence of temporal uniformity and the preceding demonstration of 4-year/15-year equivalence at a surrogate site (EBM), it is reasonable to conclude that the four years of data collected at the Ross site are representative of the long term.

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ADDENDUM 3.8-A
CULTURAL AND PALEONTOLOGICAL RESOURCE SURVEY

ADDENDUM 3.11-A
BASELINE GAMMA SURVEY REPORT

BASELINE GAMMA SURVEY REPORT

RADIOLOGICAL BASELINE CHARACTERIZATION PROGRAM
KENDRICK EXPANSION AREA

USNRC LICENSE SUA-1601
ROSS ISR PROJECT
CROOK COUNTY, WYOMING

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Preface: This report was developed on behalf of Strata Energy, Inc. in support of an amendment to Radioactive Materials License SUA-1601 with the U.S. Nuclear Regulatory Commission (USNRC) for the Ross uranium in-situ recovery (ISR) project in Crook County, Wyoming. The material contained herein pertains to planned expansion of ISR operations beyond the original Ross ISR Project area to the adjacent Kendrick Expansion area (KEA), and includes related updates to baseline gamma radiation data provided in the original Ross ISR license application. This report was developed for inclusion in radiological baseline portions of the Kendrick Amendment request with the USNRC, and is also intended to update and supersede related information as contained in the approved Ross ISR License application based on new gamma radiation survey data and updated analysis of all baseline gamma survey data.

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1.0 INTRODUCTION

On behalf of Strata Energy, Inc. (Strata), SENES Consultants (SENES) has prepared this baseline gamma radiation survey report in support of a request for an amendment to Radioactive Materials License SUA-1601 with the U.S. Nuclear Regulatory Commission (USNRC) for the Ross uranium in-situ recovery (ISR) project in Crook County, Wyoming. Strata Energy is proposing to amend the USNRC license to include 7,873.7 acres of lands adjacent to the original Ross ISR Project area (Kendrick Expansion Area) (Figure 1).

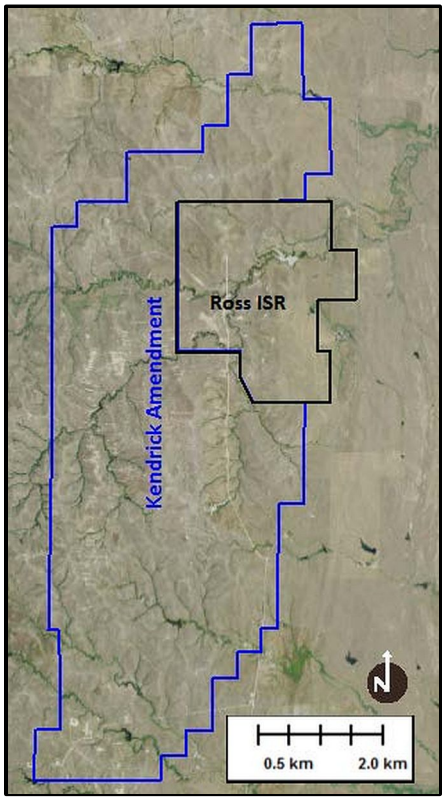


Figure 1: Kendrick Expansion Area in relation to the original Ross ISR Project area.

A baseline gamma survey of the Kendrick Expansion Area was conducted by SENES in August and September of 2014. This survey included targeted soil sampling and corresponding gamma radiation measurements to statistically correlate soil radionuclide concentrations (particularly Ra-226) with gamma radiation levels, and to estimate respective soil concentrations across the entire site based on gamma exposure rates.

The methods used for this baseline gamma survey and soil radionuclide characterization project were consistent with those widely used in the uranium recovery industry in recent years in order to meet USNRC requirements for establishing baseline radiological conditions. This basic methodology, involving Global Positioning Systems (GPS)-based gamma scanning technologies and gamma/soil radionuclide correlation techniques (e.g. Whicker et al., 2008), goes beyond basic guidance found in USNRC Regulatory Guide 4.14 (RG 4.14) to increase the spatial density of survey coverage as well as the sophistication and comprehensiveness of the overall radiological baseline characterization.

Recent advances in gamma survey data normalization techniques (Whicker and Chambers, 2014) have implications with respect to results presented in Addendum 2.9-B of the Technical Report for the original Ross ISR Project license application, not regarding the field gamma survey systems or data collection methodology, but with respect to differences in the basis of measurement in which the raw data are reported and displayed. The baseline gamma survey data set presented in the Ross license application (Tetra Tech, 2010) was not calibrated against naturally occurring environmental gamma radiation, but was calibrated against the sensitivity of Ludlum 44-10 NaI detectors to a cesium-137 (Cs-137) point source. While those results have been approved by the USNRC with the issuance of a license for the site, there are disadvantages to this basis of measurement.

One disadvantage is that relevant regulatory specifications found in RG 4.14 and 10 CFR 40.42 call for "exposure rate" as the objective of baseline and final status decommissioning gamma surveys, and

calibration of energy dependent survey instruments against a Cs-137 point source does not provide an accurate measure of this parameter with respect to general environmental radiation from terrestrial and cosmic sources. Secondly, because "exposure rate" data provided in Addendum 2.9-B of the Ross license application (Figures 10, 11, 13 and 14, and Table 1) were based on Cs-137 calibrations, respective gamma/Ra-226 correlation data are valid only for Ludlum 44-10 NaI detectors paired with Ludlum 2350 rate meters, calibrated against a Cs-137 point source.

An implication of the second disadvantage is that any significant future radiological impacts from operations at the site, or any use of gamma measurement instruments other than ^{137}Cs-calibrated Ludlum 44-10 detectors, will likely require a new correlation to be developed. While not difficult, a new correlation would take the amount of time necessary to select appropriate field locations, collect new soil samples and gamma measurements, and have the samples analyzed in a commercial laboratory. The lead time for this process is typically on the order of several months and analytical costs alone can run several thousand dollars. This could be disadvantageous in the event of a spill during operations, or for soil remediation that may otherwise occur as part of site decommissioning.

As a result of the above considerations, raw baseline gamma survey data for both the Ross ISR and Kendrick Expansion Area have been normalized in this report to represent estimates of the true total exposure rate in the field from both cosmic and terrestrial sources of naturally occurring radiation. This parameter is most accurately measured with a high-pressure ionization chamber (HPIC), yet due to high cost and difficulties with shipping, calibration and field practicality, an alternate approach to site-specific HPIC measurements was employed for normalization of all gamma survey data. This alternate approach, recently developed by SENES, has been peer-reviewed and accepted for publication in the journal of Health Physics (Whicker and Chambers, 2014). Details are provided in Section 2.3.3 of this report.

This report has been developed for inclusion in radiological baseline portions of the Kendrick Amendment request with the USNRC, and is also intended to update and supersede related information in the Ross ISR License application based on the new gamma survey data and conversion of all baseline gamma survey data to a common basis of measurement as described above. This also applies to gamma-based estimates of soil radionuclide concentrations across each survey area (Kendrick and Ross). In addition, all gamma survey data and corresponding estimates of soil radionuclide concentrations have been geostatistically interpolated (kriged) to provide continuous estimates of these radiological baseline parameters across both the Ross and Kendrick survey areas. The purpose of kriging is to maximize the ability to readily interpret generalized spatial distributions based on gamma survey data.

Finally, where directly applicable or indirectly relevant with respect to baseline gamma surveys at uranium ISR sites, the field survey methods and quantitative/spatial analysis techniques used to generate these updated baseline data sets are consistent with the technical intent and objectives of the following regulatory guidance documents:

- Regulatory Guide 4.14: *Radiological Effluent and Environmental Monitoring at Uranium Mills*. (USNRC, 1980).
- NUREG-1569: *Standard Review Plan for In Situ Leach Uranium Extraction License Applications*. (USNRC, 2003).
- Regulatory Guide 4.15: *Quality Assurance for Radiological Monitoring Programs (Inception through Normal Operations) – Effluent Streams and the Environment*. (USNRC, 2007).
- Regulatory Guide 3.8: *Preparation of Environmental Reports for Uranium Mills*. (USNRC, 1982).
- NUREG/CR-5849: *Manual for Conducting Radiological Surveys in Support of License Termination (Draft)*. (USNRC, 1992).
- NUREG-1575: *Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM), Revision 1*. (USNRC, 2000).
- NUREG-1507: *Minimum Detectable Concentrations with Typical Radiation Survey Instruments for Various Contaminants and Field Applications*. (USNRC, 1998).

The data contained in this report are of high quality and are expected to meet USNRC review criteria for characterization of respective radiological baseline conditions across both survey areas. These data, along with respective estimates of data uncertainty, are expected to be important for operational and decommissioning phases of the Ross ISR Uranium Project.

2.0 BASELINE GAMMA SURVEY

2.1 TECHNICAL AND REGULATORY BASIS

The pertinent USNRC regulation with respect to characterization of radiological baseline conditions at a uranium recovery facility is found in 10 CFR 40, Appendix A, Criterion 7:

> *"At least one full year prior to any major site construction, a preoperational monitoring program must be conducted to provide complete baseline data on a milling site and its environs."*

The USNRC currently considers Regulatory Guide 4.14 (RG 4.14) (USNRC, 1980) to be the minimum acceptable design basis for a radiological baseline characterization program that will meet the Criterion 7 regulatory requirement. For baseline gamma radiation surveys, RG 4.14 recommends 80 discrete gamma exposure rate measurements in a radial grid pattern originating in the central milling area. Alternate survey designs that meet or exceed the basic technical intent of this guidance have been accepted by the USNRC for a number of recent license applications for new uranium ISR facilities.

Regulatory Guide 4.14 also calls for baseline gamma radiation surveys to measure "exposure" rate with "passive integrating devices (such as thermoluminescent dosimeters), pressurized ionization chambers, or properly calibrated portable survey instruments." This specification implies measurement of true

dose/exposure rate in the field, not gross count rate or exposure rate relative to a Cs-137 calibration source as is common for most standard survey meters. Though not explicitly stated, the indication that "properly calibrated portable survey instruments" are an acceptable alternative to thermoluminescent dosimeters (TLDs) or a HPIC implies a technical intent for respective calibration against photon energies associated with the naturally occurring radiation being measured in the field. TLDs and the HPIC will each respond accurately to ambient environmental gamma radiation fields associated with terrestrial NORM and cosmic radiation (Botter-Jensen et al., 2003; Whicker and Chambers, 2014).

Although exposure rate is not a direct remedial criterion under USNRC regulations, 10 CFR 40.42 calls for a gamma exposure rate survey as a final step in the decommissioning process. Meeting 10 CFR 40.42 requirements for this "final status" gamma survey, as with RG 4.14 specifications for the establishment of baseline gamma exposure rates, is presumably expected to reflect measurements that are calibrated to provide estimates of true exposure rate due to photon energies associated with sources of radiation present at the site (not exposure rate based on calibration against a Cs-137 point source).

USNRC decommissioning criteria for land areas at uranium recovery sites are based on 10 CFR 40, Appendix A, Criterion 6(6). Criterion 6(6) pertains only to soil radionuclide concentrations and reflects the primary requirement for license termination and release of land areas for unrestricted future use. Though not a USNRC decommissioning criterion, exposure rate becomes important when gamma surveys are used to indirectly demonstrate compliance with Criterion 6(6) soil radionuclide cleanup levels based on gamma/soil radionuclide correlations and final status survey methods as described in NUREG-1569 (USNRC, 2003) and NUREG-1575 (MARSSIM; USNRC, 2000).

From a conceptual site model perspective, the greatest potential for radiological releases to the terrestrial environment from ISR operations in terms of volume of releases, frequency of occurrence, and potential for long-term persistence in the environment and respective doses to humans, will involve direct deposition of materials onto the ground surface or seepage of solutions into soils. Any long-lived radiological contamination from ISR operations (e.g. due to material spills or well field pipeline leaks) will tend to accumulate and persist in soils to a much greater extent versus other terrestrial environmental media[1]. After site operations, the residual radiological condition of all terrestrial environmental media (soil, sediment, air, surface water, plants and animals) will largely depend (directly or indirectly) on the levels of radionuclides present in soils at or near the ground surface[2].

For these reasons, characterization of the concentrations and distributions of radionuclides in surface soils is of paramount importance in terms of understanding overall radiological baseline conditions

[1] Soil is the primary storage medium for contaminants in terrestrial environmental systems, especially for contaminants that are particle reactive (Whicker & Rood, 2008). Long-lived radionuclides in the U-238 decay series having the greatest potential to directly or indirectly result in radiological doses to human or ecological receptors (e.g. Ra-226, Th-230 and Pb-210) typically have little mobility in soil systems.

[2] The radiological characteristics of groundwater at ISR sites are primarily influenced by resource extraction and aquifer restoration processes.

across the Ross ISR and Kendrick Amendment project areas. However, direct sampling and analysis of radionuclides in soil is inherently limited in terms of characterizing the degree of spatial variability present, especially when such large areas are involved. A grid-based soil sampling design can miss-characterize sizeable areas with elevated levels of soil radionuclides (Whicker et al., 2008).

Beginning in 2007 with the Moore Ranch (Uranium One) and Lost Creek (Ur-Energy) ISR license applications with the USNRC (the first new uranium recovery license applications in 30 years), modern GPS-based gamma survey technologies, refined gamma/soil Ra-226 correlation methods, and increasingly sophisticated spatial analysis techniques were first introduced and accepted by the USNRC for characterization of corresponding baseline parameters at ISR sites. For all of the above reasons, modern GPS-based gamma scanning technologies along with the latest advances in associated survey methods were used to provide a comprehensive characterization of true baseline gamma radiation exposure rates and associated radionuclides in surface soils across the Kendrick Expansion Area.

The baseline gamma survey of the Kendrick Expansion Area was conducted in August and September 2014 in a manner consistent with the basic methodology described in standard operating procedure (SOP) 7 and Section 3.7 of the radiological baseline SAP as presented in the Ross ISR license application (Addendum 2.9-A in the Technical Report). There were some updates to this methodology based on recent advancements in available technologies and data normalization techniques, but the foundational data collection systems and procedures employed in the field were functionally equivalent to those used for original baseline gamma surveys at the Ross ISR site. All baseline gamma survey data for both the Kendrick Amendment and original Ross ISR Project areas have been normalized to a common basis of measurement as previously indicated (further details are provided in Section 2.3.3 of this report).

2.2 OBJECTIVES

The basic objectives of this baseline gamma survey were as follows:

1. Meet the technical intent of guidance found in RG 4.14 as applicable with respect to ISR uranium extraction facilities and as commensurate with respective potential for impacts to soil and associated terrestrial gamma radiation levels.
2. Provide a direct characterization of the spatial distribution of true total baseline gamma radiation exposure rates across the entire project area.
3. Provide an indirect characterization of baseline levels of Ra-226 and potentially other radionuclides in surface soils (0-15 cm) across the project area based on gamma survey data and gamma/soil radionuclide correlations.

2.3 METHODS

The baseline gamma radiation survey consisted of five basic elements: 1) GPS-based gamma scans across the Kendrick Expansion Area, 2) site-specific instrument cross-calibration measurements and

development of corresponding algorithms to normalize scan data to a less energy dependent basis of measurement, 3) development of site-specific gamma/soil radionuclide correlations to estimate soil radionuclide concentrations based on gamma scan data, 4) data quality control (QC) measurements and related assessments, and 5) data mapping and quantitative/spatial analysis. A summary of the technical rationale and methods used for these elements is provided below.

2.3.1 Survey Coverage

The density of gamma scanning across the Kendrick Expansion Area was based on a number of considerations including 1) the size of the project area (approximately 8,000 acres), 2) anticipated degree of likely variability based on previous gamma survey data from the adjacent Ross ISR site, and 3) total "field of view" (lateral sensitivity) of the scan system's detector mounting configuration. Two all-terrain vehicles (ATVs) were each outfitted with two sodium iodide (NaI) detectors, mounted to extend about 1 meter beyond the sides of the ATV at a height of about 1 meter above the ground surface (Figure 2). At this detector height, lateral NaI detector response to significantly elevated planar (non-point) gamma sources at the ground surface is estimated to be about 2 meters, giving each detector an estimated field of view of about 4 meters in diameter at the ground surface. The approximate total effective field of view for each ATV scanning vehicle was thus about 8 meters, perpendicular to the direction of travel.

Figure 2: ATV mounting configuration for scan detectors.

Based on these considerations, areal ground coverage on the order of 8% was considered a practical and reasonable goal for gamma scan density. To approximate this degree of coverage, continuous scanning along 100-meter transects across the Project Area was planned, though considerations of safety, terrain, and natural obstructions and other factors influenced actual coverage achieved in the field. Higher density survey coverage was conducted in a few small areas discovered to have atypically higher readings. Given that gamma radiation readings were collected every 1-2 seconds while scanning, this spatial density of measurements is many orders of magnitude greater than is recommended in RG 4.14.

2.3.2 Instrumentation

Ludlum Model 44-10 NaI detectors were used for the gamma survey. The Ludlum 44-10 is a separate probe comprised of a 2"x2" NaI crystal and photomultiplier tube. Each 44-10 detector was paired with a Ludlum Model 2221 rate meter equipped with RS232 data output capability. Each detector/rate meter system was programmed to integrate gamma radiation counts every one second and provide corresponding readings in units of counts per minute (CPM) as data output through a RS232 serial port. Each detector/rate meter pairing was properly calibrated within one year prior to use for the survey (copies of calibration certificates are provided in Appendix A).

Each scanning system utilized a Wide Area Augmentation System (WAAS)-enabled GPS receiver to provide respective readings (latitude, longitude) every one second to pair with each individual gamma reading. The GPS receiver was mounted with a clear view of the sky during scanning. Data acquisition involved special software installed on a portable field computer to record paired GPS/gamma readings every 1-2 seconds. The software, developed by SENES, allows operator input of data normalization parameters to instantly convert incoming count rate data (in CPM) into real-time estimates of true total exposure rate (in µR/hr) for data recording and visual display (original count rate data are also recorded). These parameters were initially based on the average sensitivity of the Ludlum 44-10 NaI detectors to terrestrial NORM in soils, combined with the calculated site-specific contribution of cosmic radiation as proposed by Whicker and Chambers (2014) (see Section 2.3.3).

Scan data were downloaded daily into a project database and plotted on aerial imagery for the site to assess adequacy of scan coverage and to help identify any problems that may have occurred with data acquisition. Daily quality control (QC) measurements were performed in general accordance with the SAP and SOP 7 for the Ross ISR license application in order to document proper instrument function, temporal variability, variability between instruments, and to provide quantitative information on data precision and uncertainty (*see* Technical Report, Addendum 2.9-A).

2.3.3 Data Normalization

Gamma exposure rates measured by conventional NaI detectors are only relative measurements as these instruments are energy dependent (Figure 3). Unless the same equipment and scanning geometry are used for all gamma surveys over time, which can be conducted across project lifespans on the order of decades, it is necessary to normalize the data to a common basis of comparison. Normalization helps to ensure that the results of future gamma scans, which may use different NaI detectors, and perhaps different detector heights, detector models, or measurement technologies, can be meaningfully compared against the results of baseline gamma surveys. Normalization can also provide an accurate measure of the true exposure rate from both terrestrial and cosmic sources of radiation. As previously indicated, applicable regulatory guidance (RG 4.14) implies that baseline gamma surveys should provide a measure of true environmental gamma exposure rates. This parameter is valuable for evaluating any changes in external dose rates to workers or the public due to project operations.

Normalization of gamma survey data was achieved using methods recently developed by SENES as alternatives to the use of site-specific measurements with a HPIC (Whicker and Chambers, 2014). These methods are based on an extensive study of the average sensitivity of Ludlum 44-10 NaI scintillation detectors to NORM in soils at many different sites across the western U.S. (based on respective NaI/HPIC cross-calibration data), along with the average response characteristics of “tissue-equivalent” plastic scintillometers (Micro-Rem meters) and a new generation of energy-compensated NaI detectors (RadEye PRD’s) relative to the HPIC (Figure 4).

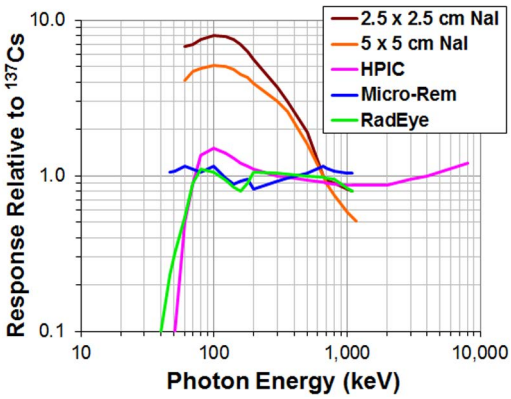


Figure 3: Approximate energy response curves for 2.5 x 2.5 cm and 5 x 5 cm NaI detectors, the HPIC, Micro-Rem meter, and RadEye PRD (in "dose rate mode") as estimated from graphical data presented in instrument specification sheets (from Whicker and Chambers, 2014).

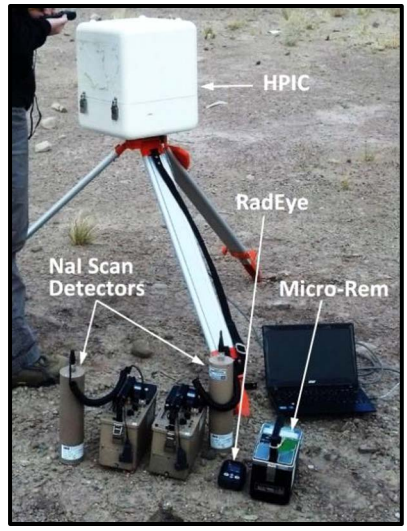


Figure 4: NaI scanning detectors and three data normalization instruments (from Whicker and Chambers, 2014).

There were three potential normalization methods used to convert raw NaI scan data to estimates of true total exposure rate. The technical basis for each method is described in Whicker and Chambers (2014). Respective results were spatially/quantitatively compared against baseline environmental dose rate monitoring data based on optically stimulated luminescent (OSL) dosimeters[3]. The method with the closest degree of agreement with "exposure rate-adjusted" OSL results[4] was selected to represent "official" baseline gamma survey results for the purposes of mapped data presentations in this report. The other two methods are retained as part of this report in order to provide options for potential

[3] OSL dosimeters are similar to TLDs, but are based on newer dosimeter technology and are reported to be more accurate (Landauer, 2007). OSL dosimeters also have the advantage of allowing repeated measurements of the quarterly dose collected by the device (accumulated TLD dose can be measured only once). InLight© low-level environmental OSL dosimeters from Landauer (Landauer, 2007) were used for "TLD monitoring" at both sites (Ross and Kendrick). The radiological quantity measured by OSL dosimeters is the same as for the Micro-Rem meter – both are calibrated to provide a measure of the "ambient dose equivalent" 10 mm deep in a standard ICRU tissue-equivalent sphere [denoted H*(10)] (Landauer, 2007; Thermo Fisher, 2007; ICRU, 1992). OSL dosimeters are nearly free of angular response dependencies (Jursinic, 2007) and are essentially energy independent for photon energies > 100 keV (Scarboro and Kry, 2013). Botter-Jensen et al. (2003) found very good agreement between OSL response and HPIC measurements, even at low exposure rates (Bhatt, 2011).

[4] Because OSL dosimeters are calibrated to measure ambient dose equivalent (in µrem/hr), corresponding estimates of exposure rate (in µR/hr) were necessary for these comparisons. This conversion was based on 49 paired Micro-Rem and RadEye measurements collected at three different sites (two in WY and one in NM) as part of the data sets evaluated by Whicker and Chambers (2014). Micro-Rem readings at these sites (in µrem/hr) averaged 7.6% higher than energy-compensated RadEye exposure rate readings (in µR/hr) among the 49 locations. This empirical difference appears reasonably consistent with theoretical differences in these measurement quantities based on relevant information provided in ICRU Report 47 (ICRU, 1992) and EURADOS Report 1999 (Thompson et al., 1999). For these comparisons, OSL results were thus reduced by 7.6% to provide an "exposure rate-adjusted" OSL-based estimate of the true total exposure rate at each OSL monitoring location.

future use depending on future instrument usage, survey objectives, or new data concerning best estimates of true exposure rate (e.g. future HPIC measurements at the site). The licensee will retain an electronic database of all raw and normalized baseline gamma survey data for both survey areas (Ross and Kendrick) in order to permit potential future use of baseline data based on any of the normalization methods described in this report, or based on new methods that may be developed in the future.

The first normalization method, which was also initially used to provide real-time estimates of true exposure rate during field scanning across the Kendrick Expansion Area, involved use of an equation based on the average sensitivity of Ludlum 44-10 detectors to terrestrial NORM in soils (6.2×10^{-4} $\mu R/hr_{HPIC}$ per CPM_{NaI}) (Whicker and Chambers, 2014), combined with the calculated cosmic contribution to the total exposure rate for the site. Because original Ross ISR baseline gamma survey data were also collected with Ludlum 44-10 NaI detectors, yet those detectors were paired with Ludlum 2350 rate meters (instead of Ludlum 2221 rate meters), respective data were provided in energy-dependent units of exposure rate based on calibration against a Cs-137 source (instead of CPM as was done for the Kendrick Expansion Area). The equivalent terrestrial sensitivity adjustment factor used to normalize raw baseline gamma survey data for the Ross ISR site was 0.56 $\mu R/hr_{HPIC}$ per $\mu R/hr_{NaI}$ (Whicker and Chambers, 2014). The estimated cosmic contribution for both survey areas was calculated using an equation adapted from Stone et al. (1999) as follows:

$$C_E = (7 \times 10^{-6}(E)^2 - 1.2 \times 10^{-3}(E) + 27.38)0.114 \qquad \text{(Equation 1)}$$

Where:
C_E = Cosmic exposure rate (µR/hr) at 1 meter above the ground surface
E = Median elevation (meters)
0.114 = Unit conversion factor from nGy/hr to µR/hr

The median elevation across both survey areas (Ross and Kendrick) is estimated to be about 1,300 meters based on data provided from Google Earth imagery. Based on this elevation, the approximate median cosmic exposure rate across this overall survey area is estimated to be 4.3 µR/hr. Based on the generalized sensitivity approach described above, raw energy-dependent gamma survey data from the Kendrick Amendment survey area were converted to estimates of true total exposure rate using the following equation:

$$Total\ Exposure\ Rate\ \left(\frac{\mu R}{hr}\right) = 6.2 \times 10^{-4}\ (raw\ NaI\ reading\ in\ CPM) + 4.3 \qquad \text{(Equation 2)}$$

Raw energy-dependent gamma survey data from the Ross ISR survey area were similarly converted to estimates of true total exposure rate using the following sensitivity-based equation:

$$Total\ Exposure\ Rate\ \left(\frac{\mu R}{hr}\right) = 0.56\left(raw\ NaI\ reading\ in \frac{\mu R}{hr}\right) + 4.3 \qquad \text{(Equation 3)}$$

The other two data normalization methods were based on paired, site-specific instrument cross-calibration measurements collected across the Kendrick Expansion Area with a Ludlum 44-10 detector and both a Micro-Rem meter and a RadEye detector (Figure 4). Measurements with the RadEye detector were performed using the instrument's energy-compensated "dose rate mode" (Thermo Fisher Scientific, 2011). The Ludlum 44-10 NaI detector used for these cross-calibration measurements was verified with onsite quality control (QC) measurements to respond consistently with all NaI detectors used for gamma scanning across the site. As shown in Figure 3, the response characteristics of the Micro-Rem and RadEye instruments are nearly energy independent across the range of photon energies typical of radiation fields due to terrestrial NORM in soils (primarily < 1 MeV).

For each instrument (NaI detector, Micro-Rem, and RadEye), static measurements were taken at 15 discrete locations covering a range of exposure rates representative of the Kendrick Expansion Area. These locations were determined based on mapped gamma survey data (see Section 2.4.2, Figure 10). At each cross-calibration measurement location, 10 individual static readings from each cross-calibration instrument were recorded and averaged. Measurement geometry involved positioning each instrument at the exact same location 1 meter above the ground surface (in the center of gamma/soil radionuclide correlation plot locations – see Section 2.3.4).

Regression analyses were performed on resulting values to determine statistical linear relationships between NaI detectors and both Micro-Rem and RadEye PRD instruments (Figure 5). These linear regression equations were used to convert raw NaI scan data into estimates of Micro-Rem and RadEye equivalent readings across both survey areas (Ross and Kendrick)[5]. In turn, these values were converted to estimates of HPIC-equivalent exposure rates using applicable relationships developed in Whicker and Chambers (2014) (see Figure 6 below) and adding the calculated cosmic component. The technical basis for this multi-step normalization process is provided in Whicker and Chambers (2014). These site-specific normalization equations are provided below (Equations 4 and 5).

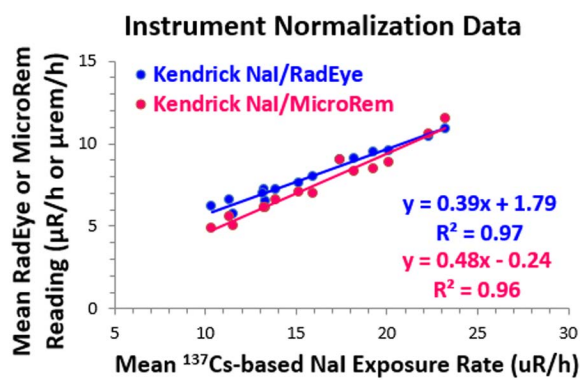


Figure 5: Site-specific NaI/Micro-Rem and NaI/RadEye cross-calibration relationships. *Note: To allow comparisons with similar data for Ross and other sites, NaI readings in CPM were converted to ^{137}Cs-based measures of exposure rate using Ludlum's nominal ^{137}Cs calibration sensitivity as indicated for the instrument (900 CPM per µR/hr).*

[5] The original cross-calibration between NaI detectors and the Micro-Rem meter as provided in the Ross ISR license application was not used for data normalization in this report because the field data collection methodology (paired averages across 100 m^2 plots) was inconsistent with standard practice (paired readings at a fixed location/geometry) and the unusually steep slope may have been unduly influenced by a single high data point.

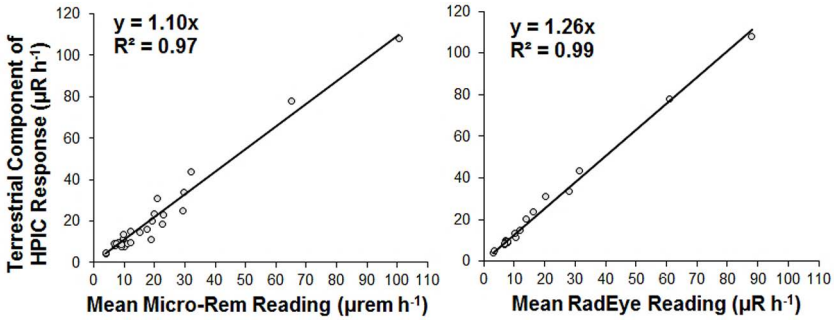


Figure 6: Generalized cross-calibration of Micro-Rem (left) and RadEye (right) readings against the terrestrial component of HPIC response (adapted from Whicker and Chambers, 2014).

$$Exposure\ Rate(1)\ \left(\frac{\mu R}{hr}\right) = 1.10\left[0.48\left(raw\ NaI\ reading\ in \frac{\mu R}{hr}\right) - 0.42\right] + 4.3 \qquad \text{(Equation 4)}$$

$$Exposure\ Rate(2)\ \left(\frac{\mu R}{hr}\right) = 1.26\left[0.39\left(raw\ NaI\ reading\ in \frac{\mu R}{hr}\right) + 1.79\right] + 4.3 \qquad \text{(Equation 5)}$$

Where:
Exposure Rate (1) includes the Site-specific NaI/Micro-Rem regression [in brackets] plus cosmic.
Exposure Rate (2) includes the Site-specific NaI/RadEye regression [in brackets] plus cosmic.

In the event that future gamma survey data are collected within these project areas using different energy-dependent gamma survey instruments (other than Ludlum 44-10 detectors), site-specific regression relationships between readings from such instruments and readings from either a Micro-Rem meter or a RadEye PRD can be developed to replace the bracketed relationships in Equations 4 and 5. The results of all of the data normalization approaches as described above (Equations 2, 3, 4 and 5) are similar to one another (within approximately ± 2 µR/hr) and are statistically described and quantitatively compared/evaluated in Section 2.4.1 of this report.

2.3.4 Gamma/Soil Radionuclide Correlations

Characterization of soil Ra-226 concentrations is a particularly important aspect of radiological baseline surveys because Ra-226 is the immediate long-lived parent of a number of short-lived radionuclides, including radon gas and its gamma-emitting decay products. These short-lived radionuclides are responsible for a vast majority of the potential for radiation doses to humans. For this reason, Ra-226 is a key constituent for assessment of radiological impacts, remedial performance, license termination and unrestricted release at uranium recovery sites [10 CFR 40, Appendix A, Criterion 6(6)]. Direct soil sampling and analysis is inherently limited in terms of the number of samples that can realistically be collected and analyzed for Ra-226. As a result, direct soil sampling is limited in terms of its ability to comprehensively characterize the spatial distributions of Ra-226 concentrations in surface soils.

However, because Ra-226 has several short-lived radioactive decay products that are strong gamma-emitters (namely Pb-214 and Bi-214), gamma surveys can be effective for characterizing soil Ra-226 distributions across large areas, including respective variability on relatively small spatial scales. A well-established, effective and widely-used analytical approach for spatially comprehensive characterization of Ra-226 concentrations in surface soils involves spatially intensive GPS-based gamma surveys combined with the use of gamma/soil Ra-226 correlations (USNRC, 2003; Johnson et al., 2006; Meyer et al., 2005; Whicker et al., 2006 and 2008).

Depending on the statistical strength of a gamma/Ra-226 regression relationship, the spatial distribution of Ra-226 concentrations in surface soils can be estimated indirectly with reasonably good accuracy based on gamma readings collected at a high density of measurements across large areas. The same is true for other radionuclides, though correlative relationships are not always present and when they are, they tend to be less statistically significant and estimation uncertainty can be higher. The advantage of gamma-based estimates of soil radionuclides is that a much higher characterization density is possible. Although such estimates have greater uncertainty versus direct soil sampling at any given location, they provide a far better understanding of the overall spatial distribution of radionuclides in surface soils across the entire site. This general principle is changing the way health physicists evaluate radiological data, and represents a scientifically supported shift of emphasis versus the traditional focus on individual sampling or measurement results (Lively, 2013). The approach provides a better overall spatial characterization for future comparisons against baseline conditions and respective evaluations of potential radiological contamination.

The methodology used to develop statistical gamma/soil radionuclide relationships at the site was generally consistent with SOP 7 in the SAP for the Ross ISR license application (Addendum 2.9-A of the Technical Report), though in addition of Ra-226 analysis for correlation soil samples, analysis of other naturally occurring radionuclides (U-nat, Th-230, P-210, Th-232[6] and K-40) was also obtained. Implementation details are as follows:

1. Baseline gamma survey rate data across the Kendrick Expansion Area was used to identify various locations for correlation soil sampling and gamma measurements covering a range of exposure rates representative of the site. A total of 15 locations were identified that appeared to have reasonably uniform gamma fields and thus had a reasonable probability of producing reliable data for this application. These locations were the same as those used for gamma survey data normalization measurements.

2. At each location, a 100 m^2 plot for correlation measurements and soil sampling was established (Figure 7). A gamma scan was performed across each correlation plot (100% scan coverage at a detector height of 1 meter) and the average normalized exposure rate reading was calculated.

3. Within each correlation plot, 9 sub-samples of surface soils were collected across the plot (to a depth of 15 cm) (Figure 7) and composited into a single sample to represent average soil

[6] Inferred based on measured Ac-228 concentration and assumption of radiological equilibrium.

radionuclide characteristics across the plot. Composite surface soil samples from each correlation plot were submitted to a qualified commercial laboratory (Intermountain Laboratories, "IML") for analysis of U-nat, Ra-226, Th-230, Pb-210, Ac-228 (Th-232) and K-40.

4. Laboratory analyses included the following parameters/methods:

   a. Ra-226 analysis by EPA Method 901.1 (gamma spectroscopy) with sample counting performed at least 21 days after sealing in the counting can to ensure full ingrowth of Rn-222 and its decay products.

   b. Analysis of K-40 by EPA Method 901.1.

   c. Analysis of Ac-228 by EPA Method 901.1 to estimate Th-232 concentrations based on assumption of radiological equilibrium.

   d. U-nat analysis using a standard ICP-MS method (EPA 200.8).

   e. Th-230 and Pb-210 analysis by radiochemical separation and measurement Methods ACW10 (alpha spectroscopy) and OTW01 (gross beta) respectively.

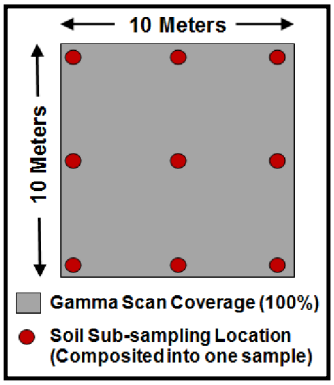


Figure 7: Correlation plot soil sampling and gamma scanning design.

5. Upon receiving soil analysis results from the laboratory, regression analysis was performed to determine if any significant statistical relationships exist between average gamma readings and soil radionuclide concentrations based on paired data among all correlation plots.

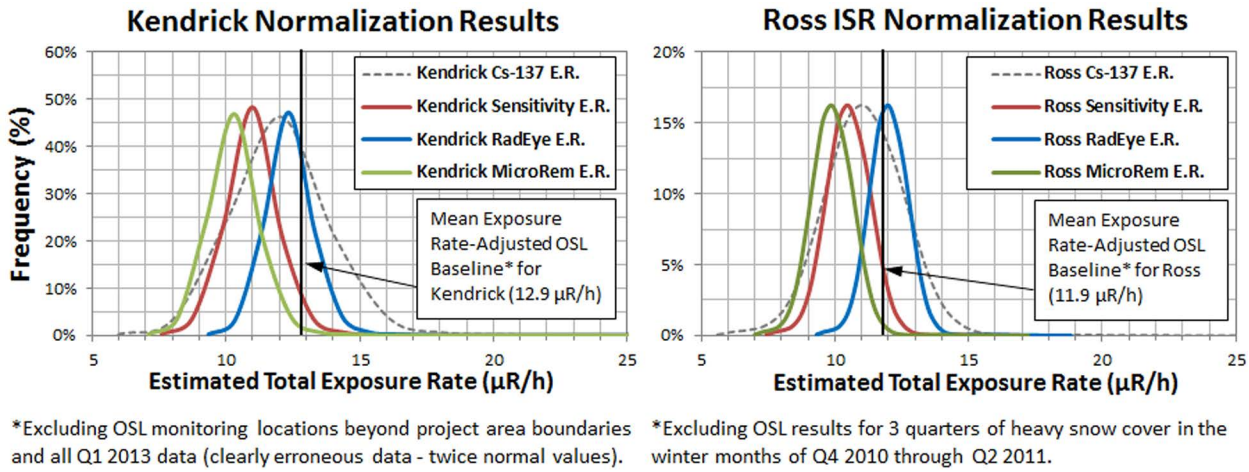
6. Where applicable, statistical gamma/radionuclide correlations were used to convert baseline gamma survey data into estimates of radionuclides in surface soils across all scanned areas.

2.4 RESULTS

2.4.1 Data Normalization Results

As previously indicated (Section 2.3.3), the results of each normalization method were spatially/quantitatively compared against baseline environmental OSL dose rate monitoring data and the method with the closest degree of agreement with OSL results was selected to represent "official" baseline gamma survey results for the purposes of mapped data presentations in this report. Histograms of all raw and normalized gamma survey data at each site (Ross and Kendrick), along with corresponding average exposure rate-adjusted environmental OSL monitoring results (see Footnotes 3 and 4) for all relevant OSL data[7] are shown in Figure 8. Corresponding descriptive statistics for the results of each normalization method are provided in Table 1.

[7] Some OSL data were not appropriate for such comparisons, including first quarter 2013 results for Kendrick (clearly erroneous data – nearly twice expected values), data for OSL monitoring locations beyond project area boundaries, and data for several quarters at Ross which are believed to have been impacted by a natural low bias due to heavy snow cover, associated soil moisture, and respective attenuation of terrestrial gamma radiation.



*Excluding OSL monitoring locations beyond project area boundaries and all Q1 2013 data (clearly erroneous data - twice normal values).

*Excluding OSL results for 3 quarters of heavy snow cover in the winter months of Q4 2010 through Q2 2011.

Figure 8: Frequency histograms of survey data normalized to estimates of true exposure rate using Sensitivity, Micro-Rem, and RadEye based normalization methods (see Section 2.3.3, Equations 2 through 5) along with raw NaI gamma survey data (exposure rate based on Cs-137 calibration) and comparisons against average exposure rate-adjusted OSL dose monitoring results.

It is apparent from the data in Figure 8 that gamma survey data normalized based on site-specific RadEye measurements and generalized cross-calibration against the HPIC (Equation 5) provides the closest agreement with average exposure rate-adjusted OSL dose monitoring results. However, because OSL monitoring locations data are not representative of the same spatial coverage as gamma survey data, location-specific averages using only normalized gamma survey collected in the immediate vicinity of each OSL monitoring station were also compared (Figure 9). These results confirm that gamma survey data normalized based on Equation 5 provide the closest agreement with exposure rate adjusted OSL dose monitoring results. As a result of these data comparisons, Equation 5 was used as the data normalization algorithm for the purposes of the official mapped presentations of gamma survey results as provided in the next section of this report (Section 2.4.2).

Table 1: Descriptive statistics for gamma survey data normalized to estimates of true exposure rate using Sensitivity, Micro-Rem, and RadEye based methods (see Section 2.3.3, Equations 2 through 5).

	Scan Data Normalization Statistics			**Scan Data Normalization Statistics**		
Statistical Parameter	*Kendrick Sensitivity (Equation 2)*	*Kendrick Micro-Rem (Equation 4)*	*Kendrick RadEye (Equation 5)*	*Ross ISR Sensitivity (Equation 3)*	*Ross ISR Micro-Rem (Equation 4)*	*Ross ISR RadEye (Equation 5)*
Mean (µR/hr)	11.0	10.3	12.4	10.5	9.9	12.0
Median (µR/hr)	11.0	10.3	12.3	10.5	9.9	12.0
Mode (µR/hr)	10.8	10.2	12.3	9.7	9.2	11.3
Standard Deviation (µR/hr)	1.3	1.3	1.2	0.9	0.8	0.8
Kurtosis	119	117	116	2	2	2
Skewness	6.8	6.8	6.7	0.3	0.3	0.3
Range (µR/hr)	57.7	54.7	51.0	11.2	10.5	9.8
Minimum (µR/hr)	7.0	6.6	8.8	7.3	6.8	9.2
Maximum (µR/hr)	64.8	61.3	59.8	18.4	17.4	19.0
Count	408,328	408,328	408,328	75,296	75,296	75,296

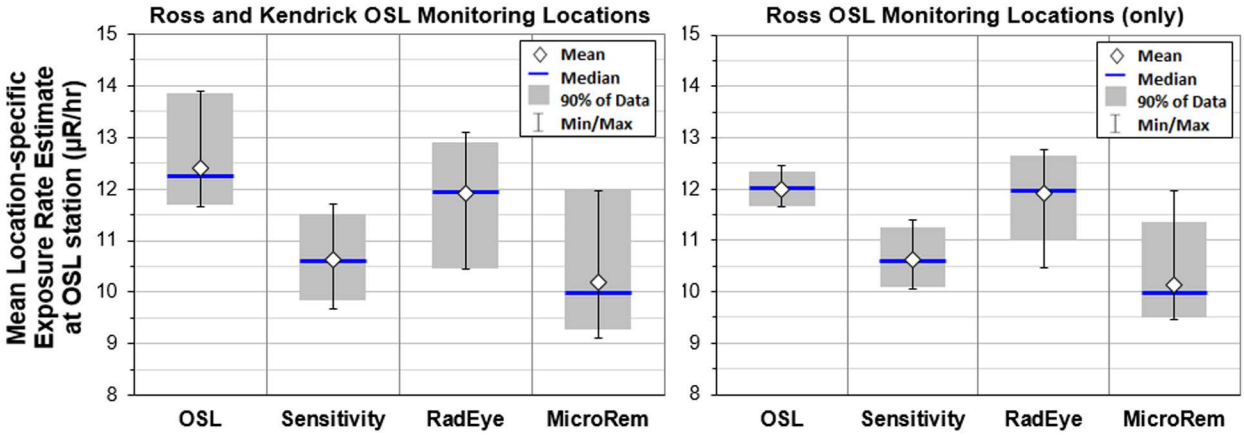


Figure 9: Box/whisker plots of location-specific measures of true total exposure rate for adjusted OSL dosimeter results at all environmental dose monitoring stations (excluding months of heavy snow cover and stations beyond project area boundaries), compared to corresponding locally averaged gamma scan results after data normalization based on the Sensitivity, Micro-Rem, and RadEye methods (see Section 2.3.3, Equations 2 through 5).

2.4.2 Baseline Gamma Survey Results

RadEye-normalized baseline gamma survey results for both the Ross ISR and Kendrick Amendment project areas are shown in Figure 10. Instrument cross-calibration and gamma/soil correlation plot locations were selected based on these data to capture a representative range of gamma exposure rates and associated soil radionuclide concentrations. In general, exposure rates are relatively low (averaging between 12.0 and 12.4 µR/hr) and uniform across both survey areas (note Table 1 and Figure 8). The data in Figure 10 were subsequently interpolated using a kriging method provided in an ArcGIS utility called Spatial Analyst. Kriging is a geostatistical interpolation procedure that fits a mathematical function to a specified number of nearest points within a defined radius to determine an output value for each location. A given "location" is represented by a cell of specified areal dimensions that may or may not include any measured data points. Values closer to the cell are given more weight than values further away and distances, directions, and overall variability in the data set are all considered in the predictive semivariogram model. Input parameters used for kriging were as follows:

Cell size:	10 feet × 10 feet
Maximum search radius:	600 feet
Semivariogram model:	Exponential
Number of nearest data points:	10

Interpolation by kriging essentially averages out variability due differences in response between different detectors and small-scale spatial variability along scan transects. This is believed to provide a more accurate representation of average values and improves visual interpretation of larger-scale spatial distributions of gamma radiation. In addition, kriged raster data were imported into a second commercially available GIS software package called Global Mapper in order to provide color

interpolation between selected color-coded legend increments based on actual predicted exposure rate values for individual prediction cells. Continuous kriged estimates of true exposure rates across the Ross ISR and Kendrick Amendment survey areas are shown in Figure 11.

Based on the data provided in Figure 11, some slight spatial trends in baseline gamma radiation are apparent in some areas, including slightly lower readings along a primary local access road (D Road) and across portions of the Ross ISR survey area and the landowner property due west of Ross. These particular trends may be related to differences in land use (e.g. imported gravel road base and possibly, a relative lack of livestock grazing compared to other portions of the project area), though natural geomorphic associations are also possible (e.g. slightly lower soil radionuclide concentrations and associated gamma radiation along the Deadman Creek drainage). There is also an apparent diffuse band of slightly higher readings stretching roughly from west to east through the central portion of the overall project area (just south of the Deadman Creek drainage), which also includes a few small anomalous baseline "hot spots".

Again, raw baseline gamma survey data from both survey areas (Ross and Kendrick, in units of both CPM and Cs-137 calibrated units of µR/hr) along with corresponding normalized data based on all three normalization methods described in this report (i.e. as represented by respective histograms in Figure 8 and corresponding descriptive statistics in Table 1) will be maintained in an electronic database by the licensee in order to permit potential future use depending on future instrument usage, survey objectives, or new data concerning best estimates of true exposure rate (which could potentially result in revised data normalization algorithms).

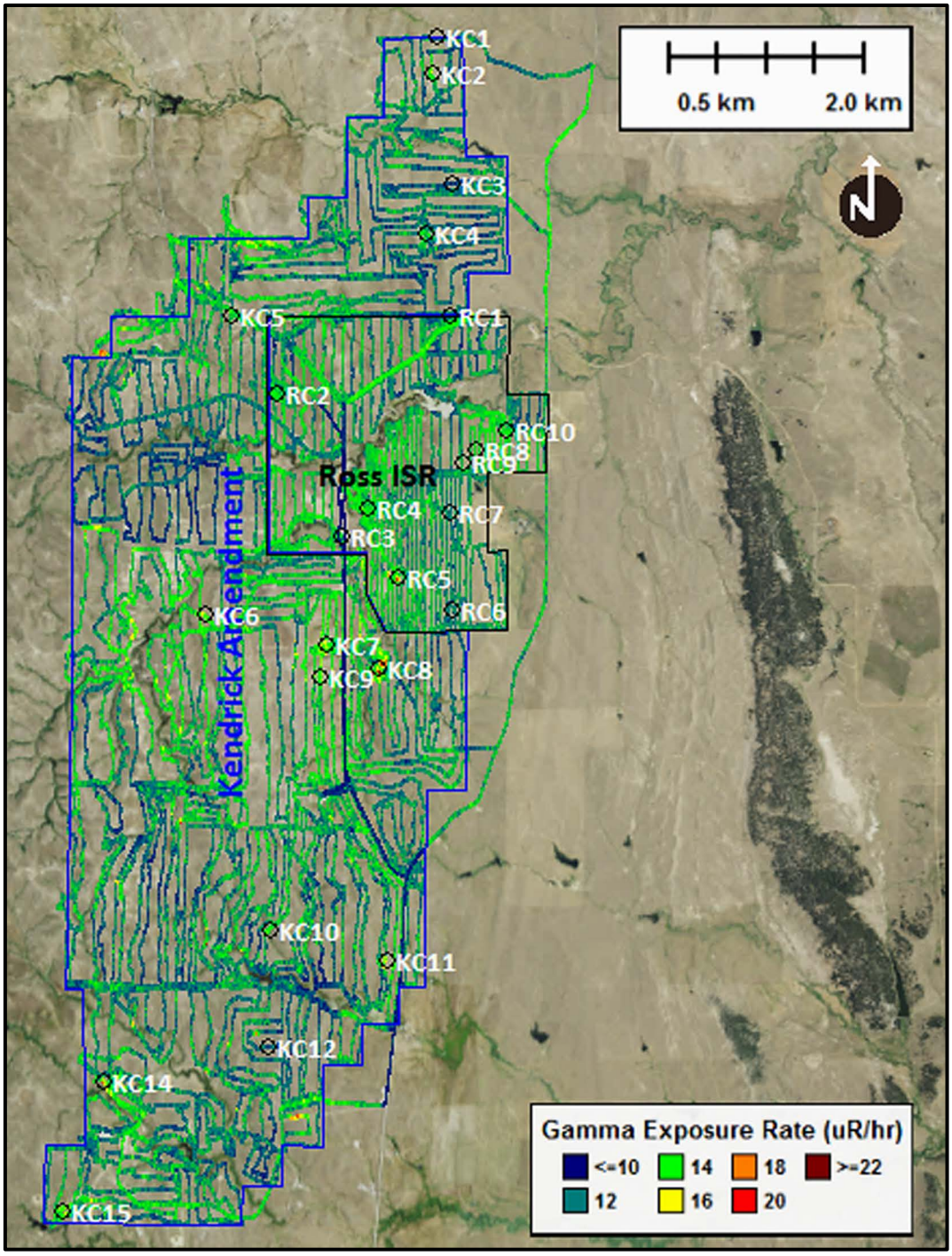


Figure 10: Map of RadEye-normalized gamma survey data (see Section 2.3.3, Equation 5) along with gamma/soil radionuclide correlation plot locations. These data represent best estimates of the spatial distribution of "true" total baseline gamma exposure rates. Individual exposure rate point values are displayed in "interpolated" color gradients between integers/colors indicated in the legend. Where data points overlap, the higher value is preferentially displayed on top.

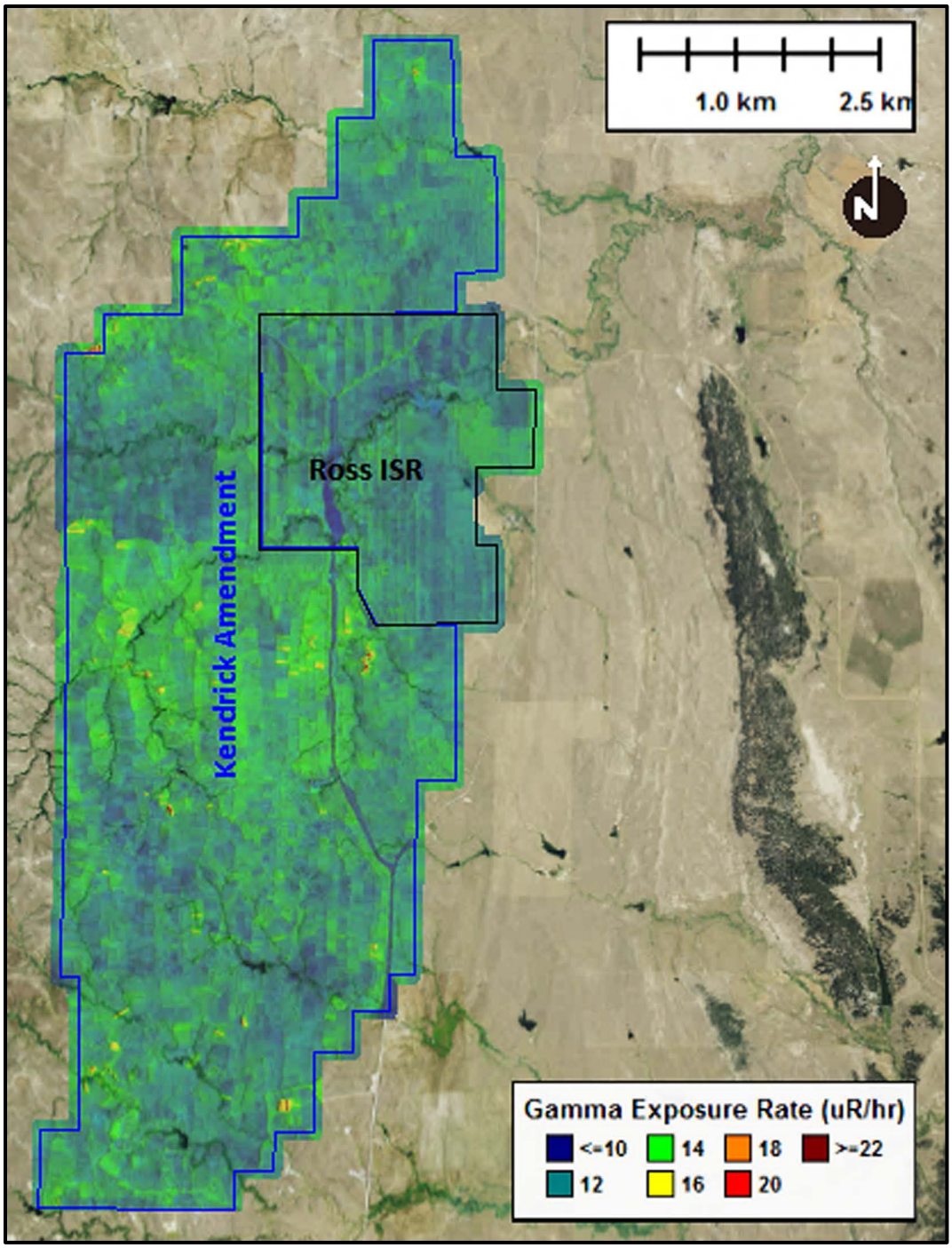


Figure 11: Spatial interpolation by kriging, combined with color ramp interpolation for RadEye-normalized baseline gamma survey data (Section 2.3.3, Equation 5). These data represent a continuous rendering of the best estimates of the spatial distribution of "true" total baseline gamma exposure rates across the overall project area. In this figure, kriged 10' x 10' "prediction cell" values (where actual scan data may or may not be present) are displayed as "interpolated" color gradients across the integers/colors indicated in the legend. Because kriging uses multiple nearby data points to estimate values for each prediction cell, the displayed data are somewhat "smoothed" relative to nearby maximum/minimum point values.

2.4.3 Gamma-based Estimates of Soil Radionuclide Concentrations

The radiological baseline data generated at each gamma/soil radionuclide correlation plot across the Kendrick Amendment and Ross survey areas are shown in Table 2. The locations of these plots are shown in Figure 10.

Table 2: Gamma/soil radionuclide data for 100 m^2 gamma/soil radionuclide correlation plots at Kendrick (left) and Ross (right).

Corr Plot ID[1]	Mean Exposure Rate[2] (µR/hr)	Mean U-nat (pCi/g)	Mean Th-230 (pCi/g)	Mean Ra-226 (pCi/g)	Mean Pb-210 (pCi/g)	Mean Th-232[3] (pCi/g)	Mean K-40 (pCi/g)
KC1	11.9	0.5	0.5	0.8	1.5	0.4	14.7
KC2	16.3	4.9	6.6	6.0	4.5	0.8	12.3
KC3	11.4	0.4	0.5	0.7	1.3	0.6	12.5
KC4	12.9	2.5	1.0	2.0	2.4	0.6	12.9
KC5	12.7	0.9	0.8	1.1	2.1	0.5	14.5
KC6	14.2	1.8	2.4	3.2	1.7	0.6	13.3
KC7	15.6	1.8	5.6	4.5	2.7	0.6	12.5
KC8	15.2	2.0	6.6	5.5	0.9	0.5	12.9
KC9	13.4	1.3	1.6	2.3	2.1	0.6	13.3
KC10	13.6	1.1	1.7	2.1	2.6	0.6	14.1
KC11	15.3	2.1	7.8	4.5	4.1	0.6	13.0
KC12	11.8	0.5	1.3	0.6	1.5	0.6	13.1
KC13	17.1	2.4	4.5	4.1	4.1	0.6	13.7
KC14	14.8	1.8	3.9	4.5	2.6	0.5	11.9
KC15	12.6	0.7	0.6	1.0	2.0	0.6	13.3

Corr Plot ID	Mean Exposure Rate[2] (µR/hr)	Mean Ra-226 (pCi/g)
RC1	11.5	1.2
RC2	11.8	2.0
RC3	11.6	2.0
RC4	12.4	1.8
RC5	15.9	14.3
RC6	11.0	1.2
RC7	11.4	0.9
RC8	12.7	1.6
RC9	11.8	1.4
RC10	12.7	1.5

[1]Note that ID numbers in this table have been modified from original field ID's for brevity and consistency with Figure 10. The nomenclature code for review of laboratory data for Kendrick correlation samples (Appendix B) is as follows: Corr1 = KC1

[2]Based on site-specific NaI/RadEye relationship and Equation 5

[3]Based on Ac-228 gamma-spec result and assumption of equilibrium

Two correlation plots, highlighted purple in Table 2, had paired gamma/radionuclide results that are considered outliers and were thus excluded from the regression analyses. These data are likely to be inaccurate and inappropriate for inclusion due to non-uniform radiological conditions across and in the general vicinity of respective correlation plots. For example, the distribution of gamma exposure rates across correlation plot KC13 (Figure 12) was highly variable, a circumstance which can result in a significant high or low bias in average gamma readings relative to soil radionuclide results (due to gamma shine effects from adjacent areas, or an opposite effect from plot selection based on a "hot spot" of small areal extent, e.g. 100 m^2 or less).

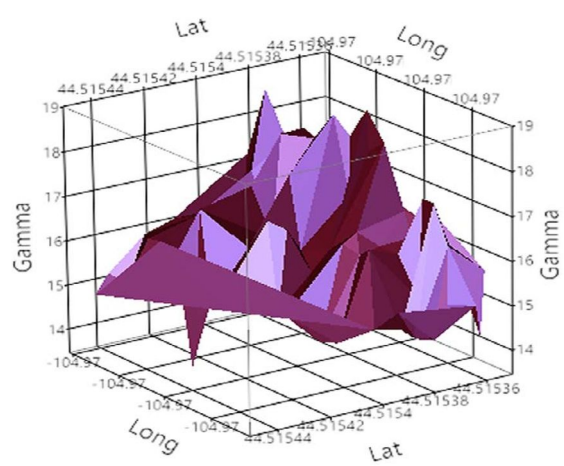


Figure 12: Three-dimensional surface plot of the spatial distribution of gamma exposure rates (µR/hr) across correlation plot KC13.

The results of regression analyses for gamma/soil radionuclide correlation plot data are shown in Figure 13. Because paired gamma/soil Ra-226 data represent the most important relationship for this aspect of the baseline gamma survey, and respective data were available from both the Ross and Kendrick survey areas, these data were combined for an overall regression analysis. Respective data indicate a non-linearity in the lower range of values, below about 13 µR/hr. This phenomenon is commonly observed as Ra-226 must become concentrated enough in surface soils to have a significant (and linear) correlative impact on gamma exposure rates (Whicker et al., 2008). The two gamma/Ra-226 regression equations (one linear and one non-linear) as shown in Figure 13 were used to subsequently convert RadEye-normalized exposure rate data into estimates of corresponding soil Ra-226 concentrations, depending on whether the exposure rate value was above or below 13 µR/hr. Both relationships are deemed sufficiently significant for this application (e.g. R^2 values > 0.75).

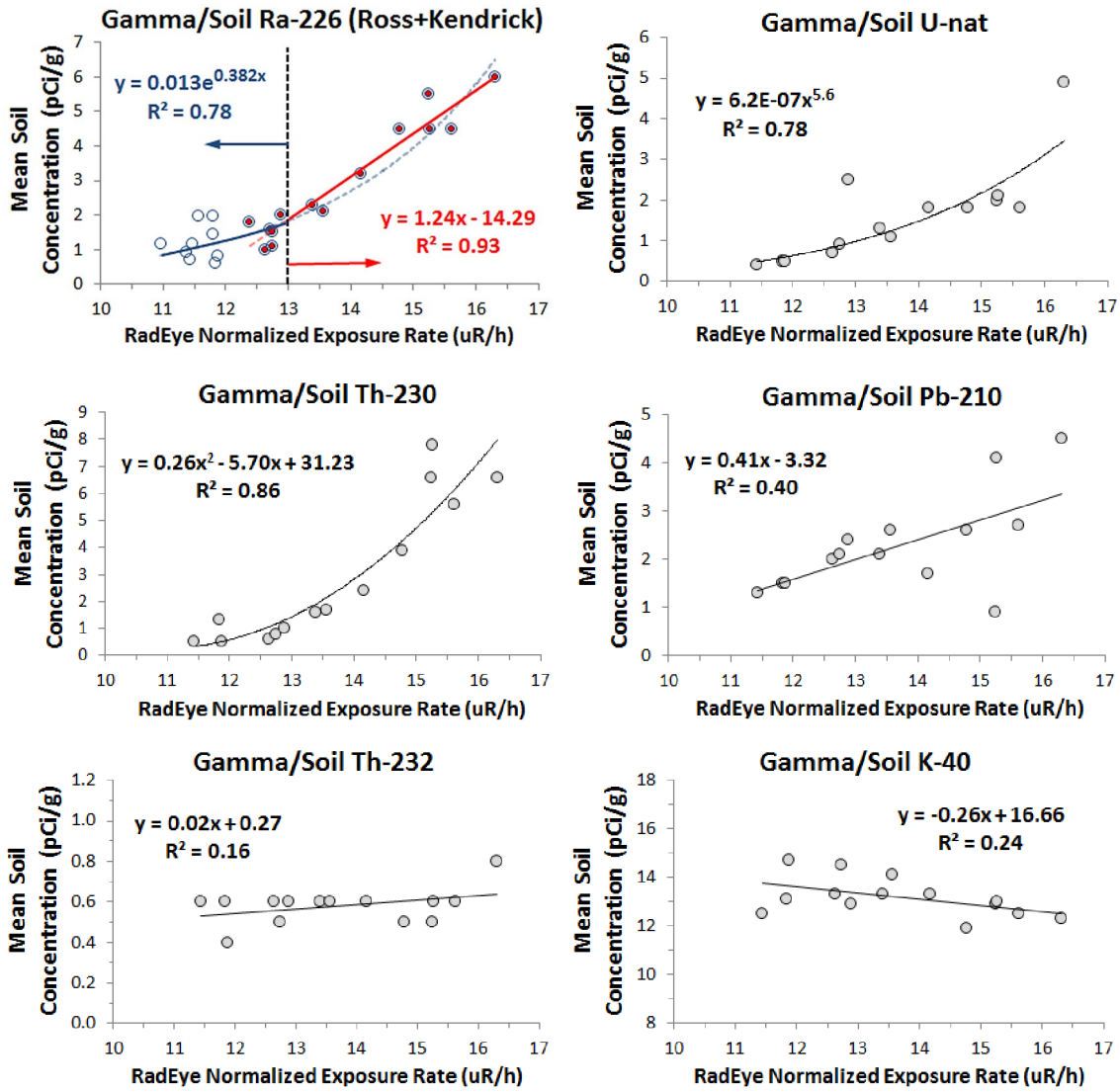


Figure 13: Paired gamma/soil radionuclide correlation data and respective regression analysis results.

Study of the data in Table 2 and Figure 13 suggests that baseline Ra-226 and Th-230 concentrations in these surface soils are generally in an approximate state of secular equilibrium, though for the lowest range of measured values, Th-230 results appear to have a slightly low analytical bias relative to Ra-226 results[8]. U-nat appears to be naturally depleted relative to Ra-226 in these soils[9] though differences in analytical method could be a contributing factor[8]. Although a slight trend of increasing Pb-210 with increasing gamma radiation is apparent, the relationship is weak and the variability is high[8]. There is effectively no relationship between gamma radiation and baseline concentrations of Th-232 and K-40 in surface soils across the project area (both are relatively uniform across all locations sampled).

Best-fit non-linear regressions for RadEye-normalized gamma exposure rates against soil U-nat and Th-230 concentrations (Figure 13) are also deemed sufficiently significant to convert gamma survey data into respective estimates of soil concentrations across the overall project area, though respective estimation uncertainties are greater[8], particularly near (or beyond) the limits of the range of measured data for these relationships. For this reason, these regression relationships were truncated in their application as follows, based on the data in Table 2 and respective interpretation of consistency with apparent relative degrees of generalized radiological equilibrium:

<u>Gamma/soil U-nat</u>

- Any gamma value < 11.3 µR/hr was assigned a fixed U-nat value of 0.5 to represent ≤ 0.5 pCi/g

<u>Gamma/Soil Th-230</u>

- Any gamma value < 12.5 µR/hr was assigned a fixed Th-230 value of 0.6 to represent ≤ 0.6 pCi/g
- Any gamma value > 15.8 µR/hr was assigned a fixed Th-230 value of 6.0 to represent ≥ 6.0 pCi/g

Official gamma-based estimates of radionuclide concentrations in surface soils (0-15 cm depth) are shown in Figure 14. Aside from greater estimation uncertainty with respect to estimates of soil U-nat and Th-230, estimated values for all of these radiological soil parameters are consistent with typical background soil concentrations in Wyoming. Note that the mean gamma exposure rates in Table 2 are based on RadEye-normalization (Equation 5) and gamma/soil radionuclide correlations (Figure 13) are based on these normalized exposure rate values. This is appropriate as future scanning detectors may differ and in order to use the relationships in Figure 13 for conversion of future gamma scan data into estimates of soil radionuclide concentrations, the raw gamma scan data must first be similarly normalized to produce comparable values. Alternatively, a new correlation can be developed.

[8] Unlike the method used for analysis of Ra-226, Th-232 and K-40 (gamma spectroscopy), wet radiochemical analysis methods tend to have a slightly low analytical bias due to incomplete digestion of silicate minerals, and are also known to have greater variability/uncertainty due to small sample aliquot size and use of radiotracers to estimate chemical yields.

[9] At radiological equilibrium, U-nat values should be about twice that of Ra-226. Relative to Th-230 and Ra-226, U-nat has greater solubility/mobility in soils under oxidizing conditions and some degree of differential leaching of U-nat from surface soils is common.

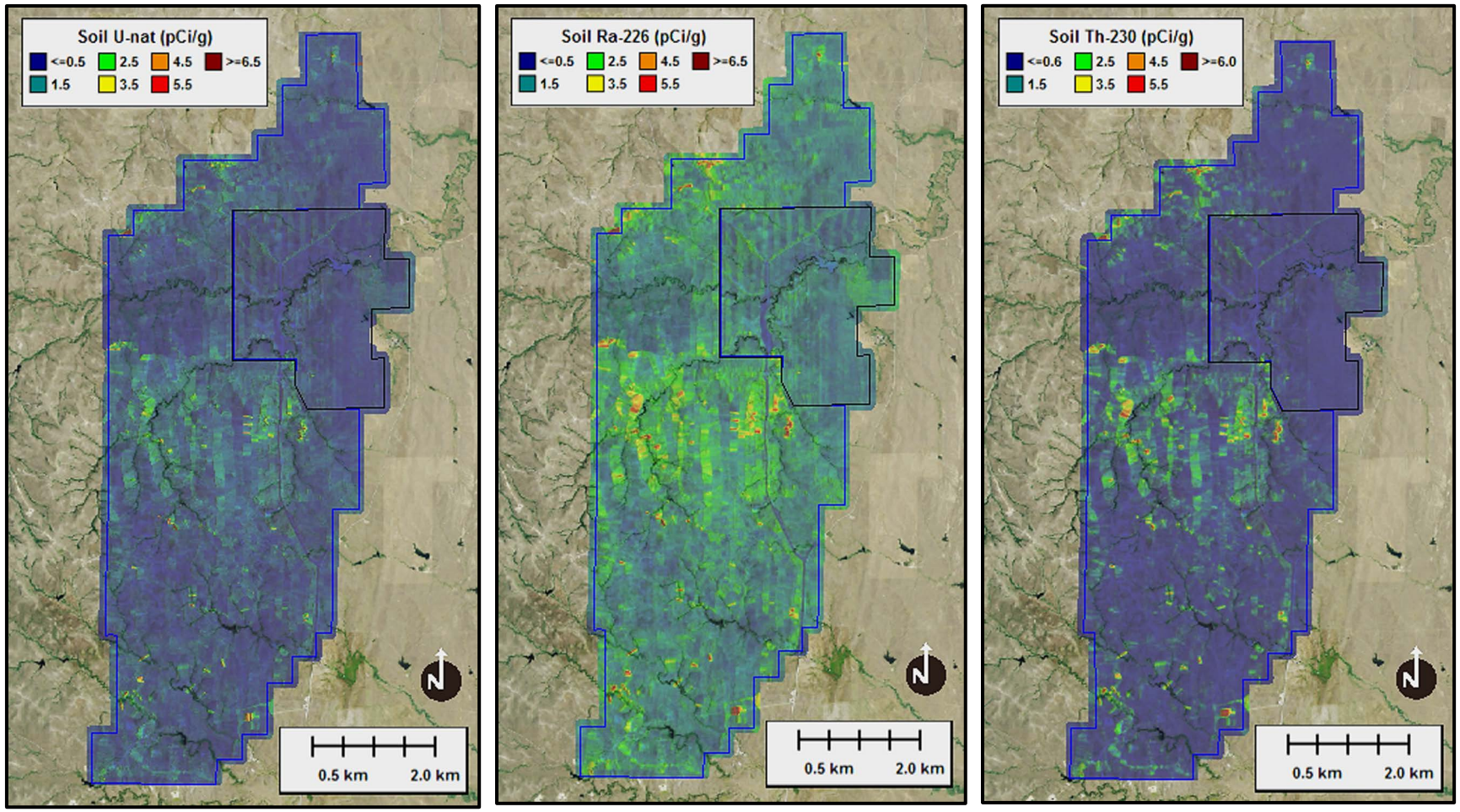


Figure 14: Gamma-based estimates of baseline concentrations of U-nat (left), Ra-226 (center) and Th-230 (right) in surface soils (0-15 cm depth) across the overall project area based on gamma/soil radionuclide correlations. Note that these estimates are specific to the analytical laboratory methods used to measure respective radionuclide concentrations in correlation soil samples (see Section 2.3.4). Any method related biases or uncertainties will be reflected in these gamma-based results, and future soil samples should be analyzed using the same methods if results are to be quantitatively/spatially compared against these kriged baseline values.

2.5 DATA QUALITY ASSURANCE / QUALITY CONTROL

All gamma surveys, supporting radiological measurements, soil sampling, data compilations and data presentations included in this report were subject to data QA/QC protocols in order to provide confidence in the results and to ensure that the data generated and presented are reliable, with a minimal amount of uncertainty introduced by variability in instruments, field survey methods, and quantitative/spatial analysis techniques. Certain aspects of these protocols are also designed to help quantify data uncertainty due to these sources of variability, as well as those associated with natural environmental factors (e.g. atmospheric stability, barometric pressure, etc.). In general, quality assurance (QA) includes qualitative factors that provide confidence in the results, while quality control (QC) includes quantitative evidence that enables estimation of data uncertainty (accuracy and precision).

Data QA factors for this radiological baseline survey included the following:

- Field activities and relevant observations regarding environmental or equipment related conditions that could affect survey data were noted in the field logbook and documented with photos as appropriate.
- The general consistency of scan data were reviewed for consistency with previous scan data and/or adjacent scan tracks.
- The baseline gamma survey design was developed and directed by a qualified environmental health physicist with highly specialized experience and expertise in gamma radiation surveys and spatial analysis techniques.
- The gamma survey was implemented in the field by qualified health physicists with extensive experience with the methods and technologies used.
- Technical information regarding the methods used, including supporting references to relevant regulatory guidance, scientific research journal articles, or other peer-reviewed technical literature are provided in this document.
- This report was developed by an experienced environmental health physicist with specialized expertise in this discipline, and has been peer reviewed by a Board Certified Health Physicist.

Data QC protocols for this radiological baseline survey included the following:

- Technical information on survey instrument calibrations and soil analysis results was reviewed for quantitative and qualitative indications of data accuracy and precision.
- QC measurements were performed daily in the field to ensure proper instrument performance and to help quantify measurement precision and data uncertainty.

The results of data QC protocols and related assessments are provided in the following sections.

2.5.1 QA/QC for Baseline Gamma Survey Data

DATA ACCURACY

All instruments were properly calibrated according to instrument manufacturer and/or ANSI N323A-1997 specifications within one year prior to use on this project (calibration certificates are provided in Appendix A)[10]. This included (as applicable) high voltage plateau and count/exposure rate calibration against a certified (NIST-traceable) Cs-137 source. Calibration certificates verify that all instruments were performing within acceptable tolerance limits after calibration (within ± 10% of known count/exposure rates). Estimates of uncertainty with respect to gamma survey data accuracy are based on this calibration performance along with the following factors:

1. Prediction error associated with each gamma survey data normalization method is expected to be within approximately ± 10% of true exposure rates from terrestrial NORM and cosmic radiation as would otherwise be measured with a HPIC (Whicker and Chambers, 2014).
2. The estimated range of true baseline exposure rates across the overall project area for the vast majority of locations is approximately 9-15 µR/hr (note distributions of RadEye-normalized values in Figure 8).
3. Natural temporal variability in outdoor gamma exposure rates at any given location is generally found to be in the range of ± 1-2 µR/hr (e.g. Figure 5.11 in NCRP, 1987).
4. The average normalized exposure rate estimate for each of the three normalization methods are within approximately ± 2 µR/hr of the average baseline exposure rate based on environmental OSL dose rate monitoring (Figure 8).

Given the above information, the degree of data uncertainty in terms of accuracy for normalized estimates of baseline gamma exposure rates across the overall project area (Figures 10 and 11) is estimated to be within about ± 2 µR/hr of the true average total baseline gamma exposure rate at any given location. Assuming that future gamma survey measurements are conducted with a consistent technique using properly calibrated Ludlum 44-10 detectors, a similar amount of uncertainty can be expected in the accuracy of equivalently normalized estimates of true exposure rate.

This uncertainty estimate is further supported by analysis of the theoretical average total exposure rate across the Site as calculated based on average cosmic and terrestrial contributions to the gamma field using 1) estimated median elevation, 2) average soil Ra-226, Th-232 and K-40 concentrations from Kendrick correlation plot soil samples, 3) assumptions of radiological equilibrium and infinite plane soil half space conditions, and 4) appropriate conversion factors as established in the literature (Stone et al., 1999; NCRP, 1987). A calculated estimate of the theoretical average total gamma exposure rate for the

[10] One slight exception is that the RadEye detector was about a week overdue for annual calibration at the time of use on the project. RadEye readings at a SENES office shortly after calibration in August 2013 were consistent with readings just prior to the Kendrick survey, supporting expectations that at the time of use in the field at the Kendrick site, this instrument was still performing within tolerance limits from the previous calibration.

site is 13.8 µR/hr. The average estimated true total baseline gamma exposure rate across the overall project area based on RadEye-normalized scan data (Table 1) is about 12.3 µR/hr. The relatively small difference in these values (1.5 µR/hr) is likely related to losses of radon gas from surface soils to the atmosphere (i.e. radiological disequilibrium between Ra-226 and its short-lived gamma-emitting decay products; NCRP, 1987). This difference is close to the estimated data uncertainty in terms of the accuracy of normalized estimates of true total baseline gamma exposure rates across the overall project area (± 2 µR/hr).

MEASUREMENT PRECISION

Daily instrument QC measurements were performed in the field at a designated onsite location for each NaI detector used for the survey. The purpose was to verify proper instrument function and to quantify the consistency of readings within and between individual scanning detectors under field conditions (site-specific measurement precision). Prior to initiation of field work each day, the mean of 10 readings for each Ludlum 44-10 scanning detector was determined and recorded for ambient background and a Cs-137 check source at a fixed location (1 meter above the ground surface). The results of these field QC measurements[11] are documented on instrument QC charts (Figures 15 and 16).

The background QC chart (Figure 15) indicates that all Ludlum 44-10 detectors used for scanning were working properly at the time of the survey, and reproducibility of readings each day was within acceptable QC limits. The total variability due to differences in the response characteristics of different detectors, and due to naturally fluctuating gamma exposure rates over time at any given location (due to the random nature of radioactive decay as well as changes in environmental factors such as soil radon exhalation rates and barometric pressure), was on the order of ± 2 µR/hr in a background gamma field of about 10.5 µR/hr. Considering the degree of spatial variability in gamma radiation present across all scanned areas, as well as an expectation that future site scanning activities will be conducted over longer time scales and with different sets of detectors, these results suggest the total data uncertainty in terms of measurement precision among these Ludlum 44-10 detectors, and among different sets of properly calibrated NaI scan detectors that may be used in the future, can generally expected to be in the range of ± 2 µR/hr.

There were two anomalies in the background QC data that required adjustments to some gamma survey data. Note that the background data on 8/22/14 are elevated on average by about 1 µR/hr relative to average daily detector readings on all other days of the survey (Figure 15). This is believed to have been a real environmental fluctuation in ambient gamma radiation at the site, perhaps due to a change in barometric pressure (the field work was cancelled the following day due to rain). All gamma scan data for this day were adjusted accordingly to avoid an erroneous suggestion of higher baseline exposure rates in the areas surveyed that day. Similarly, background QC readings from one NaI detector (Unit 2) were about 1 µR/hr low relative to all other detectors between 8/24/14 and 8/27/14. Scan data for this

[11] All QC data in these charts were normalized with the nominal sensitivity-based parameters used as input into the data acquisition software loaded on field computers (i.e. normalized using Equation 2).

detector on these days were also adjusted accordingly.

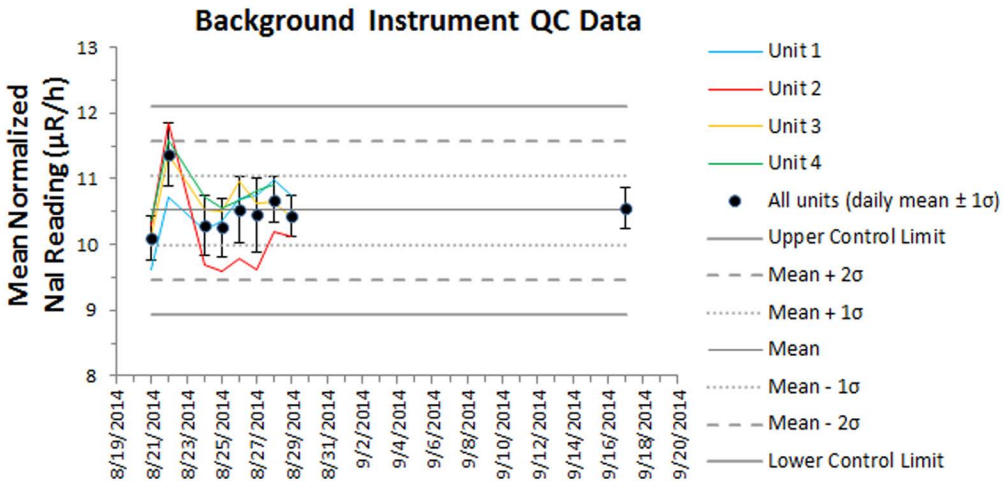


Figure 15: Static onsite background QC chart for NaI scan detectors.

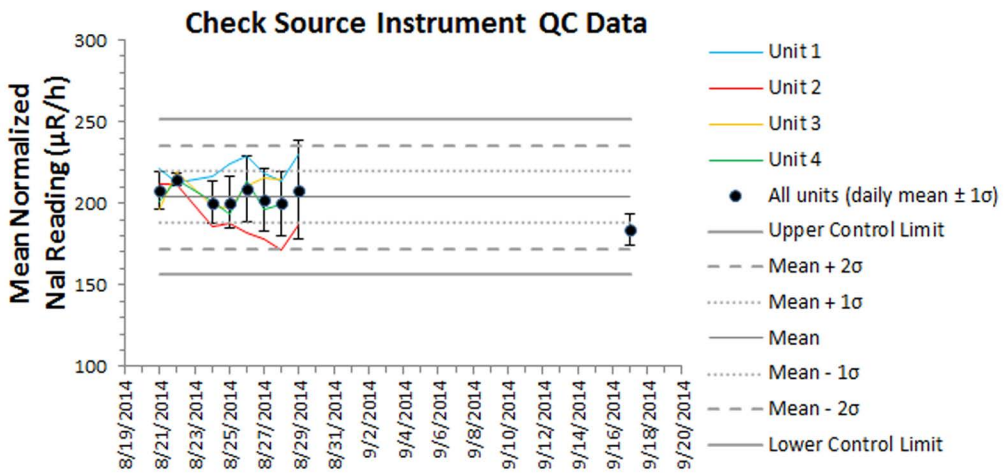


Figure 16: Onsite static check source QC chart for NaI scan detectors.

With respect to the static QC measurements collected for a Cs-137 check source, a considerably larger degree of instrument response variability was observed between different NaI detectors under high, artificially-induced gamma fields (Figure 16). This is not unusual. These Cs-137 induced gamma fields were an order of magnitude greater than natural baseline gamma radiation levels found across the Site. The reason for the observed differences in response to a Cs-137 check source is primarily due to small differences in measurement geometry. Ludlum reports that there are normally small differences in the internal mounting geometry of individual NaI crystals. Such differences relative to directional, monoenergetic photons from a Cs-137 point source can create large distance/angular response differences in NaI counting efficiency, especially when the source is placed in close proximity to the detector (Ogundare et al., 2008). Based on published experimental and theoretical modeling results for different source energies and measurement geometries (Ogundare et al. 2008), along with discussions

with Ludlum and empirical observations in the field, a more uniform response among various detectors can be expected when a higher activity natural radiation environment is encountered in the field (e.g. within ± 5-10 µR/hr of one another when placed in a natural gamma field of 100 µR/hr).

Unlike a Cs-137 point source, gamma radiation in the field is diffuse, highly scattered in nature, and is comprised of a relatively wide distribution of low-energy photons, a much higher percentage of which will interact within the detector's crystal resulting in more uniform and consistent readings between various detectors. In addition to internal geometry considerations, differences in response to a mono-energetic Cs-137 check source may be more pronounced with respect to variability in photon energy dependence and angular response for each unique NaI crystal, as well as with small variations in the performance of each unique photomultiplier tube. The relevant conclusion of this assessment is that for Cs-137 check source QC readings, comparatively large differences in readings between different detectors are not problematic, but day-to-day check source readings for a given individual detector should remain reasonably consistent over time (note that there was a change in the actual detector/meter pairing used for "Unit 2" on 8/24/14).

2.5.2 Data QA/QC for Soil Sampling

A consistent methodology as described in Section 2.3.4 was followed for all composite correlation plot soil sampling. At each correlation plot, the amount of soil collected at each sub-sampling location across the plot was as equal as possible. Location ID numbers, date, and GPS coordinates (at the center of the correlation plot) for each sampling location were recorded in the field log book, along with notes of any field observations that could potentially affect the data or related data interpretations. After samples were collected, they were maintained under proper chain-of-custody (COC) protocols. Field sampling personnel completed a COC form for each shipping container of soil samples delivered to the laboratory for analysis. COC/analytical request forms were provided by the laboratory (IML, Sheridan WY).

Each sample was thoroughly homogenized in accordance with the lab's standard sample preparation protocols. For samples analyzed for Ra-226 by HPGe gamma spectroscopy, aliquots of homogenized samples were weighed and placed into counting tins, then sealed for a minimum of 21 days prior to counting to allow ingrowth of short-lived Ra-226 progeny and approximate equilibrium conditions to become established. Separate aliquots of the homogenized samples were used for analysis of U-nat by inductively coupled plasma mass spectrometry (ICP-MS), Th-230 by alpha spectroscopy, and Pb-210 by gross beta counting.

The contract laboratory (Intermountain Laboratories, Inc.) has fully qualified radiochemistry capabilities including appropriate accreditations (e.g. NLAP, EPA, etc.). Each batch of laboratory analyses included QC measurements (e.g. sample spikes, method blanks, duplicate analyses, etc.) and QC results were provided with each data report to provide indications of measurement accuracy and precision. The laboratory uses NIST certified standards for instrument calibrations, and for gamma spectroscopy, utilizes NIST or EPA certified soil radionuclide reference material standards for such calibrations. Laboratory QC data were reviewed for data quality verification purposes and all reported results were

within EPA and the laboratory's acceptance criteria.

2.6 SUMMARY AND CONCLUSIONS

Baseline gamma radiation survey activities were conducted across the Kendrick Expansion Area in August and September of 2014. The field gamma scanning instruments and survey methods were consistent with those used for the original baseline gamma survey of the adjacent Ross ISR Project area in July 2010, but the basis of measurement differed in that raw count rate data were normalized to estimates of true exposure rate from terrestrial NORM and cosmic radiation. As a result, raw scan data from the original Ross ISR survey were retroactively normalized to the same basis of measurement to provide a consistent characterization of baseline gamma radiation and associated soil radionuclide concentrations across both survey areas (Ross and Kendrick). The revised baseline gamma survey data presented in this report for the Ross site are intended to update and supersede the original data provided in Addendum 2.9-B of the Technical Report for the Ross ISR license application. A summary of the data analyses, key findings and conclusions presented in this report is as follows:

1. Normalization of raw energy-dependent gamma survey data to estimate true baseline exposure rates across the overall project area (Ross and Kendrick) was based on new methods that have been peer-reviewed and accepted for publication in the journal of Health Physics (Whicker and Chambers, 2014). Three potential normalization methods were evaluated:

   - Adjustment of raw scan data based on the average sensitivity of Ludlum 44-10 NaI detectors to terrestrial NORM in soils among many sites across the western U.S. (Equations 2 and 3).
   - Site-specific cross-calibration of NaI detectors against a tissue-equivalent plastic scintillometer (Micro-Rem meter), combined with a generalized average Micro-Rem response relative to the HPIC (Equation 4).
   - Site-specific cross-calibration of NaI detectors against an energy-compensated RadEye PRD instrument, combined with a generalized average RadEye response relative to the HPIC (Equation 5).

   Of these three normalization methods, the RadEye-based approach (Equation 5) produced the closest degree of agreement with environmental dose rate monitoring with OSL dosimeters. Respective results were thus selected to represent best estimates of true total exposure rates for the purposes of data presentations in this report. The other two methods are retained as part of this report for potential future use. Raw baseline gamma survey data from both survey areas (Ross and Kendrick) along with corresponding normalized data based on all three normalization methods will be maintained in an electronic database by the licensee in order to permit potential future use depending on future instrument usage, survey objectives, or new data concerning true exposure rates at the Ross ISR and Kendrick Amendment sites.

2. Gamma exposure rates across the overall project area (Ross and Kendrick) are relatively low and uniform, generally ranging from about 9 to 15 µR/hr. Some moderate spatial trends in baseline gamma radiation are apparent in some areas, including slightly lower than average readings along certain sections of D Road and across lands associated with the Deadman Creek drainage. These trends may be related to differences in land use (e.g. imported gravel road base and possibly, a relative lack of livestock grazing compared to other portions of the project area), though natural geomorphic associations may also be possible. Just south of the Deadman Creek drainage, there is a diffuse band of slightly higher than average gamma exposure rates across central portions of the overall project area. A few small areas of anomalously higher readings were identified (ranging up to about 60 µR/hr), but these baseline "hot spots" are generally very small in spatial extent (e.g. typically 100-200 m^2 or less).

3. The gamma survey data provided in this report have been carefully developed, analyzed and peer reviewed by qualified environmental health physics professionals with specialized expertise in this discipline. The data are of high quality, and related uncertainty has been minimized and quantified with proper QA/QC protocols and related data assessments. The final baseline gamma exposure rate data provided are generally expected to be within ± 2 µR/hr of the "true" total baseline gamma exposure rate at any given location. The degree of uncertainty in these data with respect to measurement "precision" (reproducibility) versus equivalently normalized readings from instruments that may be used for future gamma surveys is generally estimated to be on the order of ± 2 µR/hr.

The state-of-the-art data collection, analysis, and QA/QC protocols used to establish baseline conditions with respect to gamma radiation and associated radionuclides in soil across the Ross ISR and Kendrick Expansion Area will help to ensure that future radiological surveys and assessments will be able to accurately identify any impacts from ISR operations, and are expected to be valuable for operational monitoring, compliance evaluations, health physics assessments, and development of decommissioning criteria for soils across the Site. These data should meet applicable regulatory requirements and associated data quality objectives for characterization of baseline gamma radiation exposure rates and associated soil radionuclide concentrations across the Ross ISR and Kendrick Amendment project areas.

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APPENDIX A – Instrument Calibration Certificates

Designer and Manufacturer of Scientific and Industrial Instruments

CERTIFICATE OF CALIBRATION

LUDLUM MEASUREMENTS, INC.
501 Oak Street, 325-235-5494, Sweetwater, TX 79556, U.S.A.
☐ 10744 Dutchtown Road, 865-392-4601, Knoxville, TN 37932, U.S.A.

CUSTOMER FRG ORDER NO. 20232212/397960

Mfg. Bicron Model MICRO REM Serial No. 1535

Mfg. Model Serial No.

Cal. Date 21-Oct-13 Cal Due Date 21-Oct-14 Cal. Interval 1 Year Meterface 200 µRem/h

Check mark ☑ applies to applicable instr. and/or detector IAW mfg. spec. T. 74 °F RH 44 % Alt 704.8 mm Hg

☐ New Instrument Instrument Received ☑ Within Toler. +-10% ☐ 10-20% ☐ Out of Tol. ☐ Requiring Repair ☐ Other-See comments

☑ Mechanical ck. ☑ Meter Zeroed ☐ Background Subtract ☐ Input Sens. Linearity
☐ F/S Resp. ck ☐ Reset ck. ☐ Window Operation ☐ Geotropism
☐ Audio ck. ☐ Alarm Setting ck. ☑ Batt. ck. (Min. Volt) VDC
☐ Calibrated in accordance with LMI SOP 14.8 rev 12/05/89. ☑ Calibrated in accordance with LMI SOP 14.9 rev 02/07/97.

nstrument Volt Set V Input Sens. mV Det. Oper. V at mV Threshold Dial Ratio = mV

☐ HV Readout (2 points) Ref./Inst. / V Ref./Inst. / V

COMMENTS:

Gamma Calibration: GM detectors positioned perpendicular to source except for M 44-9 in which the front of probe faces source.

RANGE/MULTIPLIER	REFERENCE CAL. POINT	INSTRUMENT REC'D "AS FOUND READING"	INSTRUMENT METER READING*
X 1000	150 mR/hr	150	150
X 1000	50 mR/hr	45	45
X 100	15 mR/hr	142	150
X 100	5 mR/hr	45	50
X 10	1500 µR/hr	150	150
X 10	500 µR/hr	50	50
X 1	150 µR/hr	150	150
X 1	100 µR/hr	100	100
X 0.1	15 µR/hr	150	150
X 0.1			

*Uncertainty within ± 10% C.F. within ± 20% **Range(s) Calibrated Electronically**

	REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*		REFERENCE CAL. POINT	INSTRUMENT RECEIVED	INSTRUMENT METER READING*
gital eadout				Log Scale			

ldum Measurements, Inc. certifies that the above instrument has been calibrated by standards traceable to the National Institute of Standards and Technology, or to the calibration facilities of er International Standards Organization members, or have been derived from accepted values of natural physical constants or have been derived by the ratio type of calibration techniques. calibration system conforms to the requirements of ANSI/NCSL Z540-1-1994 and ANSI N323-1978 State of Texas Calibration License No. LO-1963

Reference Instruments and/or Sources: ☐ 059 ☐ 280 ☐ 720 ☐ 734 ☐ 781 ☐ 1131 ☐ 1616 ☐ 1696 ☐ 5105 ☐ 5717CO ☐ 5719CO
☐ 60646 ☐ 70897 ☐ 73410 ☐ E551 ☐ E552 ☑ G112 ☑ M565 ☐ S-394 ☐ S-1054 ☐ T-304 ☐ T879 ☐ T10081 ☐ T10082 ☐ Y982

☐ Alpha S/N ☐ Beta S/N ☑ Other Cs-137 201 µCi

☐ m 500 S/N ☐ Oscilloscope S/N ☐ Multimeter S/N

Calibrated By: Donnie Miekos Date 21-OCT-13

Reviewed By: Date 21 Oct 13

his certificate shall not be reproduced except in full, without the written approval of Ludlum Measurements, Inc.
ORM C22A 02/26/2013 Page 1 of 1

AC Inst. Only ☐ Passed Dielectric (Hi-Pot) and Continuity Test ☐ Failed:

Certificate of Calibration

Calibration and Voltage Plateau

Environmental Restoration Group, Inc.
8809 Washington St NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224
www.ERGoffice.com

Meter:	Manufacturer:	Ludlum	Model Number:	2221r	Serial Number:	117652
Detector:	Manufacturer:	Ludlum	Model Number:	44-10	Serial Number:	PR154617

- [x] Mechanical Check
- [x] F/S Response Check
- [x] Geotropism
- [x] Meter Zeroed
- [x] THR/WIN Operation
- [x] Reset Check
- [x] Audio Check
- [x] Battery Check (Min 4.4 VDC)

HV Check (+/- 2.5%): [x] 500 V [x] 1000 V [x] 1500 V

Cable Length: [ ] 39-inch [x] 72-inch [ ] Other:

Source Distance: [ ] Contact [x] 6 inches [ ] Other:

Source Geometry [x] Side [ ] Below [ ] Other:

Threshold: 10 mV

Window:

Barometric Pressure: 24.66 inches Hg

Temperature: 77 °F

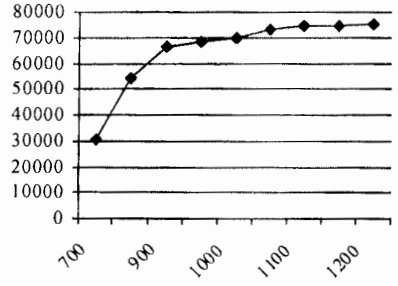
Relative Humidity: 20 %

Instrument found within tolerance: [x] Yes [ ] No

Range/Multiplier	Reference Setting	"As Found Reading"	Meter Reading	Integrated 1-Min. Count	Log Scale Count
x 1000	400	400	400	399417	400
x 1000	100	100	100		100
x 100	400	400	400	39958	400
x 100	100	100	100		100
x 10	400	400	400	3996	400
x 10	100	100	100		100
x 1	400	400	400	399	400
x 1	100	100	100		100

High Voltage	Source Counts	Background
700	30551	
800	54498	
900	66246	
950	68630	
1000	70027	10883
1050	73124	
1100	74528	
1150	74529	
1200	74973	

Voltage Plateau



Comments: HV Plateau Scaler Count Time = 1-min. Recommended HV = 950

Reference Instruments and/or Sources:

Ludlum pulser serial number: [ ] 97743 [x] 201932

[ ] Alpha Source: Th-230 @ 12,800 dpm (1/4/12) sn: 4098-03

[ ] Beta Source: Tc-99 @ 17,700 dpm (1/4/12) sn: 4099-03

Fluke multimeter serial number: [ ] 8749012

[x] Gamma Source Cs-137 @ 5.2 uCi (1/4/12) sn: 4097-03

[ ] Other Source:

Calibrated By: [signature]

Calibration Date: 8-12-14

Calibration Due 8-12-15

Reviewed By: [signature]

Date: 8/12/14

ERG Form ITC. 101.A

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997

Certificate of Calibration

Calibration and Voltage Plateau

Environmental Restoration Group, Inc.
8809 Washington St NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224
www.ERGoffice.com

Meter:	Manufacturer:	Ludlum	Model Number:	2221r	Serial Number:	282982
Detector:	Manufacturer:	Ludlum	Model Number:	44-10	Serial Number:	PR321856

- [x] Mechanical Check
- [x] F/S Response Check
- [x] Geotropism
- [x] Meter Zeroed
- [x] THR/WIN Operation
- [x] Reset Check
- [x] Audio Check
- [x] Battery Check (Min 4.4 VDC)

HV Check (+/- 2.5%): [x] 500 V [x] 1000 V [x] 1500 V

Cable Length: [ ] 39-inch [x] 72-inch [ ] Other:

Source Distance: [ ] Contact [x] 6 inches [ ] Other:

Source Geometry [x] Side [ ] Below [ ] Other:

Threshold: 10 mV

Window:

Barometric Pressure: 24.76 inches Hg

Temperature: 78 °F

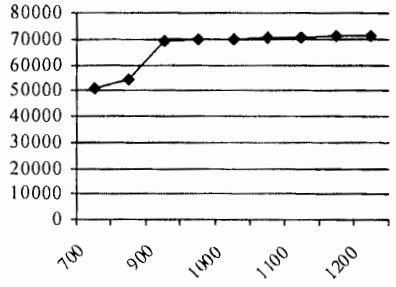
Relative Humidity: 20 %

Instrument found within tolerance: [x] Yes [ ] No

Range/Multiplier	Reference Setting	"As Found Reading"	Meter Reading	Integrated 1-Min. Count	Log Scale Count
x 1000	400	400	400	399315	400
x 1000	100	100	100		100
x 100	400	400	400	39948	400
x 100	100	100	100		100
x 10	400	400	400	3995	400
x 10	100	100	100		100
x 1	400	400	400	399	400
x 1	100	100	100		100

High Voltage	Source Counts	Background
700	50689	
800	54535	
900	68931	
950	69596	
1000	69989	
1050	70373	
1100	70509	9683
1150	71058	
1200	71266	

Voltage Plateau



Comments: HV Plateau Scaler Count Time - 1-min. Recommended HV = 1100

Reference Instruments and/or Sources:

Ludlum pulser serial number: [ ] 97743 [x] 201932

Fluke multimeter serial number: [ ] 8749012

[ ] Alpha Source: Th-230 @ 12,800 dpm (1/4/12) sn: 4098-03

[x] Gamma Source Cs-137 @ 5.2 uCi (1/4/12) sn: 4097-03

[ ] Beta Source: Tc-99 @ 17,700 dpm (1/4/12) sn: 4099-03

[ ] Other Source:

ated By: [signature]

Calibration Date: 8-12-14

Calibration Due 8-12-15

ed By: [signature]

Date: 8/12/14

ERG Form ITC. 101.A

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997

Certificate of Calibration

Calibration and Voltage Plateau

Environmental Restoration Group, Inc.
8809 Washington St NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224
www.ERGoffice.com

Meter:	Manufacturer:	Ludlum	Model Number:	2221r	Serial Number:	282973
Detector:	Manufacturer:	Ludlum	Model Number:	44-10	Serial Number:	PR199127

- [x] Mechanical Check
- [x] F/S Response Check
- [x] Geotropism
- [x] Meter Zeroed
- [x] THR/WIN Operation
- [x] Reset Check
- [x] Audio Check
- [x] Battery Check (Min 4.4 VDC)

HV Check (+/- 2.5%): [x] 500 V [x] 1000 V [x] 1500 V

Cable Length: [ ] 39-inch [x] 72-inch [ ] Other:

Source Distance: [ ] Contact [x] 6 inches [ ] Other:

Source Geometry [x] Side [ ] Below [ ] Other:

Threshold: 10 mV

Window:

Barometric Pressure: 24.69 inches Hg

Temperature: 78 °F

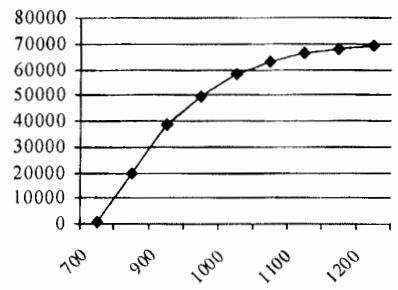
Relative Humidity: 20 %

Instrument found within tolerance: [x] Yes [ ] No

Range/Multiplier	Reference Setting	"As Found Reading"	Meter Reading	Integrated 1-Min. Count	Log Scale Count
x 1000	400	400	400	399941	400
x 1000	100	100	100		100
x 100	400	400	400	39956	400
x 100	100	100	100		100
x 10	400	400	400	3996	400
x 10	100	100	100		100
x 1	400	400	400	399	400
x 1	100	100	100		100

High Voltage	Source Counts	Background
700	382	
800	19671	
900	38484	
950	49522	
1000	58081	
1050	62780	
1100	66291	
1150	67895	9492
1200	69090	

Voltage Plateau



Comments: HV Plateau Scaler Count Time = 1-min. Recommended HV = 1150

Reference Instruments and/or Sources:

Ludlum pulser serial number: [ ] 97743 [x] 201932

Fluke multimeter serial number: [ ] 8749012

[ ] Alpha Source: Th-230 @ 12,800 dpm (1/4/12) sn: 4098-03

[x] Gamma Source Cs-137 @ 5.2 uCi (1/4/12) sn: 4097-03

[ ] Beta Source: Tc-99 @ 17,700 dpm (1/4/12) sn: 4099-03

[ ] Other Source:

Calibrated By: [signature] Calibration Date: 8-12-14 Calibration Due 8-12-15

Reviewed By: [signature] Date: 8/12/14

ERG Form ITC. 101.A

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997

Certificate of Calibration

Calibration and Voltage Plateau

Environmental Restoration Group, Inc.
8809 Washington St NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224
www.ERGoffice.com

Meter:	Manufacturer:	Ludlum	Model Number:	2221r	Serial Number:	86306
Detector:	Manufacturer:	Ludlum	Model Number:	44-10	Serial Number:	PR122188

- [x] Mechanical Check
- [x] F/S Response Check
- [x] Geotropism
- [x] Meter Zeroed
- [x] THR/WIN Operation
- [x] Reset Check
- [x] Audio Check
- [x] Battery Check (Min 4.4 VDC)

HV Check (+/- 2.5%): [x] 500 V [x] 1000 V [x] 1500 V

Cable Length: [ ] 39-inch [x] 72-inch [ ] Other:

Source Distance: [ ] Contact [x] 6 inches [ ] Other:

Source Geometry [x] Side [ ] Below [ ] Other:

Threshold: 10 mV

Window:

Barometric Pressure: 24.56 inches Hg

Temperature: 78 °F

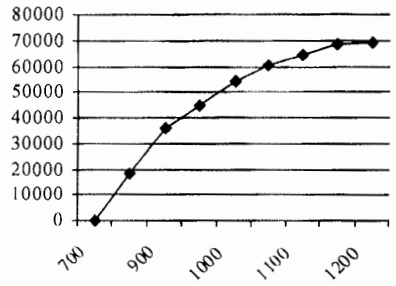
Relative Humidity: 20 %

Instrument found within tolerance: [x] Yes [ ] No

Range/Multiplier	Reference Setting	"As Found Reading"	Meter Reading	Integrated 1-Min. Count	Log Scale Count
x 1000	400	400	400	399163	400
x 1000	100	100	100		100
x 100	400	400	400	39906	400
x 100	100	100	100		100
x 10	400	400	400	3984	400
x 10	100	100	100		100
x 1	400	400	400	398	400
x 1	100	100	100		100

High Voltage	Source Counts	Background
700	314	
800	18630	
900	36076	
950	45072	
1000	54546	
1050	60370	
1100	64739	
1150	68294	10245
1200	69416	

Voltage Plateau



Comments: HV Plateau Scaler Count Time = 1-min. Recommended HV = 1150

Reference Instruments and/or Sources:

Ludlum pulser serial number: [ ] 97743 [x] 201932

Fluke multimeter serial number: [ ] 8749012

[ ] Alpha Source: Th-230 @ 12,800 dpm (1/4/12) sn: 4098-03

[x] Gamma Source Cs-137 @ 5.2 uCi (1/4/12) sn: 4097-03

[ ] Beta Source: Tc-99 @ 17,700 dpm (1/4/12) sn: 4099-03

[ ] Other Source:

Calibrated By: [signature]

Calibration Date: 8-12-14

Calibration Due 8-12-15

Reviewed By: [signature]

Date: 8/12/14

ERG Form ITC. 101.A

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997

Certificate of Calibration

Calibration and Voltage Plateau

Environmental Restoration Group, Inc.
8809 Washington St NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224
www.ERGoffice.com

Meter:	Manufacturer:	Ludlum	Model Number:	2221r	Serial Number:	149938
Detector:	Manufacturer:	Ludlum	Model Number:	44-10	Serial Number:	PR122612

- [x] Mechanical Check
- [x] F/S Response Check
- [x] Geotropism
- [x] Meter Zeroed
- [x] THR/WIN Operation
- [x] Reset Check
- [x] Audio Check
- [x] Battery Check (Min 4.4 VDC)

HV Check (+/- 2.5%): [x] 500 V [x] 1000 V [x] 1500 V

Cable Length: [ ] 39-inch [x] 72-inch [ ] Other:

Source Distance: [ ] Contact [x] 6 inches [ ] Other:

Source Geometry [x] Side [ ] Below [ ] Other:

Threshold: 10 mV

Window:

Barometric Pressure: 24.78 inches Hg

Temperature: 77 °F

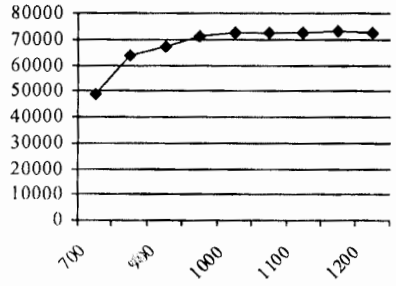
Relative Humidity: 20 %

Instrument found within tolerance: [x] Yes [ ] No

Range/Multiplier	Reference Setting	"As Found Reading"	Meter Reading	Integrated 1-Min. Count	Log Scale Count
x 1000	400	400	400	400001	400
x 1000	100	100	100		100
x 100	400	400	400	40002	400
x 100	100	100	100		100
x 10	400	400	400	4000	400
x 10	100	100	100		100
x 1	400	400	400	400	400
x 1	100	100	100		100

High Voltage	Source Counts	Background
700	49040	
800	63821	
900	67337	
950	70886	
1000	72404	
1050	72704	
1100	72237	10225
1150	72916	
1200	72832	

Voltage Plateau



Comments: HV Plateau Scaler Count Time = 1-min. Recommended HV =1100

Reference Instruments and/or Sources:

Ludlum pulser serial number: [ ] 97743 [x] 201932

[ ] Alpha Source: Th-230 @ 12,800 dpm (1/4/12) sn: 4098-03

[ ] Beta Source: Tc-99 @ 17,700 dpm (1/4/12) sn: 4099-03

Fluke multimeter serial number: [ ] 8749012

[x] Gamma Source Cs-137 @ 5.2 uCi (1/4/12) sn: 4097-03

[ ] Other Source:

Calibrated By: [signature]

Calibration Date: 8-27-14

Calibration Due 8-27-15

Reviewed By: [signature]

Date: 8/27/14

ERG Form ITC. 101.A

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997

Certificate of Calibration

Calibration and Voltage Plateau

Environmental Restoration Group, Inc.
8809 Washington St NE, Suite 150
Albuquerque, NM 87113
(505) 298-4224
www.ERGoffice.com

Meter:	Manufacturer:	Ludlum	Model Number:	2221r	Serial Number:	262328
Detector:	Manufacturer:	Ludlum	Model Number:	44-10	Serial Number:	PR321859

☑ Mechanical Check ☑ THR/WIN Operation
☑ F/S Response Check ☑ Reset Check
☑ Geotropism ☑ Audio Check
☑ Meter Zeroed ☑ Battery Check (Min 4.4 VDC)

HV Check (+/- 2.5%): ☑ 500 V ☑ 1000 V ☑ 1500 V
Cable Length: ☐ 39-inch ☑ 72-inch ☐ Other:

Source Distance: ☐ Contact ☑ 6 inches ☐ Other:
Source Geometry ☑ Side ☐ Below ☐ Other:

Threshold: 10 mV
Window:

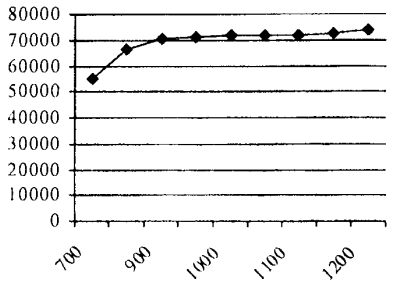
Barometric Pressure: 24.75 inches Hg
Temperature: 77 °F
Relative Humidity: 20 %

Instrument found within tolerance: ☑ Yes ☐ No

Range/Multiplier	Reference Setting	"As Found Reading"	Meter Reading	Integrated 1-Min. Count	Log Scale Count
x 1000	400	400	400	399746	400
x 1000	100	100	100		100
x 100	400	400	400	39947	400
x 100	100	100	100		100
x 10	400	400	400	3996	400
x 10	100	100	100		100
x 1	400	400	400	400	400
x 1	100	100	100		100

High Voltage	Source Counts	Background
700	54670	
800	66463	
900	70402	
950	70982	
1000	71821	9645
1050	71871	
1100	72055	
1150	72710	
1200	74062	

Voltage Plateau



Comments: HV Plateau Scaler Count Time = 1-min. Recommended HV = 1000

Reference Instruments and/or Sources:

Ludlum pulser serial number: ☐ 97743 ☑ 201932
☐ Alpha Source: Th-230 @ 12,800 dpm (1/4/12) sn: 4098-03
☐ Beta Source: Tc-99 @ 17,700 dpm (1/4/12) sn: 4099-03

Fluke multimeter serial number: ☐ 8749012
☑ Gamma Source Cs-137 @ 5.2 uCi (1/4/12) sn: 4097-03
☐ Other Source:

Calibrated By: [signature]
Reviewed By: [signature]

Calibration Date: 8-12-14
Date: 8/12/14

Calibration Due 8-12-15

ERG Form ITC. 101.A

This calibration conforms to the requirements and acceptable calibration conditions of ANSI N323A - 1997

Certificate of Calibration

Calibration and Voltage Plateau

Environmental Restoration Group, Inc.
8809 Washington St. N.E., Suite 350
Albuquerque, NM 87113
(505) 298-4224
www.ERGroupInc.com

Meter	Manufacturer:	Ludlum	Model Number:	2221	Serial Number:	[illegible]	
Detector	Manufacturer:	Ludlum	Model Number:	44-10	Serial Number:	PR2[illegible]507	

✔ Mechanical Check ✔ THR W/IN Operation
✔ E/S Response Check ✔ Reset Check
✔ Geotropism ✔ Audio Check
✔ Meter Zeroed ✔ Battery Check (Min. 1.4 VDC)

HV Check (+/- 2.5%): ✔ 500 V ✔ 1000 V ✔ 1500 V
Cable Length: 59-inch ✔ 72-inch Other:

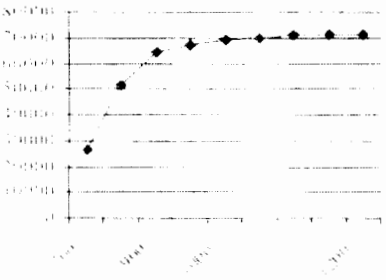
Barometric Pressure: 24.6 inches Hg
Source Distance: Contact ✔ 6 inches Other
Threshold: 10 mV
Temperature: 78 F
Source Geometry: ✔ Side Below Other:
Window:
Relative Humidity: 20 %

Instrument found within tolerance: ✔ Yes No

Range Multiplier	Reference Setting	"As Found Reading"	Meter Reading	Integrated 1-Min. Count	Log Scale Count
x 1000	400	400	400	400460	400
x 1000	100	100	100		100
x 100	400	400	400	40015	400
x 100	100	100	100		100
x 10	400	400	400	4004	400
x 10	100	100	100		100
x 1	400	400	400	400	400
x 1	100	100	100		100

High Voltage	Source Counts	Background
700	26531	
800	51731	
900	64514	
950	67163	
1000	69030	
1050	70140	
1100	70924	11025
1150	71431	
1200	71484	

Voltage Plateau



Comments: HV Plateau Scaler Count Time 1-min. Recommended HV 1100

Reference Instruments and or Sources:

Ludlum pulser serial number: 97743 ✔ 201932
Fluke multimeter serial number: 87490[illegible]
Alpha Source: Th-230 @ 12,800 dpm (+/- 4.12%) s/n 4098-03
✔ Gamma Source: Cs-137 @ 5.2 uCi (+/- 4.12%) s/n 4097-03
Beta Source: Tc-99 @ 17,700 dpm (+/- 4.12%) s/n 4099-03
Other Source

Calibrated By: [signature]
Calibration Date: 9-9-14
Calibration Due: 9-9-[illegible]
Reviewed By: [signature]
Date: 9/9/14

ERG Form HC-001A

Certificate of Calibration

Calibration and Voltage Plateau

Environmental Restoration Group, Inc.
8809 Washington St. NE, Ste. 150
Albuquerque, NM 87113
(505) 298-4224
www.ERGnetwork.com

Meter: Manufacturer: Ludlum Model Number: 2221 Serial Number: 86-506

Detector: Manufacturer: Ludlum Model Number: 44-10 Serial Number: PR1[illegible]188

✔ Mechanical Check ✔ EHR WIN Operation HV Check (+/- 2.5% of): ✔ 500 V ✔ 1000 V ✔ [illegible] V

✔ F/S Response Check ✔ Reset Check Cable Length: 39-meter ✔ 22-inch Other:

✔ Geotropism ✔ Audio Check

✔ Meter Zeroed ✔ Battery Check (Min 4.4 V DC) Barometric Pressure: 24.5 inches Hg

Source Distance: Contact ✔ 6 inches Other: Threshold: 10 mV Temperature: 78 F

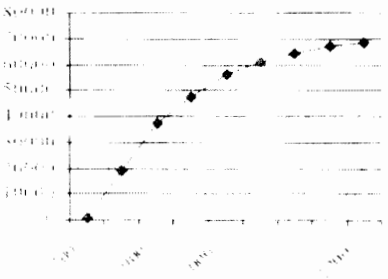
Source Geometry: ✔ Side Below Other Window Relative Humidity: 20 %

Instrument found within tolerance: ✔ Yes No

Range Multiplier	Reference Setting	"As Found Reading"	Meter Reading	Integrated 1-Min. Count	Log Scale Count
x 1000	400	400	400	399053	400
x 1000	100	100	100		100
x 100	400	400	400	39898	400
x 100	100	100	100		100
x 10	400	400	400	3990	400
x 10	100	100	100		100
x 1	400	400	400	399	400
x 1	100	100	100		100

High Voltage	Source Counts	Background
700	394	
800	19179	
900	37229	
950	47413	
1000	56132	
1050	61058	
1100	64509	
1150	67367	11171
1200	68679	

Voltage Plateau



Comments: HV Plateau Scaler Count Time 1-min. Recommended HV 1150

Reference Instruments and/or Sources:

Ludlum pulser serial number: 97743 ✔ 201932 Fluke multimeter serial number: 8749012

Alpha Source: Th-230 @ 12,800 dpm (1-4-12) sn: 4098-03 ✔ Gamma Source: Cs-137 @ 5.2 uCi (1-4-12) sn: 4097-03

Beta Source: Sr-90 @ 17,700 dpm (1-4-12) sn: 4099-03 Other Source:

Calibrated By: [signature] Calibration Date: 9-9-14 Calibration Due: 9-9-[illegible]

Reviewed By: [signature] Date: 9/9/14

ERG Form HC-101-A

Certificate of Calibration

Calibration and Voltage Plateau

Environmental Restoration Group, Inc.
8809 Washington St. NE, Suite 350
Albuquerque, NM 87113
(505) 298-4224
www.ERGoffice.com

Meter: Manufacturer: Ludlum Model Number: 2221 Serial Number: 249938

Detector: Manufacturer: Ludlum Model Number: 44-10 Serial Number: PR149127

✔ Mechanical Check ✔ HHR WIN Operation HV Check (+/- 2.5%): ✔ 500 V ✔ 1000 V ✔ 1500 V

✔ F/S Response Check ✔ Reset Check Cable Length: 39-inch ✔ 72-inch Other

✔ Geotropism ✔ Audio Check

✔ Meter Zeroed ✔ Battery Check (Min 4.4 VDC) Barometric Pressure: 24.6 inches Hg

Source Distance: Contact ✔ 6 inches Other Threshold: 10 mV Temperature: 78 F

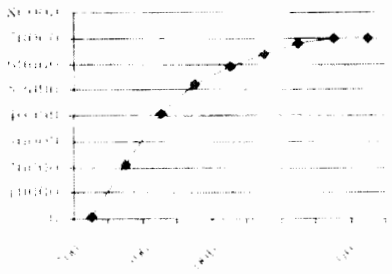
Source Geometry: ✔ Side Below Other Window Relative Humidity: 20 %

Instrument found within tolerance: ✔ Yes No

Range Multiplier	Reference Setting	"As Found Reading"	Meter Reading	Integrated 1-Min Count	Log Scale Count
x 1000	400	400	400	399924	400
x 1000	100	100	100		100
x 100	400	400	400	39982	400
x 100	100	100	100		100
x 10	400	400	400	3996	400
x 10	100	100	100		100
x 1	400	400	400	400	400
x 1	100	100	100		100

High Voltage	Source Counts	Background
700	371	
800	30960	
900	40823	
950	51964	
1000	58821	
1050	63827	
1100	67778	
1150	69517	11040
1200	70139	

Voltage Plateau



Comments: HV Plateau Scaler Count Time: 1-min Recommended HV: 1150

Reference Instruments and/or Sources:

Ludlum pulser serial number: 97743 ✔ 201932 Fluke multimeter serial number: 8749012

Alpha Source: Th-230 @ 12,800 dpm (1-4-12) sn: 4098-03 ✔ Gamma Source: Cs-137 @ 5.2 uCi (1-4-12) sn: 4097-03

Beta Source: Tc-99 @ 17,700 dpm (1-4-12) sn: 4099-03 Other Source

Calibrated By: Calibration Date: 9-9-14 Calibration Due: 9-9-15

Reviewed By: Date: 9/9/14

ERG Form HC-3-01-A

Thermo SCIENTIFIC

Calibration Certificate

Test piece :	**RadEye PRD-S**
Serial number :	**163**
Identification :	7130-02
Software version :	E2.08
Measurement range :	1 µR/h - 25 mR/h

Calibration Parameters

Ambient equivalent :	H*(10)
Date of calibration :	August 15, 2013
Calibration factor weighted :	2.3847E-05
Dead time R1 [µs] :	6.0000E+00
Dead time R2 [µs] :	5.0000E+00
Dead time R3 [µs] :	-3.0491E+01
Overload current [cps] :	100
HV ADC offset :	118
HV ADC correction :	0

Check measurements

Verification of the measurement accuracy Cs-137 :

Nominal [mR/h] :	Actual [mR/h] :	Deviation [%]	C1 [cps]	Measuring time [s]	Tolerance limit [%]
0.250	0.249	-0.4	686	120	10
2.00	1.99	-0.6	3466	30	10
25.0	25.6	2.5	43009	20	10

Deviation within the tolerance : **Yes**

Overrange OK : **Yes**

Test according to test instruction RadEye PRD-S.

Calibration is saved in File :
PC1\\C:\Program Files\Thermo\CalRadEye\Calib\163.cal

PO N/A Temp 21 °C Rh 41 % BP 30.10 Inhg
Standards Used: Procedure: IW1048 18 Feb 13d
Cs-137 733,375,371(Due: 4Feb14)JLS 89 (Due: NA)Pu238B 10205(Due: NA)
Our QA System is certified to ISO 9001:2008. Measurements reported herein traceable to NIST

Protocol date :	Signature :
W. Columbia, August 15, 2013	B. Jackson

Thermo Fisher Scientific Messtechnik GmbH, Erlangen (Germany)

Version ~~1.21.0~~

19-Aug-1

Thermo SCIENTIFIC

Calibration Certificate

Test piece :	**RadEye PRD-S**
Serial number :	**163**
Identification :	7130-02
Software version :	E2.08
Measurement range :	1 µR/h - 25 mR/h

Generals

Type :	Export
Beep when key pressed :	On
History timer interval :	120 s
Type of battery :	Battery (Alkaline)
Language :	English
Acoustic Indication :	Single Pulse
Display temperature :	None
Single Pulse Click Divider :	On
Upper key display dose :	On
Display upside down :	On
Autosend :	Off

Text

Text Info 1 :	
Text Info 2 :	
Text Info 3 :	
Text Info 4 :	
Text Field :	This text is not shown in the LCD.

Mode

Operation Mode :	Ratemeter
Unit :	R/h
Dose rate unit in cps mode :	R/h
Show dose rate in cps mode :	Off
Scaler	
Auto restart :	Off
Background substraction :	On
Scaler mode :	Time
Preset time :	300 s
Preset counts :	9999 counts
Pre wait time :	10 s
Ratemeter	
Background substraction :	Off
Background	
Current Background :	0.00 cps
Preset time :	1800 s
Preset counts :	65000 counts

Thermo Fisher Scientific Messtechnik GmbH, Erlangen (Germany)

Version 1.21.0

Thermo SCIENTIFIC

Calibration Certificate

Test piece : **RadEye PRD-S**

Serial number : **163**
Identification : 7130-02
Software version : E2.08
Measurement range : 1 µR/h - 25 mR/h

Alarms	Alarm 1	Alarm 2	Sigma	Min.Rate
Count Rate :	50.00 cps	200.00 cps	6	30 cps
Dose Rate :	50 µR/h	2000 µR/h		
Dose	1000000000 µR	1000000000 µR		

Safety alarm count rate : Active
Alarm read only : No

Energy ratio
Active : No
Minimum rate : 15 cps
Sensitivity low energy : 165 %
Sensitivity high energy : 65 %

Alarm indicator
Sound : Off
Vibrator : Off
Alarm latching time : Off
LED : On

Active Functions

Instrument off	Background
Backlight on / off	Measuring units
Operation mode	Scaler Parameter
Alarm Count Rate	Alarm Dose Rate
Alarm-NBR	Alarm Dose
Clear Dose	Show alarm
Text Info	

Active functions sub menu settings

Battery type	Autosend
Single Pulse	Finder
Set Date/Time	Lu-Test

Active functions sub menu alarm indication

Sound	Vibrator
LED	

Thermo Fisher Scientific Messtechnik GmbH, Erlangen (Germany) Version 1.21.0

Certificate of Test & Calibration & Conformance

Thermo Fisher Scientific RM&SI certifies that the items in this report were inspected, tested and calibrated (as indicated on front of this form) and found to meet all documented requirements for quality and performance under Thermo Fisher Scientifics ISO 9001:2008 Certified Quality Management System inspection and test procedures and in compliance with ISO / IEC 17025 1999 and ANSI / NCSL Z540 1994 and all requirements of the Customer Purchase Order.

GENERAL: All calibrations performed at Thermo Fisher Scientific are performed within the following environmental conditions:
Temperature: 20-24 °C (68-75 °F) **Humidity**: Ambient ± 10% but ≤ 75%.
Barometric Pressure: 20.67 – 31.30 inHg.
Test equipment: All test equipment calibrations are traceable to NIST and equipment is re-certified annually.
Radiation Sources: All radiation sources have emission rates or exposure intensities that are traceable to NIST and are re-verified at least annually.

ACCURACY OF CALIBRATION: Calibrations are performed per the methods and requirements stated in ANSI N323A 1997 unless the customer and Thermo have agreed to a different standard. Some instrumentation is inherently incapable of meeting this requirement and the calibration will meet the technical specification as stated in the equipment's technical literature.

STATEMENT OF MEASUREMENT UNCERTAINTY: Estimated uncertainties in reference field measurements. Uncertainties in Gamma reference field measurements. Unless stated otherwise; the expanded measurement uncertainty of the measurement process does not exceed 10%, uncertainties of measurements for calibrations based upon 95.54% confidence limits.
Uncertainties in Neutron reference field measurements. Unless stated otherwise; the expanded measurement uncertainty of the measurement process does not exceed 20%, uncertainties of measurements for calibrations based upon 95.54% confidence limits.

NOTIFICATION OF ERRORS: If any errors are detected in Thermo Fisher Scientific RM&SI's calibrations, Thermo Fisher Scientific will notify the customer and meet any other reporting requirements.

DO NOT REPRODUCE: This report shall not be reproduced except in full without the written approval of Thermo Fisher Scientific RM&SI.

INFORMATION ON TECHNICAL ASPECTS OF A CALIBRATION: Information on a calibration may be obtained from Thermo Fisher Scientific RM&SI's Quality Assurance Manager or the Service Depot Supervisor:

QA Manager
One Thermo Fisher Way
Oakwood Village, OH 44146-6519
Phone: (440) 703-1400
Fax: (440) 703-1596

Service Depot Manager
312 Miami Street
West Columbia, SC 29170
Phone: (803) 822-8040
Fax: (803) 822-8053

Form 20.1-504A Rev2

APPENDIX B – Analytical Laboratory Results

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

Date: 10/15/2014

CLIENT: Western Water Consultants
Project: Soil / Sediment
Lab Order: S1409241

CASE NARRATIVE

Report ID: S1409241001

Samples CORR1, CORR10, CORR11, CORR12, CORR13, CORR14, CORR15, CORR2, CORR3, CORR4, CORR5, CORR6, CORR7, CORR8, and CORR9 were received on September 8, 2014.

All samples were received and analyzed within the EPA recommended holding times, except those noted below in this case narrative. Samples were analyzed using the methods outlined in the following references:

"Standard Methods For The Examination of Water and Wastewater", approved method versions
Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 3rd Edition
40 CFR Parts 136 and 141
40 CFR Part 50, Appendices B, J, L, and O
Methods indicated in the Methods Update Rule published in the Federal Register Friday, May 18, 2012
ASTM approved and recognized standards

All Quality Control parameters met the acceptance criteria defined by EPA and Inter-Mountain Laboratories except as indicated in this case narrative.

Reviewed by:

Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/15/2014
Report ID S1409241001

ProjectName: Soil / Sediment
Lab ID: S1409241-001
ClientSample ID: CORR5
COC: WEB

WorkOrder: S1409241
CollectionDate: 8/28/2014 1:00:00 PM
DateReceived: 9/8/2014
FieldSampler: LM
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Actinium 228	0.5	pCi/g		0.2	E901.1 Mod.	10/08/2014 2208	MB
Actinium 228 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/08/2014 2208	MB
Lead 210	2.1	pCi/g		0.2	OTW01	09/29/2014 1517	MB
Lead 210 Precision (±)	0.4	pCi/g			OTW01	09/29/2014 1517	MB
Potassium 40	14.5	pCi/g		0.2	E901.1 Mod.	10/08/2014 2208	MB
Potassium 40 Precision (±)	0.3	pCi/g			E901.1 Mod.	10/08/2014 2208	MB
Radium 226	1.1	pCi/g		0.2	E901.1 Mod.	10/08/2014 2208	MB
Radium 226 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/08/2014 2208	MB
Thorium 230	0.8	pCi/g		0.2	ACW10	09/25/2014 1759	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	09/25/2014 1759	MB
Thorium229 Tracer (30-120)	98.2	%		0.2	ACW10	09/25/2014 1759	MB
Metals - Total							
Uranium	0.9	pCi/g		0.2	EPA 200.8	09/18/2014 540	MS

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/15/2014
Report ID S1409241001

ProjectName: Soil / Sediment
Lab ID: S1409241-002
ClientSample ID: CORR4
COC: WEB

WorkOrder: S1409241
CollectionDate: 8/28/2014 2:00:00 PM
DateReceived: 9/8/2014
FieldSampler: LM
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Actinium 228	0.6	pCi/g		0.2	E901.1 Mod.	10/09/2014 209	MB
Actinium 228 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/09/2014 209	MB
Lead 210	2.4	pCi/g		0.2	OTW01	09/29/2014 1517	MB
Lead 210 Precision (±)	0.5	pCi/g			OTW01	09/29/2014 1517	MB
Potassium 40	12.9	pCi/g		0.2	E901.1 Mod.	10/09/2014 209	MB
Potassium 40 Precision (±)	0.9	pCi/g			E901.1 Mod.	10/09/2014 209	MB
Radium 226	2.0	pCi/g		0.2	E901.1 Mod.	10/09/2014 209	MB
Radium 226 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/09/2014 209	MB
Thorium 230	1.0	pCi/g		0.2	ACW10	09/25/2014 1759	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	09/25/2014 1759	MB
Thorium229 Tracer (30-120)	101	%		0.2	ACW10	09/25/2014 1759	MB
Metals - Total							
Uranium	2.5	pCi/g		0.2	EPA 200.8	09/18/2014 601	MS

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/15/2014
Report ID S1409241001

ProjectName: Soil / Sediment
Lab ID: S1409241-003
ClientSample ID: CORR9
COC: WEB

WorkOrder: S1409241
CollectionDate: 8/28/2014 5:35:00 PM
DateReceived: 9/8/2014
FieldSampler: LM
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Actinium 228	0.6	pCi/g		0.2	E901.1 Mod.	10/09/2014 610	MB
Actinium 228 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/09/2014 610	MB
Lead 210	2.1	pCi/g		0.2	OTW01	09/29/2014 1517	MB
Lead 210 Precision (±)	0.9	pCi/g			OTW01	09/29/2014 1517	MB
Potassium 40	13.3	pCi/g		0.2	E901.1 Mod.	10/09/2014 610	MB
Potassium 40 Precision (±)	0.8	pCi/g			E901.1 Mod.	10/09/2014 610	MB
Radium 226	2.3	pCi/g		0.2	E901.1 Mod.	10/09/2014 610	MB
Radium 226 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/09/2014 610	MB
Thorium 230	1.6	pCi/g		0.2	ACW10	09/25/2014 1759	MB
Thorium230 Precision (±)	0.3	pCi/g			ACW10	09/25/2014 1759	MB
Thorium229 Tracer (30-120)	105	%		0.2	ACW10	09/25/2014 1759	MB
Metals - Total							
Uranium	1.3	pCi/g		0.2	EPA 200.8	09/18/2014 617	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/15/2014
Report ID S1409241001

ProjectName: Soil / Sediment
Lab ID: S1409241-004
ClientSample ID: CORR3
COC: WEB

WorkOrder: S1409241
CollectionDate: 8/28/2014 2:25:00 PM
DateReceived: 9/8/2014
FieldSampler: LM
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Actinium 228	0.6	pCi/g		0.2	E901.1 Mod.	10/09/2014 1011	MB
Actinium 228 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/09/2014 1011	MB
Lead 210	1.3	pCi/g		0.2	OTW01	09/29/2014 1517	MB
Lead 210 Precision (±)	0.4	pCi/g			OTW01	09/29/2014 1517	MB
Potassium 40	12.5	pCi/g		0.2	E901.1 Mod.	10/09/2014 1011	MB
Potassium 40 Precision (±)	0.8	pCi/g			E901.1 Mod.	10/09/2014 1011	MB
Radium 226	0.7	pCi/g		0.2	E901.1 Mod.	10/09/2014 1011	MB
Radium 226 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/09/2014 1011	MB
Thorium 230	0.5	pCi/g		0.2	ACW10	09/25/2014 1759	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	09/25/2014 1759	MB
Thorium229 Tracer (30-120)	88.1	%		0.2	ACW10	09/25/2014 1759	MB
Metals - Total							
Uranium	0.4	pCi/g		0.2	EPA 200.8	09/18/2014 622	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/15/2014
Report ID S1409241001

ProjectName: Soil / Sediment
Lab ID: S1409241-005
ClientSample ID: CORR2
COC: WEB

WorkOrder: S1409241
CollectionDate: 8/28/2014 3:00:00 PM
DateReceived: 9/8/2014
FieldSampler: LM
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Actinium 228	0.8	pCi/g		0.2	E901.1 Mod.	10/09/2014 1412	MB
Actinium 228 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/09/2014 1412	MB
Lead 210	4.5	pCi/g		0.2	OTW01	09/29/2014 1517	MB
Lead 210 Precision (±)	0.6	pCi/g			OTW01	09/29/2014 1517	MB
Potassium 40	12.3	pCi/g		0.2	E901.1 Mod.	10/09/2014 1412	MB
Potassium 40 Precision (±)	0.8	pCi/g			E901.1 Mod.	10/09/2014 1412	MB
Radium 226	6.0	pCi/g		0.2	E901.1 Mod.	10/09/2014 1412	MB
Radium 226 Precision (±)	0.2	pCi/g			E901.1 Mod.	10/09/2014 1412	MB
Thorium 230	6.6	pCi/g		0.2	ACW10	09/25/2014 1759	MB
Thorium230 Precision (±)	0.9	pCi/g			ACW10	09/25/2014 1759	MB
Thorium229 Tracer (30-120)	82.3	%		0.2	ACW10	09/25/2014 1759	MB
Metals - Total							
Uranium	4.9	pCi/g		0.2	EPA 200.8	09/18/2014 628	MS

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/15/2014
Report ID S1409241001

ProjectName: Soil / Sediment
Lab ID: S1409241-006
ClientSample ID: CORR8
COC: WEB

WorkOrder: S1409241
CollectionDate: 8/28/2014 4:50:00 PM
DateReceived: 9/8/2014
FieldSampler: LM
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Actinium 228	0.5	pCi/g		0.2	E901.1 Mod.	10/09/2014 1813	MB
Actinium 228 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/09/2014 1813	MB
Lead 210	0.9	pCi/g		0.2	OTW01	09/29/2014 1517	MB
Lead 210 Precision (±)	0.1	pCi/g			OTW01	09/29/2014 1517	MB
Potassium 40	12.9	pCi/g		0.2	E901.1 Mod.	10/09/2014 1813	MB
Potassium 40 Precision (±)	0.9	pCi/g			E901.1 Mod.	10/09/2014 1813	MB
Radium 226	5.5	pCi/g		0.2	E901.1 Mod.	10/09/2014 1813	MB
Radium 226 Precision (±)	0.2	pCi/g			E901.1 Mod.	10/09/2014 1813	MB
Thorium 230	6.6	pCi/g		0.2	ACW10	09/25/2014 1759	MB
Thorium230 Precision (±)	0.9	pCi/g			ACW10	09/25/2014 1759	MB
Thorium229 Tracer (30-120)	87.8	%		0.2	ACW10	09/25/2014 1759	MB
Metals - Total							
Uranium	2.0	pCi/g		0.2	EPA 200.8	09/18/2014 633	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/15/2014
Report ID S1409241001

ProjectName: Soil / Sediment
Lab ID: S1409241-007
ClientSample ID: CORR11
COC: WEB

WorkOrder: S1409241
CollectionDate: 8/29/2014 3:15:00 PM
DateReceived: 9/8/2014
FieldSampler: LM
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Actinium 228	0.6	pCi/g		0.2	E901.1 Mod.	10/09/2014 2214	MB
Actinium 228 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/09/2014 2214	MB
Lead 210	4.1	pCi/g		0.2	OTW01	09/29/2014 1517	MB
Lead 210 Precision (±)	0.5	pCi/g			OTW01	09/29/2014 1517	MB
Potassium 40	13.0	pCi/g		0.2	E901.1 Mod.	10/09/2014 2214	MB
Potassium 40 Precision (±)	0.8	pCi/g			E901.1 Mod.	10/09/2014 2214	MB
Radium 226	4.5	pCi/g		0.2	E901.1 Mod.	10/09/2014 2214	MB
Radium 226 Precision (±)	0.2	pCi/g			E901.1 Mod.	10/09/2014 2214	MB
Thorium 230	7.8	pCi/g		0.2	ACW10	09/26/2014 924	MB
Thorium230 Precision (±)	1.1	pCi/g			ACW10	09/26/2014 924	MB
Thorium229 Tracer (30-120)	75.1	%		0.2	ACW10	09/26/2014 924	MB
Metals - Total							
Uranium	2.1	pCi/g		0.2	EPA 200.8	09/18/2014 639	MS

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/15/2014
Report ID S1409241001

ProjectName: Soil / Sediment
Lab ID: S1409241-008
ClientSample ID: CORR1
COC: WEB

WorkOrder: S1409241
CollectionDate: 8/28/2014 4:00:00 PM
DateReceived: 9/8/2014
FieldSampler: LM
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Actinium 228	0.4	pCi/g		0.2	E901.1 Mod.	10/10/2014 215	MB
Actinium 228 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/10/2014 215	MB
Lead 210	1.5	pCi/g		0.2	OTW01	09/30/2014 843	MB
Lead 210 Precision (±)	0.6	pCi/g			OTW01	09/30/2014 843	MB
Potassium 40	14.7	pCi/g		0.2	E901.1 Mod.	10/10/2014 215	MB
Potassium 40 Precision (±)	0.9	pCi/g			E901.1 Mod.	10/10/2014 215	MB
Radium 226	0.8	pCi/g		0.2	E901.1 Mod.	10/10/2014 215	MB
Radium 226 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/10/2014 215	MB
Thorium 230	0.5	pCi/g		0.2	ACW10	09/26/2014 924	MB
Thorium230 Precision (±)	0.1	pCi/g			ACW10	09/26/2014 924	MB
Thorium229 Tracer (30-120)	102	%		0.2	ACW10	09/26/2014 924	MB
Metals - Total							
Uranium	0.5	pCi/g		0.2	EPA 200.8	09/18/2014 644	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/15/2014
Report ID S1409241001

ProjectName: Soil / Sediment
Lab ID: S1409241-009
ClientSample ID: CORR14
COC: WEB

WorkOrder: S1409241
CollectionDate: 8/29/2014 2:53:00 PM
DateReceived: 9/8/2014
FieldSampler: LM
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Actinium 228	0.5	pCi/g		0.2	E901.1 Mod.	10/10/2014 616	MB
Actinium 228 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/10/2014 616	MB
Lead 210	2.6	pCi/g		0.2	OTW01	09/30/2014 843	MB
Lead 210 Precision (±)	0.6	pCi/g			OTW01	09/30/2014 843	MB
Potassium 40	11.9	pCi/g		0.2	E901.1 Mod.	10/10/2014 616	MB
Potassium 40 Precision (±)	0.8	pCi/g			E901.1 Mod.	10/10/2014 616	MB
Radium 226	4.5	pCi/g		0.2	E901.1 Mod.	10/10/2014 616	MB
Radium 226 Precision (±)	0.2	pCi/g			E901.1 Mod.	10/10/2014 616	MB
Thorium 230	3.9	pCi/g		0.2	ACW10	09/26/2014 924	MB
Thorium230 Precision (±)	0.6	pCi/g			ACW10	09/26/2014 924	MB
Thorium229 Tracer (30-120)	95.5	%		0.2	ACW10	09/26/2014 924	MB
Metals - Total							
Uranium	1.8	pCi/g		0.2	EPA 200.8	09/18/2014 649	MS

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/15/2014
Report ID S1409241001

ProjectName: Soil / Sediment
Lab ID: S1409241-010
ClientSample ID: CORR7
COC: WEB

WorkOrder: S1409241
CollectionDate: 8/28/2014 5:15:00 PM
DateReceived: 9/8/2014
FieldSampler: LM
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Actinium 228	0.6	pCi/g		0.2	E901.1 Mod.	10/10/2014 1017	MB
Actinium 228 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/10/2014 1017	MB
Lead 210	2.7	pCi/g		0.2	OTW01	09/30/2014 843	MB
Lead 210 Precision (±)	0.7	pCi/g			OTW01	09/30/2014 843	MB
Potassium 40	12.5	pCi/g		0.2	E901.1 Mod.	10/10/2014 1017	MB
Potassium 40 Precision (±)	0.8	pCi/g			E901.1 Mod.	10/10/2014 1017	MB
Radium 226	4.5	pCi/g		0.2	E901.1 Mod.	10/10/2014 1017	MB
Radium 226 Precision (±)	0.2	pCi/g			E901.1 Mod.	10/10/2014 1017	MB
Thorium 230	5.6	pCi/g		0.2	ACW10	09/26/2014 924	MB
Thorium230 Precision (±)	0.7	pCi/g			ACW10	09/26/2014 924	MB
Thorium229 Tracer (30-120)	93.5	%		0.2	ACW10	09/26/2014 924	MB
Metals - Total							
Uranium	1.8	pCi/g		0.2	EPA 200.8	09/18/2014 655	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/15/2014
Report ID S1409241001

ProjectName: Soil / Sediment
Lab ID: S1409241-011
ClientSample ID: CORR15
COC: WEB

WorkOrder: S1409241
CollectionDate: 8/29/2014 2:15:00 PM
DateReceived: 9/8/2014
FieldSampler: LM
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Actinium 228	0.6	pCi/g		0.2	E901.1 Mod.	10/10/2014 1417	MB
Actinium 228 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/10/2014 1417	MB
Lead 210	2.0	pCi/g		0.2	OTW01	09/30/2014 843	MB
Lead 210 Precision (±)	0.6	pCi/g			OTW01	09/30/2014 843	MB
Potassium 40	13.3	pCi/g		0.2	E901.1 Mod.	10/10/2014 1417	MB
Potassium 40 Precision (±)	0.8	pCi/g			E901.1 Mod.	10/10/2014 1417	MB
Radium 226	1.0	pCi/g		0.2	E901.1 Mod.	10/10/2014 1417	MB
Radium 226 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/10/2014 1417	MB
Thorium 230	0.6	pCi/g		0.2	ACW10	09/26/2014 924	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	09/26/2014 924	MB
Thorium229 Tracer (30-120)	80.4	%		0.2	ACW10	09/26/2014 924	MB
Metals - Total							
Uranium	0.7	pCi/g		0.2	EPA 200.8	09/18/2014 700	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/15/2014
Report ID S1409241001

ProjectName: Soil / Sediment
Lab ID: S1409241-012
ClientSample ID: CORR13
COC: WEB

WorkOrder: S1409241
CollectionDate: 8/29/2014 1:55:00 PM
DateReceived: 9/8/2014
FieldSampler: LM
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Actinium 228	0.6	pCi/g		0.2	E901.1 Mod.	10/10/2014 1818	MB
Actinium 228 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/10/2014 1818	MB
Lead 210	4.1	pCi/g		0.2	OTW01	09/30/2014 843	MB
Lead 210 Precision (±)	0.8	pCi/g			OTW01	09/30/2014 843	MB
Potassium 40	13.7	pCi/g		0.2	E901.1 Mod.	10/10/2014 1818	MB
Potassium 40 Precision (±)	0.8	pCi/g			E901.1 Mod.	10/10/2014 1818	MB
Radium 226	4.1	pCi/g		0.2	E901.1 Mod.	10/10/2014 1818	MB
Radium 226 Precision (±)	0.2	pCi/g			E901.1 Mod.	10/10/2014 1818	MB
Thorium 230	4.5	pCi/g		0.2	ACW10	09/26/2014 924	MB
Thorium230 Precision (±)	0.7	pCi/g			ACW10	09/26/2014 924	MB
Thorium229 Tracer (30-120)	83.9	%		0.2	ACW10	09/26/2014 924	MB
Metals - Total							
Uranium	2.4	pCi/g		0.2	EPA 200.8	09/18/2014 732	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/15/2014
Report ID S1409241001

ProjectName: Soil / Sediment
Lab ID: S1409241-013
ClientSample ID: CORR12
COC: WEB

WorkOrder: S1409241
CollectionDate: 8/29/2014 1:00:00 PM
DateReceived: 9/8/2014
FieldSampler: LM
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Actinium 228	0.6	pCi/g		0.2	E901.1 Mod.	10/10/2014 2219	MB
Actinium 228 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/10/2014 2219	MB
Lead 210	1.5	pCi/g		0.2	OTW01	09/30/2014 1050	MB
Lead 210 Precision (±)	0.6	pCi/g			OTW01	09/30/2014 1050	MB
Potassium 40	13.1	pCi/g		0.2	E901.1 Mod.	10/10/2014 2219	MB
Potassium 40 Precision (±)	0.8	pCi/g			E901.1 Mod.	10/10/2014 2219	MB
Radium 226	0.6	pCi/g		0.2	E901.1 Mod.	10/10/2014 2219	MB
Radium 226 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/10/2014 2219	MB
Thorium 230	1.3	pCi/g		0.2	ACW10	09/26/2014 924	MB
Thorium230 Precision (±)	0.3	pCi/g			ACW10	09/26/2014 924	MB
Thorium229 Tracer (30-120)	77.7	%		0.2	ACW10	09/26/2014 924	MB
Metals - Total							
Uranium	0.5	pCi/g		0.2	EPA 200.8	09/18/2014 737	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/15/2014
Report ID S1409241001

ProjectName: Soil / Sediment
Lab ID: S1409241-014
ClientSample ID: CORR10
COC: WEB

WorkOrder: S1409241
CollectionDate: 8/29/2014 12:30:00 PM
DateReceived: 9/8/2014
FieldSampler: LM
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Actinium 228	0.6	pCi/g		0.2	E901.1 Mod.	10/11/2014 220	MB
Actinium 228 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/11/2014 220	MB
Lead 210	2.6	pCi/g		0.2	OTW01	09/30/2014 1050	MB
Lead 210 Precision (±)	0.7	pCi/g			OTW01	09/30/2014 1050	MB
Potassium 40	14.1	pCi/g		0.2	E901.1 Mod.	10/11/2014 220	MB
Potassium 40 Precision (±)	0.8	pCi/g			E901.1 Mod.	10/11/2014 220	MB
Radium 226	2.1	pCi/g		0.2	E901.1 Mod.	10/11/2014 220	MB
Radium 226 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/11/2014 220	MB
Thorium 230	1.7	pCi/g		0.2	ACW10	09/30/2014 1319	MB
Thorium230 Precision (±)	0.3	pCi/g			ACW10	09/30/2014 1319	MB
Thorium229 Tracer (30-120)	84.3	%		0.2	ACW10	09/30/2014 1319	MB
Metals - Total							
Uranium	1.1	pCi/g		0.2	EPA 200.8	09/18/2014 743	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/15/2014
Report ID S1409241001

ProjectName: Soil / Sediment
Lab ID: S1409241-015
ClientSample ID: CORR6
COC: WEB

WorkOrder: S1409241
CollectionDate: 8/29/2014 12:00:00 PM
DateReceived: 9/8/2014
FieldSampler: LM
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Actinium 228	0.6	pCi/g		0.2	E901.1 Mod.	10/11/2014 621	MB
Actinium 228 Precision (±)	0.1	pCi/g			E901.1 Mod.	10/11/2014 621	MB
Lead 210	1.7	pCi/g		0.2	OTW01	09/30/2014 1050	MB
Lead 210 Precision (±)	0.6	pCi/g			OTW01	09/30/2014 1050	MB
Potassium 40	13.3	pCi/g		0.2	E901.1 Mod.	10/11/2014 621	MB
Potassium 40 Precision (±)	0.8	pCi/g			E901.1 Mod.	10/11/2014 621	MB
Radium 226	3.2	pCi/g		0.2	E901.1 Mod.	10/11/2014 621	MB
Radium 226 Precision (±)	0.2	pCi/g			E901.1 Mod.	10/11/2014 621	MB
Thorium 230	2.4	pCi/g		0.2	ACW10	09/30/2014 1319	MB
Thorium230 Precision (±)	0.4	pCi/g			ACW10	09/30/2014 1319	MB
Thorium229 Tracer (30-120)	86.4	%		0.2	ACW10	09/30/2014 1319	MB
Metals - Total							
Uranium	1.8	pCi/g		0.2	EPA 200.8	09/18/2014 748	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

ADDENDUM 3.11-B
BASELINE RADIOLOGICAL MONITORING RESULTS AND LABORATORY REPORTS

GROUNDWATER

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5268-12-01OZ	OZ	1Q13	4/4/2013	Gross Alpha	25.5	pCi/l	2	3	NA	2.55E-08	1466257	704594	0' - 795'	325.68	SM 7110B	IML
5268-12-01OZ	OZ	1Q13	4/4/2013	Gross Beta	7.1	pCi/l	3	2.4	NA	7.1E-09	1466257	704594	0' - 795'	325.68	SM 7110B	IML
5268-12-01OZ	OZ	1Q13	4/4/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1466257	704594	0' - 795'	325.68	EPA 901.1M	IML
5268-12-01OZ	OZ	1Q13	4/4/2013	Pb-210, D	3.3	pCi/l	1	0.6	1.0E-08	3.3E-09	1466257	704594	0' - 795'	325.68	OTW01	IML
5268-12-01OZ	OZ	1Q13	4/4/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1466257	704594	0' - 795'	325.68	OTW01	IML
5268-12-01OZ	OZ	1Q13	4/4/2013	Po-210, D	2.3	pCi/l	1	0.9	4.0E-08	2.3E-09	1466257	704594	0' - 795'	325.68	OTW01	IML
5268-12-01OZ	OZ	1Q13	4/4/2013	Po-210, S	3.6	pCi/l	1	1.5	4.0E-08	3.6E-09	1466257	704594	0' - 795'	325.68	OTW01	IML
5268-12-01OZ	OZ	1Q13	4/4/2013	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2E-10	1466257	704594	0' - 795'	325.68	SM 7500 Ra-B	IML
5268-12-01OZ	OZ	1Q13	4/4/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466257	704594	0' - 795'	325.68	SM 7500 Ra-B	IML
5268-12-01OZ	OZ	1Q13	4/4/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1466257	704594	0' - 795'	325.68	Ga-Tech	IML
5268-12-01OZ	OZ	1Q13	4/4/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466257	704594	0' - 795'	325.68	ACW10	IML
5268-12-01OZ	OZ	1Q13	4/4/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466257	704594	0' - 795'	325.68	ACW10	IML
5268-12-01OZ	OZ	1Q13	4/4/2013	U, D	0.0119	mg/l	0.0003	0	3.0E-07	8.06E-09	1466257	704594	0' - 795'	325.68	EPA 200.8	IML
5268-12-01OZ	OZ	1Q13	4/4/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466257	704594	0' - 795'	325.68	EPA 200.8	IML
5268-12-01OZ	OZ	2Q13	6/20/2013	Gross Alpha	25.1	pCi/l	2	3	NA	2.51E-08	1466257	704594	0' - 795'	328.05	SM 7110B	IML
5268-12-01OZ	OZ	2Q13	6/20/2013	Gross Beta	<4	pCi/l	4	0	NA	NA	1466257	704594	0' - 795'	328.05	SM 7110B	IML
5268-12-01OZ	OZ	2Q13	6/20/2013	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4E-10	1466257	704594	0' - 795'	328.05	SM 7500 Ra-B	IML
5268-12-01OZ	OZ	2Q13	6/20/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466257	704594	0' - 795'	328.05	SM 7500 Ra-B	IML
5268-12-01OZ	OZ	2Q13	6/20/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1466257	704594	0' - 795'	328.05	Ga-Tech	IML
5268-12-01OZ	OZ	2Q13	6/20/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466257	704594	0' - 795'	328.05	ACW10	IML
5268-12-01OZ	OZ	2Q13	6/20/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466257	704594	0' - 795'	328.05	ACW10	IML
5268-12-01OZ	OZ	2Q13	6/20/2013	U, D	0.0127	mg/l	0.0003	0	3.0E-07	8.60E-09	1466257	704594	0' - 795'	328.05	EPA 200.8	IML
5268-12-01OZ	OZ	2Q13	6/20/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466257	704594	0' - 795'	328.05	EPA 200.8	IML
5268-12-01OZ	OZ	3Q13	8/21/2013	Gross Alpha	23.6	pCi/l	2	2.8	NA	2.36E-08	1466257	704594	0' - 795'	329.92	SM 7110B	IML
5268-12-01OZ	OZ	3Q13	8/21/2013	Gross Beta	6.4	pCi/l	3	2.1	NA	6.4E-09	1466257	704594	0' - 795'	329.92	SM 7110B	IML
5268-12-01OZ	OZ	3Q13	8/21/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1466257	704594	0' - 795'	329.92	SM 7500 Ra-B	IML
5268-12-01OZ	OZ	3Q13	8/21/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466257	704594	0' - 795'	329.92	SM 7500 Ra-B	IML
5268-12-01OZ	OZ	3Q13	8/21/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1466257	704594	0' - 795'	329.92	Ga-Tech	IML
5268-12-01OZ	OZ	3Q13	8/21/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466257	704594	0' - 795'	329.92	ACW10	IML
5268-12-01OZ	OZ	3Q13	8/21/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466257	704594	0' - 795'	329.92	ACW10	IML
5268-12-01OZ	OZ	3Q13	8/21/2013	U, D	0.0125	mg/l	0.0003	0	3.0E-07	8.46E-09	1466257	704594	0' - 795'	329.92	EPA 200.8	IML
5268-12-01OZ	OZ	3Q13	8/21/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466257	704594	0' - 795'	329.92	EPA 200.8	IML
5268-12-01OZ	OZ	4Q13	10/23/2013	Gross Alpha	14.6	pCi/l	2	2.4	NA	1.46E-08	1466257	704594	0' - 795'	329.28	SM 7110B	IML
5268-12-01OZ	OZ	4Q13	10/23/2013	Gross Beta	7.8	pCi/l	4	2.4	NA	7.8E-09	1466257	704594	0' - 795'	329.28	SM 7110B	IML
5268-12-01OZ	OZ	4Q13	10/23/2013	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4E-10	1466257	704594	0' - 795'	329.28	SM 7500 Ra-B	IML
5268-12-01OZ	OZ	4Q13	10/23/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466257	704594	0' - 795'	329.28	SM 7500 Ra-B	IML
5268-12-01OZ	OZ	4Q13	10/23/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1466257	704594	0' - 795'	329.28	Ga-Tech	IML
5268-12-01OZ	OZ	4Q13	10/23/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466257	704594	0' - 795'	329.28	ACW10	IML
5268-12-01OZ	OZ	4Q13	10/23/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466257	704594	0' - 795'	329.28	ACW10	IML
5268-12-01OZ	OZ	4Q13	10/23/2013	U, D	0.0091	mg/l	0.0003	0	3.0E-07	6.16E-09	1466257	704594	0' - 795'	329.28	EPA 200.8	IML
5268-12-01OZ	OZ	4Q13	10/23/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466257	704594	0' - 795'	329.28	EPA 200.8	IML
5268-12-01SA	SA	1Q13	3/26/2013	Gross Alpha	3.7	pCi/l	2	1.6	NA	3.7E-09	1466216	704608	0' - 60'	55.63	SM 7110B	IML
5268-12-01SA	SA	1Q13	3/26/2013	Gross Beta	3.5	pCi/l	3	2.2	NA	3.5E-09	1466216	704608	0' - 60'	55.63	SM 7110B	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5268-12-01SA	SA	1Q13	3/26/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1466216	704608	0' - 60'	55.63	EPA 901.1M	IML
5268-12-01SA	SA	1Q13	3/26/2013	Pb-210, D	11.9	pCi/l	1	0.9	1.0E-08	1.19E-08	1466216	704608	0' - 60'	55.63	OTW01	IML
5268-12-01SA	SA	1Q13	3/26/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1466216	704608	0' - 60'	55.63	OTW01	IML
5268-12-01SA	SA	1Q13	3/26/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1466216	704608	0' - 60'	55.63	OTW01	IML
5268-12-01SA	SA	1Q13	3/26/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1466216	704608	0' - 60'	55.63	OTW01	IML
5268-12-01SA	SA	1Q13	3/26/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466216	704608	0' - 60'	55.63	SM 7500 Ra-B	IML
5268-12-01SA	SA	1Q13	3/26/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466216	704608	0' - 60'	55.63	SM 7500 Ra-B	IML
5268-12-01SA	SA	1Q13	3/26/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1466216	704608	0' - 60'	55.63	Ga-Tech	IML
5268-12-01SA	SA	1Q13	3/26/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466216	704608	0' - 60'	55.63	ACW10	IML
5268-12-01SA	SA	1Q13	3/26/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466216	704608	0' - 60'	55.63	ACW10	IML
5268-12-01SA	SA	1Q13	3/26/2013	U, D	0.0006	mg/l	0.0003	0	3.0E-07	4.06E-10	1466216	704608	0' - 60'	55.63	EPA 200.8	IML
5268-12-01SA	SA	1Q13	3/26/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466216	704608	0' - 60'	55.63	EPA 200.8	IML
5268-12-01SA	SA	2Q13	6/19/2013	Gross Alpha	2.4	pCi/l	2	1.2	NA	2.4E-09	1466216	704608	0' - 60'	53.71	SM 7110B	IML
5268-12-01SA	SA	2Q13	6/19/2013	Gross Beta	5	pCi/l	3	2.1	NA	5E-09	1466216	704608	0' - 60'	53.71	SM 7110B	IML
5268-12-01SA	SA	2Q13	6/19/2013	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2E-10	1466216	704608	0' - 60'	53.71	SM 7500 Ra-B	IML
5268-12-01SA	SA	2Q13	6/19/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466216	704608	0' - 60'	53.71	SM 7500 Ra-B	IML
5268-12-01SA	SA	2Q13	6/19/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1466216	704608	0' - 60'	53.71	Ga-Tech	IML
5268-12-01SA	SA	2Q13	6/19/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466216	704608	0' - 60'	53.71	ACW10	IML
5268-12-01SA	SA	2Q13	6/19/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466216	704608	0' - 60'	53.71	ACW10	IML
5268-12-01SA	SA	2Q13	6/19/2013	U, D	0.0007	mg/l	0.0003	0	3.0E-07	4.74E-10	1466216	704608	0' - 60'	53.71	EPA 200.8	IML
5268-12-01SA	SA	2Q13	6/19/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466216	704608	0' - 60'	53.71	EPA 200.8	IML
5268-12-01SA	SA	3Q13	8/20/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1466216	704608	0' - 60'	54.05	SM 7110B	IML
5268-12-01SA	SA	3Q13	8/20/2013	Gross Beta	5.1	pCi/l	4	2.1	NA	5.1E-09	1466216	704608	0' - 60'	54.05	SM 7110B	IML
5268-12-01SA	SA	3Q13	8/20/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466216	704608	0' - 60'	54.05	SM 7500 Ra-B	IML
5268-12-01SA	SA	3Q13	8/20/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466216	704608	0' - 60'	54.05	SM 7500 Ra-B	IML
5268-12-01SA	SA	3Q13	8/20/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1466216	704608	0' - 60'	54.05	Ga-Tech	IML
5268-12-01SA	SA	3Q13	8/20/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466216	704608	0' - 60'	54.05	ACW10	IML
5268-12-01SA	SA	3Q13	8/20/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466216	704608	0' - 60'	54.05	ACW10	IML
5268-12-01SA	SA	3Q13	8/20/2013	U, D	0.0003	mg/l	0.0003	0	3.0E-07	2.03E-10	1466216	704608	0' - 60'	54.05	EPA 200.8	IML
5268-12-01SA	SA	3Q13	8/20/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466216	704608	0' - 60'	54.05	EPA 200.8	IML
5268-12-01SA	SA	4Q13	10/23/2013	Gross Alpha	3.9	pCi/l	2	1.7	NA	3.9E-09	1466216	704608	0' - 60'	54.05	SM 7110B	IML
5268-12-01SA	SA	4Q13	10/23/2013	Gross Beta	5.7	pCi/l	5	2.7	NA	5.7E-09	1466216	704608	0' - 60'	54.05	SM 7110B	IML
5268-12-01SA	SA	4Q13	10/23/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466216	704608	0' - 60'	54.05	SM 7500 Ra-B	IML
5268-12-01SA	SA	4Q13	10/23/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466216	704608	0' - 60'	54.05	SM 7500 Ra-B	IML
5268-12-01SA	SA	4Q13	10/23/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1466216	704608	0' - 60'	54.05	Ga-Tech	IML
5268-12-01SA	SA	4Q13	10/23/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466216	704608	0' - 60'	54.05	ACW10	IML
5268-12-01SA	SA	4Q13	10/23/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466216	704608	0' - 60'	54.05	ACW10	IML
5268-12-01SA	SA	4Q13	10/23/2013	U, D	0.0003	mg/l	0.0003	0	3.0E-07	2.03E-10	1466216	704608	0' - 60'	54.05	EPA 200.8	IML
5268-12-01SA	SA	4Q13	10/23/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466216	704608	0' - 60'	54.05	EPA 200.8	IML
5268-12-01SM	SM	1Q13	4/4/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1466232	704653	0' - 670'	318.6	SM 7110B	IML
5268-12-01SM	SM	1Q13	4/4/2013	Gross Beta	4.4	pCi/l	3	3.7	NA	4.4E-09	1466232	704653	0' - 670'	318.6	SM 7110B	IML
5268-12-01SM	SM	1Q13	4/4/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1466232	704653	0' - 670'	318.6	EPA 901.1M	IML
5268-12-01SM	SM	1Q13	4/4/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1466232	704653	0' - 670'	318.6	OTW01	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5268-12-01SM	SM	1Q13	4/4/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1466232	704653	0' - 670'	318.6	OTW01	IML
5268-12-01SM	SM	1Q13	4/4/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1466232	704653	0' - 670'	318.6	OTW01	IML
5268-12-01SM	SM	1Q13	4/4/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1466232	704653	0' - 670'	318.6	OTW01	IML
5268-12-01SM	SM	1Q13	4/4/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466232	704653	0' - 670'	318.6	SM 7500 Ra-B	IML
5268-12-01SM	SM	1Q13	4/4/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466232	704653	0' - 670'	318.6	SM 7500 Ra-B	IML
5268-12-01SM	SM	1Q13	4/4/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1466232	704653	0' - 670'	318.6	Ga-Tech	IML
5268-12-01SM	SM	1Q13	4/4/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466232	704653	0' - 670'	318.6	ACW10	IML
5268-12-01SM	SM	1Q13	4/4/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466232	704653	0' - 670'	318.6	ACW10	IML
5268-12-01SM	SM	1Q13	4/4/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466232	704653	0' - 670'	318.6	EPA 200.8	IML
5268-12-01SM	SM	1Q13	4/4/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466232	704653	0' - 670'	318.6	EPA 200.8	IML
5268-12-01SM	SM	2Q13	6/20/2013	Gross Alpha	<4	pCi/l	4	0	NA	NA	1466232	704653	0' - 670'	319.2	SM 7110B	IML
5268-12-01SM	SM	2Q13	6/20/2013	Gross Beta	<8	pCi/l	8	0	NA	NA	1466232	704653	0' - 670'	319.2	SM 7110B	IML
5268-12-01SM	SM	2Q13	6/20/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466232	704653	0' - 670'	319.2	SM 7500 Ra-B	IML
5268-12-01SM	SM	2Q13	6/20/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466232	704653	0' - 670'	319.2	SM 7500 Ra-B	IML
5268-12-01SM	SM	2Q13	6/20/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1466232	704653	0' - 670'	319.2	Ga-Tech	IML
5268-12-01SM	SM	2Q13	6/20/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466232	704653	0' - 670'	319.2	ACW10	IML
5268-12-01SM	SM	2Q13	6/20/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466232	704653	0' - 670'	319.2	ACW10	IML
5268-12-01SM	SM	2Q13	6/20/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466232	704653	0' - 670'	319.2	EPA 200.8	IML
5268-12-01SM	SM	2Q13	6/20/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466232	704653	0' - 670'	319.2	EPA 200.8	IML
5268-12-01SM	SM	3Q13	8/21/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1466232	704653	0' - 670'	320.33	SM 7110B	IML
5268-12-01SM	SM	3Q13	8/21/2013	Gross Beta	<3	pCi/l	3	0	NA	NA	1466232	704653	0' - 670'	320.33	SM 7110B	IML
5268-12-01SM	SM	3Q13	8/21/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466232	704653	0' - 670'	320.33	SM 7500 Ra-B	IML
5268-12-01SM	SM	3Q13	8/21/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466232	704653	0' - 670'	320.33	SM 7500 Ra-B	IML
5268-12-01SM	SM	3Q13	8/21/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1466232	704653	0' - 670'	320.33	Ga-Tech	IML
5268-12-01SM	SM	3Q13	8/21/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466232	704653	0' - 670'	320.33	ACW10	IML
5268-12-01SM	SM	3Q13	8/21/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466232	704653	0' - 670'	320.33	ACW10	IML
5268-12-01SM	SM	3Q13	8/21/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466232	704653	0' - 670'	320.33	EPA 200.8	IML
5268-12-01SM	SM	3Q13	8/21/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466232	704653	0' - 670'	320.33	EPA 200.8	IML
5268-12-01SM	SM	4Q13	10/23/2013	Gross Alpha	4	pCi/l	3	2.3	NA	4E-09	1466232	704653	0' - 670'	320.65	SM 7110B	IML
5268-12-01SM	SM	4Q13	10/23/2013	Gross Beta	11.5	pCi/l	7	4.3	NA	1.15E-08	1466232	704653	0' - 670'	320.65	SM 7110B	IML
5268-12-01SM	SM	4Q13	10/23/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466232	704653	0' - 670'	320.65	SM 7500 Ra-B	IML
5268-12-01SM	SM	4Q13	10/23/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1466232	704653	0' - 670'	320.65	SM 7500 Ra-B	IML
5268-12-01SM	SM	4Q13	10/23/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1466232	704653	0' - 670'	320.65	Ga-Tech	IML
5268-12-01SM	SM	4Q13	10/23/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466232	704653	0' - 670'	320.65	ACW10	IML
5268-12-01SM	SM	4Q13	10/23/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1466232	704653	0' - 670'	320.65	ACW10	IML
5268-12-01SM	SM	4Q13	10/23/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466232	704653	0' - 670'	320.65	EPA 200.8	IML
5268-12-01SM	SM	4Q13	10/23/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1466232	704653	0' - 670'	320.65	EPA 200.8	IML
5268-21-11OZ	OZ	1Q13	4/3/2013	Gross Alpha	57.7	pCi/l	2	4.9	NA	5.77E-08	1462261	700687	0' - 990'	407	SM 7110B	IML
5268-21-11OZ	OZ	1Q13	4/3/2013	Gross Beta	22	pCi/l	3	3.1	NA	2.2E-08	1462261	700687	0' - 990'	407	SM 7110B	IML
5268-21-11OZ	OZ	1Q13	4/3/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1462261	700687	0' - 990'	407	EPA 901.1M	IML
5268-21-11OZ	OZ	1Q13	4/3/2013	Pb-210, D	2.2	pCi/l	1	0.6	1.0E-08	2.2E-09	1462261	700687	0' - 990'	407	OTW01	IML
5268-21-11OZ	OZ	1Q13	4/3/2013	Pb-210, S	3.9	pCi/l	1	0.8	1.0E-08	3.9E-09	1462261	700687	0' - 990'	407	OTW01	IML
5268-21-11OZ	OZ	1Q13	4/3/2013	Po-210, D	1.1	pCi/l	1	1	4.0E-08	1.1E-09	1462261	700687	0' - 990'	407	OTW01	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5268-21-11OZ	OZ	1Q13	4/3/2013	Po-210, S	1.3	pCi/l	1	1	4.0E-08	1.3E-09	1462261	700687	0' - 990'	407	OTW01	IML
5268-21-11OZ	OZ	1Q13	4/3/2013	Ra-226, D	0.7	pCi/l	0.2	0.1	6.0E-08	7E-10	1462261	700687	0' - 990'	407	SM 7500 Ra-B	IML
5268-21-11OZ	OZ	1Q13	4/3/2013	Ra-226, S	1.7	pCi/l	0.2	0.1	6.0E-08	1.7E-09	1462261	700687	0' - 990'	407	SM 7500 Ra-B	IML
5268-21-11OZ	OZ	1Q13	4/3/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1462261	700687	0' - 990'	407	Ga-Tech	IML
5268-21-11OZ	OZ	1Q13	4/3/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462261	700687	0' - 990'	407	ACW10	IML
5268-21-11OZ	OZ	1Q13	4/3/2013	Th-230, S	0.6	pCi/l	0.2	0.2	1.0E-07	6E-10	1462261	700687	0' - 990'	407	ACW10	IML
5268-21-11OZ	OZ	1Q13	4/3/2013	U, D	0.0308	mg/l	0.0003	0	3.0E-07	2.09E-08	1462261	700687	0' - 990'	407	EPA 200.8	IML
5268-21-11OZ	OZ	1Q13	4/3/2013	U, S	0.0017	mg/l	0.0003	0	3.0E-07	1.15E-09	1462261	700687	0' - 990'	407	EPA 200.8	IML
5268-21-11OZ	OZ	2Q13	6/18/2013	Gross Alpha	58.5	pCi/l	2	4.1	NA	5.85E-08	1462261	700687	0' - 990'	406.3	SM 7110B	IML
5268-21-11OZ	OZ	2Q13	6/18/2013	Gross Beta	19	pCi/l	3	2.4	NA	1.9E-08	1462261	700687	0' - 990'	406.3	SM 7110B	IML
5268-21-11OZ	OZ	2Q13	6/18/2013	Ra-226, D	1.7	pCi/l	0.2	0.2	6.0E-08	1.7E-09	1462261	700687	0' - 990'	406.3	SM 7500 Ra-B	IML
5268-21-11OZ	OZ	2Q13	6/18/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1462261	700687	0' - 990'	406.3	SM 7500 Ra-B	IML
5268-21-11OZ	OZ	2Q13	6/18/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1462261	700687	0' - 990'	406.3	Ga-Tech	IML
5268-21-11OZ	OZ	2Q13	6/18/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462261	700687	0' - 990'	406.3	ACW10	IML
5268-21-11OZ	OZ	2Q13	6/18/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462261	700687	0' - 990'	406.3	ACW10	IML
5268-21-11OZ	OZ	2Q13	6/18/2013	U, D	0.029	mg/l	0.0003	0	3.0E-07	1.96E-08	1462261	700687	0' - 990'	406.3	EPA 200.8	IML
5268-21-11OZ	OZ	2Q13	6/18/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1462261	700687	0' - 990'	406.3	EPA 200.8	IML
5268-21-11OZ	OZ	3Q13	8/19/2013	Gross Alpha	61.6	pCi/l	2	4.3	NA	6.16E-08	1462261	700687	0' - 990'	415.35	SM 7110B	IML
5268-21-11OZ	OZ	3Q13	8/19/2013	Gross Beta	14.8	pCi/l	4	2.5	NA	1.48E-08	1462261	700687	0' - 990'	415.35	SM 7110B	IML
5268-21-11OZ	OZ	3Q13	8/19/2013	Ra-226, D	1.6	pCi/l	0.2	0.2	6.0E-08	1.6E-09	1462261	700687	0' - 990'	415.35	SM 7500 Ra-B	IML
5268-21-11OZ	OZ	3Q13	8/19/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1462261	700687	0' - 990'	415.35	SM 7500 Ra-B	IML
5268-21-11OZ	OZ	3Q13	8/19/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1462261	700687	0' - 990'	415.35	Ga-Tech	IML
5268-21-11OZ	OZ	3Q13	8/19/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462261	700687	0' - 990'	415.35	ACW10	IML
5268-21-11OZ	OZ	3Q13	8/19/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462261	700687	0' - 990'	415.35	ACW10	IML
5268-21-11OZ	OZ	3Q13	8/19/2013	U, D	0.0287	mg/l	0.0003	0	3.0E-07	1.94E-08	1462261	700687	0' - 990'	415.35	EPA 200.8	IML
5268-21-11OZ	OZ	3Q13	8/19/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1462261	700687	0' - 990'	415.35	EPA 200.8	IML
5268-21-11OZ	OZ	4Q13	10/21/2013	Gross Alpha	73.1	pCi/l	2	4.6	NA	7.31E-08	1462261	700687	0' - 990'	412.1	SM 7110B	IML
5268-21-11OZ	OZ	4Q13	10/21/2013	Gross Beta	14.2	pCi/l	3	2.3	NA	1.42E-08	1462261	700687	0' - 990'	412.1	SM 7110B	IML
5268-21-11OZ	OZ	4Q13	10/21/2013	Ra-226, D	1.4	pCi/l	0.2	0.1	6.0E-08	1.4E-09	1462261	700687	0' - 990'	412.1	SM 7500 Ra-B	IML
5268-21-11OZ	OZ	4Q13	10/21/2013	Ra-226, S	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1462261	700687	0' - 990'	412.1	SM 7500 Ra-B	IML
5268-21-11OZ	OZ	4Q13	10/21/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1462261	700687	0' - 990'	412.1	Ga-Tech	IML
5268-21-11OZ	OZ	4Q13	10/21/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462261	700687	0' - 990'	412.1	ACW10	IML
5268-21-11OZ	OZ	4Q13	10/21/2013	Th-230, S	0.2	pCi/l	0.2	0.1	1.0E-07	2E-10	1462261	700687	0' - 990'	412.1	ACW10	IML
5268-21-11OZ	OZ	4Q13	10/21/2013	U, D	0.0285	mg/l	0.0003	0	3.0E-07	1.93E-08	1462261	700687	0' - 990'	412.1	EPA 200.8	IML
5268-21-11OZ	OZ	4Q13	10/21/2013	U, S	0.0003	mg/l	0.0003	0	3.0E-07	2.03E-10	1462261	700687	0' - 990'	412.1	EPA 200.8	IML
5268-21-11SA	SA	1Q13	3/12/2013	Gross Alpha	6.3	pCi/l	4	2.6	NA	6.3E-09	1462226	700718	0' - 50'	52.98	SM 7110B	IML
5268-21-11SA	SA	1Q13	3/12/2013	Gross Beta	34	pCi/l	7	4.6	NA	3.4E-08	1462226	700718	0' - 50'	52.98	SM 7110B	IML
5268-21-11SA	SA	1Q13	3/12/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1462226	700718	0' - 50'	52.98	EPA 901.1M	IML
5268-21-11SA	SA	1Q13	3/12/2013	Pb-210, D	1.2	pCi/l	1	0.4	1.0E-08	1.2E-09	1462226	700718	0' - 50'	52.98	OTW01	IML
5268-21-11SA	SA	1Q13	3/12/2013	Pb-210, S	2.3	pCi/l	1	0.4	1.0E-08	2.3E-09	1462226	700718	0' - 50'	52.98	OTW01	IML
5268-21-11SA	SA	1Q13	3/12/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1462226	700718	0' - 50'	52.98	OTW01	IML
5268-21-11SA	SA	1Q13	3/12/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1462226	700718	0' - 50'	52.98	OTW01	IML
5268-21-11SA	SA	1Q13	3/12/2013	Ra-226, D	3.1	pCi/l	0.2	0.2	6.0E-08	3.1E-09	1462226	700718	0' - 50'	52.98	SM 7500 Ra-B	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5268-21-11SA	SA	1Q13	3/12/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1462226	700718	0' - 50'	52.98	SM 7500 Ra-B	IML
5268-21-11SA	SA	1Q13	3/12/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1462226	700718	0' - 50'	52.98	Ga-Tech	IML
5268-21-11SA	SA	1Q13	3/12/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462226	700718	0' - 50'	52.98	ACW10	IML
5268-21-11SA	SA	1Q13	3/12/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462226	700718	0' - 50'	52.98	ACW10	IML
5268-21-11SA	SA	1Q13	3/12/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1462226	700718	0' - 50'	52.98	EPA 200.8	IML
5268-21-11SA	SA	1Q13	3/12/2013	U, S	0.0026	mg/l	0.0003	0	3.0E-07	1.76E-09	1462226	700718	0' - 50'	52.98	EPA 200.8	IML
5268-21-11SM	SM	1Q13	4/3/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1462262	700759	0' - 790'	346.08	SM 7110B	IML
5268-21-11SM	SM	1Q13	4/3/2013	Gross Beta	4.9	pCi/l	3	2.3	NA	4.9E-09	1462262	700759	0' - 790'	346.08	SM 7110B	IML
5268-21-11SM	SM	1Q13	4/3/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1462262	700759	0' - 790'	346.08	EPA 901.1M	IML
5268-21-11SM	SM	1Q13	4/3/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1462262	700759	0' - 790'	346.08	OTW01	IML
5268-21-11SM	SM	1Q13	4/3/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1462262	700759	0' - 790'	346.08	OTW01	IML
5268-21-11SM	SM	1Q13	4/3/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1462262	700759	0' - 790'	346.08	OTW01	IML
5268-21-11SM	SM	1Q13	4/3/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1462262	700759	0' - 790'	346.08	OTW01	IML
5268-21-11SM	SM	1Q13	4/3/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1462262	700759	0' - 790'	346.08	SM 7500 Ra-B	IML
5268-21-11SM	SM	1Q13	4/3/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1462262	700759	0' - 790'	346.08	SM 7500 Ra-B	IML
5268-21-11SM	SM	1Q13	4/3/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1462262	700759	0' - 790'	346.08	Ga-Tech	IML
5268-21-11SM	SM	1Q13	4/3/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462262	700759	0' - 790'	346.08	ACW10	IML
5268-21-11SM	SM	1Q13	4/3/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462262	700759	0' - 790'	346.08	ACW10	IML
5268-21-11SM	SM	1Q13	4/3/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1462262	700759	0' - 790'	346.08	EPA 200.8	IML
5268-21-11SM	SM	1Q13	4/3/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1462262	700759	0' - 790'	346.08	EPA 200.8	IML
5268-21-11SM	SM	2Q13	6/19/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1462262	700759	0' - 790'	346.2	SM 7110B	IML
5268-21-11SM	SM	2Q13	6/19/2013	Gross Beta	5.7	pCi/l	3	2.2	NA	5.7E-09	1462262	700759	0' - 790'	346.2	SM 7110B	IML
5268-21-11SM	SM	2Q13	6/19/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1462262	700759	0' - 790'	346.2	SM 7500 Ra-B	IML
5268-21-11SM	SM	2Q13	6/19/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1462262	700759	0' - 790'	346.2	SM 7500 Ra-B	IML
5268-21-11SM	SM	2Q13	6/19/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1462262	700759	0' - 790'	346.2	Ga-Tech	IML
5268-21-11SM	SM	2Q13	6/19/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462262	700759	0' - 790'	346.2	ACW10	IML
5268-21-11SM	SM	2Q13	6/19/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462262	700759	0' - 790'	346.2	ACW10	IML
5268-21-11SM	SM	2Q13	6/19/2013	U, D	0.0004	mg/l	0.0003	0	3.0E-07	2.71E-10	1462262	700759	0' - 790'	346.2	EPA 200.8	IML
5268-21-11SM	SM	2Q13	6/19/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1462262	700759	0' - 790'	346.2	EPA 200.8	IML
5268-21-11SM	SM	3Q13	8/19/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1462262	700759	0' - 790'	347.05	SM 7110B	IML
5268-21-11SM	SM	3Q13	8/19/2013	Gross Beta	<4	pCi/l	4	0	NA	NA	1462262	700759	0' - 790'	347.05	SM 7110B	IML
5268-21-11SM	SM	3Q13	8/19/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1462262	700759	0' - 790'	347.05	SM 7500 Ra-B	IML
5268-21-11SM	SM	3Q13	8/19/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1462262	700759	0' - 790'	347.05	SM 7500 Ra-B	IML
5268-21-11SM	SM	3Q13	8/19/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1462262	700759	0' - 790'	347.05	Ga-Tech	IML
5268-21-11SM	SM	3Q13	8/19/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462262	700759	0' - 790'	347.05	ACW10	IML
5268-21-11SM	SM	3Q13	8/19/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462262	700759	0' - 790'	347.05	ACW10	IML
5268-21-11SM	SM	3Q13	8/19/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1462262	700759	0' - 790'	347.05	EPA 200.8	IML
5268-21-11SM	SM	3Q13	8/19/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1462262	700759	0' - 790'	347.05	EPA 200.8	IML
5268-21-11SM	SM	4Q13	10/21/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1462262	700759	0' - 790'	347.05	SM 7110B	IML
5268-21-11SM	SM	4Q13	10/21/2013	Gross Beta	4.5	pCi/l	3	2.1	NA	4.5E-09	1462262	700759	0' - 790'	347.05	SM 7110B	IML
5268-21-11SM	SM	4Q13	10/21/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1462262	700759	0' - 790'	347.05	SM 7500 Ra-B	IML
5268-21-11SM	SM	4Q13	10/21/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1462262	700759	0' - 790'	347.05	SM 7500 Ra-B	IML
5268-21-11SM	SM	4Q13	10/21/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1462262	700759	0' - 790'	347.05	Ga-Tech	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5268-21-11SM	SM	4Q13	10/21/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462262	700759	0' - 790'	347.05	ACW10	IML
5268-21-11SM	SM	4Q13	10/21/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1462262	700759	0' - 790'	347.05	ACW10	IML
5268-21-11SM	SM	4Q13	10/21/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1462262	700759	0' - 790'	347.05	EPA 200.8	IML
5268-21-11SM	SM	4Q13	10/21/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1462262	700759	0' - 790'	347.05	EPA 200.8	IML
5367-34-06OZ	OZ	1Q13	3/29/2013	Gross Alpha	31.5	pCi/l	3	4	NA	3.15E-08	1494421	712748	0' - 278'	66.55	SM 7110B	IML
5367-34-06OZ	OZ	1Q13	3/29/2013	Gross Beta	15.5	pCi/l	6	3.7	NA	1.55E-08	1494421	712748	0' - 278'	66.55	SM 7110B	IML
5367-34-06OZ	OZ	1Q13	3/29/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1494421	712748	0' - 278'	66.55	EPA 901.1M	IML
5367-34-06OZ	OZ	1Q13	3/29/2013	Pb-210, D	1.1	pCi/l	1	0.9	1.0E-08	1.1E-09	1494421	712748	0' - 278'	66.55	OTW01	IML
5367-34-06OZ	OZ	1Q13	3/29/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1494421	712748	0' - 278'	66.55	OTW01	IML
5367-34-06OZ	OZ	1Q13	3/29/2013	Po-210, D	5.1	pCi/l	1	1	4.0E-08	5.1E-09	1494421	712748	0' - 278'	66.55	OTW01	IML
5367-34-06OZ	OZ	1Q13	3/29/2013	Po-210, S	3.1	pCi/l	1	0.9	4.0E-08	3.1E-09	1494421	712748	0' - 278'	66.55	OTW01	IML
5367-34-06OZ	OZ	1Q13	3/29/2013	Ra-226, D	1.4	pCi/l	0.2	0.2	6.0E-08	1.4E-09	1494421	712748	0' - 278'	66.55	SM 7500 Ra-B	IML
5367-34-06OZ	OZ	1Q13	3/29/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494421	712748	0' - 278'	66.55	SM 7500 Ra-B	IML
5367-34-06OZ	OZ	1Q13	3/29/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1494421	712748	0' - 278'	66.55	Ga-Tech	IML
5367-34-06OZ	OZ	1Q13	3/29/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494421	712748	0' - 278'	66.55	ACW10	IML
5367-34-06OZ	OZ	1Q13	3/29/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494421	712748	0' - 278'	66.55	ACW10	IML
5367-34-06OZ	OZ	1Q13	3/29/2013	U, D	0.0145	mg/l	0.0003	0	3.0E-07	9.82E-09	1494421	712748	0' - 278'	66.55	EPA 200.8	IML
5367-34-06OZ	OZ	1Q13	3/29/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1494421	712748	0' - 278'	66.55	EPA 200.8	IML
5367-34-06OZ	OZ	2Q13	6/26/2013	Gross Alpha	36.7	pCi/l	4	5	NA	3.67E-08	1494421	712748	0' - 278'	65.98	SM 7110B	IML
5367-34-06OZ	OZ	2Q13	6/26/2013	Gross Beta	8.2	pCi/l	3	4.6	NA	8.2E-09	1494421	712748	0' - 278'	65.98	SM 7110B	IML
5367-34-06OZ	OZ	2Q13	6/26/2013	Ra-226, D	1.8	pCi/l	0.2	0.2	6.0E-08	1.8E-09	1494421	712748	0' - 278'	65.98	SM 7500 Ra-B	IML
5367-34-06OZ	OZ	2Q13	6/26/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494421	712748	0' - 278'	65.98	SM 7500 Ra-B	IML
5367-34-06OZ	OZ	2Q13	6/26/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1494421	712748	0' - 278'	65.98	Ga-Tech	IML
5367-34-06OZ	OZ	2Q13	6/26/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494421	712748	0' - 278'	65.98	ACW10	IML
5367-34-06OZ	OZ	2Q13	6/26/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494421	712748	0' - 278'	65.98	ACW10	IML
5367-34-06OZ	OZ	2Q13	6/26/2013	U, D	0.0116	mg/l	0.0003	0	3.0E-07	7.85E-09	1494421	712748	0' - 278'	65.98	EPA 200.8	IML
5367-34-06OZ	OZ	2Q13	6/26/2013	U, S	0.0005	mg/l	0.0003	0	3.0E-07	3.39E-10	1494421	712748	0' - 278'	65.98	EPA 200.8	IML
5367-34-06OZ	OZ	3Q13	8/28/2013	Gross Alpha	27.9	pCi/l	3	4	NA	2.79E-08	1494421	712748	0' - 278'	66.03	SM 7110B	IML
5367-34-06OZ	OZ	3Q13	8/28/2013	Gross Beta	<7	pCi/l	7	0	NA	NA	1494421	712748	0' - 278'	66.03	SM 7110B	IML
5367-34-06OZ	OZ	3Q13	8/28/2013	Ra-226, D	1.8	pCi/l	0.2	0.2	6.0E-08	1.8E-09	1494421	712748	0' - 278'	66.03	SM 7500 Ra-B	IML
5367-34-06OZ	OZ	3Q13	8/28/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494421	712748	0' - 278'	66.03	SM 7500 Ra-B	IML
5367-34-06OZ	OZ	3Q13	8/28/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1494421	712748	0' - 278'	66.03	Ga-Tech	IML
5367-34-06OZ	OZ	3Q13	8/28/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494421	712748	0' - 278'	66.03	ACW10	IML
5367-34-06OZ	OZ	3Q13	8/28/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494421	712748	0' - 278'	66.03	ACW10	IML
5367-34-06OZ	OZ	3Q13	8/28/2013	U, D	0.012	mg/l	0.0003	0	3.0E-07	8.12E-09	1494421	712748	0' - 278'	66.03	EPA 200.8	IML
5367-34-06OZ	OZ	3Q13	8/28/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1494421	712748	0' - 278'	66.03	EPA 200.8	IML
5367-34-06OZ	OZ	4Q13	10/25/2013	Gross Alpha	29.1	pCi/l	2	4.4	NA	2.91E-08	1494421	712748	0' - 278'	65.71	SM 7110B	IML
5367-34-06OZ	OZ	4Q13	10/25/2013	Gross Beta	8.9	pCi/l	3	4.3	NA	8.9E-09	1494421	712748	0' - 278'	65.71	SM 7110B	IML
5367-34-06OZ	OZ	4Q13	10/25/2013	Ra-226, D	5.1	pCi/l	0.2	0.6	6.0E-08	5.1E-09	1494421	712748	0' - 278'	65.71	SM 7500 Ra-B	IML
5367-34-06OZ	OZ	4Q13	10/25/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494421	712748	0' - 278'	65.71	SM 7500 Ra-B	IML
5367-34-06OZ	OZ	4Q13	10/25/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1494421	712748	0' - 278'	65.71	Ga-Tech	IML
5367-34-06OZ	OZ	4Q13	10/25/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494421	712748	0' - 278'	65.71	ACW10	IML
5367-34-06OZ	OZ	4Q13	10/25/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494421	712748	0' - 278'	65.71	ACW10	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5367-34-06OZ	OZ	4Q13	10/25/2013	U, D	0.0082	mg/l	0.0003	0	3.0E-07	5.55E-09	1494421	712748	0' - 278'	65.71	EPA 200.8	IML
5367-34-06OZ	OZ	4Q13	10/25/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1494421	712748	0' - 278'	65.71	EPA 200.8	IML
5367-34-06SA	SA	1Q13	3/26/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1494390	712780	0' - 39'	21.37	SM 7110B	IML
5367-34-06SA	SA	1Q13	3/26/2013	Gross Beta	4.8	pCi/l	3	3.3	NA	4.8E-09	1494390	712780	0' - 39'	21.37	SM 7110B	IML
5367-34-06SA	SA	1Q13	3/26/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1494390	712780	0' - 39'	21.37	EPA 901.1M	IML
5367-34-06SA	SA	1Q13	3/26/2013	Pb-210, D	1.7	pCi/l	1	0.4	1.0E-08	1.7E-09	1494390	712780	0' - 39'	21.37	OTW01	IML
5367-34-06SA	SA	1Q13	3/26/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1494390	712780	0' - 39'	21.37	OTW01	IML
5367-34-06SA	SA	1Q13	3/26/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1494390	712780	0' - 39'	21.37	OTW01	IML
5367-34-06SA	SA	1Q13	3/26/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1494390	712780	0' - 39'	21.37	OTW01	IML
5367-34-06SA	SA	1Q13	3/26/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494390	712780	0' - 39'	21.37	SM 7500 Ra-B	IML
5367-34-06SA	SA	1Q13	3/26/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494390	712780	0' - 39'	21.37	SM 7500 Ra-B	IML
5367-34-06SA	SA	1Q13	3/26/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1494390	712780	0' - 39'	21.37	Ga-Tech	IML
5367-34-06SA	SA	1Q13	3/26/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494390	712780	0' - 39'	21.37	ACW10	IML
5367-34-06SA	SA	1Q13	3/26/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494390	712780	0' - 39'	21.37	ACW10	IML
5367-34-06SA	SA	1Q13	3/26/2013	U, D	0.0013	mg/l	0.0003	0	3.0E-07	8.80E-10	1494390	712780	0' - 39'	21.37	EPA 200.8	IML
5367-34-06SA	SA	1Q13	3/26/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1494390	712780	0' - 39'	21.37	EPA 200.8	IML
5367-34-06SA	SA	2Q13	6/13/2013	Gross Alpha	<4	pCi/l	4	0	NA	NA	1494390	712780	0' - 39'	21.48	SM 7110B	IML
5367-34-06SA	SA	2Q13	6/13/2013	Gross Beta	<8	pCi/l	8	0	NA	NA	1494390	712780	0' - 39'	21.48	SM 7110B	IML
5367-34-06SA	SA	2Q13	6/13/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494390	712780	0' - 39'	21.48	SM 7500 Ra-B	IML
5367-34-06SA	SA	2Q13	6/13/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494390	712780	0' - 39'	21.48	SM 7500 Ra-B	IML
5367-34-06SA	SA	2Q13	6/13/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1494390	712780	0' - 39'	21.48	Ga-Tech	IML
5367-34-06SA	SA	2Q13	6/13/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494390	712780	0' - 39'	21.48	ACW10	IML
5367-34-06SA	SA	2Q13	6/13/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494390	712780	0' - 39'	21.48	ACW10	IML
5367-34-06SA	SA	2Q13	6/13/2013	U, D	0.0014	mg/l	0.0003	0	3.0E-07	9.48E-10	1494390	712780	0' - 39'	21.48	EPA 200.8	IML
5367-34-06SA	SA	2Q13	6/13/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1494390	712780	0' - 39'	21.48	EPA 200.8	IML
5367-34-06SA	SA	3Q13	8/19/2013	Gross Alpha	<4	pCi/l	4	0	NA	NA	1494390	712780	0' - 39'	21.27	SM 7110B	IML
5367-34-06SA	SA	3Q13	8/19/2013	Gross Beta	<7	pCi/l	7	0	NA	NA	1494390	712780	0' - 39'	21.27	SM 7110B	IML
5367-34-06SA	SA	3Q13	8/19/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494390	712780	0' - 39'	21.27	SM 7500 Ra-B	IML
5367-34-06SA	SA	3Q13	8/19/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494390	712780	0' - 39'	21.27	SM 7500 Ra-B	IML
5367-34-06SA	SA	3Q13	8/19/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1494390	712780	0' - 39'	21.27	Ga-Tech	IML
5367-34-06SA	SA	3Q13	8/19/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494390	712780	0' - 39'	21.27	ACW10	IML
5367-34-06SA	SA	3Q13	8/19/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494390	712780	0' - 39'	21.27	ACW10	IML
5367-34-06SA	SA	3Q13	8/19/2013	U, D	0.0012	mg/l	0.0003	0	3.0E-07	8.12E-10	1494390	712780	0' - 39'	21.27	EPA 200.8	IML
5367-34-06SA	SA	3Q13	8/19/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1494390	712780	0' - 39'	21.27	EPA 200.8	IML
5367-34-06SA	SA	4Q13	10/22/2013	Gross Alpha	<4	pCi/l	4	0	NA	NA	1494390	712780	0' - 39'	21.29	SM 7110B	IML
5367-34-06SA	SA	4Q13	10/22/2013	Gross Beta	<7	pCi/l	7	0	NA	NA	1494390	712780	0' - 39'	21.29	SM 7110B	IML
5367-34-06SA	SA	4Q13	10/22/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494390	712780	0' - 39'	21.29	SM 7500 Ra-B	IML
5367-34-06SA	SA	4Q13	10/22/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494390	712780	0' - 39'	21.29	SM 7500 Ra-B	IML
5367-34-06SA	SA	4Q13	10/22/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1494390	712780	0' - 39'	21.29	Ga-Tech	IML
5367-34-06SA	SA	4Q13	10/22/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494390	712780	0' - 39'	21.29	ACW10	IML
5367-34-06SA	SA	4Q13	10/22/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494390	712780	0' - 39'	21.29	ACW10	IML
5367-34-06SA	SA	4Q13	10/22/2013	U, D	0.0008	mg/l	0.0003	0	3.0E-07	5.42E-10	1494390	712780	0' - 39'	21.29	EPA 200.8	IML
5367-34-06SA	SA	4Q13	10/22/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1494390	712780	0' - 39'	21.29	EPA 200.8	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5367-34-06SM	SM	1Q13	3/29/2013	Gross Alpha	7.6	pCi/l	4	2.6	NA	7.6E-09	1494425	712816	0' - 175'	59.6	SM 7110B	IML
5367-34-06SM	SM	1Q13	3/29/2013	Gross Beta	19.1	pCi/l	6	3.9	NA	1.91E-08	1494425	712816	0' - 175'	59.6	SM 7110B	IML
5367-34-06SM	SM	1Q13	3/29/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1494425	712816	0' - 175'	59.6	EPA 901.1M	IML
5367-34-06SM	SM	1Q13	3/29/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1494425	712816	0' - 175'	59.6	OTW01	IML
5367-34-06SM	SM	1Q13	3/29/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1494425	712816	0' - 175'	59.6	OTW01	IML
5367-34-06SM	SM	1Q13	3/29/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1494425	712816	0' - 175'	59.6	OTW01	IML
5367-34-06SM	SM	1Q13	3/29/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1494425	712816	0' - 175'	59.6	OTW01	IML
5367-34-06SM	SM	1Q13	3/29/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494425	712816	0' - 175'	59.6	SM 7500 Ra-B	IML
5367-34-06SM	SM	1Q13	3/29/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494425	712816	0' - 175'	59.6	SM 7500 Ra-B	IML
5367-34-06SM	SM	1Q13	3/29/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1494425	712816	0' - 175'	59.6	Ga-Tech	IML
5367-34-06SM	SM	1Q13	3/29/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494425	712816	0' - 175'	59.6	ACW10	IML
5367-34-06SM	SM	1Q13	3/29/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494425	712816	0' - 175'	59.6	ACW10	IML
5367-34-06SM	SM	1Q13	3/29/2013	U, D	0.0044	mg/l	0.0003	0	3.0E-07	2.98E-09	1494425	712816	0' - 175'	59.6	EPA 200.8	IML
5367-34-06SM	SM	1Q13	3/29/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1494425	712816	0' - 175'	59.6	EPA 200.8	IML
5367-34-06SM	SM	2Q13	6/26/2013	Gross Alpha	4.4	pCi/l	4	2.7	NA	4.4E-09	1494425	712816	0' - 175'	59.32	SM 7110B	IML
5367-34-06SM	SM	2Q13	6/26/2013	Gross Beta	12.7	pCi/l	8	4.5	NA	1.27E-08	1494425	712816	0' - 175'	59.32	SM 7110B	IML
5367-34-06SM	SM	2Q13	6/26/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1494425	712816	0' - 175'	59.32	SM 7500 Ra-B	IML
5367-34-06SM	SM	2Q13	6/26/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494425	712816	0' - 175'	59.32	SM 7500 Ra-B	IML
5367-34-06SM	SM	2Q13	6/26/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1494425	712816	0' - 175'	59.32	Ga-Tech	IML
5367-34-06SM	SM	2Q13	6/26/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494425	712816	0' - 175'	59.32	ACW10	IML
5367-34-06SM	SM	2Q13	6/26/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494425	712816	0' - 175'	59.32	ACW10	IML
5367-34-06SM	SM	2Q13	6/26/2013	U, D	0.0027	mg/l	0.0003	0	3.0E-07	1.83E-09	1494425	712816	0' - 175'	59.32	EPA 200.8	IML
5367-34-06SM	SM	2Q13	6/26/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1494425	712816	0' - 175'	59.32	EPA 200.8	IML
5367-34-06SM	SM	3Q13	8/28/2013	Gross Alpha	4.1	pCi/l	4	2.6	NA	4.1E-09	1494425	712816	0' - 175'	59.35	SM 7110B	IML
5367-34-06SM	SM	3Q13	8/28/2013	Gross Beta	16.3	pCi/l	6	3.8	NA	1.63E-08	1494425	712816	0' - 175'	59.35	SM 7110B	IML
5367-34-06SM	SM	3Q13	8/28/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1494425	712816	0' - 175'	59.35	SM 7500 Ra-B	IML
5367-34-06SM	SM	3Q13	8/28/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494425	712816	0' - 175'	59.35	SM 7500 Ra-B	IML
5367-34-06SM	SM	3Q13	8/28/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1494425	712816	0' - 175'	59.35	Ga-Tech	IML
5367-34-06SM	SM	3Q13	8/28/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494425	712816	0' - 175'	59.35	ACW10	IML
5367-34-06SM	SM	3Q13	8/28/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494425	712816	0' - 175'	59.35	ACW10	IML
5367-34-06SM	SM	3Q13	8/28/2013	U, D	0.0024	mg/l	0.0003	0	3.0E-07	1.62E-09	1494425	712816	0' - 175'	59.35	EPA 200.8	IML
5367-34-06SM	SM	3Q13	8/28/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1494425	712816	0' - 175'	59.35	EPA 200.8	IML
5367-34-06SM	SM	4Q13	10/25/2013	Gross Alpha	7.7	pCi/l	2	2.7	NA	7.7E-09	1494425	712816	0' - 175'	59.17	SM 7110B	IML
5367-34-06SM	SM	4Q13	10/25/2013	Gross Beta	15.1	pCi/l	3	4.4	NA	1.51E-08	1494425	712816	0' - 175'	59.17	SM 7110B	IML
5367-34-06SM	SM	4Q13	10/25/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1494425	712816	0' - 175'	59.17	SM 7500 Ra-B	IML
5367-34-06SM	SM	4Q13	10/25/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1494425	712816	0' - 175'	59.17	SM 7500 Ra-B	IML
5367-34-06SM	SM	4Q13	10/25/2013	Ra-228, D	1.8	pCi/l	1	1.1	6.0E-08	1.8E-09	1494425	712816	0' - 175'	59.17	Ga-Tech	IML
5367-34-06SM	SM	4Q13	10/25/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494425	712816	0' - 175'	59.17	ACW10	IML
5367-34-06SM	SM	4Q13	10/25/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1494425	712816	0' - 175'	59.17	ACW10	IML
5367-34-06SM	SM	4Q13	10/25/2013	U, D	0.0017	mg/l	0.0003	0	3.0E-07	1.15E-09	1494425	712816	0' - 175'	59.17	EPA 200.8	IML
5367-34-06SM	SM	4Q13	10/25/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1494425	712816	0' - 175'	59.17	EPA 200.8	IML
5368-12-25OZ	OZ	1Q13	4/2/2013	Gross Alpha	2.4	pCi/l	2	1.4	NA	2.4E-09	1475785	704010	0' - 845'	383.68	SM 7110B	IML
5368-12-25OZ	OZ	1Q13	4/2/2013	Gross Beta	3.1	pCi/l	3	2.2	NA	3.1E-09	1475785	704010	0' - 845'	383.68	SM 7110B	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-12-25OZ	OZ	1Q13	4/2/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1475785	704010	0' - 845'	383.68	EPA 901.1M	IML
5368-12-25OZ	OZ	1Q13	4/2/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1475785	704010	0' - 845'	383.68	OTW01	IML
5368-12-25OZ	OZ	1Q13	4/2/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1475785	704010	0' - 845'	383.68	OTW01	IML
5368-12-25OZ	OZ	1Q13	4/2/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1475785	704010	0' - 845'	383.68	OTW01	IML
5368-12-25OZ	OZ	1Q13	4/2/2013	Po-210, S	1.5	pCi/l	1	1.1	4.0E-08	1.5E-09	1475785	704010	0' - 845'	383.68	OTW01	IML
5368-12-25OZ	OZ	1Q13	4/2/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1475785	704010	0' - 845'	383.68	SM 7500 Ra-B	IML
5368-12-25OZ	OZ	1Q13	4/2/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475785	704010	0' - 845'	383.68	SM 7500 Ra-B	IML
5368-12-25OZ	OZ	1Q13	4/2/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1475785	704010	0' - 845'	383.68	Ga-Tech	IML
5368-12-25OZ	OZ	1Q13	4/2/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475785	704010	0' - 845'	383.68	ACW10	IML
5368-12-25OZ	OZ	1Q13	4/2/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475785	704010	0' - 845'	383.68	ACW10	IML
5368-12-25OZ	OZ	1Q13	4/2/2013	U, D	0.0013	mg/l	0.0003	0	3.0E-07	8.80E-10	1475785	704010	0' - 845'	383.68	EPA 200.8	IML
5368-12-25OZ	OZ	1Q13	4/2/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1475785	704010	0' - 845'	383.68	EPA 200.8	IML
5368-12-25OZ	OZ	2Q13	6/25/2013	Gross Alpha	<3	pCi/l	3	0	NA	NA	1475785	704010	0' - 845'	383.4	SM 7110B	IML
5368-12-25OZ	OZ	2Q13	6/25/2013	Gross Beta	<4	pCi/l	4	0	NA	NA	1475785	704010	0' - 845'	383.4	SM 7110B	IML
5368-12-25OZ	OZ	2Q13	6/25/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475785	704010	0' - 845'	383.4	SM 7500 Ra-B	IML
5368-12-25OZ	OZ	2Q13	6/25/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475785	704010	0' - 845'	383.4	SM 7500 Ra-B	IML
5368-12-25OZ	OZ	2Q13	6/25/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1475785	704010	0' - 845'	383.4	Ga-Tech	IML
5368-12-25OZ	OZ	2Q13	6/25/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475785	704010	0' - 845'	383.4	ACW10	IML
5368-12-25OZ	OZ	2Q13	6/25/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475785	704010	0' - 845'	383.4	ACW10	IML
5368-12-25OZ	OZ	2Q13	6/25/2013	U, D	0.0011	mg/l	0.0003	0	3.0E-07	7.45E-10	1475785	704010	0' - 845'	383.4	EPA 200.8	IML
5368-12-25OZ	OZ	2Q13	6/25/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1475785	704010	0' - 845'	383.4	EPA 200.8	IML
5368-12-25OZ	OZ	3Q13	8/22/2013	Gross Alpha	3.6	pCi/l	2	1.5	NA	3.6E-09	1475785	704010	0' - 845'	382.73	SM 7110B	IML
5368-12-25OZ	OZ	3Q13	8/22/2013	Gross Beta	4.5	pCi/l	3	2.6	NA	4.5E-09	1475785	704010	0' - 845'	382.73	SM 7110B	IML
5368-12-25OZ	OZ	3Q13	8/22/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475785	704010	0' - 845'	382.73	SM 7500 Ra-B	IML
5368-12-25OZ	OZ	3Q13	8/22/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475785	704010	0' - 845'	382.73	SM 7500 Ra-B	IML
5368-12-25OZ	OZ	3Q13	8/22/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1475785	704010	0' - 845'	382.73	Ga-Tech	IML
5368-12-25OZ	OZ	3Q13	8/22/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475785	704010	0' - 845'	382.73	ACW10	IML
5368-12-25OZ	OZ	3Q13	8/22/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475785	704010	0' - 845'	382.73	ACW10	IML
5368-12-25OZ	OZ	3Q13	8/22/2013	U, D	0.001	mg/l	0.0003	0	3.0E-07	6.77E-10	1475785	704010	0' - 845'	382.73	EPA 200.8	IML
5368-12-25OZ	OZ	3Q13	8/22/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1475785	704010	0' - 845'	382.73	EPA 200.8	IML
5368-12-25OZ	OZ	4Q13	10/24/2013	Gross Alpha	<3	pCi/l	3	0	NA	NA	1475785	704010	0' - 845'	381.98	SM 7110B	IML
5368-12-25OZ	OZ	4Q13	10/24/2013	Gross Beta	<5	pCi/l	5	0	NA	NA	1475785	704010	0' - 845'	381.98	SM 7110B	IML
5368-12-25OZ	OZ	4Q13	10/24/2013	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2E-10	1475785	704010	0' - 845'	381.98	SM 7500 Ra-B	IML
5368-12-25OZ	OZ	4Q13	10/24/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475785	704010	0' - 845'	381.98	SM 7500 Ra-B	IML
5368-12-25OZ	OZ	4Q13	10/24/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1475785	704010	0' - 845'	381.98	Ga-Tech	IML
5368-12-25OZ	OZ	4Q13	10/24/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475785	704010	0' - 845'	381.98	ACW10	IML
5368-12-25OZ	OZ	4Q13	10/24/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475785	704010	0' - 845'	381.98	ACW10	IML
5368-12-25OZ	OZ	4Q13	10/24/2013	U, D	0.0012	mg/l	0.0003	0	3.0E-07	8.12E-10	1475785	704010	0' - 845'	381.98	EPA 200.8	IML
5368-12-25OZ	OZ	4Q13	10/24/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1475785	704010	0' - 845'	381.98	EPA 200.8	IML
5368-12-25SA	SA	1Q13	3/27/2013	Gross Alpha	18.5	pCi/l	2	2.6	NA	1.85E-08	1475751	704039	0' - 60'	68.12	SM 7110B	IML
5368-12-25SA	SA	1Q13	3/27/2013	Gross Beta	19.1	pCi/l	3	2.6	NA	1.91E-08	1475751	704039	0' - 60'	68.12	SM 7110B	IML
5368-12-25SA	SA	1Q13	3/27/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1475751	704039	0' - 60'	68.12	EPA 901.1M	IML
5368-12-25SA	SA	1Q13	3/27/2013	Pb-210, D	4.4	pCi/l	1	0.5	1.0E-08	4.4E-09	1475751	704039	0' - 60'	68.12	OTW01	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-12-25SA	SA	1Q13	3/27/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1475751	704039	0' - 60'	68.12	OTW01	IML
5368-12-25SA	SA	1Q13	3/27/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1475751	704039	0' - 60'	68.12	OTW01	IML
5368-12-25SA	SA	1Q13	3/27/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1475751	704039	0' - 60'	68.12	OTW01	IML
5368-12-25SA	SA	1Q13	3/27/2013	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4E-10	1475751	704039	0' - 60'	68.12	SM 7500 Ra-B	IML
5368-12-25SA	SA	1Q13	3/27/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475751	704039	0' - 60'	68.12	SM 7500 Ra-B	IML
5368-12-25SA	SA	1Q13	3/27/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1475751	704039	0' - 60'	68.12	Ga-Tech	IML
5368-12-25SA	SA	1Q13	3/27/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475751	704039	0' - 60'	68.12	ACW10	IML
5368-12-25SA	SA	1Q13	3/27/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475751	704039	0' - 60'	68.12	ACW10	IML
5368-12-25SA	SA	1Q13	3/27/2013	U, D	0.0151	mg/l	0.0003	0	3.0E-07	1.02E-08	1475751	704039	0' - 60'	68.12	EPA 200.8	IML
5368-12-25SA	SA	1Q13	3/27/2013	U, S	0.0008	mg/l	0.0003	0	3.0E-07	5.42E-10	1475751	704039	0' - 60'	68.12	EPA 200.8	IML
5368-12-25SA	SA	2Q13	6/20/2013	Gross Alpha	9.3	pCi/l	2	2.2	NA	9.3E-09	1475751	704039	0' - 60'	68.19	SM 7110B	IML
5368-12-25SA	SA	2Q13	6/20/2013	Gross Beta	19.8	pCi/l	5	3	NA	1.98E-08	1475751	704039	0' - 60'	68.19	SM 7110B	IML
5368-12-25SA	SA	2Q13	6/20/2013	Ra-226, D	0.5	pCi/l	0.2	0.1	6.0E-08	5E-10	1475751	704039	0' - 60'	68.19	SM 7500 Ra-B	IML
5368-12-25SA	SA	2Q13	6/20/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475751	704039	0' - 60'	68.19	SM 7500 Ra-B	IML
5368-12-25SA	SA	2Q13	6/20/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1475751	704039	0' - 60'	68.19	Ga-Tech	IML
5368-12-25SA	SA	2Q13	6/20/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475751	704039	0' - 60'	68.19	ACW10	IML
5368-12-25SA	SA	2Q13	6/20/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475751	704039	0' - 60'	68.19	ACW10	IML
5368-12-25SA	SA	2Q13	6/20/2013	U, D	0.0047	mg/l	0.0003	0	3.0E-07	3.18E-09	1475751	704039	0' - 60'	68.19	EPA 200.8	IML
5368-12-25SA	SA	2Q13	6/20/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1475751	704039	0' - 60'	68.19	EPA 200.8	IML
5368-12-25SA	SA	3Q13	8/21/2013	Gross Alpha	4.1	pCi/l	2	2	NA	4.1E-09	1475751	704039	0' - 60'	68.27	SM 7110B	IML
5368-12-25SA	SA	3Q13	8/21/2013	Gross Beta	20.9	pCi/l	3	3.1	NA	2.09E-08	1475751	704039	0' - 60'	68.27	SM 7110B	IML
5368-12-25SA	SA	3Q13	8/21/2013	Ra-226, D	0.5	pCi/l	0.2	0.1	6.0E-08	5E-10	1475751	704039	0' - 60'	68.27	SM 7500 Ra-B	IML
5368-12-25SA	SA	3Q13	8/21/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475751	704039	0' - 60'	68.27	SM 7500 Ra-B	IML
5368-12-25SA	SA	3Q13	8/21/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1475751	704039	0' - 60'	68.27	Ga-Tech	IML
5368-12-25SA	SA	3Q13	8/21/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475751	704039	0' - 60'	68.27	ACW10	IML
5368-12-25SA	SA	3Q13	8/21/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475751	704039	0' - 60'	68.27	ACW10	IML
5368-12-25SA	SA	3Q13	8/21/2013	U, D	0.0026	mg/l	0.0003	0	3.0E-07	1.76E-09	1475751	704039	0' - 60'	68.27	EPA 200.8	IML
5368-12-25SA	SA	3Q13	8/21/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1475751	704039	0' - 60'	68.27	EPA 200.8	IML
5368-12-25SA	SA	4Q13	10/24/2013	Gross Alpha	4.4	pCi/l	3	1.8	NA	4.4E-09	1475751	704039	0' - 60'	68.24	SM 7110B	IML
5368-12-25SA	SA	4Q13	10/24/2013	Gross Beta	15.6	pCi/l	5	3.1	NA	1.56E-08	1475751	704039	0' - 60'	68.24	SM 7110B	IML
5368-12-25SA	SA	4Q13	10/24/2013	Ra-226, D	0.7	pCi/l	0.2	0.1	6.0E-08	7E-10	1475751	704039	0' - 60'	68.24	SM 7500 Ra-B	IML
5368-12-25SA	SA	4Q13	10/24/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475751	704039	0' - 60'	68.24	SM 7500 Ra-B	IML
5368-12-25SA	SA	4Q13	10/24/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1475751	704039	0' - 60'	68.24	Ga-Tech	IML
5368-12-25SA	SA	4Q13	10/24/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475751	704039	0' - 60'	68.24	ACW10	IML
5368-12-25SA	SA	4Q13	10/24/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475751	704039	0' - 60'	68.24	ACW10	IML
5368-12-25SA	SA	4Q13	10/24/2013	U, D	0.0024	mg/l	0.0003	0	3.0E-07	1.62E-09	1475751	704039	0' - 60'	68.24	EPA 200.8	IML
5368-12-25SA	SA	4Q13	10/24/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1475751	704039	0' - 60'	68.24	EPA 200.8	IML
5368-12-25SM	SM	1Q13	4/2/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1475778	704083	0' - 750'	375.68	SM 7110B	IML
5368-12-25SM	SM	1Q13	4/2/2013	Gross Beta	8.2	pCi/l	3	2.2	NA	8.2E-09	1475778	704083	0' - 750'	375.68	SM 7110B	IML
5368-12-25SM	SM	1Q13	4/2/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1475778	704083	0' - 750'	375.68	EPA 901.1M	IML
5368-12-25SM	SM	1Q13	4/2/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1475778	704083	0' - 750'	375.68	OTW01	IML
5368-12-25SM	SM	1Q13	4/2/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1475778	704083	0' - 750'	375.68	OTW01	IML
5368-12-25SM	SM	1Q13	4/2/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1475778	704083	0' - 750'	375.68	OTW01	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-12-25SM	SM	1Q13	4/2/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1475778	704083	0' - 750'	375.68	OTW01	IML
5368-12-25SM	SM	1Q13	4/2/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475778	704083	0' - 750'	375.68	SM 7500 Ra-B	IML
5368-12-25SM	SM	1Q13	4/2/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475778	704083	0' - 750'	375.68	SM 7500 Ra-B	IML
5368-12-25SM	SM	1Q13	4/2/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1475778	704083	0' - 750'	375.68	Ga-Tech	IML
5368-12-25SM	SM	1Q13	4/2/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475778	704083	0' - 750'	375.68	ACW10	IML
5368-12-25SM	SM	1Q13	4/2/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475778	704083	0' - 750'	375.68	ACW10	IML
5368-12-25SM	SM	1Q13	4/2/2013	U, D	0.0004	mg/l	0.0003	0	3.0E-07	2.71E-10	1475778	704083	0' - 750'	375.68	EPA 200.8	IML
5368-12-25SM	SM	1Q13	4/2/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1475778	704083	0' - 750'	375.68	EPA 200.8	IML
5368-12-25SM	SM	2Q13	6/25/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1475778	704083	0' - 750'	375.19	SM 7110B	IML
5368-12-25SM	SM	2Q13	6/25/2013	Gross Beta	4.9	pCi/l	4	2.1	NA	4.9E-09	1475778	704083	0' - 750'	375.19	SM 7110B	IML
5368-12-25SM	SM	2Q13	6/25/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475778	704083	0' - 750'	375.19	SM 7500 Ra-B	IML
5368-12-25SM	SM	2Q13	6/25/2013	Ra-226, S	0.2	pCi/l	0.2	0.1	6.0E-08	2E-10	1475778	704083	0' - 750'	375.19	SM 7500 Ra-B	IML
5368-12-25SM	SM	2Q13	6/25/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1475778	704083	0' - 750'	375.19	Ga-Tech	IML
5368-12-25SM	SM	2Q13	6/25/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475778	704083	0' - 750'	375.19	ACW10	IML
5368-12-25SM	SM	2Q13	6/25/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475778	704083	0' - 750'	375.19	ACW10	IML
5368-12-25SM	SM	2Q13	6/25/2013	U, D	0.0003	mg/l	0.0003	0	3.0E-07	2.03E-10	1475778	704083	0' - 750'	375.19	EPA 200.8	IML
5368-12-25SM	SM	2Q13	6/25/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1475778	704083	0' - 750'	375.19	EPA 200.8	IML
5368-12-25SM	SM	3Q13	8/22/2013	Gross Alpha	2.1	pCi/l	2	1.6	NA	2.1E-09	1475778	704083	0' - 750'	375.83	SM 7110B	IML
5368-12-25SM	SM	3Q13	8/22/2013	Gross Beta	5.4	pCi/l	3	2.6	NA	5.4E-09	1475778	704083	0' - 750'	375.83	SM 7110B	IML
5368-12-25SM	SM	3Q13	8/22/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475778	704083	0' - 750'	375.83	SM 7500 Ra-B	IML
5368-12-25SM	SM	3Q13	8/22/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475778	704083	0' - 750'	375.83	SM 7500 Ra-B	IML
5368-12-25SM	SM	3Q13	8/22/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1475778	704083	0' - 750'	375.83	Ga-Tech	IML
5368-12-25SM	SM	3Q13	8/22/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475778	704083	0' - 750'	375.83	ACW10	IML
5368-12-25SM	SM	3Q13	8/22/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475778	704083	0' - 750'	375.83	ACW10	IML
5368-12-25SM	SM	3Q13	8/22/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1475778	704083	0' - 750'	375.83	EPA 200.8	IML
5368-12-25SM	SM	3Q13	8/22/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1475778	704083	0' - 750'	375.83	EPA 200.8	IML
5368-12-25SM	SM	4Q13	10/24/2013	Gross Alpha	<3	pCi/l	3	0	NA	NA	1475778	704083	0' - 750'	374.3	SM 7110B	IML
5368-12-25SM	SM	4Q13	10/24/2013	Gross Beta	<5	pCi/l	5	0	NA	NA	1475778	704083	0' - 750'	374.3	SM 7110B	IML
5368-12-25SM	SM	4Q13	10/24/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475778	704083	0' - 750'	374.3	SM 7500 Ra-B	IML
5368-12-25SM	SM	4Q13	10/24/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1475778	704083	0' - 750'	374.3	SM 7500 Ra-B	IML
5368-12-25SM	SM	4Q13	10/24/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1475778	704083	0' - 750'	374.3	Ga-Tech	IML
5368-12-25SM	SM	4Q13	10/24/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475778	704083	0' - 750'	374.3	ACW10	IML
5368-12-25SM	SM	4Q13	10/24/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1475778	704083	0' - 750'	374.3	ACW10	IML
5368-12-25SM	SM	4Q13	10/24/2013	U, D	0.0004	mg/l	0.0003	0	3.0E-07	2.71E-10	1475778	704083	0' - 750'	374.3	EPA 200.8	IML
5368-12-25SM	SM	4Q13	10/24/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1475778	704083	0' - 750'	374.3	EPA 200.8	IML
5368-24-12OZ	OZ	1Q13	3/28/2013	Gross Alpha	15.1	pCi/l	3	3.1	NA	1.51E-08	1490521	705296	0' - 750'	309.78	SM 7110B	IML
5368-24-12OZ	OZ	1Q13	3/28/2013	Gross Beta	<7	pCi/l	7	0	NA	NA	1490521	705296	0' - 750'	309.78	SM 7110B	IML
5368-24-12OZ	OZ	1Q13	3/28/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1490521	705296	0' - 750'	309.78	EPA 901.1M	IML
5368-24-12OZ	OZ	1Q13	3/28/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1490521	705296	0' - 750'	309.78	OTW01	IML
5368-24-12OZ	OZ	1Q13	3/28/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1490521	705296	0' - 750'	309.78	OTW01	IML
5368-24-12OZ	OZ	1Q13	3/28/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1490521	705296	0' - 750'	309.78	OTW01	IML
5368-24-12OZ	OZ	1Q13	3/28/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1490521	705296	0' - 750'	309.78	OTW01	IML
5368-24-12OZ	OZ	1Q13	3/28/2013	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2E-10	1490521	705296	0' - 750'	309.78	SM 7500 Ra-B	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-24-12OZ	OZ	1Q13	3/28/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490521	705296	0' - 750'	309.78	SM 7500 Ra-B	IML
5368-24-12OZ	OZ	1Q13	3/28/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1490521	705296	0' - 750'	309.78	Ga-Tech	IML
5368-24-12OZ	OZ	1Q13	3/28/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490521	705296	0' - 750'	309.78	ACW10	IML
5368-24-12OZ	OZ	1Q13	3/28/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490521	705296	0' - 750'	309.78	ACW10	IML
5368-24-12OZ	OZ	1Q13	3/28/2013	U, D	0.0092	mg/l	0.0003	0	3.0E-07	6.23E-09	1490521	705296	0' - 750'	309.78	EPA 200.8	IML
5368-24-12OZ	OZ	1Q13	3/28/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490521	705296	0' - 750'	309.78	EPA 200.8	IML
5368-24-12OZ	OZ	2Q13	6/26/2013	Gross Alpha	19.6	pCi/l	5	4.2	NA	1.96E-08	1490521	705296	0' - 750'	309.5	SM 7110B	IML
5368-24-12OZ	OZ	2Q13	6/26/2013	Gross Beta	8.7	pCi/l	8	4.8	NA	8.7E-09	1490521	705296	0' - 750'	309.5	SM 7110B	IML
5368-24-12OZ	OZ	2Q13	6/26/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1490521	705296	0' - 750'	309.5	SM 7500 Ra-B	IML
5368-24-12OZ	OZ	2Q13	6/26/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490521	705296	0' - 750'	309.5	SM 7500 Ra-B	IML
5368-24-12OZ	OZ	2Q13	6/26/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1490521	705296	0' - 750'	309.5	Ga-Tech	IML
5368-24-12OZ	OZ	2Q13	6/26/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490521	705296	0' - 750'	309.5	ACW10	IML
5368-24-12OZ	OZ	2Q13	6/26/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490521	705296	0' - 750'	309.5	ACW10	IML
5368-24-12OZ	OZ	2Q13	6/26/2013	U, D	0.0097	mg/l	0.0003	0	3.0E-07	6.57E-09	1490521	705296	0' - 750'	309.5	EPA 200.8	IML
5368-24-12OZ	OZ	2Q13	6/26/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490521	705296	0' - 750'	309.5	EPA 200.8	IML
5368-24-12OZ	OZ	3Q13	8/27/2013	Gross Alpha	16.2	pCi/l	4	3.6	NA	1.62E-08	1490521	705296	0' - 750'	308.45	SM 7110B	IML
5368-24-12OZ	OZ	3Q13	8/27/2013	Gross Beta	<8	pCi/l	8	0	NA	NA	1490521	705296	0' - 750'	308.45	SM 7110B	IML
5368-24-12OZ	OZ	3Q13	8/27/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1490521	705296	0' - 750'	308.45	SM 7500 Ra-B	IML
5368-24-12OZ	OZ	3Q13	8/27/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490521	705296	0' - 750'	308.45	SM 7500 Ra-B	IML
5368-24-12OZ	OZ	3Q13	8/27/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1490521	705296	0' - 750'	308.45	Ga-Tech	IML
5368-24-12OZ	OZ	3Q13	8/27/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490521	705296	0' - 750'	308.45	ACW10	IML
5368-24-12OZ	OZ	3Q13	8/27/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490521	705296	0' - 750'	308.45	ACW10	IML
5368-24-12OZ	OZ	3Q13	8/27/2013	U, D	0.0094	mg/l	0.0003	0	3.0E-07	6.36E-09	1490521	705296	0' - 750'	308.45	EPA 200.8	IML
5368-24-12OZ	OZ	3Q13	8/27/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490521	705296	0' - 750'	308.45	EPA 200.8	IML
5368-24-12OZ	OZ	4Q13	10/27/2013	Gross Alpha	21.6	pCi/l	2	4.1	NA	2.16E-08	1490521	705296	0' - 750'	307.28	SM 7110B	IML
5368-24-12OZ	OZ	4Q13	10/27/2013	Gross Beta	<3	pCi/l	3	0	NA	NA	1490521	705296	0' - 750'	307.28	SM 7110B	IML
5368-24-12OZ	OZ	4Q13	10/27/2013	Ra-226, D	3.7	pCi/l	0.2	0.3	6.0E-08	3.7E-09	1490521	705296	0' - 750'	307.28	SM 7500 Ra-B	IML
5368-24-12OZ	OZ	4Q13	10/27/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490521	705296	0' - 750'	307.28	SM 7500 Ra-B	IML
5368-24-12OZ	OZ	4Q13	10/27/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1490521	705296	0' - 750'	307.28	Ga-Tech	IML
5368-24-12OZ	OZ	4Q13	10/27/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490521	705296	0' - 750'	307.28	ACW10	IML
5368-24-12OZ	OZ	4Q13	10/27/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490521	705296	0' - 750'	307.28	ACW10	IML
5368-24-12OZ	OZ	4Q13	10/27/2013	U, D	0.0097	mg/l	0.0003	0	3.0E-07	6.57E-09	1490521	705296	0' - 750'	307.28	EPA 200.8	IML
5368-24-12OZ	OZ	4Q13	10/27/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490521	705296	0' - 750'	307.28	EPA 200.8	IML
5368-24-12SA	SA	1Q13	3/11/2013	Gross Alpha	2.8	pCi/l	2	1.5	NA	2.8E-09	1490486	705330	0' - 100'	79	SM 7110B	IML
5368-24-12SA	SA	1Q13	3/11/2013	Gross Beta	7	pCi/l	4	2.4	NA	7E-09	1490486	705330	0' - 100'	79	SM 7110B	IML
5368-24-12SA	SA	1Q13	3/11/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1490486	705330	0' - 100'	79	EPA 901.1M	IML
5368-24-12SA	SA	1Q13	3/11/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1490486	705330	0' - 100'	79	OTW01	IML
5368-24-12SA	SA	1Q13	3/11/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1490486	705330	0' - 100'	79	OTW01	IML
5368-24-12SA	SA	1Q13	3/11/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1490486	705330	0' - 100'	79	OTW01	IML
5368-24-12SA	SA	1Q13	3/11/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1490486	705330	0' - 100'	79	OTW01	IML
5368-24-12SA	SA	1Q13	3/11/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490486	705330	0' - 100'	79	SM 7500 Ra-B	IML
5368-24-12SA	SA	1Q13	3/11/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490486	705330	0' - 100'	79	SM 7500 Ra-B	IML
5368-24-12SA	SA	1Q13	3/11/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1490486	705330	0' - 100'	79	Ga-Tech	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-24-12SA	SA	1Q13	3/11/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490486	705330	0' - 100'	79	ACW10	IML
5368-24-12SA	SA	1Q13	3/11/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490486	705330	0' - 100'	79	ACW10	IML
5368-24-12SA	SA	1Q13	3/11/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490486	705330	0' - 100'	79	EPA 200.8	IML
5368-24-12SA	SA	1Q13	3/11/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490486	705330	0' - 100'	79	EPA 200.8	IML
5368-24-12SA	SA	2Q13	6/13/2013	Gross Alpha	2.2	pCi/l	2	1.5	NA	2.2E-09	1490486	705330	0' - 100'	79.51	SM 7110B	IML
5368-24-12SA	SA	2Q13	6/13/2013	Gross Beta	<4	pCi/l	4	0	NA	NA	1490486	705330	0' - 100'	79.51	SM 7110B	IML
5368-24-12SA	SA	2Q13	6/13/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490486	705330	0' - 100'	79.51	SM 7500 Ra-B	IML
5368-24-12SA	SA	2Q13	6/13/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490486	705330	0' - 100'	79.51	SM 7500 Ra-B	IML
5368-24-12SA	SA	2Q13	6/13/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1490486	705330	0' - 100'	79.51	Ga-Tech	IML
5368-24-12SA	SA	2Q13	6/13/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490486	705330	0' - 100'	79.51	ACW10	IML
5368-24-12SA	SA	2Q13	6/13/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490486	705330	0' - 100'	79.51	ACW10	IML
5368-24-12SA	SA	2Q13	6/13/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490486	705330	0' - 100'	79.51	EPA 200.8	IML
5368-24-12SA	SA	2Q13	6/13/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490486	705330	0' - 100'	79.51	EPA 200.8	IML
5368-24-12SA	SA	3Q13	8/19/2013	Gross Alpha	2.9	pCi/l	2	1.3	NA	2.9E-09	1490486	705330	0' - 100'	79.41	SM 7110B	IML
5368-24-12SA	SA	3Q13	8/19/2013	Gross Beta	<4	pCi/l	4	0	NA	NA	1490486	705330	0' - 100'	79.41	SM 7110B	IML
5368-24-12SA	SA	3Q13	8/19/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490486	705330	0' - 100'	79.41	SM 7500 Ra-B	IML
5368-24-12SA	SA	3Q13	8/19/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490486	705330	0' - 100'	79.41	SM 7500 Ra-B	IML
5368-24-12SA	SA	3Q13	8/19/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1490486	705330	0' - 100'	79.41	Ga-Tech	IML
5368-24-12SA	SA	3Q13	8/19/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490486	705330	0' - 100'	79.41	ACW10	IML
5368-24-12SA	SA	3Q13	8/19/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490486	705330	0' - 100'	79.41	ACW10	IML
5368-24-12SA	SA	3Q13	8/19/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490486	705330	0' - 100'	79.41	EPA 200.8	IML
5368-24-12SA	SA	3Q13	8/19/2013	U, S	0.0005	mg/l	0.0003	0	3.0E-07	3.39E-10	1490486	705330	0' - 100'	79.41	EPA 200.8	IML
5368-24-12SA	SA	4Q13	10/22/2013	Gross Alpha	2	pCi/l	2	1.2	NA	2E-09	1490486	705330	0' - 100'	79.47	SM 7110B	IML
5368-24-12SA	SA	4Q13	10/22/2013	Gross Beta	4.8	pCi/l	4	2.2	NA	4.8E-09	1490486	705330	0' - 100'	79.47	SM 7110B	IML
5368-24-12SA	SA	4Q13	10/22/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490486	705330	0' - 100'	79.47	SM 7500 Ra-B	IML
5368-24-12SA	SA	4Q13	10/22/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490486	705330	0' - 100'	79.47	SM 7500 Ra-B	IML
5368-24-12SA	SA	4Q13	10/22/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1490486	705330	0' - 100'	79.47	Ga-Tech	IML
5368-24-12SA	SA	4Q13	10/22/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490486	705330	0' - 100'	79.47	ACW10	IML
5368-24-12SA	SA	4Q13	10/22/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490486	705330	0' - 100'	79.47	ACW10	IML
5368-24-12SA	SA	4Q13	10/22/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490486	705330	0' - 100'	79.47	EPA 200.8	IML
5368-24-12SA	SA	4Q13	10/22/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490486	705330	0' - 100'	79.47	EPA 200.8	IML
5368-24-12SM	SM	1Q13	3/28/2013	Gross Alpha	6.8	pCi/l	2	1.9	NA	6.8E-09	1490517	705361	0' - 565'	247.97	SM 7110B	IML
5368-24-12SM	SM	1Q13	3/28/2013	Gross Beta	6	pCi/l	4	2.3	NA	6E-09	1490517	705361	0' - 565'	247.97	SM 7110B	IML
5368-24-12SM	SM	1Q13	3/28/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1490517	705361	0' - 565'	247.97	EPA 901.1M	IML
5368-24-12SM	SM	1Q13	3/28/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1490517	705361	0' - 565'	247.97	OTW01	IML
5368-24-12SM	SM	1Q13	3/28/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1490517	705361	0' - 565'	247.97	OTW01	IML
5368-24-12SM	SM	1Q13	3/28/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1490517	705361	0' - 565'	247.97	OTW01	IML
5368-24-12SM	SM	1Q13	3/28/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1490517	705361	0' - 565'	247.97	OTW01	IML
5368-24-12SM	SM	1Q13	3/28/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490517	705361	0' - 565'	247.97	SM 7500 Ra-B	IML
5368-24-12SM	SM	1Q13	3/28/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490517	705361	0' - 565'	247.97	SM 7500 Ra-B	IML
5368-24-12SM	SM	1Q13	3/28/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1490517	705361	0' - 565'	247.97	Ga-Tech	IML
5368-24-12SM	SM	1Q13	3/28/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490517	705361	0' - 565'	247.97	ACW10	IML
5368-24-12SM	SM	1Q13	3/28/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490517	705361	0' - 565'	247.97	ACW10	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-24-12SM	SM	1Q13	3/28/2013	U, D	0.0004	mg/l	0.0003	0	3.0E-07	2.71E-10	1490517	705361	0' - 565'	247.97	EPA 200.8	IML
5368-24-12SM	SM	1Q13	3/28/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490517	705361	0' - 565'	247.97	EPA 200.8	IML
5368-24-12SM	SM	2Q13	6/26/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1490517	705361	0' - 565'	247.27	SM 7110B	IML
5368-24-12SM	SM	2Q13	6/26/2013	Gross Beta	<4	pCi/l	4	0	NA	NA	1490517	705361	0' - 565'	247.27	SM 7110B	IML
5368-24-12SM	SM	2Q13	6/26/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490517	705361	0' - 565'	247.27	SM 7500 Ra-B	IML
5368-24-12SM	SM	2Q13	6/26/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490517	705361	0' - 565'	247.27	SM 7500 Ra-B	IML
5368-24-12SM	SM	2Q13	6/26/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1490517	705361	0' - 565'	247.27	Ga-Tech	IML
5368-24-12SM	SM	2Q13	6/26/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490517	705361	0' - 565'	247.27	ACW10	IML
5368-24-12SM	SM	2Q13	6/26/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490517	705361	0' - 565'	247.27	ACW10	IML
5368-24-12SM	SM	2Q13	6/26/2013	U, D	0.0005	mg/l	0.0003	0	3.0E-07	3.39E-10	1490517	705361	0' - 565'	247.27	EPA 200.8	IML
5368-24-12SM	SM	2Q13	6/26/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490517	705361	0' - 565'	247.27	EPA 200.8	IML
5368-24-12SM	SM	3Q13	8/27/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1490517	705361	0' - 565'	247.83	SM 7110B	IML
5368-24-12SM	SM	3Q13	8/27/2013	Gross Beta	<4	pCi/l	4	0	NA	NA	1490517	705361	0' - 565'	247.83	SM 7110B	IML
5368-24-12SM	SM	3Q13	8/27/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490517	705361	0' - 565'	247.83	SM 7500 Ra-B	IML
5368-24-12SM	SM	3Q13	8/27/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490517	705361	0' - 565'	247.83	SM 7500 Ra-B	IML
5368-24-12SM	SM	3Q13	8/27/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1490517	705361	0' - 565'	247.83	Ga-Tech	IML
5368-24-12SM	SM	3Q13	8/27/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490517	705361	0' - 565'	247.83	ACW10	IML
5368-24-12SM	SM	3Q13	8/27/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490517	705361	0' - 565'	247.83	ACW10	IML
5368-24-12SM	SM	3Q13	8/27/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490517	705361	0' - 565'	247.83	EPA 200.8	IML
5368-24-12SM	SM	3Q13	8/27/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490517	705361	0' - 565'	247.83	EPA 200.8	IML
5368-24-12SM	SM	4Q13	10/27/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1490517	705361	0' - 565'	247.24	SM 7110B	IML
5368-24-12SM	SM	4Q13	10/27/2013	Gross Beta	<3	pCi/l	3	0	NA	NA	1490517	705361	0' - 565'	247.24	SM 7110B	IML
5368-24-12SM	SM	4Q13	10/27/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490517	705361	0' - 565'	247.24	SM 7500 Ra-B	IML
5368-24-12SM	SM	4Q13	10/27/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1490517	705361	0' - 565'	247.24	SM 7500 Ra-B	IML
5368-24-12SM	SM	4Q13	10/27/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1490517	705361	0' - 565'	247.24	Ga-Tech	IML
5368-24-12SM	SM	4Q13	10/27/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490517	705361	0' - 565'	247.24	ACW10	IML
5368-24-12SM	SM	4Q13	10/27/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1490517	705361	0' - 565'	247.24	ACW10	IML
5368-24-12SM	SM	4Q13	10/27/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490517	705361	0' - 565'	247.24	EPA 200.8	IML
5368-24-12SM	SM	4Q13	10/27/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1490517	705361	0' - 565'	247.24	EPA 200.8	IML
5368-31-35OZ	OZ	1Q13	4/5/2013	Gross Alpha	99.3	pCi/l	2	5.5	NA	9.93E-08	1472224	701916	0' - 960'	446.07	SM 7110B	IML
5368-31-35OZ	OZ	1Q13	4/5/2013	Gross Beta	13.9	pCi/l	3	2.5	NA	1.39E-08	1472224	701916	0' - 960'	446.07	SM 7110B	IML
5368-31-35OZ	OZ	1Q13	4/5/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1472224	701916	0' - 960'	446.07	EPA 901.1M	IML
5368-31-35OZ	OZ	1Q13	4/5/2013	Pb-210, D	6.5	pCi/l	1	0.7	1.0E-08	6.5E-09	1472224	701916	0' - 960'	446.07	OTW01	IML
5368-31-35OZ	OZ	1Q13	4/5/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1472224	701916	0' - 960'	446.07	OTW01	IML
5368-31-35OZ	OZ	1Q13	4/5/2013	Po-210, D	21	pCi/l	1	2.9	4.0E-08	2.1E-08	1472224	701916	0' - 960'	446.07	OTW01	IML
5368-31-35OZ	OZ	1Q13	4/5/2013	Po-210, S	20.5	pCi/l	1	2.7	4.0E-08	2.05E-08	1472224	701916	0' - 960'	446.07	OTW01	IML
5368-31-35OZ	OZ	1Q13	4/5/2013	Ra-226, D	4	pCi/l	0.2	0.2	6.0E-08	4E-09	1472224	701916	0' - 960'	446.07	SM 7500 Ra-B	IML
5368-31-35OZ	OZ	1Q13	4/5/2013	Ra-226, S	0.5	pCi/l	0.2	0.1	6.0E-08	5E-10	1472224	701916	0' - 960'	446.07	SM 7500 Ra-B	IML
5368-31-35OZ	OZ	1Q13	4/5/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1472224	701916	0' - 960'	446.07	Ga-Tech	IML
5368-31-35OZ	OZ	1Q13	4/5/2013	Th-230, D	0.2	pCi/l	0.2	0.2	1.0E-07	2E-10	1472224	701916	0' - 960'	446.07	ACW10	IML
5368-31-35OZ	OZ	1Q13	4/5/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472224	701916	0' - 960'	446.07	ACW10	IML
5368-31-35OZ	OZ	1Q13	4/5/2013	U, D	0.0307	mg/l	0.0003	0	3.0E-07	2.08E-08	1472224	701916	0' - 960'	446.07	EPA 200.8	IML
5368-31-35OZ	OZ	1Q13	4/5/2013	U, S	0.0005	mg/l	0.0003	0	3.0E-07	3.39E-10	1472224	701916	0' - 960'	446.07	EPA 200.8	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-31-35OZ	OZ	2Q13	6/19/2013	Gross Alpha	98.3	pCi/l	2	5.6	NA	9.83E-08	1472224	701916	0' - 960'	446.59	SM 7110B	IML
5368-31-35OZ	OZ	2Q13	6/19/2013	Gross Beta	15.7	pCi/l	3	2.5	NA	1.57E-08	1472224	701916	0' - 960'	446.59	SM 7110B	IML
5368-31-35OZ	OZ	2Q13	6/19/2013	Ra-226, D	4.5	pCi/l	0.2	0.2	6.0E-08	4.5E-09	1472224	701916	0' - 960'	446.59	SM 7500 Ra-B	IML
5368-31-35OZ	OZ	2Q13	6/19/2013	Ra-226, S	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1472224	701916	0' - 960'	446.59	SM 7500 Ra-B	IML
5368-31-35OZ	OZ	2Q13	6/19/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1472224	701916	0' - 960'	446.59	Ga-Tech	IML
5368-31-35OZ	OZ	2Q13	6/19/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472224	701916	0' - 960'	446.59	ACW10	IML
5368-31-35OZ	OZ	2Q13	6/19/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472224	701916	0' - 960'	446.59	ACW10	IML
5368-31-35OZ	OZ	2Q13	6/19/2013	U, D	0.0265	mg/l	0.0003	0	3.0E-07	1.79E-08	1472224	701916	0' - 960'	446.59	EPA 200.8	IML
5368-31-35OZ	OZ	2Q13	6/19/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1472224	701916	0' - 960'	446.59	EPA 200.8	IML
5368-31-35OZ	OZ	3Q13	8/20/2013	Gross Alpha	90.2	pCi/l	2	5.1	NA	9.02E-08	1472224	701916	0' - 960'	446.71	SM 7110B	IML
5368-31-35OZ	OZ	3Q13	8/20/2013	Gross Beta	16.3	pCi/l	4	2.4	NA	1.63E-08	1472224	701916	0' - 960'	446.71	SM 7110B	IML
5368-31-35OZ	OZ	3Q13	8/20/2013	Ra-226, D	4.2	pCi/l	0.2	0.3	6.0E-08	4.2E-09	1472224	701916	0' - 960'	446.71	SM 7500 Ra-B	IML
5368-31-35OZ	OZ	3Q13	8/20/2013	Ra-226, S	0.4	pCi/l	0.2	0.1	6.0E-08	4E-10	1472224	701916	0' - 960'	446.71	SM 7500 Ra-B	IML
5368-31-35OZ	OZ	3Q13	8/20/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1472224	701916	0' - 960'	446.71	Ga-Tech	IML
5368-31-35OZ	OZ	3Q13	8/20/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472224	701916	0' - 960'	446.71	ACW10	IML
5368-31-35OZ	OZ	3Q13	8/20/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472224	701916	0' - 960'	446.71	ACW10	IML
5368-31-35OZ	OZ	3Q13	8/20/2013	U, D	0.0252	mg/l	0.0003	0	3.0E-07	1.71E-08	1472224	701916	0' - 960'	446.71	EPA 200.8	IML
5368-31-35OZ	OZ	3Q13	8/20/2013	U, S	0.0003	mg/l	0.0003	0	3.0E-07	2.03E-10	1472224	701916	0' - 960'	446.71	EPA 200.8	IML
5368-31-35OZ	OZ	4Q13	10/23/2013	Gross Alpha	91.8	pCi/l	3	5.7	NA	9.18E-08	1472224	701916	0' - 960'	446.15	SM 7110B	IML
5368-31-35OZ	OZ	4Q13	10/23/2013	Gross Beta	11.5	pCi/l	5	2.9	NA	1.15E-08	1472224	701916	0' - 960'	446.15	SM 7110B	IML
5368-31-35OZ	OZ	4Q13	10/23/2013	Ra-226, D	4.8	pCi/l	0.2	0.3	6.0E-08	4.8E-09	1472224	701916	0' - 960'	446.15	SM 7500 Ra-B	IML
5368-31-35OZ	OZ	4Q13	10/23/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1472224	701916	0' - 960'	446.15	SM 7500 Ra-B	IML
5368-31-35OZ	OZ	4Q13	10/23/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1472224	701916	0' - 960'	446.15	Ga-Tech	IML
5368-31-35OZ	OZ	4Q13	10/23/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472224	701916	0' - 960'	446.15	ACW10	IML
5368-31-35OZ	OZ	4Q13	10/23/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472224	701916	0' - 960'	446.15	ACW10	IML
5368-31-35OZ	OZ	4Q13	10/23/2013	U, D	0.0291	mg/l	0.0003	0	3.0E-07	1.97E-08	1472224	701916	0' - 960'	446.15	EPA 200.8	IML
5368-31-35OZ	OZ	4Q13	10/23/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1472224	701916	0' - 960'	446.15	EPA 200.8	IML
5368-31-35SA	SA	1Q13	3/26/2013	Gross Alpha	16.6	pCi/l	2	2.3	NA	1.66E-08	1472188	701950	0' - 95'	102.65	SM 7110B	IML
5368-31-35SA	SA	1Q13	3/26/2013	Gross Beta	10.3	pCi/l	3	2.2	NA	1.03E-08	1472188	701950	0' - 95'	102.65	SM 7110B	IML
5368-31-35SA	SA	1Q13	3/26/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1472188	701950	0' - 95'	102.65	EPA 901.1M	IML
5368-31-35SA	SA	1Q13	3/26/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1472188	701950	0' - 95'	102.65	OTW01	IML
5368-31-35SA	SA	1Q13	3/26/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1472188	701950	0' - 95'	102.65	OTW01	IML
5368-31-35SA	SA	1Q13	3/26/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1472188	701950	0' - 95'	102.65	OTW01	IML
5368-31-35SA	SA	1Q13	3/26/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1472188	701950	0' - 95'	102.65	OTW01	IML
5368-31-35SA	SA	1Q13	3/26/2013	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2E-10	1472188	701950	0' - 95'	102.65	SM 7500 Ra-B	IML
5368-31-35SA	SA	1Q13	3/26/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1472188	701950	0' - 95'	102.65	SM 7500 Ra-B	IML
5368-31-35SA	SA	1Q13	3/26/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1472188	701950	0' - 95'	102.65	Ga-Tech	IML
5368-31-35SA	SA	1Q13	3/26/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472188	701950	0' - 95'	102.65	ACW10	IML
5368-31-35SA	SA	1Q13	3/26/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472188	701950	0' - 95'	102.65	ACW10	IML
5368-31-35SA	SA	1Q13	3/26/2013	U, D	0.0111	mg/l	0.0003	0	3.0E-07	7.51E-09	1472188	701950	0' - 95'	102.65	EPA 200.8	IML
5368-31-35SA	SA	1Q13	3/26/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1472188	701950	0' - 95'	102.65	EPA 200.8	IML
5368-31-35SA	SA	2Q13	6/19/2013	Gross Alpha	15	pCi/l	2	2.2	NA	1.5E-08	1472188	701950	0' - 95'	102.41	SM 7110B	IML
5368-31-35SA	SA	2Q13	6/19/2013	Gross Beta	8.7	pCi/l	3	2.2	NA	8.7E-09	1472188	701950	0' - 95'	102.41	SM 7110B	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-31-35SA	SA	2Q13	6/19/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1472188	701950	0' - 95'	102.41	SM 7500 Ra-B	IML
5368-31-35SA	SA	2Q13	6/19/2013	Ra-226, S	0.2	pCi/l	0.2	0.1	6.0E-08	2E-10	1472188	701950	0' - 95'	102.41	SM 7500 Ra-B	IML
5368-31-35SA	SA	2Q13	6/19/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1472188	701950	0' - 95'	102.41	Ga-Tech	IML
5368-31-35SA	SA	2Q13	6/19/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472188	701950	0' - 95'	102.41	ACW10	IML
5368-31-35SA	SA	2Q13	6/19/2013	Th-230, S	0.2	pCi/l	0.2	0.1	1.0E-07	2E-10	1472188	701950	0' - 95'	102.41	ACW10	IML
5368-31-35SA	SA	2Q13	6/19/2013	U, D	0.0078	mg/l	0.0003	0	3.0E-07	5.28E-09	1472188	701950	0' - 95'	102.41	EPA 200.8	IML
5368-31-35SA	SA	2Q13	6/19/2013	U, S	0.0004	mg/l	0.0003	0	3.0E-07	2.71E-10	1472188	701950	0' - 95'	102.41	EPA 200.8	IML
5368-31-35SA	SA	3Q13	8/20/2013	Gross Alpha	8	pCi/l	2	1.8	NA	8E-09	1472188	701950	0' - 95'	102.79	SM 7110B	IML
5368-31-35SA	SA	3Q13	8/20/2013	Gross Beta	6.5	pCi/l	3	2.1	NA	6.5E-09	1472188	701950	0' - 95'	102.79	SM 7110B	IML
5368-31-35SA	SA	3Q13	8/20/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1472188	701950	0' - 95'	102.79	SM 7500 Ra-B	IML
5368-31-35SA	SA	3Q13	8/20/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1472188	701950	0' - 95'	102.79	SM 7500 Ra-B	IML
5368-31-35SA	SA	3Q13	8/20/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1472188	701950	0' - 95'	102.79	Ga-Tech	IML
5368-31-35SA	SA	3Q13	8/20/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472188	701950	0' - 95'	102.79	ACW10	IML
5368-31-35SA	SA	3Q13	8/20/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472188	701950	0' - 95'	102.79	ACW10	IML
5368-31-35SA	SA	3Q13	8/20/2013	U, D	0.0062	mg/l	0.0003	0	3.0E-07	4.20E-09	1472188	701950	0' - 95'	102.79	EPA 200.8	IML
5368-31-35SA	SA	3Q13	8/20/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1472188	701950	0' - 95'	102.79	EPA 200.8	IML
5368-31-35SA	SA	4Q13	10/23/2013	Gross Alpha	9.1	pCi/l	3	2.4	NA	9.1E-09	1472188	701950	0' - 95'	102.9	SM 7110B	IML
5368-31-35SA	SA	4Q13	10/23/2013	Gross Beta	<5	pCi/l	5	0	NA	NA	1472188	701950	0' - 95'	102.9	SM 7110B	IML
5368-31-35SA	SA	4Q13	10/23/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1472188	701950	0' - 95'	102.9	SM 7500 Ra-B	IML
5368-31-35SA	SA	4Q13	10/23/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1472188	701950	0' - 95'	102.9	SM 7500 Ra-B	IML
5368-31-35SA	SA	4Q13	10/23/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1472188	701950	0' - 95'	102.9	Ga-Tech	IML
5368-31-35SA	SA	4Q13	10/23/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472188	701950	0' - 95'	102.9	ACW10	IML
5368-31-35SA	SA	4Q13	10/23/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472188	701950	0' - 95'	102.9	ACW10	IML
5368-31-35SA	SA	4Q13	10/23/2013	U, D	0.0043	mg/l	0.0003	0	3.0E-07	2.91E-09	1472188	701950	0' - 95'	102.9	EPA 200.8	IML
5368-31-35SA	SA	4Q13	10/23/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1472188	701950	0' - 95'	102.9	EPA 200.8	IML
5368-31-35SM	SM	1Q13	4/5/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1472227	701989	0' - 840'	435.25	SM 7110B	IML
5368-31-35SM	SM	1Q13	4/5/2013	Gross Beta	8.4	pCi/l	3	2.4	NA	8.4E-09	1472227	701989	0' - 840'	435.25	SM 7110B	IML
5368-31-35SM	SM	1Q13	4/5/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1472227	701989	0' - 840'	435.25	EPA 901.1M	IML
5368-31-35SM	SM	1Q13	4/5/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1472227	701989	0' - 840'	435.25	OTW01	IML
5368-31-35SM	SM	1Q13	4/5/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1472227	701989	0' - 840'	435.25	OTW01	IML
5368-31-35SM	SM	1Q13	4/5/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1472227	701989	0' - 840'	435.25	OTW01	IML
5368-31-35SM	SM	1Q13	4/5/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1472227	701989	0' - 840'	435.25	OTW01	IML
5368-31-35SM	SM	1Q13	4/5/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1472227	701989	0' - 840'	435.25	SM 7500 Ra-B	IML
5368-31-35SM	SM	1Q13	4/5/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1472227	701989	0' - 840'	435.25	SM 7500 Ra-B	IML
5368-31-35SM	SM	1Q13	4/5/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1472227	701989	0' - 840'	435.25	Ga-Tech	IML
5368-31-35SM	SM	1Q13	4/5/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472227	701989	0' - 840'	435.25	ACW10	IML
5368-31-35SM	SM	1Q13	4/5/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472227	701989	0' - 840'	435.25	ACW10	IML
5368-31-35SM	SM	1Q13	4/5/2013	U, D	0.0003	mg/l	0.0003	0	3.0E-07	2.03E-10	1472227	701989	0' - 840'	435.25	EPA 200.8	IML
5368-31-35SM	SM	1Q13	4/5/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1472227	701989	0' - 840'	435.25	EPA 200.8	IML
5368-31-35SM	SM	2Q13	6/19/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1472227	701989	0' - 840'	435.55	SM 7110B	IML
5368-31-35SM	SM	2Q13	6/19/2013	Gross Beta	7.7	pCi/l	3	2.4	NA	7.7E-09	1472227	701989	0' - 840'	435.55	SM 7110B	IML
5368-31-35SM	SM	2Q13	6/19/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1472227	701989	0' - 840'	435.55	SM 7500 Ra-B	IML
5368-31-35SM	SM	2Q13	6/19/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1472227	701989	0' - 840'	435.55	SM 7500 Ra-B	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-31-35SM	SM	2Q13	6/19/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1472227	701989	0' - 840'	435.55	Ga-Tech	IML
5368-31-35SM	SM	2Q13	6/19/2013	Th-230, D	0.2	pCi/l	0.2	0.1	1.0E-07	2E-10	1472227	701989	0' - 840'	435.55	ACW10	IML
5368-31-35SM	SM	2Q13	6/19/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472227	701989	0' - 840'	435.55	ACW10	IML
5368-31-35SM	SM	2Q13	6/19/2013	U, D	0.0005	mg/l	0.0003	0	3.0E-07	3.39E-10	1472227	701989	0' - 840'	435.55	EPA 200.8	IML
5368-31-35SM	SM	2Q13	6/19/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1472227	701989	0' - 840'	435.55	EPA 200.8	IML
5368-31-35SM	SM	3Q13	8/20/2013	Gross Alpha	<3	pCi/l	3	0	NA	NA	1472227	701989	0' - 840'	435.58	SM 7110B	IML
5368-31-35SM	SM	3Q13	8/20/2013	Gross Beta	9	pCi/l	4	2.7	NA	9E-09	1472227	701989	0' - 840'	435.58	SM 7110B	IML
5368-31-35SM	SM	3Q13	8/20/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1472227	701989	0' - 840'	435.58	SM 7500 Ra-B	IML
5368-31-35SM	SM	3Q13	8/20/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1472227	701989	0' - 840'	435.58	SM 7500 Ra-B	IML
5368-31-35SM	SM	3Q13	8/20/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1472227	701989	0' - 840'	435.58	Ga-Tech	IML
5368-31-35SM	SM	3Q13	8/20/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472227	701989	0' - 840'	435.58	ACW10	IML
5368-31-35SM	SM	3Q13	8/20/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472227	701989	0' - 840'	435.58	ACW10	IML
5368-31-35SM	SM	3Q13	8/20/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1472227	701989	0' - 840'	435.58	EPA 200.8	IML
5368-31-35SM	SM	3Q13	8/20/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1472227	701989	0' - 840'	435.58	EPA 200.8	IML
5368-31-35SM	SM	4Q13	10/23/2013	Gross Alpha	<3	pCi/l	3	0	NA	NA	1472227	701989	0' - 840'	435.12	SM 7110B	IML
5368-31-35SM	SM	4Q13	10/23/2013	Gross Beta	11.6	pCi/l	4	2.7	NA	1.16E-08	1472227	701989	0' - 840'	435.12	SM 7110B	IML
5368-31-35SM	SM	4Q13	10/23/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1472227	701989	0' - 840'	435.12	SM 7500 Ra-B	IML
5368-31-35SM	SM	4Q13	10/23/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1472227	701989	0' - 840'	435.12	SM 7500 Ra-B	IML
5368-31-35SM	SM	4Q13	10/23/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1472227	701989	0' - 840'	435.12	Ga-Tech	IML
5368-31-35SM	SM	4Q13	10/23/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472227	701989	0' - 840'	435.12	ACW10	IML
5368-31-35SM	SM	4Q13	10/23/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1472227	701989	0' - 840'	435.12	ACW10	IML
5368-31-35SM	SM	4Q13	10/23/2013	U, D	0.0003	mg/l	0.0003	0	3.0E-07	2.03E-10	1472227	701989	0' - 840'	435.12	EPA 200.8	IML
5368-31-35SM	SM	4Q13	10/23/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1472227	701989	0' - 840'	435.12	EPA 200.8	IML
5368-32-23OZ	OZ	1Q13	4/3/2013	Gross Alpha	29.5	pCi/l	2	3	NA	2.95E-08	1481033	701348	0' - 852'	363.05	SM 7110B	IML
5368-32-23OZ	OZ	1Q13	4/3/2013	Gross Beta	6	pCi/l	3	2.3	NA	6E-09	1481033	701348	0' - 852'	363.05	SM 7110B	IML
5368-32-23OZ	OZ	1Q13	4/3/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1481033	701348	0' - 852'	363.05	EPA 901.1M	IML
5368-32-23OZ	OZ	1Q13	4/3/2013	Pb-210, D	2.1	pCi/l	1	0.6	1.0E-08	2.1E-09	1481033	701348	0' - 852'	363.05	OTW01	IML
5368-32-23OZ	OZ	1Q13	4/3/2013	Pb-210, S	1.2	pCi/l	1	0.5	1.0E-08	1.2E-09	1481033	701348	0' - 852'	363.05	OTW01	IML
5368-32-23OZ	OZ	1Q13	4/3/2013	Po-210, D	12.6	pCi/l	1	2.6	4.0E-08	1.26E-08	1481033	701348	0' - 852'	363.05	OTW01	IML
5368-32-23OZ	OZ	1Q13	4/3/2013	Po-210, S	27.1	pCi/l	1	4	4.0E-08	2.71E-08	1481033	701348	0' - 852'	363.05	OTW01	IML
5368-32-23OZ	OZ	1Q13	4/3/2013	Ra-226, D	0.6	pCi/l	0.2	0.1	6.0E-08	6E-10	1481033	701348	0' - 852'	363.05	SM 7500 Ra-B	IML
5368-32-23OZ	OZ	1Q13	4/3/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481033	701348	0' - 852'	363.05	SM 7500 Ra-B	IML
5368-32-23OZ	OZ	1Q13	4/3/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481033	701348	0' - 852'	363.05	Ga-Tech	IML
5368-32-23OZ	OZ	1Q13	4/3/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481033	701348	0' - 852'	363.05	ACW10	IML
5368-32-23OZ	OZ	1Q13	4/3/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481033	701348	0' - 852'	363.05	ACW10	IML
5368-32-23OZ	OZ	1Q13	4/3/2013	U, D	0.01	mg/l	0.0003	0	3.0E-07	6.77E-09	1481033	701348	0' - 852'	363.05	EPA 200.8	IML
5368-32-23OZ	OZ	1Q13	4/3/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481033	701348	0' - 852'	363.05	EPA 200.8	IML
5368-32-23OZ	OZ	2Q13	6/24/2013	Gross Alpha	34.1	pCi/l	3	3.6	NA	3.41E-08	1481033	701348	0' - 852'	360.8	SM 7110B	IML
5368-32-23OZ	OZ	2Q13	6/24/2013	Gross Beta	<5	pCi/l	5	0	NA	NA	1481033	701348	0' - 852'	360.8	SM 7110B	IML
5368-32-23OZ	OZ	2Q13	6/24/2013	Ra-226, D	0.5	pCi/l	0.2	0.1	6.0E-08	5E-10	1481033	701348	0' - 852'	360.8	SM 7500 Ra-B	IML
5368-32-23OZ	OZ	2Q13	6/24/2013	Ra-226, S	0.2	pCi/l	0.2	0.1	6.0E-08	2E-10	1481033	701348	0' - 852'	360.8	SM 7500 Ra-B	IML
5368-32-23OZ	OZ	2Q13	6/24/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481033	701348	0' - 852'	360.8	Ga-Tech	IML
5368-32-23OZ	OZ	2Q13	6/24/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481033	701348	0' - 852'	360.8	ACW10	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-32-23OZ	OZ	2Q13	6/24/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481033	701348	0' - 852'	360.8	ACW10	IML
5368-32-23OZ	OZ	2Q13	6/24/2013	U, D	0.0093	mg/l	0.0003	0	3.0E-07	6.30E-09	1481033	701348	0' - 852'	360.8	EPA 200.8	IML
5368-32-23OZ	OZ	2Q13	6/24/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481033	701348	0' - 852'	360.8	EPA 200.8	IML
5368-32-23OZ	OZ	3Q13	8/22/2013	Gross Alpha	20	pCi/l	2	2.9	NA	0.00000002	1481033	701348	0' - 852'	358.15	SM 7110B	IML
5368-32-23OZ	OZ	3Q13	8/22/2013	Gross Beta	8.8	pCi/l	3	2.8	NA	8.8E-09	1481033	701348	0' - 852'	358.15	SM 7110B	IML
5368-32-23OZ	OZ	3Q13	8/22/2013	Ra-226, D	0.6	pCi/l	0.2	0.1	6.0E-08	6E-10	1481033	701348	0' - 852'	358.15	SM 7500 Ra-B	IML
5368-32-23OZ	OZ	3Q13	8/22/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481033	701348	0' - 852'	358.15	SM 7500 Ra-B	IML
5368-32-23OZ	OZ	3Q13	8/22/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481033	701348	0' - 852'	358.15	Ga-Tech	IML
5368-32-23OZ	OZ	3Q13	8/22/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481033	701348	0' - 852'	358.15	ACW10	IML
5368-32-23OZ	OZ	3Q13	8/22/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481033	701348	0' - 852'	358.15	ACW10	IML
5368-32-23OZ	OZ	3Q13	8/22/2013	U, D	0.0103	mg/l	0.0003	0	3.0E-07	6.97E-09	1481033	701348	0' - 852'	358.15	EPA 200.8	IML
5368-32-23OZ	OZ	3Q13	8/22/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481033	701348	0' - 852'	358.15	EPA 200.8	IML
5368-32-23OZ	OZ	4Q13	10/25/2013	Gross Alpha	15.2	pCi/l	2	2.7	NA	1.52E-08	1481033	701348	0' - 852'	356.81	SM 7110B	IML
5368-32-23OZ	OZ	4Q13	10/25/2013	Gross Beta	<3	pCi/l	3	0	NA	NA	1481033	701348	0' - 852'	356.81	SM 7110B	IML
5368-32-23OZ	OZ	4Q13	10/25/2013	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4E-10	1481033	701348	0' - 852'	356.81	SM 7500 Ra-B	IML
5368-32-23OZ	OZ	4Q13	10/25/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481033	701348	0' - 852'	356.81	SM 7500 Ra-B	IML
5368-32-23OZ	OZ	4Q13	10/25/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481033	701348	0' - 852'	356.81	Ga-Tech	IML
5368-32-23OZ	OZ	4Q13	10/25/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481033	701348	0' - 852'	356.81	ACW10	IML
5368-32-23OZ	OZ	4Q13	10/25/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481033	701348	0' - 852'	356.81	ACW10	IML
5368-32-23OZ	OZ	4Q13	10/25/2013	U, D	0.0111	mg/l	0.0003	0	3.0E-07	7.51E-09	1481033	701348	0' - 852'	356.81	EPA 200.8	IML
5368-32-23OZ	OZ	4Q13	10/25/2013	U, S	0.0007	mg/l	0.0003	0	3.0E-07	4.74E-10	1481033	701348	0' - 852'	356.81	EPA 200.8	IML
5368-32-23SM	SM	1Q13	4/3/2013	Gross Alpha	2.6	pCi/l	2	1.7	NA	2.6E-09	1481032	701419	0' - 692'	320.12	SM 7110B	IML
5368-32-23SM	SM	1Q13	4/3/2013	Gross Beta	6.9	pCi/l	3	2.8	NA	6.9E-09	1481032	701419	0' - 692'	320.12	SM 7110B	IML
5368-32-23SM	SM	1Q13	4/3/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1481032	701419	0' - 692'	320.12	EPA 901.1M	IML
5368-32-23SM	SM	1Q13	4/3/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1481032	701419	0' - 692'	320.12	OTW01	IML
5368-32-23SM	SM	1Q13	4/3/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1481032	701419	0' - 692'	320.12	OTW01	IML
5368-32-23SM	SM	1Q13	4/3/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1481032	701419	0' - 692'	320.12	OTW01	IML
5368-32-23SM	SM	1Q13	4/3/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1481032	701419	0' - 692'	320.12	OTW01	IML
5368-32-23SM	SM	1Q13	4/3/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481032	701419	0' - 692'	320.12	SM 7500 Ra-B	IML
5368-32-23SM	SM	1Q13	4/3/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481032	701419	0' - 692'	320.12	SM 7500 Ra-B	IML
5368-32-23SM	SM	1Q13	4/3/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481032	701419	0' - 692'	320.12	Ga-Tech	IML
5368-32-23SM	SM	1Q13	4/3/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481032	701419	0' - 692'	320.12	ACW10	IML
5368-32-23SM	SM	1Q13	4/3/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481032	701419	0' - 692'	320.12	ACW10	IML
5368-32-23SM	SM	1Q13	4/3/2013	U, D	0.0009	mg/l	0.0003	0	3.0E-07	6.09E-10	1481032	701419	0' - 692'	320.12	EPA 200.8	IML
5368-32-23SM	SM	1Q13	4/3/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481032	701419	0' - 692'	320.12	EPA 200.8	IML
5368-32-23SM	SM	2Q13	6/24/2013	Gross Alpha	<3	pCi/l	3	0	NA	NA	1481032	701419	0' - 692'	319.51	SM 7110B	IML
5368-32-23SM	SM	2Q13	6/24/2013	Gross Beta	<5	pCi/l	5	0	NA	NA	1481032	701419	0' - 692'	319.51	SM 7110B	IML
5368-32-23SM	SM	2Q13	6/24/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481032	701419	0' - 692'	319.51	SM 7500 Ra-B	IML
5368-32-23SM	SM	2Q13	6/24/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481032	701419	0' - 692'	319.51	SM 7500 Ra-B	IML
5368-32-23SM	SM	2Q13	6/24/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481032	701419	0' - 692'	319.51	Ga-Tech	IML
5368-32-23SM	SM	2Q13	6/24/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481032	701419	0' - 692'	319.51	ACW10	IML
5368-32-23SM	SM	2Q13	6/24/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481032	701419	0' - 692'	319.51	ACW10	IML
5368-32-23SM	SM	2Q13	6/24/2013	U, D	0.0005	mg/l	0.0003	0	3.0E-07	3.39E-10	1481032	701419	0' - 692'	319.51	EPA 200.8	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-32-23SM	SM	2Q13	6/24/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481032	701419	0' - 692'	319.51	EPA 200.8	IML
5368-32-23SM	SM	3Q13	8/22/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1481032	701419	0' - 692'	318.66	SM 7110B	IML
5368-32-23SM	SM	3Q13	8/22/2013	Gross Beta	5	pCi/l	3	2.6	NA	5E-09	1481032	701419	0' - 692'	318.66	SM 7110B	IML
5368-32-23SM	SM	3Q13	8/22/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481032	701419	0' - 692'	318.66	SM 7500 Ra-B	IML
5368-32-23SM	SM	3Q13	8/22/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481032	701419	0' - 692'	318.66	SM 7500 Ra-B	IML
5368-32-23SM	SM	3Q13	8/22/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481032	701419	0' - 692'	318.66	Ga-Tech	IML
5368-32-23SM	SM	3Q13	8/22/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481032	701419	0' - 692'	318.66	ACW10	IML
5368-32-23SM	SM	3Q13	8/22/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481032	701419	0' - 692'	318.66	ACW10	IML
5368-32-23SM	SM	3Q13	8/22/2013	U, D	0.0006	mg/l	0.0003	0	3.0E-07	4.06E-10	1481032	701419	0' - 692'	318.66	EPA 200.8	IML
5368-32-23SM	SM	3Q13	8/22/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481032	701419	0' - 692'	318.66	EPA 200.8	IML
5368-32-23SM	SM	4Q13	10/25/2013	Gross Alpha	3.1	pCi/l	2	1.7	NA	3.1E-09	1481032	701419	0' - 692'	317.37	SM 7110B	IML
5368-32-23SM	SM	4Q13	10/25/2013	Gross Beta	4.3	pCi/l	3	2.6	NA	4.3E-09	1481032	701419	0' - 692'	317.37	SM 7110B	IML
5368-32-23SM	SM	4Q13	10/25/2013	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2E-10	1481032	701419	0' - 692'	317.37	SM 7500 Ra-B	IML
5368-32-23SM	SM	4Q13	10/25/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481032	701419	0' - 692'	317.37	SM 7500 Ra-B	IML
5368-32-23SM	SM	4Q13	10/25/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481032	701419	0' - 692'	317.37	Ga-Tech	IML
5368-32-23SM	SM	4Q13	10/25/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481032	701419	0' - 692'	317.37	ACW10	IML
5368-32-23SM	SM	4Q13	10/25/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481032	701419	0' - 692'	317.37	ACW10	IML
5368-32-23SM	SM	4Q13	10/25/2013	U, D	0.0005	mg/l	0.0003	0	3.0E-07	3.39E-10	1481032	701419	0' - 692'	317.37	EPA 200.8	IML
5368-32-23SM	SM	4Q13	10/25/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481032	701419	0' - 692'	317.37	EPA 200.8	IML
5368-33-14OZ	OZ	1Q13	3/29/2013	Gross Alpha	35.6	pCi/l	2	3.6	NA	3.56E-08	1486002	701644	0' - 710'	225.48	SM 7110B	IML
5368-33-14OZ	OZ	1Q13	3/29/2013	Gross Beta	8.5	pCi/l	5	2.8	NA	8.5E-09	1486002	701644	0' - 710'	225.48	SM 7110B	IML
5368-33-14OZ	OZ	1Q13	3/29/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1486002	701644	0' - 710'	225.48	EPA 901.1M	IML
5368-33-14OZ	OZ	1Q13	3/29/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1486002	701644	0' - 710'	225.48	OTW01	IML
5368-33-14OZ	OZ	1Q13	3/29/2013	Pb-210, S	1.1	pCi/l	1	0.4	1.0E-08	1.1E-09	1486002	701644	0' - 710'	225.48	OTW01	IML
5368-33-14OZ	OZ	1Q13	3/29/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1486002	701644	0' - 710'	225.48	OTW01	IML
5368-33-14OZ	OZ	1Q13	3/29/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1486002	701644	0' - 710'	225.48	OTW01	IML
5368-33-14OZ	OZ	1Q13	3/29/2013	Ra-226, D	0.8	pCi/l	0.2	0.1	6.0E-08	8E-10	1486002	701644	0' - 710'	225.48	SM 7500 Ra-B	IML
5368-33-14OZ	OZ	1Q13	3/29/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1486002	701644	0' - 710'	225.48	SM 7500 Ra-B	IML
5368-33-14OZ	OZ	1Q13	3/29/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1486002	701644	0' - 710'	225.48	Ga-Tech	IML
5368-33-14OZ	OZ	1Q13	3/29/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486002	701644	0' - 710'	225.48	ACW10	IML
5368-33-14OZ	OZ	1Q13	3/29/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486002	701644	0' - 710'	225.48	ACW10	IML
5368-33-14OZ	OZ	1Q13	3/29/2013	U, D	0.0201	mg/l	0.0003	0	3.0E-07	1.36E-08	1486002	701644	0' - 710'	225.48	EPA 200.8	IML
5368-33-14OZ	OZ	1Q13	3/29/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1486002	701644	0' - 710'	225.48	EPA 200.8	IML
5368-33-14OZ	OZ	2Q13	6/28/2013	Gross Alpha	34.9	pCi/l	3	3.7	NA	3.49E-08	1486002	701644	0' - 710'	221.32	SM 7110B	IML
5368-33-14OZ	OZ	2Q13	6/28/2013	Gross Beta	10	pCi/l	4	2.7	NA	0.00000001	1486002	701644	0' - 710'	221.32	SM 7110B	IML
5368-33-14OZ	OZ	2Q13	6/28/2013	Ra-226, D	1	pCi/l	0.2	0.1	6.0E-08	1E-09	1486002	701644	0' - 710'	221.32	SM 7500 Ra-B	IML
5368-33-14OZ	OZ	2Q13	6/28/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1486002	701644	0' - 710'	221.32	SM 7500 Ra-B	IML
5368-33-14OZ	OZ	2Q13	6/28/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1486002	701644	0' - 710'	221.32	Ga-Tech	IML
5368-33-14OZ	OZ	2Q13	6/28/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486002	701644	0' - 710'	221.32	ACW10	IML
5368-33-14OZ	OZ	2Q13	6/28/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486002	701644	0' - 710'	221.32	ACW10	IML
5368-33-14OZ	OZ	2Q13	6/28/2013	U, D	0.0172	mg/l	0.0003	0	3.0E-07	1.16E-08	1486002	701644	0' - 710'	221.32	EPA 200.8	IML
5368-33-14OZ	OZ	2Q13	6/28/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1486002	701644	0' - 710'	221.32	EPA 200.8	IML
5368-33-14OZ	OZ	3Q13	8/26/2013	Gross Alpha	30.2	pCi/l	3	3.4	NA	3.02E-08	1486002	701644	0' - 710'	218.1	SM 7110B	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-33-14OZ	OZ	3Q13	8/26/2013	Gross Beta	9.1	pCi/l	4	2.7	NA	9.1E-09	1486002	701644	0' - 710'	218.1	SM 7110B	IML
5368-33-14OZ	OZ	3Q13	8/26/2013	Ra-226, D	0.8	pCi/l	0.2	0.1	6.0E-08	8E-10	1486002	701644	0' - 710'	218.1	SM 7500 Ra-B	IML
5368-33-14OZ	OZ	3Q13	8/26/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1486002	701644	0' - 710'	218.1	SM 7500 Ra-B	IML
5368-33-14OZ	OZ	3Q13	8/26/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1486002	701644	0' - 710'	218.1	Ga-Tech	IML
5368-33-14OZ	OZ	3Q13	8/26/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486002	701644	0' - 710'	218.1	ACW10	IML
5368-33-14OZ	OZ	3Q13	8/26/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486002	701644	0' - 710'	218.1	ACW10	IML
5368-33-14OZ	OZ	3Q13	8/26/2013	U, D	0.0165	mg/l	0.0003	0	3.0E-07	1.12E-08	1486002	701644	0' - 710'	218.1	EPA 200.8	IML
5368-33-14OZ	OZ	3Q13	8/26/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1486002	701644	0' - 710'	218.1	EPA 200.8	IML
5368-33-14OZ	OZ	4Q13	10/26/2013	Gross Alpha	32	pCi/l	2	3.5	NA	3.2E-08	1486002	701644	0' - 710'	216.67	SM 7110B	IML
5368-33-14OZ	OZ	4Q13	10/26/2013	Gross Beta	12	pCi/l	3	2.8	NA	1.2E-08	1486002	701644	0' - 710'	216.67	SM 7110B	IML
5368-33-14OZ	OZ	4Q13	10/26/2013	Ra-226, D	0.7	pCi/l	0.2	0.1	6.0E-08	7E-10	1486002	701644	0' - 710'	216.67	SM 7500 Ra-B	IML
5368-33-14OZ	OZ	4Q13	10/26/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1486002	701644	0' - 710'	216.67	SM 7500 Ra-B	IML
5368-33-14OZ	OZ	4Q13	10/26/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1486002	701644	0' - 710'	216.67	Ga-Tech	IML
5368-33-14OZ	OZ	4Q13	10/26/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486002	701644	0' - 710'	216.67	ACW10	IML
5368-33-14OZ	OZ	4Q13	10/26/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486002	701644	0' - 710'	216.67	ACW10	IML
5368-33-14OZ	OZ	4Q13	10/26/2013	U, D	0.0145	mg/l	0.0003	0	3.0E-07	9.82E-09	1486002	701644	0' - 710'	216.67	EPA 200.8	IML
5368-33-14OZ	OZ	4Q13	10/26/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1486002	701644	0' - 710'	216.67	EPA 200.8	IML
5368-33-14SA	SA	1Q13	3/12/2013	Gross Alpha	8.6	pCi/l	2	1.5	NA	8.6E-09	1485965	701679	0' - 39'	31.13	SM 7110B	IML
5368-33-14SA	SA	1Q13	3/12/2013	Gross Beta	12	pCi/l	3	1.6	NA	1.2E-08	1485965	701679	0' - 39'	31.13	SM 7110B	IML
5368-33-14SA	SA	1Q13	3/12/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1485965	701679	0' - 39'	31.13	EPA 901.1M	IML
5368-33-14SA	SA	1Q13	3/12/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1485965	701679	0' - 39'	31.13	OTW01	IML
5368-33-14SA	SA	1Q13	3/12/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1485965	701679	0' - 39'	31.13	OTW01	IML
5368-33-14SA	SA	1Q13	3/12/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1485965	701679	0' - 39'	31.13	OTW01	IML
5368-33-14SA	SA	1Q13	3/12/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1485965	701679	0' - 39'	31.13	OTW01	IML
5368-33-14SA	SA	1Q13	3/12/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1485965	701679	0' - 39'	31.13	SM 7500 Ra-B	IML
5368-33-14SA	SA	1Q13	3/12/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1485965	701679	0' - 39'	31.13	SM 7500 Ra-B	IML
5368-33-14SA	SA	1Q13	3/12/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1485965	701679	0' - 39'	31.13	Ga-Tech	IML
5368-33-14SA	SA	1Q13	3/12/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1485965	701679	0' - 39'	31.13	ACW10	IML
5368-33-14SA	SA	1Q13	3/12/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1485965	701679	0' - 39'	31.13	ACW10	IML
5368-33-14SA	SA	1Q13	3/12/2013	U, D	0.0141	mg/l	0.0003	0	3.0E-07	9.55E-09	1485965	701679	0' - 39'	31.13	EPA 200.8	IML
5368-33-14SA	SA	1Q13	3/12/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1485965	701679	0' - 39'	31.13	EPA 200.8	IML
5368-33-14SA	SA	2Q13	6/18/2013	Gross Alpha	7.1	pCi/l	2	1.9	NA	7.1E-09	1485965	701679	0' - 39'	30.26	SM 7110B	IML
5368-33-14SA	SA	2Q13	6/18/2013	Gross Beta	7.3	pCi/l	3	2.5	NA	7.3E-09	1485965	701679	0' - 39'	30.26	SM 7110B	IML
5368-33-14SA	SA	2Q13	6/18/2013	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4E-10	1485965	701679	0' - 39'	30.26	SM 7500 Ra-B	IML
5368-33-14SA	SA	2Q13	6/18/2013	Ra-226, S	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1485965	701679	0' - 39'	30.26	SM 7500 Ra-B	IML
5368-33-14SA	SA	2Q13	6/18/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1485965	701679	0' - 39'	30.26	Ga-Tech	IML
5368-33-14SA	SA	2Q13	6/18/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1485965	701679	0' - 39'	30.26	ACW10	IML
5368-33-14SA	SA	2Q13	6/18/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1485965	701679	0' - 39'	30.26	ACW10	IML
5368-33-14SA	SA	2Q13	6/18/2013	U, D	0.0108	mg/l	0.0003	0	3.0E-07	7.31E-09	1485965	701679	0' - 39'	30.26	EPA 200.8	IML
5368-33-14SA	SA	2Q13	6/18/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1485965	701679	0' - 39'	30.26	EPA 200.8	IML
5368-33-14SA	SA	3Q13	8/21/2013	Gross Alpha	9.5	pCi/l	2	2.2	NA	9.5E-09	1485965	701679	0' - 39'	31.07	SM 7110B	IML
5368-33-14SA	SA	3Q13	8/21/2013	Gross Beta	10.2	pCi/l	3	2.1	NA	1.02E-08	1485965	701679	0' - 39'	31.07	SM 7110B	IML
5368-33-14SA	SA	3Q13	8/21/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1485965	701679	0' - 39'	31.07	SM 7500 Ra-B	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-33-14SA	SA	3Q13	8/21/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1485965	701679	0' - 39'	31.07	SM 7500 Ra-B	IML
5368-33-14SA	SA	3Q13	8/21/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1485965	701679	0' - 39'	31.07	Ga-Tech	IML
5368-33-14SA	SA	3Q13	8/21/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1485965	701679	0' - 39'	31.07	ACW10	IML
5368-33-14SA	SA	3Q13	8/21/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1485965	701679	0' - 39'	31.07	ACW10	IML
5368-33-14SA	SA	3Q13	8/21/2013	U, D	0.0126	mg/l	0.0003	0	3.0E-07	8.53E-09	1485965	701679	0' - 39'	31.07	EPA 200.8	IML
5368-33-14SA	SA	3Q13	8/21/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1485965	701679	0' - 39'	31.07	EPA 200.8	IML
5368-33-14SA	SA	4Q13	10/24/2013	Gross Alpha	4.8	pCi/l	2	1.5	NA	4.8E-09	1485965	701679	0' - 39'	31.2	SM 7110B	IML
5368-33-14SA	SA	4Q13	10/24/2013	Gross Beta	7.6	pCi/l	4	2.4	NA	7.6E-09	1485965	701679	0' - 39'	31.2	SM 7110B	IML
5368-33-14SA	SA	4Q13	10/24/2013	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2E-10	1485965	701679	0' - 39'	31.2	SM 7500 Ra-B	IML
5368-33-14SA	SA	4Q13	10/24/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1485965	701679	0' - 39'	31.2	SM 7500 Ra-B	IML
5368-33-14SA	SA	4Q13	10/24/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1485965	701679	0' - 39'	31.2	Ga-Tech	IML
5368-33-14SA	SA	4Q13	10/24/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1485965	701679	0' - 39'	31.2	ACW10	IML
5368-33-14SA	SA	4Q13	10/24/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1485965	701679	0' - 39'	31.2	ACW10	IML
5368-33-14SA	SA	4Q13	10/24/2013	U, D	0.0125	mg/l	0.0003	0	3.0E-07	8.46E-09	1485965	701679	0' - 39'	31.2	EPA 200.8	IML
5368-33-14SA	SA	4Q13	10/24/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1485965	701679	0' - 39'	31.2	EPA 200.8	IML
5368-33-14SM	SM	1Q13	3/29/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1486001	701715	0' - 598'	179	SM 7110B	IML
5368-33-14SM	SM	1Q13	3/29/2013	Gross Beta	24.5	pCi/l	4	2.5	NA	2.45E-08	1486001	701715	0' - 598'	179	SM 7110B	IML
5368-33-14SM	SM	1Q13	3/29/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1486001	701715	0' - 598'	179	EPA 901.1M	IML
5368-33-14SM	SM	1Q13	3/29/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1486001	701715	0' - 598'	179	OTW01	IML
5368-33-14SM	SM	1Q13	3/29/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1486001	701715	0' - 598'	179	OTW01	IML
5368-33-14SM	SM	1Q13	3/29/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1486001	701715	0' - 598'	179	OTW01	IML
5368-33-14SM	SM	1Q13	3/29/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1486001	701715	0' - 598'	179	OTW01	IML
5368-33-14SM	SM	1Q13	3/29/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1486001	701715	0' - 598'	179	SM 7500 Ra-B	IML
5368-33-14SM	SM	1Q13	3/29/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1486001	701715	0' - 598'	179	SM 7500 Ra-B	IML
5368-33-14SM	SM	1Q13	3/29/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1486001	701715	0' - 598'	179	Ga-Tech	IML
5368-33-14SM	SM	1Q13	3/29/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486001	701715	0' - 598'	179	ACW10	IML
5368-33-14SM	SM	1Q13	3/29/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486001	701715	0' - 598'	179	ACW10	IML
5368-33-14SM	SM	1Q13	3/29/2013	U, D	0.0004	mg/l	0.0003	0	3.0E-07	2.71E-10	1486001	701715	0' - 598'	179	EPA 200.8	IML
5368-33-14SM	SM	1Q13	3/29/2013	U, S	0.0006	mg/l	0.0003	0	3.0E-07	4.06E-10	1486001	701715	0' - 598'	179	EPA 200.8	IML
5368-33-14SM	SM	2Q13	6/28/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1486001	701715	0' - 598'	176.82	SM 7110B	IML
5368-33-14SM	SM	2Q13	6/28/2013	Gross Beta	16.4	pCi/l	4	2.8	NA	1.64E-08	1486001	701715	0' - 598'	176.82	SM 7110B	IML
5368-33-14SM	SM	2Q13	6/28/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1486001	701715	0' - 598'	176.82	SM 7500 Ra-B	IML
5368-33-14SM	SM	2Q13	6/28/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1486001	701715	0' - 598'	176.82	SM 7500 Ra-B	IML
5368-33-14SM	SM	2Q13	6/28/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1486001	701715	0' - 598'	176.82	Ga-Tech	IML
5368-33-14SM	SM	2Q13	6/28/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486001	701715	0' - 598'	176.82	ACW10	IML
5368-33-14SM	SM	2Q13	6/28/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486001	701715	0' - 598'	176.82	ACW10	IML
5368-33-14SM	SM	2Q13	6/28/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1486001	701715	0' - 598'	176.82	EPA 200.8	IML
5368-33-14SM	SM	2Q13	6/28/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1486001	701715	0' - 598'	176.82	EPA 200.8	IML
5368-33-14SM	SM	3Q13	8/26/2013	Gross Alpha	3.1	pCi/l	2	1.6	NA	3.1E-09	1486001	701715	0' - 598'	175.25	SM 7110B	IML
5368-33-14SM	SM	3Q13	8/26/2013	Gross Beta	10.4	pCi/l	5	2.8	NA	1.04E-08	1486001	701715	0' - 598'	175.25	SM 7110B	IML
5368-33-14SM	SM	3Q13	8/26/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1486001	701715	0' - 598'	175.25	SM 7500 Ra-B	IML
5368-33-14SM	SM	3Q13	8/26/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1486001	701715	0' - 598'	175.25	SM 7500 Ra-B	IML
5368-33-14SM	SM	3Q13	8/26/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1486001	701715	0' - 598'	175.25	Ga-Tech	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-33-14SM	SM	3Q13	8/26/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486001	701715	0' - 598'	175.25	ACW10	IML
5368-33-14SM	SM	3Q13	8/26/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486001	701715	0' - 598'	175.25	ACW10	IML
5368-33-14SM	SM	3Q13	8/26/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1486001	701715	0' - 598'	175.25	EPA 200.8	IML
5368-33-14SM	SM	3Q13	8/26/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1486001	701715	0' - 598'	175.25	EPA 200.8	IML
5368-33-14SM	SM	4Q13	10/26/2013	Gross Alpha	8.2	pCi/l	2	2	NA	8.2E-09	1486001	701715	0' - 598'	174.2	SM 7110B	IML
5368-33-14SM	SM	4Q13	10/26/2013	Gross Beta	14.8	pCi/l	3	2.9	NA	1.48E-08	1486001	701715	0' - 598'	174.2	SM 7110B	IML
5368-33-14SM	SM	4Q13	10/26/2013	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2E-10	1486001	701715	0' - 598'	174.2	SM 7500 Ra-B	IML
5368-33-14SM	SM	4Q13	10/26/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1486001	701715	0' - 598'	174.2	SM 7500 Ra-B	IML
5368-33-14SM	SM	4Q13	10/26/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1486001	701715	0' - 598'	174.2	Ga-Tech	IML
5368-33-14SM	SM	4Q13	10/26/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486001	701715	0' - 598'	174.2	ACW10	IML
5368-33-14SM	SM	4Q13	10/26/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1486001	701715	0' - 598'	174.2	ACW10	IML
5368-33-14SM	SM	4Q13	10/26/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1486001	701715	0' - 598'	174.2	EPA 200.8	IML
5368-33-14SM	SM	4Q13	10/26/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1486001	701715	0' - 598'	174.2	EPA 200.8	IML
5368-41-23OZ	OZ	1Q13	4/2/2013	Gross Alpha	10.5	pCi/l	2	2.2	NA	1.05E-08	1483419	703122	0' - 745'	272.18	SM 7110B	IML
5368-41-23OZ	OZ	1Q13	4/2/2013	Gross Beta	3.3	pCi/l	3	2.6	NA	3.3E-09	1483419	703122	0' - 745'	272.18	SM 7110B	IML
5368-41-23OZ	OZ	1Q13	4/2/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1483419	703122	0' - 745'	272.18	EPA 901.1M	IML
5368-41-23OZ	OZ	1Q13	4/2/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1483419	703122	0' - 745'	272.18	OTW01	IML
5368-41-23OZ	OZ	1Q13	4/2/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1483419	703122	0' - 745'	272.18	OTW01	IML
5368-41-23OZ	OZ	1Q13	4/2/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1483419	703122	0' - 745'	272.18	OTW01	IML
5368-41-23OZ	OZ	1Q13	4/2/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1483419	703122	0' - 745'	272.18	OTW01	IML
5368-41-23OZ	OZ	1Q13	4/2/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1483419	703122	0' - 745'	272.18	SM 7500 Ra-B	IML
5368-41-23OZ	OZ	1Q13	4/2/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483419	703122	0' - 745'	272.18	SM 7500 Ra-B	IML
5368-41-23OZ	OZ	1Q13	4/2/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1483419	703122	0' - 745'	272.18	Ga-Tech	IML
5368-41-23OZ	OZ	1Q13	4/2/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483419	703122	0' - 745'	272.18	ACW10	IML
5368-41-23OZ	OZ	1Q13	4/2/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483419	703122	0' - 745'	272.18	ACW10	IML
5368-41-23OZ	OZ	1Q13	4/2/2013	U, D	0.008	mg/l	0.0003	0	3.0E-07	5.42E-09	1483419	703122	0' - 745'	272.18	EPA 200.8	IML
5368-41-23OZ	OZ	1Q13	4/2/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1483419	703122	0' - 745'	272.18	EPA 200.8	IML
5368-41-23OZ	OZ	2Q13	6/27/2013	Gross Alpha	12	pCi/l	2	2.3	NA	1.2E-08	1483419	703122	0' - 745'	271.13	SM 7110B	IML
5368-41-23OZ	OZ	2Q13	6/27/2013	Gross Beta	5.1	pCi/l	4	2.6	NA	5.1E-09	1483419	703122	0' - 745'	271.13	SM 7110B	IML
5368-41-23OZ	OZ	2Q13	6/27/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483419	703122	0' - 745'	271.13	SM 7500 Ra-B	IML
5368-41-23OZ	OZ	2Q13	6/27/2013	Ra-226, S	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1483419	703122	0' - 745'	271.13	SM 7500 Ra-B	IML
5368-41-23OZ	OZ	2Q13	6/27/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1483419	703122	0' - 745'	271.13	Ga-Tech	IML
5368-41-23OZ	OZ	2Q13	6/27/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483419	703122	0' - 745'	271.13	ACW10	IML
5368-41-23OZ	OZ	2Q13	6/27/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483419	703122	0' - 745'	271.13	ACW10	IML
5368-41-23OZ	OZ	2Q13	6/27/2013	U, D	0.006	mg/l	0.0003	0	3.0E-07	4.06E-09	1483419	703122	0' - 745'	271.13	EPA 200.8	IML
5368-41-23OZ	OZ	2Q13	6/27/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1483419	703122	0' - 745'	271.13	EPA 200.8	IML
5368-41-23OZ	OZ	3Q13	8/26/2013	Gross Alpha	5.9	pCi/l	3	2	NA	5.9E-09	1483419	703122	0' - 745'	270.45	SM 7110B	IML
5368-41-23OZ	OZ	3Q13	8/26/2013	Gross Beta	<4	pCi/l	4	0	NA	NA	1483419	703122	0' - 745'	270.45	SM 7110B	IML
5368-41-23OZ	OZ	3Q13	8/26/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483419	703122	0' - 745'	270.45	SM 7500 Ra-B	IML
5368-41-23OZ	OZ	3Q13	8/26/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483419	703122	0' - 745'	270.45	SM 7500 Ra-B	IML
5368-41-23OZ	OZ	3Q13	8/26/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1483419	703122	0' - 745'	270.45	Ga-Tech	IML
5368-41-23OZ	OZ	3Q13	8/26/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483419	703122	0' - 745'	270.45	ACW10	IML
5368-41-23OZ	OZ	3Q13	8/26/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483419	703122	0' - 745'	270.45	ACW10	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-41-23OZ	OZ	3Q13	8/26/2013	U, D	0.0025	mg/l	0.0003	0	3.0E-07	1.69E-09	1483419	703122	0' - 745'	270.45	EPA 200.8	IML
5368-41-23OZ	OZ	3Q13	8/26/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1483419	703122	0' - 745'	270.45	EPA 200.8	IML
5368-41-23OZ	OZ	4Q13	10/27/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1483419	703122	0' - 745'	271.09	SM 7110B	IML
5368-41-23OZ	OZ	4Q13	10/27/2013	Gross Beta	<3	pCi/l	3	0	NA	NA	1483419	703122	0' - 745'	271.09	SM 7110B	IML
5368-41-23OZ	OZ	4Q13	10/27/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483419	703122	0' - 745'	271.09	SM 7500 Ra-B	IML
5368-41-23OZ	OZ	4Q13	10/27/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483419	703122	0' - 745'	271.09	SM 7500 Ra-B	IML
5368-41-23OZ	OZ	4Q13	10/27/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1483419	703122	0' - 745'	271.09	Ga-Tech	IML
5368-41-23OZ	OZ	4Q13	10/27/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483419	703122	0' - 745'	271.09	ACW10	IML
5368-41-23OZ	OZ	4Q13	10/27/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483419	703122	0' - 745'	271.09	ACW10	IML
5368-41-23OZ	OZ	4Q13	10/27/2013	U, D	0.001	mg/l	0.0003	0	3.0E-07	6.77E-10	1483419	703122	0' - 745'	271.09	EPA 200.8	IML
5368-41-23OZ	OZ	4Q13	10/27/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1483419	703122	0' - 745'	271.09	EPA 200.8	IML
5368-41-23SA	SA	1Q13	3/12/2013	Gross Alpha	36.6	pCi/l	2	3.4	NA	3.66E-08	1483381	703155	0' - 60'	83.1	SM 7110B	IML
5368-41-23SA	SA	1Q13	3/12/2013	Gross Beta	29.4	pCi/l	4	2.7	NA	2.94E-08	1483381	703155	0' - 60'	83.1	SM 7110B	IML
5368-41-23SA	SA	1Q13	3/12/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1483381	703155	0' - 60'	83.1	EPA 901.1M	IML
5368-41-23SA	SA	1Q13	3/12/2013	Pb-210, D	1.4	pCi/l	1	0.4	1.0E-08	1.4E-09	1483381	703155	0' - 60'	83.1	OTW01	IML
5368-41-23SA	SA	1Q13	3/12/2013	Pb-210, S	1	pCi/l	1	0.4	1.0E-08	1E-09	1483381	703155	0' - 60'	83.1	OTW01	IML
5368-41-23SA	SA	1Q13	3/12/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1483381	703155	0' - 60'	83.1	OTW01	IML
5368-41-23SA	SA	1Q13	3/12/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1483381	703155	0' - 60'	83.1	OTW01	IML
5368-41-23SA	SA	1Q13	3/12/2013	Ra-226, D	0.8	pCi/l	0.2	0.1	6.0E-08	8E-10	1483381	703155	0' - 60'	83.1	SM 7500 Ra-B	IML
5368-41-23SA	SA	1Q13	3/12/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483381	703155	0' - 60'	83.1	SM 7500 Ra-B	IML
5368-41-23SA	SA	1Q13	3/12/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1483381	703155	0' - 60'	83.1	Ga-Tech	IML
5368-41-23SA	SA	1Q13	3/12/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483381	703155	0' - 60'	83.1	ACW10	IML
5368-41-23SA	SA	1Q13	3/12/2013	Th-230, S	0.5	pCi/l	0.2	0.1	1.0E-07	5E-10	1483381	703155	0' - 60'	83.1	ACW10	IML
5368-41-23SA	SA	1Q13	3/12/2013	U, D	0.0561	mg/l	0.0003	0	3.0E-07	3.80E-08	1483381	703155	0' - 60'	83.1	EPA 200.8	IML
5368-41-23SA	SA	1Q13	3/12/2013	U, S	0.0003	mg/l	0.0003	0	3.0E-07	2.03E-10	1483381	703155	0' - 60'	83.1	EPA 200.8	IML
5368-41-23SA	SA	2Q13	6/18/2013	Gross Alpha	44	pCi/l	2	4	NA	4.4E-08	1483381	703155	0' - 60'	83.05	SM 7110B	IML
5368-41-23SA	SA	2Q13	6/18/2013	Gross Beta	33.2	pCi/l	3	2.8	NA	3.32E-08	1483381	703155	0' - 60'	83.05	SM 7110B	IML
5368-41-23SA	SA	2Q13	6/18/2013	Ra-226, D	0.8	pCi/l	0.2	0.1	6.0E-08	8E-10	1483381	703155	0' - 60'	83.05	SM 7500 Ra-B	IML
5368-41-23SA	SA	2Q13	6/18/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483381	703155	0' - 60'	83.05	SM 7500 Ra-B	IML
5368-41-23SA	SA	2Q13	6/18/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1483381	703155	0' - 60'	83.05	Ga-Tech	IML
5368-41-23SA	SA	2Q13	6/18/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483381	703155	0' - 60'	83.05	ACW10	IML
5368-41-23SA	SA	2Q13	6/18/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483381	703155	0' - 60'	83.05	ACW10	IML
5368-41-23SA	SA	2Q13	6/18/2013	U, D	0.0534	mg/l	0.0003	0	3.0E-07	3.62E-08	1483381	703155	0' - 60'	83.05	EPA 200.8	IML
5368-41-23SA	SA	2Q13	6/18/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1483381	703155	0' - 60'	83.05	EPA 200.8	IML
5368-41-23SA	SA	3Q13	8/21/2013	Gross Alpha	49.4	pCi/l	2	4.2	NA	4.94E-08	1483381	703155	0' - 60'	83.91	SM 7110B	IML
5368-41-23SA	SA	3Q13	8/21/2013	Gross Beta	34.3	pCi/l	3	2.8	NA	3.43E-08	1483381	703155	0' - 60'	83.91	SM 7110B	IML
5368-41-23SA	SA	3Q13	8/21/2013	Ra-226, D	0.7	pCi/l	0.2	0.1	6.0E-08	7E-10	1483381	703155	0' - 60'	83.91	SM 7500 Ra-B	IML
5368-41-23SA	SA	3Q13	8/21/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483381	703155	0' - 60'	83.91	SM 7500 Ra-B	IML
5368-41-23SA	SA	3Q13	8/21/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1483381	703155	0' - 60'	83.91	Ga-Tech	IML
5368-41-23SA	SA	3Q13	8/21/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483381	703155	0' - 60'	83.91	ACW10	IML
5368-41-23SA	SA	3Q13	8/21/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483381	703155	0' - 60'	83.91	ACW10	IML
5368-41-23SA	SA	3Q13	8/21/2013	U, D	0.0622	mg/l	0.0003	0	3.0E-07	4.21E-08	1483381	703155	0' - 60'	83.91	EPA 200.8	IML
5368-41-23SA	SA	3Q13	8/21/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1483381	703155	0' - 60'	83.91	EPA 200.8	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-41-23SA	SA	4Q13	10/24/2013	Gross Alpha	35.4	pCi/l	3	3.8	NA	3.54E-08	1483381	703155	0' - 60'	83.43	SM 7110B	IML
5368-41-23SA	SA	4Q13	10/24/2013	Gross Beta	26.3	pCi/l	5	3.2	NA	2.63E-08	1483381	703155	0' - 60'	83.43	SM 7110B	IML
5368-41-23SA	SA	4Q13	10/24/2013	Ra-226, D	0.8	pCi/l	0.2	0.1	6.0E-08	8E-10	1483381	703155	0' - 60'	83.43	SM 7500 Ra-B	IML
5368-41-23SA	SA	4Q13	10/24/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483381	703155	0' - 60'	83.43	SM 7500 Ra-B	IML
5368-41-23SA	SA	4Q13	10/24/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1483381	703155	0' - 60'	83.43	Ga-Tech	IML
5368-41-23SA	SA	4Q13	10/24/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483381	703155	0' - 60'	83.43	ACW10	IML
5368-41-23SA	SA	4Q13	10/24/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483381	703155	0' - 60'	83.43	ACW10	IML
5368-41-23SA	SA	4Q13	10/24/2013	U, D	0.0626	mg/l	0.0003	0	3.0E-07	4.24E-08	1483381	703155	0' - 60'	83.43	EPA 200.8	IML
5368-41-23SA	SA	4Q13	10/24/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1483381	703155	0' - 60'	83.43	EPA 200.8	IML
5368-41-23SM	SM	1Q13	4/2/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1483411	703195	0' - 690'	238.85	SM 7110B	IML
5368-41-23SM	SM	1Q13	4/2/2013	Gross Beta	4	pCi/l	3	2.6	NA	4E-09	1483411	703195	0' - 690'	238.85	SM 7110B	IML
5368-41-23SM	SM	1Q13	4/2/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1483411	703195	0' - 690'	238.85	EPA 901.1M	IML
5368-41-23SM	SM	1Q13	4/2/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1483411	703195	0' - 690'	238.85	OTW01	IML
5368-41-23SM	SM	1Q13	4/2/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1483411	703195	0' - 690'	238.85	OTW01	IML
5368-41-23SM	SM	1Q13	4/2/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1483411	703195	0' - 690'	238.85	OTW01	IML
5368-41-23SM	SM	1Q13	4/2/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1483411	703195	0' - 690'	238.85	OTW01	IML
5368-41-23SM	SM	1Q13	4/2/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483411	703195	0' - 690'	238.85	SM 7500 Ra-B	IML
5368-41-23SM	SM	1Q13	4/2/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483411	703195	0' - 690'	238.85	SM 7500 Ra-B	IML
5368-41-23SM	SM	1Q13	4/2/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1483411	703195	0' - 690'	238.85	Ga-Tech	IML
5368-41-23SM	SM	1Q13	4/2/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483411	703195	0' - 690'	238.85	ACW10	IML
5368-41-23SM	SM	1Q13	4/2/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483411	703195	0' - 690'	238.85	ACW10	IML
5368-41-23SM	SM	1Q13	4/2/2013	U, D	0.0003	mg/l	0.0003	0	3.0E-07	2.03E-10	1483411	703195	0' - 690'	238.85	EPA 200.8	IML
5368-41-23SM	SM	1Q13	4/2/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1483411	703195	0' - 690'	238.85	EPA 200.8	IML
5368-41-23SM	SM	2Q13	6/27/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1483411	703195	0' - 690'	237.63	SM 7110B	IML
5368-41-23SM	SM	2Q13	6/27/2013	Gross Beta	<4	pCi/l	4	0	NA	NA	1483411	703195	0' - 690'	237.63	SM 7110B	IML
5368-41-23SM	SM	2Q13	6/27/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483411	703195	0' - 690'	237.63	SM 7500 Ra-B	IML
5368-41-23SM	SM	2Q13	6/27/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483411	703195	0' - 690'	237.63	SM 7500 Ra-B	IML
5368-41-23SM	SM	2Q13	6/27/2013	Ra-228, D	2.1	pCi/l	1	1	6.0E-08	2.1E-09	1483411	703195	0' - 690'	237.63	Ga-Tech	IML
5368-41-23SM	SM	2Q13	6/27/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483411	703195	0' - 690'	237.63	ACW10	IML
5368-41-23SM	SM	2Q13	6/27/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483411	703195	0' - 690'	237.63	ACW10	IML
5368-41-23SM	SM	2Q13	6/27/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1483411	703195	0' - 690'	237.63	EPA 200.8	IML
5368-41-23SM	SM	2Q13	6/27/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1483411	703195	0' - 690'	237.63	EPA 200.8	IML
5368-41-23SM	SM	3Q13	8/26/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1483411	703195	0' - 690'	236.13	SM 7110B	IML
5368-41-23SM	SM	3Q13	8/26/2013	Gross Beta	<4	pCi/l	4	0	NA	NA	1483411	703195	0' - 690'	236.13	SM 7110B	IML
5368-41-23SM	SM	3Q13	8/26/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483411	703195	0' - 690'	236.13	SM 7500 Ra-B	IML
5368-41-23SM	SM	3Q13	8/26/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483411	703195	0' - 690'	236.13	SM 7500 Ra-B	IML
5368-41-23SM	SM	3Q13	8/26/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1483411	703195	0' - 690'	236.13	Ga-Tech	IML
5368-41-23SM	SM	3Q13	8/26/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483411	703195	0' - 690'	236.13	ACW10	IML
5368-41-23SM	SM	3Q13	8/26/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483411	703195	0' - 690'	236.13	ACW10	IML
5368-41-23SM	SM	3Q13	8/26/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1483411	703195	0' - 690'	236.13	EPA 200.8	IML
5368-41-23SM	SM	3Q13	8/26/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1483411	703195	0' - 690'	236.13	EPA 200.8	IML
5368-41-23SM	SM	4Q13	10/27/2013	Gross Alpha	4.4	pCi/l	2	1.8	NA	4.4E-09	1483411	703195	0' - 690'	235.05	SM 7110B	IML
5368-41-23SM	SM	4Q13	10/27/2013	Gross Beta	<3	pCi/l	3	0	NA	NA	1483411	703195	0' - 690'	235.05	SM 7110B	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-41-23SM	SM	4Q13	10/27/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483411	703195	0' - 690'	235.05	SM 7500 Ra-B	IML
5368-41-23SM	SM	4Q13	10/27/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1483411	703195	0' - 690'	235.05	SM 7500 Ra-B	IML
5368-41-23SM	SM	4Q13	10/27/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1483411	703195	0' - 690'	235.05	Ga-Tech	IML
5368-41-23SM	SM	4Q13	10/27/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483411	703195	0' - 690'	235.05	ACW10	IML
5368-41-23SM	SM	4Q13	10/27/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1483411	703195	0' - 690'	235.05	ACW10	IML
5368-41-23SM	SM	4Q13	10/27/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1483411	703195	0' - 690'	235.05	EPA 200.8	IML
5368-41-23SM	SM	4Q13	10/27/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1483411	703195	0' - 690'	235.05	EPA 200.8	IML
5368-41-36OZ	OZ	1Q13	3/27/2013	Gross Alpha	43.9	pCi/l	2	3.8	NA	4.39E-08	1473122	708050	0' - 665'	363.65	SM 7110B	IML
5368-41-36OZ	OZ	1Q13	3/27/2013	Gross Beta	9.8	pCi/l	3	2.2	NA	9.8E-09	1473122	708050	0' - 665'	363.65	SM 7110B	IML
5368-41-36OZ	OZ	1Q13	3/27/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1473122	708050	0' - 665'	363.65	EPA 901.1M	IML
5368-41-36OZ	OZ	1Q13	3/27/2013	Pb-210, D	4.9	pCi/l	1	1	1.0E-08	4.9E-09	1473122	708050	0' - 665'	363.65	OTW01	IML
5368-41-36OZ	OZ	1Q13	3/27/2013	Pb-210, S	1.3	pCi/l	1	0.4	1.0E-08	1.3E-09	1473122	708050	0' - 665'	363.65	OTW01	IML
5368-41-36OZ	OZ	1Q13	3/27/2013	Po-210, D	2.6	pCi/l	1	0.8	4.0E-08	2.6E-09	1473122	708050	0' - 665'	363.65	OTW01	IML
5368-41-36OZ	OZ	1Q13	3/27/2013	Po-210, S	3	pCi/l	1	0.4	4.0E-08	3E-09	1473122	708050	0' - 665'	363.65	OTW01	IML
5368-41-36OZ	OZ	1Q13	3/27/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1473122	708050	0' - 665'	363.65	SM 7500 Ra-B	IML
5368-41-36OZ	OZ	1Q13	3/27/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1473122	708050	0' - 665'	363.65	SM 7500 Ra-B	IML
5368-41-36OZ	OZ	1Q13	3/27/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1473122	708050	0' - 665'	363.65	Ga-Tech	IML
5368-41-36OZ	OZ	1Q13	3/27/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1473122	708050	0' - 665'	363.65	ACW10	IML
5368-41-36OZ	OZ	1Q13	3/27/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1473122	708050	0' - 665'	363.65	ACW10	IML
5368-41-36OZ	OZ	1Q13	3/27/2013	U, D	0.0291	mg/l	0.0003	0	3.0E-07	1.97E-08	1473122	708050	0' - 665'	363.65	EPA 200.8	IML
5368-41-36OZ	OZ	1Q13	3/27/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1473122	708050	0' - 665'	363.65	EPA 200.8	IML
5368-41-36OZ	OZ	2Q13	6/24/2013	Gross Alpha	19.4	pCi/l	3	2.9	NA	1.94E-08	1473122	708050	0' - 665'	362.1	SM 7110B	IML
5368-41-36OZ	OZ	2Q13	6/24/2013	Gross Beta	8.7	pCi/l	4	2.7	NA	8.7E-09	1473122	708050	0' - 665'	362.1	SM 7110B	IML
5368-41-36OZ	OZ	2Q13	6/24/2013	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4E-10	1473122	708050	0' - 665'	362.1	SM 7500 Ra-B	IML
5368-41-36OZ	OZ	2Q13	6/24/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1473122	708050	0' - 665'	362.1	SM 7500 Ra-B	IML
5368-41-36OZ	OZ	2Q13	6/24/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1473122	708050	0' - 665'	362.1	Ga-Tech	IML
5368-41-36OZ	OZ	2Q13	6/24/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1473122	708050	0' - 665'	362.1	ACW10	IML
5368-41-36OZ	OZ	2Q13	6/24/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1473122	708050	0' - 665'	362.1	ACW10	IML
5368-41-36OZ	OZ	2Q13	6/24/2013	U, D	0.0114	mg/l	0.0003	0	3.0E-07	7.72E-09	1473122	708050	0' - 665'	362.1	EPA 200.8	IML
5368-41-36OZ	OZ	2Q13	6/24/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1473122	708050	0' - 665'	362.1	EPA 200.8	IML
5368-41-36OZ	OZ	3Q13	8/23/2013	Gross Alpha	19.5	pCi/l	3	3.4	NA	1.95E-08	1473122	708050	0' - 665'	361.7	SM 7110B	IML
5368-41-36OZ	OZ	3Q13	8/23/2013	Gross Beta	<7	pCi/l	7	0	NA	NA	1473122	708050	0' - 665'	361.7	SM 7110B	IML
5368-41-36OZ	OZ	3Q13	8/23/2013	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4E-10	1473122	708050	0' - 665'	361.7	SM 7500 Ra-B	IML
5368-41-36OZ	OZ	3Q13	8/23/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1473122	708050	0' - 665'	361.7	SM 7500 Ra-B	IML
5368-41-36OZ	OZ	3Q13	8/23/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1473122	708050	0' - 665'	361.7	Ga-Tech	IML
5368-41-36OZ	OZ	3Q13	8/23/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1473122	708050	0' - 665'	361.7	ACW10	IML
5368-41-36OZ	OZ	3Q13	8/23/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1473122	708050	0' - 665'	361.7	ACW10	IML
5368-41-36OZ	OZ	3Q13	8/23/2013	U, D	0.0132	mg/l	0.0003	0	3.0E-07	8.94E-09	1473122	708050	0' - 665'	361.7	EPA 200.8	IML
5368-41-36OZ	OZ	3Q13	8/23/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1473122	708050	0' - 665'	361.7	EPA 200.8	IML
5368-41-36OZ	OZ	4Q13	10/22/2013	Gross Alpha	19.6	pCi/l	3	3.5	NA	1.96E-08	1473122	708050	0' - 665'	360.85	SM 7110B	IML
5368-41-36OZ	OZ	4Q13	10/22/2013	Gross Beta	<6	pCi/l	6	0	NA	NA	1473122	708050	0' - 665'	360.85	SM 7110B	IML
5368-41-36OZ	OZ	4Q13	10/22/2013	Ra-226, D	0.5	pCi/l	0.2	0.1	6.0E-08	5E-10	1473122	708050	0' - 665'	360.85	SM 7500 Ra-B	IML
5368-41-36OZ	OZ	4Q13	10/22/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1473122	708050	0' - 665'	360.85	SM 7500 Ra-B	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-41-36OZ	OZ	4Q13	10/22/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1473122	708050	0' - 665'	360.85	Ga-Tech	IML
5368-41-36OZ	OZ	4Q13	10/22/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1473122	708050	0' - 665'	360.85	ACW10	IML
5368-41-36OZ	OZ	4Q13	10/22/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1473122	708050	0' - 665'	360.85	ACW10	IML
5368-41-36OZ	OZ	4Q13	10/22/2013	U, D	0.01	mg/l	0.0003	0	3.0E-07	6.77E-09	1473122	708050	0' - 665'	360.85	EPA 200.8	IML
5368-41-36OZ	OZ	4Q13	10/22/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1473122	708050	0' - 665'	360.85	EPA 200.8	IML
5368-41-36SM	SM	1Q13	3/27/2013	Gross Alpha	2.1	pCi/l	2	1.4	NA	2.1E-09	1473122	708121	0' - 540'	321.18	SM 7110B	IML
5368-41-36SM	SM	1Q13	3/27/2013	Gross Beta	6.1	pCi/l	3	2.3	NA	6.1E-09	1473122	708121	0' - 540'	321.18	SM 7110B	IML
5368-41-36SM	SM	1Q13	3/27/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1473122	708121	0' - 540'	321.18	EPA 901.1M	IML
5368-41-36SM	SM	1Q13	3/27/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1473122	708121	0' - 540'	321.18	OTW01	IML
5368-41-36SM	SM	1Q13	3/27/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1473122	708121	0' - 540'	321.18	OTW01	IML
5368-41-36SM	SM	1Q13	3/27/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1473122	708121	0' - 540'	321.18	OTW01	IML
5368-41-36SM	SM	1Q13	3/27/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1473122	708121	0' - 540'	321.18	OTW01	IML
5368-41-36SM	SM	1Q13	3/27/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1473122	708121	0' - 540'	321.18	SM 7500 Ra-B	IML
5368-41-36SM	SM	1Q13	3/27/2013	Ra-226, S	0.2	pCi/l	0.2	0.1	6.0E-08	2E-10	1473122	708121	0' - 540'	321.18	SM 7500 Ra-B	IML
5368-41-36SM	SM	1Q13	3/27/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1473122	708121	0' - 540'	321.18	Ga-Tech	IML
5368-41-36SM	SM	1Q13	3/27/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1473122	708121	0' - 540'	321.18	ACW10	IML
5368-41-36SM	SM	1Q13	3/27/2013	Th-230, S	0.2	pCi/l	0.2	0.1	1.0E-07	2E-10	1473122	708121	0' - 540'	321.18	ACW10	IML
5368-41-36SM	SM	1Q13	3/27/2013	U, D	0.0005	mg/l	0.0003	0	3.0E-07	3.39E-10	1473122	708121	0' - 540'	321.18	EPA 200.8	IML
5368-41-36SM	SM	1Q13	3/27/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1473122	708121	0' - 540'	321.18	EPA 200.8	IML
5368-41-36SM	SM	2Q13	6/24/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1473122	708121	0' - 540'	320.29	SM 7110B	IML
5368-41-36SM	SM	2Q13	6/24/2013	Gross Beta	7.9	pCi/l	4	2.7	NA	7.9E-09	1473122	708121	0' - 540'	320.29	SM 7110B	IML
5368-41-36SM	SM	2Q13	6/24/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1473122	708121	0' - 540'	320.29	SM 7500 Ra-B	IML
5368-41-36SM	SM	2Q13	6/24/2013	Ra-226, S	0.4	pCi/l	0.2	0.1	6.0E-08	4E-10	1473122	708121	0' - 540'	320.29	SM 7500 Ra-B	IML
5368-41-36SM	SM	2Q13	6/24/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1473122	708121	0' - 540'	320.29	Ga-Tech	IML
5368-41-36SM	SM	2Q13	6/24/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1473122	708121	0' - 540'	320.29	ACW10	IML
5368-41-36SM	SM	2Q13	6/24/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1473122	708121	0' - 540'	320.29	ACW10	IML
5368-41-36SM	SM	2Q13	6/24/2013	U, D	0.0005	mg/l	0.0003	0	3.0E-07	3.39E-10	1473122	708121	0' - 540'	320.29	EPA 200.8	IML
5368-41-36SM	SM	2Q13	6/24/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1473122	708121	0' - 540'	320.29	EPA 200.8	IML
5368-41-36SM	SM	3Q13	8/23/2013	Gross Alpha	<4	pCi/l	4	0	NA	NA	1473122	708121	0' - 540'	319.83	SM 7110B	IML
5368-41-36SM	SM	3Q13	8/23/2013	Gross Beta	<6	pCi/l	6	0	NA	NA	1473122	708121	0' - 540'	319.83	SM 7110B	IML
5368-41-36SM	SM	3Q13	8/23/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1473122	708121	0' - 540'	319.83	SM 7500 Ra-B	IML
5368-41-36SM	SM	3Q13	8/23/2013	Ra-226, S	0.2	pCi/l	0.2	0.1	6.0E-08	2E-10	1473122	708121	0' - 540'	319.83	SM 7500 Ra-B	IML
5368-41-36SM	SM	3Q13	8/23/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1473122	708121	0' - 540'	319.83	Ga-Tech	IML
5368-41-36SM	SM	3Q13	8/23/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1473122	708121	0' - 540'	319.83	ACW10	IML
5368-41-36SM	SM	3Q13	8/23/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1473122	708121	0' - 540'	319.83	ACW10	IML
5368-41-36SM	SM	3Q13	8/23/2013	U, D	0.0004	mg/l	0.0003	0	3.0E-07	2.71E-10	1473122	708121	0' - 540'	319.83	EPA 200.8	IML
5368-41-36SM	SM	3Q13	8/23/2013	U, S	0.0004	mg/l	0.0003	0	3.0E-07	2.71E-10	1473122	708121	0' - 540'	319.83	EPA 200.8	IML
5368-41-36SM	SM	4Q13	10/22/2013	Gross Alpha	<3	pCi/l	3	0	NA	NA	1473122	708121	0' - 540'	318.97	SM 7110B	IML
5368-41-36SM	SM	4Q13	10/22/2013	Gross Beta	7.2	pCi/l	5	3.1	NA	7.2E-09	1473122	708121	0' - 540'	318.97	SM 7110B	IML
5368-41-36SM	SM	4Q13	10/22/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1473122	708121	0' - 540'	318.97	SM 7500 Ra-B	IML
5368-41-36SM	SM	4Q13	10/22/2013	Ra-226, S	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1473122	708121	0' - 540'	318.97	SM 7500 Ra-B	IML
5368-41-36SM	SM	4Q13	10/22/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1473122	708121	0' - 540'	318.97	Ga-Tech	IML
5368-41-36SM	SM	4Q13	10/22/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1473122	708121	0' - 540'	318.97	ACW10	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-41-36SM	SM	4Q13	10/22/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1473122	708121	0' - 540'	318.97	ACW10	IML
5368-41-36SM	SM	4Q13	10/22/2013	U, D	0.0004	mg/l	0.0003	0	3.0E-07	2.71E-10	1473122	708121	0' - 540'	318.97	EPA 200.8	IML
5368-41-36SM	SM	4Q13	10/22/2013	U, S	0.0004	mg/l	0.0003	0	3.0E-07	2.71E-10	1473122	708121	0' - 540'	318.97	EPA 200.8	IML
5368-43-12OZ	OZ	1Q13	3/28/2013	Gross Alpha	32.8	pCi/l	4	4.8	NA	3.28E-08	1491413	708612	0' - 630'	247.31	SM 7110B	IML
5368-43-12OZ	OZ	1Q13	3/28/2013	Gross Beta	13.5	pCi/l	7	4.1	NA	1.35E-08	1491413	708612	0' - 630'	247.31	SM 7110B	IML
5368-43-12OZ	OZ	1Q13	3/28/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1491413	708612	0' - 630'	247.31	EPA 901.1M	IML
5368-43-12OZ	OZ	1Q13	3/28/2013	Pb-210, D	2.4	pCi/l	1	0.4	1.0E-08	2.4E-09	1491413	708612	0' - 630'	247.31	OTW01	IML
5368-43-12OZ	OZ	1Q13	3/28/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1491413	708612	0' - 630'	247.31	OTW01	IML
5368-43-12OZ	OZ	1Q13	3/28/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1491413	708612	0' - 630'	247.31	OTW01	IML
5368-43-12OZ	OZ	1Q13	3/28/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1491413	708612	0' - 630'	247.31	OTW01	IML
5368-43-12OZ	OZ	1Q13	3/28/2013	Ra-226, D	0.5	pCi/l	0.2	0.1	6.0E-08	5E-10	1491413	708612	0' - 630'	247.31	SM 7500 Ra-B	IML
5368-43-12OZ	OZ	1Q13	3/28/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1491413	708612	0' - 630'	247.31	SM 7500 Ra-B	IML
5368-43-12OZ	OZ	1Q13	3/28/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1491413	708612	0' - 630'	247.31	Ga-Tech	IML
5368-43-12OZ	OZ	1Q13	3/28/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491413	708612	0' - 630'	247.31	ACW10	IML
5368-43-12OZ	OZ	1Q13	3/28/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491413	708612	0' - 630'	247.31	ACW10	IML
5368-43-12OZ	OZ	1Q13	3/28/2013	U, D	0.018	mg/l	0.0003	0	3.0E-07	1.22E-08	1491413	708612	0' - 630'	247.31	EPA 200.8	IML
5368-43-12OZ	OZ	1Q13	3/28/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1491413	708612	0' - 630'	247.31	EPA 200.8	IML
5368-43-12OZ	OZ	2Q13	6/27/2013	Gross Alpha	50.9	pCi/l	4	5.7	NA	5.09E-08	1491413	708612	0' - 630'	247.17	SM 7110B	IML
5368-43-12OZ	OZ	2Q13	6/27/2013	Gross Beta	17.5	pCi/l	7	4.3	NA	1.75E-08	1491413	708612	0' - 630'	247.17	SM 7110B	IML
5368-43-12OZ	OZ	2Q13	6/27/2013	Ra-226, D	0.8	pCi/l	0.2	0.1	6.0E-08	8E-10	1491413	708612	0' - 630'	247.17	SM 7500 Ra-B	IML
5368-43-12OZ	OZ	2Q13	6/27/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1491413	708612	0' - 630'	247.17	SM 7500 Ra-B	IML
5368-43-12OZ	OZ	2Q13	6/27/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1491413	708612	0' - 630'	247.17	Ga-Tech	IML
5368-43-12OZ	OZ	2Q13	6/27/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491413	708612	0' - 630'	247.17	ACW10	IML
5368-43-12OZ	OZ	2Q13	6/27/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491413	708612	0' - 630'	247.17	ACW10	IML
5368-43-12OZ	OZ	2Q13	6/27/2013	U, D	0.0231	mg/l	0.0003	0	3.0E-07	1.56E-08	1491413	708612	0' - 630'	247.17	EPA 200.8	IML
5368-43-12OZ	OZ	2Q13	6/27/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1491413	708612	0' - 630'	247.17	EPA 200.8	IML
5368-43-12OZ	OZ	3Q13	8/27/2013	Gross Alpha	43	pCi/l	4	5.1	NA	4.3E-08	1491413	708612	0' - 630'	246.69	SM 7110B	IML
5368-43-12OZ	OZ	3Q13	8/27/2013	Gross Beta	13.7	pCi/l	7	4.3	NA	1.37E-08	1491413	708612	0' - 630'	246.69	SM 7110B	IML
5368-43-12OZ	OZ	3Q13	8/27/2013	Ra-226, D	0.7	pCi/l	0.2	0.1	6.0E-08	7E-10	1491413	708612	0' - 630'	246.69	SM 7500 Ra-B	IML
5368-43-12OZ	OZ	3Q13	8/27/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1491413	708612	0' - 630'	246.69	SM 7500 Ra-B	IML
5368-43-12OZ	OZ	3Q13	8/27/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1491413	708612	0' - 630'	246.69	Ga-Tech	IML
5368-43-12OZ	OZ	3Q13	8/27/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491413	708612	0' - 630'	246.69	ACW10	IML
5368-43-12OZ	OZ	3Q13	8/27/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491413	708612	0' - 630'	246.69	ACW10	IML
5368-43-12OZ	OZ	3Q13	8/27/2013	U, D	0.0168	mg/l	0.0003	0	3.0E-07	1.14E-08	1491413	708612	0' - 630'	246.69	EPA 200.8	IML
5368-43-12OZ	OZ	3Q13	8/27/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1491413	708612	0' - 630'	246.69	EPA 200.8	IML
5368-43-12OZ	OZ	4Q13	10/26/2013	Gross Alpha	40.8	pCi/l	2	5.8	NA	4.08E-08	1491413	708612	0' - 630'	246.08	SM 7110B	IML
5368-43-12OZ	OZ	4Q13	10/26/2013	Gross Beta	19.1	pCi/l	3	5.3	NA	1.91E-08	1491413	708612	0' - 630'	246.08	SM 7110B	IML
5368-43-12OZ	OZ	4Q13	10/26/2013	Ra-226, D	0.8	pCi/l	0.2	0.1	6.0E-08	8E-10	1491413	708612	0' - 630'	246.08	SM 7500 Ra-B	IML
5368-43-12OZ	OZ	4Q13	10/26/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1491413	708612	0' - 630'	246.08	SM 7500 Ra-B	IML
5368-43-12OZ	OZ	4Q13	10/26/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1491413	708612	0' - 630'	246.08	Ga-Tech	IML
5368-43-12OZ	OZ	4Q13	10/26/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491413	708612	0' - 630'	246.08	ACW10	IML
5368-43-12OZ	OZ	4Q13	10/26/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491413	708612	0' - 630'	246.08	ACW10	IML
5368-43-12OZ	OZ	4Q13	10/26/2013	U, D	0.0185	mg/l	0.0003	0	3.0E-07	1.25E-08	1491413	708612	0' - 630'	246.08	EPA 200.8	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-43-12OZ	OZ	4Q13	10/26/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1491413	708612	0' - 630'	246.08	EPA 200.8	IML
5368-43-12SM	SM	1Q13	3/28/2013	Gross Alpha	<3	pCi/l	3	0	NA	NA	1491393	708682	0' - 425'	191.66	SM 7110B	IML
5368-43-12SM	SM	1Q13	3/28/2013	Gross Beta	17.1	pCi/l	4	2.8	NA	1.71E-08	1491393	708682	0' - 425'	191.66	SM 7110B	IML
5368-43-12SM	SM	1Q13	3/28/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1491393	708682	0' - 425'	191.66	EPA 901.1M	IML
5368-43-12SM	SM	1Q13	3/28/2013	Pb-210, D	3	pCi/l	1	0.4	1.0E-08	3E-09	1491393	708682	0' - 425'	191.66	OTW01	IML
5368-43-12SM	SM	1Q13	3/28/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1491393	708682	0' - 425'	191.66	OTW01	IML
5368-43-12SM	SM	1Q13	3/28/2013	Po-210, D	1	pCi/l	1	0.8	4.0E-08	1E-09	1491393	708682	0' - 425'	191.66	OTW01	IML
5368-43-12SM	SM	1Q13	3/28/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1491393	708682	0' - 425'	191.66	OTW01	IML
5368-43-12SM	SM	1Q13	3/28/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1491393	708682	0' - 425'	191.66	SM 7500 Ra-B	IML
5368-43-12SM	SM	1Q13	3/28/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1491393	708682	0' - 425'	191.66	SM 7500 Ra-B	IML
5368-43-12SM	SM	1Q13	3/28/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1491393	708682	0' - 425'	191.66	Ga-Tech	IML
5368-43-12SM	SM	1Q13	3/28/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491393	708682	0' - 425'	191.66	ACW10	IML
5368-43-12SM	SM	1Q13	3/28/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491393	708682	0' - 425'	191.66	ACW10	IML
5368-43-12SM	SM	1Q13	3/28/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1491393	708682	0' - 425'	191.66	EPA 200.8	IML
5368-43-12SM	SM	1Q13	3/28/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1491393	708682	0' - 425'	191.66	EPA 200.8	IML
5368-43-12SM	SM	2Q13	6/27/2013	Gross Alpha	<3	pCi/l	3	0	NA	NA	1491393	708682	0' - 425'	191.5	SM 7110B	IML
5368-43-12SM	SM	2Q13	6/27/2013	Gross Beta	10.6	pCi/l	6	3.7	NA	1.06E-08	1491393	708682	0' - 425'	191.5	SM 7110B	IML
5368-43-12SM	SM	2Q13	6/27/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1491393	708682	0' - 425'	191.5	SM 7500 Ra-B	IML
5368-43-12SM	SM	2Q13	6/27/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1491393	708682	0' - 425'	191.5	SM 7500 Ra-B	IML
5368-43-12SM	SM	2Q13	6/27/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1491393	708682	0' - 425'	191.5	Ga-Tech	IML
5368-43-12SM	SM	2Q13	6/27/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491393	708682	0' - 425'	191.5	ACW10	IML
5368-43-12SM	SM	2Q13	6/27/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491393	708682	0' - 425'	191.5	ACW10	IML
5368-43-12SM	SM	2Q13	6/27/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1491393	708682	0' - 425'	191.5	EPA 200.8	IML
5368-43-12SM	SM	2Q13	6/27/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1491393	708682	0' - 425'	191.5	EPA 200.8	IML
5368-43-12SM	SM	3Q13	8/27/2013	Gross Alpha	3.3	pCi/l	3	2	NA	3.3E-09	1491393	708682	0' - 425'	191.37	SM 7110B	IML
5368-43-12SM	SM	3Q13	8/27/2013	Gross Beta	13.5	pCi/l	6	3.7	NA	1.35E-08	1491393	708682	0' - 425'	191.37	SM 7110B	IML
5368-43-12SM	SM	3Q13	8/27/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1491393	708682	0' - 425'	191.37	SM 7500 Ra-B	IML
5368-43-12SM	SM	3Q13	8/27/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1491393	708682	0' - 425'	191.37	SM 7500 Ra-B	IML
5368-43-12SM	SM	3Q13	8/27/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1491393	708682	0' - 425'	191.37	Ga-Tech	IML
5368-43-12SM	SM	3Q13	8/27/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491393	708682	0' - 425'	191.37	ACW10	IML
5368-43-12SM	SM	3Q13	8/27/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491393	708682	0' - 425'	191.37	ACW10	IML
5368-43-12SM	SM	3Q13	8/27/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1491393	708682	0' - 425'	191.37	EPA 200.8	IML
5368-43-12SM	SM	3Q13	8/27/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1491393	708682	0' - 425'	191.37	EPA 200.8	IML
5368-43-12SM	SM	4Q13	10/26/2013	Gross Alpha	2.2	pCi/l	2	4.8	NA	2.2E-09	1491393	708682	0' - 425'	194.08	SM 7110B	IML
5368-43-12SM	SM	4Q13	10/26/2013	Gross Beta	8.1	pCi/l	3	4.4	NA	8.1E-09	1491393	708682	0' - 425'	194.08	SM 7110B	IML
5368-43-12SM	SM	4Q13	10/26/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1491393	708682	0' - 425'	194.08	SM 7500 Ra-B	IML
5368-43-12SM	SM	4Q13	10/26/2013	Ra-226, S	0.3	pCi/l	0.2	0.2	6.0E-08	3E-10	1491393	708682	0' - 425'	194.08	SM 7500 Ra-B	IML
5368-43-12SM	SM	4Q13	10/26/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1491393	708682	0' - 425'	194.08	Ga-Tech	IML
5368-43-12SM	SM	4Q13	10/26/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491393	708682	0' - 425'	194.08	ACW10	IML
5368-43-12SM	SM	4Q13	10/26/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1491393	708682	0' - 425'	194.08	ACW10	IML
5368-43-12SM	SM	4Q13	10/26/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1491393	708682	0' - 425'	194.08	EPA 200.8	IML
5368-43-12SM	SM	4Q13	10/26/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1491393	708682	0' - 425'	194.08	EPA 200.8	IML
5368-43-24OZ	OZ	1Q13	3/25/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1481117	707588	0' - 563'	238.24	SM 7110B	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-43-24OZ	OZ	1Q13	3/25/2013	Gross Beta	9.3	pCi/l	3	3.4	NA	9.3E-09	1481117	707588	0' - 563'	238.24	SM 7110B	IML
5368-43-24OZ	OZ	1Q13	3/25/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1481117	707588	0' - 563'	238.24	EPA 901.1M	IML
5368-43-24OZ	OZ	1Q13	3/25/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1481117	707588	0' - 563'	238.24	OTW01	IML
5368-43-24OZ	OZ	1Q13	3/25/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1481117	707588	0' - 563'	238.24	OTW01	IML
5368-43-24OZ	OZ	1Q13	3/25/2013	Po-210, D	2.7	pCi/l	1	0.6	4.0E-08	2.7E-09	1481117	707588	0' - 563'	238.24	OTW01	IML
5368-43-24OZ	OZ	1Q13	3/25/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1481117	707588	0' - 563'	238.24	OTW01	IML
5368-43-24OZ	OZ	1Q13	3/25/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481117	707588	0' - 563'	238.24	SM 7500 Ra-B	IML
5368-43-24OZ	OZ	1Q13	3/25/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481117	707588	0' - 563'	238.24	SM 7500 Ra-B	IML
5368-43-24OZ	OZ	1Q13	3/25/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481117	707588	0' - 563'	238.24	Ga-Tech	IML
5368-43-24OZ	OZ	1Q13	3/25/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481117	707588	0' - 563'	238.24	ACW10	IML
5368-43-24OZ	OZ	1Q13	3/25/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481117	707588	0' - 563'	238.24	ACW10	IML
5368-43-24OZ	OZ	1Q13	3/25/2013	U, D	0.0012	mg/l	0.0003	0	3.0E-07	8.12E-10	1481117	707588	0' - 563'	238.24	EPA 200.8	IML
5368-43-24OZ	OZ	1Q13	3/25/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481117	707588	0' - 563'	238.24	EPA 200.8	IML
5368-43-24OZ	OZ	2Q13	6/25/2013	Gross Alpha	4.5	pCi/l	2	2.3	NA	4.5E-09	1481117	707588	0' - 563'	238.3	SM 7110B	IML
5368-43-24OZ	OZ	2Q13	6/25/2013	Gross Beta	8.6	pCi/l	3	3.5	NA	8.6E-09	1481117	707588	0' - 563'	238.3	SM 7110B	IML
5368-43-24OZ	OZ	2Q13	6/25/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481117	707588	0' - 563'	238.3	SM 7500 Ra-B	IML
5368-43-24OZ	OZ	2Q13	6/25/2013	Ra-226, S	0.2	pCi/l	0.2	0.1	6.0E-08	2E-10	1481117	707588	0' - 563'	238.3	SM 7500 Ra-B	IML
5368-43-24OZ	OZ	2Q13	6/25/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481117	707588	0' - 563'	238.3	Ga-Tech	IML
5368-43-24OZ	OZ	2Q13	6/25/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481117	707588	0' - 563'	238.3	ACW10	IML
5368-43-24OZ	OZ	2Q13	6/25/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481117	707588	0' - 563'	238.3	ACW10	IML
5368-43-24OZ	OZ	2Q13	6/25/2013	U, D	0.0009	mg/l	0.0003	0	3.0E-07	6.09E-10	1481117	707588	0' - 563'	238.3	EPA 200.8	IML
5368-43-24OZ	OZ	2Q13	6/25/2013	U, S	0.0003	mg/l	0.0003	0	3.0E-07	2.03E-10	1481117	707588	0' - 563'	238.3	EPA 200.8	IML
5368-43-24OZ	OZ	3Q13	8/28/2013	Gross Alpha	<4	pCi/l	4	0	NA	NA	1481117	707588	0' - 563'	236.76	SM 7110B	IML
5368-43-24OZ	OZ	3Q13	8/28/2013	Gross Beta	<6	pCi/l	6	0	NA	NA	1481117	707588	0' - 563'	236.76	SM 7110B	IML
5368-43-24OZ	OZ	3Q13	8/28/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481117	707588	0' - 563'	236.76	SM 7500 Ra-B	IML
5368-43-24OZ	OZ	3Q13	8/28/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481117	707588	0' - 563'	236.76	SM 7500 Ra-B	IML
5368-43-24OZ	OZ	3Q13	8/28/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481117	707588	0' - 563'	236.76	Ga-Tech	IML
5368-43-24OZ	OZ	3Q13	8/28/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481117	707588	0' - 563'	236.76	ACW10	IML
5368-43-24OZ	OZ	3Q13	8/28/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481117	707588	0' - 563'	236.76	ACW10	IML
5368-43-24OZ	OZ	3Q13	8/28/2013	U, D	0.001	mg/l	0.0003	0	3.0E-07	6.77E-10	1481117	707588	0' - 563'	236.76	EPA 200.8	IML
5368-43-24OZ	OZ	3Q13	8/28/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481117	707588	0' - 563'	236.76	EPA 200.8	IML
5368-43-24OZ	OZ	4Q13	10/25/2013	Gross Alpha	6	pCi/l	2	2.8	NA	6E-09	1481117	707588	0' - 563'	234.05	SM 7110B	IML
5368-43-24OZ	OZ	4Q13	10/25/2013	Gross Beta	8.3	pCi/l	3	4.1	NA	8.3E-09	1481117	707588	0' - 563'	234.05	SM 7110B	IML
5368-43-24OZ	OZ	4Q13	10/25/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481117	707588	0' - 563'	234.05	SM 7500 Ra-B	IML
5368-43-24OZ	OZ	4Q13	10/25/2013	Ra-226, S	0.5	pCi/l	0.2	0.3	6.0E-08	5E-10	1481117	707588	0' - 563'	234.05	SM 7500 Ra-B	IML
5368-43-24OZ	OZ	4Q13	10/25/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481117	707588	0' - 563'	234.05	Ga-Tech	IML
5368-43-24OZ	OZ	4Q13	10/25/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481117	707588	0' - 563'	234.05	ACW10	IML
5368-43-24OZ	OZ	4Q13	10/25/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481117	707588	0' - 563'	234.05	ACW10	IML
5368-43-24OZ	OZ	4Q13	10/25/2013	U, D	0.0009	mg/l	0.0003	0	3.0E-07	6.09E-10	1481117	707588	0' - 563'	234.05	EPA 200.8	IML
5368-43-24OZ	OZ	4Q13	10/25/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481117	707588	0' - 563'	234.05	EPA 200.8	IML
5368-43-24SA	SA	1Q13	3/11/2013	Gross Alpha	37	pCi/l	2	2.7	NA	3.7E-08	1481079	707619	0' - 30'	30.85	SM 7110B	IML
5368-43-24SA	SA	1Q13	3/11/2013	Gross Beta	21.3	pCi/l	3	1.7	NA	2.13E-08	1481079	707619	0' - 30'	30.85	SM 7110B	IML
5368-43-24SA	SA	1Q13	3/11/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1481079	707619	0' - 30'	30.85	EPA 901.1M	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-43-24SA	SA	1Q13	3/11/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1481079	707619	0' - 30'	30.85	OTW01	IML
5368-43-24SA	SA	1Q13	3/11/2013	Pb-210, S	1.7	pCi/l	1	0.4	1.0E-08	1.7E-09	1481079	707619	0' - 30'	30.85	OTW01	IML
5368-43-24SA	SA	1Q13	3/11/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1481079	707619	0' - 30'	30.85	OTW01	IML
5368-43-24SA	SA	1Q13	3/11/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1481079	707619	0' - 30'	30.85	OTW01	IML
5368-43-24SA	SA	1Q13	3/11/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1481079	707619	0' - 30'	30.85	SM 7500 Ra-B	IML
5368-43-24SA	SA	1Q13	3/11/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481079	707619	0' - 30'	30.85	SM 7500 Ra-B	IML
5368-43-24SA	SA	1Q13	3/11/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481079	707619	0' - 30'	30.85	Ga-Tech	IML
5368-43-24SA	SA	1Q13	3/11/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481079	707619	0' - 30'	30.85	ACW10	IML
5368-43-24SA	SA	1Q13	3/11/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481079	707619	0' - 30'	30.85	ACW10	IML
5368-43-24SA	SA	1Q13	3/11/2013	U, D	0.0561	mg/l	0.0003	0	3.0E-07	3.80E-08	1481079	707619	0' - 30'	30.85	EPA 200.8	IML
5368-43-24SA	SA	1Q13	3/11/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481079	707619	0' - 30'	30.85	EPA 200.8	IML
5368-43-24SA	SA	2Q13	6/20/2013	Gross Alpha	33.1	pCi/l	2	2.6	NA	3.31E-08	1481079	707619	0' - 30'	31.04	SM 7110B	IML
5368-43-24SA	SA	2Q13	6/20/2013	Gross Beta	21.4	pCi/l	3	1.8	NA	2.14E-08	1481079	707619	0' - 30'	31.04	SM 7110B	IML
5368-43-24SA	SA	2Q13	6/20/2013	Ra-226, D	0.6	pCi/l	0.2	0.1	6.0E-08	6E-10	1481079	707619	0' - 30'	31.04	SM 7500 Ra-B	IML
5368-43-24SA	SA	2Q13	6/20/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481079	707619	0' - 30'	31.04	SM 7500 Ra-B	IML
5368-43-24SA	SA	2Q13	6/20/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481079	707619	0' - 30'	31.04	Ga-Tech	IML
5368-43-24SA	SA	2Q13	6/20/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481079	707619	0' - 30'	31.04	ACW10	IML
5368-43-24SA	SA	2Q13	6/20/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481079	707619	0' - 30'	31.04	ACW10	IML
5368-43-24SA	SA	2Q13	6/20/2013	U, D	0.0483	mg/l	0.0003	0	3.0E-07	3.27E-08	1481079	707619	0' - 30'	31.04	EPA 200.8	IML
5368-43-24SA	SA	2Q13	6/20/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481079	707619	0' - 30'	31.04	EPA 200.8	IML
5368-43-24SA	SA	3Q13	8/22/2013	Gross Alpha	39.1	pCi/l	2	2.9	NA	3.91E-08	1481079	707619	0' - 30'	31.17	SM 7110B	IML
5368-43-24SA	SA	3Q13	8/22/2013	Gross Beta	17.7	pCi/l	3	1.8	NA	1.77E-08	1481079	707619	0' - 30'	31.17	SM 7110B	IML
5368-43-24SA	SA	3Q13	8/22/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1481079	707619	0' - 30'	31.17	SM 7500 Ra-B	IML
5368-43-24SA	SA	3Q13	8/22/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481079	707619	0' - 30'	31.17	SM 7500 Ra-B	IML
5368-43-24SA	SA	3Q13	8/22/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481079	707619	0' - 30'	31.17	Ga-Tech	IML
5368-43-24SA	SA	3Q13	8/22/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481079	707619	0' - 30'	31.17	ACW10	IML
5368-43-24SA	SA	3Q13	8/22/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481079	707619	0' - 30'	31.17	ACW10	IML
5368-43-24SA	SA	3Q13	8/22/2013	U, D	0.0581	mg/l	0.0003	0	3.0E-07	3.93E-08	1481079	707619	0' - 30'	31.17	EPA 200.8	IML
5368-43-24SA	SA	3Q13	8/22/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481079	707619	0' - 30'	31.17	EPA 200.8	IML
5368-43-24SA	SA	4Q13	10/24/2013	Gross Alpha	38.1	pCi/l	2	3.4	NA	3.81E-08	1481079	707619	0' - 30'	31.23	SM 7110B	IML
5368-43-24SA	SA	4Q13	10/24/2013	Gross Beta	14.5	pCi/l	4	2.4	NA	1.45E-08	1481079	707619	0' - 30'	31.23	SM 7110B	IML
5368-43-24SA	SA	4Q13	10/24/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3E-10	1481079	707619	0' - 30'	31.23	SM 7500 Ra-B	IML
5368-43-24SA	SA	4Q13	10/24/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481079	707619	0' - 30'	31.23	SM 7500 Ra-B	IML
5368-43-24SA	SA	4Q13	10/24/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481079	707619	0' - 30'	31.23	Ga-Tech	IML
5368-43-24SA	SA	4Q13	10/24/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481079	707619	0' - 30'	31.23	ACW10	IML
5368-43-24SA	SA	4Q13	10/24/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481079	707619	0' - 30'	31.23	ACW10	IML
5368-43-24SA	SA	4Q13	10/24/2013	U, D	0.0619	mg/l	0.0003	0	3.0E-07	4.19E-08	1481079	707619	0' - 30'	31.23	EPA 200.8	IML
5368-43-24SA	SA	4Q13	10/24/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481079	707619	0' - 30'	31.23	EPA 200.8	IML
5368-43-24SM	SM	1Q13	3/25/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	1481110	707654	0' - 452'	147.28	SM 7110B	IML
5368-43-24SM	SM	1Q13	3/25/2013	Gross Beta	5.7	pCi/l	3	3.5	NA	5.7E-09	1481110	707654	0' - 452'	147.28	SM 7110B	IML
5368-43-24SM	SM	1Q13	3/25/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	1481110	707654	0' - 452'	147.28	EPA 901.1M	IML
5368-43-24SM	SM	1Q13	3/25/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	1481110	707654	0' - 452'	147.28	OTW01	IML
5368-43-24SM	SM	1Q13	3/25/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	1481110	707654	0' - 452'	147.28	OTW01	IML

Kendrick Expansion Area
Regional Baseline Monitor Well Data

Station ID	Zone	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	NAD 83 Northing	NAD 83 Easting	Depth Interval	Depth to Water	Method	Contract Laboratory
5368-43-24SM	SM	1Q13	3/25/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	1481110	707654	0' - 452'	147.28	OTW01	IML
5368-43-24SM	SM	1Q13	3/25/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	1481110	707654	0' - 452'	147.28	OTW01	IML
5368-43-24SM	SM	1Q13	3/25/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481110	707654	0' - 452'	147.28	SM 7500 Ra-B	IML
5368-43-24SM	SM	1Q13	3/25/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481110	707654	0' - 452'	147.28	SM 7500 Ra-B	IML
5368-43-24SM	SM	1Q13	3/25/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481110	707654	0' - 452'	147.28	Ga-Tech	IML
5368-43-24SM	SM	1Q13	3/25/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481110	707654	0' - 452'	147.28	ACW10	IML
5368-43-24SM	SM	1Q13	3/25/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481110	707654	0' - 452'	147.28	ACW10	IML
5368-43-24SM	SM	1Q13	3/25/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481110	707654	0' - 452'	147.28	EPA 200.8	IML
5368-43-24SM	SM	1Q13	3/25/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481110	707654	0' - 452'	147.28	EPA 200.8	IML
5368-43-24SM	SM	2Q13	6/25/2013	Gross Alpha	<5	pCi/l	5	0	NA	NA	1481110	707654	0' - 452'	145.97	SM 7110B	IML
5368-43-24SM	SM	2Q13	6/25/2013	Gross Beta	<7	pCi/l	7	0	NA	NA	1481110	707654	0' - 452'	145.97	SM 7110B	IML
5368-43-24SM	SM	2Q13	6/25/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481110	707654	0' - 452'	145.97	SM 7500 Ra-B	IML
5368-43-24SM	SM	2Q13	6/25/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481110	707654	0' - 452'	145.97	SM 7500 Ra-B	IML
5368-43-24SM	SM	2Q13	6/25/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481110	707654	0' - 452'	145.97	Ga-Tech	IML
5368-43-24SM	SM	2Q13	6/25/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481110	707654	0' - 452'	145.97	ACW10	IML
5368-43-24SM	SM	2Q13	6/25/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481110	707654	0' - 452'	145.97	ACW10	IML
5368-43-24SM	SM	2Q13	6/25/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481110	707654	0' - 452'	145.97	EPA 200.8	IML
5368-43-24SM	SM	2Q13	6/25/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481110	707654	0' - 452'	145.97	EPA 200.8	IML
5368-43-24SM	SM	3Q13	8/28/2013	Gross Alpha	<3	pCi/l	3	0	NA	NA	1481110	707654	0' - 452'	145.77	SM 7110B	IML
5368-43-24SM	SM	3Q13	8/28/2013	Gross Beta	<6	pCi/l	6	0	NA	NA	1481110	707654	0' - 452'	145.77	SM 7110B	IML
5368-43-24SM	SM	3Q13	8/28/2013	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2E-10	1481110	707654	0' - 452'	145.77	SM 7500 Ra-B	IML
5368-43-24SM	SM	3Q13	8/28/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481110	707654	0' - 452'	145.77	SM 7500 Ra-B	IML
5368-43-24SM	SM	3Q13	8/28/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481110	707654	0' - 452'	145.77	Ga-Tech	IML
5368-43-24SM	SM	3Q13	8/28/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481110	707654	0' - 452'	145.77	ACW10	IML
5368-43-24SM	SM	3Q13	8/28/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481110	707654	0' - 452'	145.77	ACW10	IML
5368-43-24SM	SM	3Q13	8/28/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481110	707654	0' - 452'	145.77	EPA 200.8	IML
5368-43-24SM	SM	3Q13	8/28/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481110	707654	0' - 452'	145.77	EPA 200.8	IML
5368-43-24SM	SM	4Q13	10/25/2013	Gross Alpha	3.3	pCi/l	2	2.5	NA	3.3E-09	1481110	707654	0' - 452'	145.02	SM 7110B	IML
5368-43-24SM	SM	4Q13	10/25/2013	Gross Beta	<3	pCi/l	3	0	NA	NA	1481110	707654	0' - 452'	145.02	SM 7110B	IML
5368-43-24SM	SM	4Q13	10/25/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481110	707654	0' - 452'	145.02	SM 7500 Ra-B	IML
5368-43-24SM	SM	4Q13	10/25/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	1481110	707654	0' - 452'	145.02	SM 7500 Ra-B	IML
5368-43-24SM	SM	4Q13	10/25/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	1481110	707654	0' - 452'	145.02	Ga-Tech	IML
5368-43-24SM	SM	4Q13	10/25/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481110	707654	0' - 452'	145.02	ACW10	IML
5368-43-24SM	SM	4Q13	10/25/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	1481110	707654	0' - 452'	145.02	ACW10	IML
5368-43-24SM	SM	4Q13	10/25/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481110	707654	0' - 452'	145.02	EPA 200.8	IML
5368-43-24SM	SM	4Q13	10/25/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	1481110	707654	0' - 452'	145.02	EPA 200.8	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
19XX18	1Q11	2/16/2011	Ra-226, D	31.1	pCi/l	0.2	1.1	6.0E-08	3.11E-08	44.57187	-104.95372	536	Unk	SM 7500-Ra B	IND	IML
19XX18	1Q11	2/16/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.57187	-104.95372	536	Unk	Ra-05	IND	IML
19XX18	1Q11	2/16/2011	U, D	0.0726	mg/l	0.0003	0	3.0E-07	4.92E-08	44.57187	-104.95372	536	Unk	EPA 200.8	IND	IML
19XX18	1Q11	2/16/2011	Gross Alpha	267	pCi/l	5	13	NA	2.67E-07	44.57187	-104.95372	536	Unk	SM 7110B	IND	IML
19XX18	1Q11	2/16/2011	Gross Beta	116	pCi/l	8	6	NA	1.16E-07	44.57187	-104.95372	536	Unk	SM 7110B	IND	IML
19XX18	2Q11	5/6/2011	Pb-210, D	3.9	pCi/l	1	0.6	1.0E-08	3.90E-09	44.57187	-104.95372	536	Unk	OTW01	IND	IML
19XX18	2Q11	5/6/2011	Pb-210, S	1.7	pCi/l	1.0	0.7	1.0E-08	1.70E-09	44.57187	-104.95372	536	Unk	OTW01	IND	IML
19XX18	2Q11	5/6/2011	Po-210, D	4	pCi/l	1	0.9	4.0E-08	4.00E-09	44.57187	-104.95372	536	Unk	OTW01	IND	IML
19XX18	2Q11	5/6/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.57187	-104.95372	536	Unk	OTW01	IND	IML
19XX18	2Q11	5/6/2011	Ra-226, D	37.1	pCi/l	0.2	0.7	6.0E-08	3.71E-08	44.57187	-104.95372	536	Unk	SM 7500-Ra B	IND	IML
19XX18	2Q11	5/6/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.57187	-104.95372	536	Unk	SM 7500-Ra B	IND	IML
19XX18	2Q11	5/6/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.57187	-104.95372	536	Unk	Ra-05	IND	IML
19XX18	2Q11	5/6/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57187	-104.95372	536	Unk	ACW10	IND	IML
19XX18	2Q11	5/6/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57187	-104.95372	536	Unk	ACW10	IND	IML
19XX18	2Q11	5/6/2011	U, D	0.0779	mg/l	0.0	0	3.0E-07	5.27E-08	44.57187	-104.95372	536	Unk	EPA 200.8	IND	IML
19XX18	2Q11	5/6/2011	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.57187	-104.95372	536	Unk	EPA 200.8	IND	IML
19XX18	2Q11	5/6/2011	Gross Alpha	190	pCi/l	3	9.8	NA	1.90E-07	44.57187	-104.95372	536	Unk	SM 7110B	IND	IML
19XX18	2Q11	5/6/2011	Gross Beta	57.9	pCi/l	7	5.1	NA	5.79E-08	44.57187	-104.95372	536	Unk	SM 7110B	IND	IML
19XX18	3Q11	9/7/2011	Pb-210, D	13.4	pCi/l	1	0.8	1.0E-08	1.34E-08	44.57187	-104.95372	536	Unk	OTW01	IND	IML
19XX18	3Q11	9/7/2011	Pb-210, S	3.4	pCi/l	1	0.7	1.0E-08	3.40E-09	44.57187	-104.95372	536	Unk	OTW01	IND	IML
19XX18	3Q11	9/7/2011	Po-210, D	1.1	pCi/l	1	0.7	4.0E-08	1.10E-09	44.57187	-104.95372	536	Unk	OTW01	IND	IML
19XX18	3Q11	9/7/2011	Po-210, S	5.1	pCi/l	1	1.4	4.0E-08	5.10E-09	44.57187	-104.95372	536	Unk	OTW01	IND	IML
19XX18	3Q11	9/7/2011	Ra-226, D	35.6	pCi/l	0.2	0.7	6.0E-08	3.56E-08	44.57187	-104.95372	536	Unk	SM 7500-Ra B	IND	IML
19XX18	3Q11	9/7/2011	Ra-226, S	0.7	pCi/l	0.2	0.1	6.0E-08	7.00E-10	44.57187	-104.95372	536	Unk	SM 7500-Ra B	IND	IML
19XX18	3Q11	9/7/2011	Ra-228, D	<1.0	pCi/l	1	0	6.0E-08	NA	44.57187	-104.95372	536	Unk	Ra-05	IND	IML
19XX18	3Q11	9/7/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57187	-104.95372	536	Unk	ACW10	IND	IML
19XX18	3Q11	9/7/2011	Th-230, S	0.2	pCi/l	0.2	0.1	1.0E-07	2.00E-10	44.57187	-104.95372	536	Unk	ACW10	IND	IML
19XX18	3Q11	9/7/2011	U, D	0.0835	mg/l	0.0	0	3.0E-07	5.65E-08	44.57187	-104.95372	536	Unk	EPA 200.8	IND	IML
19XX18	3Q11	9/7/2011	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.57187	-104.95372	536	Unk	EPA 200.8	IND	IML
19XX18	3Q11	9/7/2011	Gross Alpha	233	pCi/l	4	11	NA	2.33E-07	44.57187	-104.95372	536	Unk	SM 7110B	IND	IML
19XX18	3Q11	9/7/2011	Gross Beta	72.1	pCi/l	7	5.5	NA	7.21E-08	44.57187	-104.95372	536	Unk	SM 7110B	IND	IML
19XX18	4Q11	11/22/2011	Ra-226, D	37.5	pCi/l	0.2	0.8	6.0E-08	3.75E-08	44.57187	-104.95372	536	Unk	SM 7500-Ra B	IND	IML
19XX18	4Q11	11/22/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.57187	-104.95372	536	Unk	Ra-05	IND	IML
19XX18	4Q11	11/22/2011	U, D	0.0837	mg/l	0.0003	0	3.0E-07	5.67E-08	44.57187	-104.95372	536	Unk	EPA 200.8	IND	IML
19XX18	4Q11	11/22/2011	Gross Alpha	207	pCi/l	5	11	NA	2.07E-07	44.57187	-104.95372	536	Unk	SM 7110B	IND	IML
19XX18	4Q11	11/22/2011	Gross Beta	53.2	pCi/l	8	5.5	NA	5.32E-08	44.57187	-104.95372	536	Unk	SM 7110B	IND	IML
19XX18	1Q12	3/15/2012	Ra-226, D	39.6	pCi/l	0.2	0.8	6.0E-08	3.96E-08	44.57187	-104.95372	536	Unk	SM 7500-Ra B	IND	IML
19XX18	1Q12	3/15/2012	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.57187	-104.95372	536	Unk	Ra-05	IND	IML
19XX18	1Q12	3/15/2012	U, D	0.081	mg/l	0.0003	0	3.0E-07	5.48E-08	44.57187	-104.95372	536	Unk	EPA 200.8	IND	IML
19XX18	1Q12	3/15/2012	Gross Alpha	138	pCi/l	4	8.8	NA	1.38E-07	44.57187	-104.95372	536	Unk	SM 7110B	IND	IML
19XX18	1Q12	3/15/2012	Gross Beta	49.3	pCi/l	7	5	NA	4.93E-08	44.57187	-104.95372	536	Unk	SM 7110B	IND	IML
19XX18	3Q12	8/1/2012	Ra-226, D	43.1	pCi/l	0.2	0.9	6.0E-08	4.31E-08	44.57187	-104.95372	536	Unk	SM 7500 Ra-B	IND	IML
19XX18	3Q12	8/1/2012	Ra-228, D	2.19	pCi/l	1.0	0.98	6.0E-08	2.19E-09	44.57187	-104.95372	536	Unk	Ga-Tech	IND	IML
19XX18	3Q12	8/1/2012	U, D	0.0691	mg/l	0.0	0	3.0E-07	4.68E-08	44.57187	-104.95372	536	Unk	EPA 200.8	IND	IML
19XX18	3Q12	8/1/2012	Gross Alpha	189	pCi/l	5	11	NA	1.89E-07	44.57187	-104.95372	536	Unk	SM 7110B	IND	IML
19XX18	3Q12	8/1/2012	Gross Beta	50	pCi/l	8	5.7	NA	5.00E-08	44.57187	-104.95372	536	Unk	SM 7110B	IND	IML
19XX18	1Q13	3/12/2013	Pb-210, D	4.5	pCi/l	1	0.6	1.0E-08	4.50E-09	44.57187	-104.95372	536	Unk	OTW01	IND	IML
19XX18	1Q13	3/12/2013	Pb-210, S	2.2	pCi/l	1	0.4	1.0E-08	2.20E-09	44.57187	-104.95372	536	Unk	OTW01	IND	IML
19XX18	1Q13	3/12/2013	Po-210, D	2.3	pCi/l	1	0.8	4.0E-08	2.30E-09	44.57187	-104.95372	536	Unk	OTW01	IND	IML
19XX18	1Q13	3/12/2013	Po-210, S	4.5	pCi/l	1	1.4	4.0E-08	4.50E-09	44.57187	-104.95372	536	Unk	OTW01	IND	IML
19XX18	1Q13	3/12/2013	Ra-226, D	41.3	pCi/l	0.2	0.8	6.0E-08	4.13E-08	44.57187	-104.95372	536	Unk	SM 7500 Ra-B	IND	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
19XX18	1Q13	3/12/2013	Ra-226, S	0.7	pCi/l	0.2	0.1	6.0E-08	7.00E-10	44.57187	-104.95372	536	Unk	SM 7500 Ra-B	IND	IML
19XX18	1Q13	3/12/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.57187	-104.95372	536	Unk	Ga-Tech	IND	IML
19XX18	1Q13	3/12/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57187	-104.95372	536	Unk	ACW10	IND	IML
19XX18	1Q13	3/12/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57187	-104.95372	536	Unk	ACW10	IND	IML
19XX18	1Q13	3/12/2013	U, D	0.0864	mg/l	0.0	0	3.0E-07	5.85E-08	44.57187	-104.95372	536	Unk	EPA 200.8	IND	IML
19XX18	1Q13	3/12/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.57187	-104.95372	536	Unk	EPA 200.8	IND	IML
19XX18	1Q13	3/12/2013	Gross Alpha	259	pCi/l	4	12	NA	2.59E-07	44.57187	-104.95372	536	Unk	SM 7110B	IND	IML
19XX18	1Q13	3/12/2013	Gross Beta	77	pCi/l	7	5.6	NA	7.70E-08	44.57187	-104.95372	536	Unk	SM 7110B	IND	IML
22X-19	1Q11	2/17/2011	Ra-226, D	2.8	pCi/l	0.2	0.2	6.0E-08	2.80E-09	44.56631	-104.95694	750	Unk	SM 7500-Ra B	IND	IML
22X-19	1Q11	2/17/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.56631	-104.95694	750	Unk	Ra-05	IND	IML
22X-19	1Q11	2/17/2011	U, D	0.0213	mg/l	0.0003	0	3.0E-07	1.44E-08	44.56631	-104.95694	750	Unk	EPA 200.8	IND	IML
22X-19	1Q11	2/17/2011	Gross Alpha	42.6	pCi/l	4	6.6	NA	4.26E-08	44.56631	-104.95694	750	Unk	SM 7110B	IND	IML
22X-19	1Q11	2/17/2011	Gross Beta	<7	pCi/l	7	0	NA	NA	44.56631	-104.95694	750	Unk	SM 7110B	IND	IML
22X-19	2Q11	5/6/2011	Pb-210, D	1.1	pCi/l	1	0.4	1.0E-08	1.10E-09	44.56631	-104.95694	750	Unk	OTW01	IND	IML
22X-19	2Q11	5/6/2011	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.56631	-104.95694	750	Unk	OTW01	IND	IML
22X-19	2Q11	5/6/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.56631	-104.95694	750	Unk	OTW01	IND	IML
22X-19	2Q11	5/6/2011	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.56631	-104.95694	750	Unk	OTW01	IND	IML
22X-19	2Q11	5/6/2011	Ra-226, D	3.4	pCi/l	0.2	0.2	6.0E-08	3.40E-09	44.56631	-104.95694	750	Unk	SM 7500-Ra B	IND	IML
22X-19	2Q11	5/6/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.56631	-104.95694	750	Unk	SM 7500-Ra B	IND	IML
22X-19	2Q11	5/6/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.56631	-104.95694	750	Unk	Ra-05	IND	IML
22X-19	2Q11	5/6/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56631	-104.95694	750	Unk	ACW10	IND	IML
22X-19	2Q11	5/6/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56631	-104.95694	750	Unk	ACW10	IND	IML
22X-19	2Q11	5/6/2011	U, D	0.02	mg/l	0.0003	0	3.0E-07	1.35E-08	44.56631	-104.95694	750	Unk	EPA 200.8	IND	IML
22X-19	2Q11	5/6/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.56631	-104.95694	750	Unk	EPA 200.8	IND	IML
22X-19	2Q11	5/6/2011	Gross Alpha	40.3	pCi/l	3	4.8	NA	4.03E-08	44.56631	-104.95694	750	Unk	SM 7110B	IND	IML
22X-19	2Q11	5/6/2011	Gross Beta	9.4	pCi/l	7	4.3	NA	9.40E-09	44.56631	-104.95694	750	Unk	SM 7110B	IND	IML
22X-19	3Q11	9/7/2011	Pb-210, D	3	pCi/l	1	0.5	1.0E-08	3.00E-09	44.56631	-104.95694	750	Unk	OTW01	IND	IML
22X-19	3Q11	9/7/2011	Pb-210, S	1.8	pCi/l	1	0.5	1.0E-08	1.80E-09	44.56631	-104.95694	750	Unk	OTW01	IND	IML
22X-19	3Q11	9/7/2011	Po-210, D	<1.0	pCi/l	1.0	0	4.0E-08	NA	44.56631	-104.95694	750	Unk	OTW01	IND	IML
22X-19	3Q11	9/7/2011	Po-210, S	<1.0	pCi/l	1.0	0	4.0E-08	NA	44.56631	-104.95694	750	Unk	OTW01	IND	IML
22X-19	3Q11	9/7/2011	Ra-226, D	3.1	pCi/l	0.2	0.2	6.0E-08	3.10E-09	44.56631	-104.95694	750	Unk	SM 7500-Ra B	IND	IML
22X-19	3Q11	9/7/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.56631	-104.95694	750	Unk	SM 7500-Ra B	IND	IML
22X-19	3Q11	9/7/2011	Ra-228, D	<1.0	pCi/l	1	0	6.0E-08	NA	44.56631	-104.95694	750	Unk	Ra-05	IND	IML
22X-19	3Q11	9/7/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56631	-104.95694	750	Unk	ACW10	IND	IML
22X-19	3Q11	9/7/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56631	-104.95694	750	Unk	ACW10	IND	IML
22X-19	3Q11	9/7/2011	U, D	0.016	mg/l	0.0003	0	3.0E-07	1.08E-08	44.56631	-104.95694	750	Unk	EPA 200.8	IND	IML
22X-19	3Q11	9/7/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.56631	-104.95694	750	Unk	EPA 200.8	IND	IML
22X-19	3Q11	9/7/2011	Gross Alpha	48.2	pCi/l	5	5.7	NA	4.82E-08	44.56631	-104.95694	750	Unk	SM 7110B	IND	IML
22X-19	3Q11	9/7/2011	Gross Beta	12	pCi/l	7	4.4	NA	1.20E-08	44.56631	-104.95694	750	Unk	SM 7110B	IND	IML
22X-19	4Q11	11/22/2011	Ra-226, D	3.2	pCi/l	0.2	0.2	6.0E-08	3.20E-09	44.56631	-104.95694	750	Unk	SM 7500-Ra B	IND	IML
22X-19	4Q11	11/22/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.56631	-104.95694	750	Unk	Ra-05	IND	IML
22X-19	4Q11	11/22/2011	U, D	0.0199	mg/l	0.0	0	3.0E-07	1.35E-08	44.56631	-104.95694	750	Unk	EPA 200.8	IND	IML
22X-19	4Q11	11/22/2011	Gross Alpha	30.1	pCi/l	6.0	5.4	NA	3.01E-08	44.56631	-104.95694	750	Unk	SM 7110B	IND	IML
22X-19	4Q11	11/22/2011	Gross Beta	8.2	pCi/l	8.0	4.8	NA	8.20E-09	44.56631	-104.95694	750	Unk	SM 7110B	IND	IML
22X-19	1Q12	3/15/2012	Ra-226, D	3.1	pCi/l	0.2	0.2	6.0E-08	3.10E-09	44.56631	-104.95694	750	Unk	SM 7500-Ra B	IND	IML
22X-19	1Q12	3/15/2012	Ra-228, D	1.2	pCi/l	1	0.9	6.0E-08	1.20E-09	44.56631	-104.95694	750	Unk	Ra-05	IND	IML
22X-19	1Q12	3/15/2012	U, D	0.0208	mg/l	0.0003	0	3.0E-07	1.41E-08	44.56631	-104.95694	750	Unk	EPA 200.8	IND	IML
22X-19	1Q12	3/15/2012	Gross Alpha	42.4	pCi/l	3	5.1	NA	4.24E-08	44.56631	-104.95694	750	Unk	SM 7110B	IND	IML
22X-19	1Q12	3/15/2012	Gross Beta	14.5	pCi/l	7	4.5	NA	1.45E-08	44.56631	-104.95694	750	Unk	SM 7110B	IND	IML
22X-19	3Q12	8/1/2012	Ra-226, D	2.9	pCi/l	0.2	0.2	6.0E-08	2.90E-09	44.56631	-104.95694	750	Unk	SM 7500 Ra-B	IND	IML
22X-19	3Q12	8/1/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.56631	-104.95694	750	Unk	Ga-Tech	IND	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
22X-19	3Q12	8/1/2012	U, D	0.0174	mg/l	0.0003	0	3.0E-07	1.18E-08	44.56631	-104.95694	750	Unk	EPA 200.8	IND	IML
22X-19	3Q12	8/1/2012	Gross Alpha	40	pCi/l	5	5.5	NA	4.00E-08	44.56631	-104.95694	750	Unk	SM 7110B	IND	IML
22X-19	3Q12	8/1/2012	Gross Beta	9	pCi/l	8.0	4.6	NA	9.00E-09	44.56631	-104.95694	750	Unk	SM 7110B	IND	IML
22X-19	1Q13	3/12/2013	Pb-210, D	1.3	pCi/l	1	0.4	1.0E-08	1.30E-09	44.56631	-104.95694	750	Unk	OTW01	IND	IML
22X-19	1Q13	3/12/2013	Pb-210, S	1.5	pCi/l	1	0.4	1.0E-08	1.50E-09	44.56631	-104.95694	750	Unk	OTW01	IND	IML
22X-19	1Q13	3/12/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.56631	-104.95694	750	Unk	OTW01	IND	IML
22X-19	1Q13	3/12/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.56631	-104.95694	750	Unk	OTW01	IND	IML
22X-19	1Q13	3/12/2013	Ra-226, D	3.3	pCi/l	0.2	0.2	6.0E-08	3.30E-09	44.56631	-104.95694	750	Unk	SM 7500 Ra-B	IND	IML
22X-19	1Q13	3/12/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.56631	-104.95694	750	Unk	SM 7500 Ra-B	IND	IML
22X-19	1Q13	3/12/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.56631	-104.95694	750	Unk	Ga-Tech	IND	IML
22X-19	1Q13	3/12/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56631	-104.95694	750	Unk	ACW10	IND	IML
22X-19	1Q13	3/12/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56631	-104.95694	750	Unk	ACW10	IND	IML
22X-19	1Q13	3/12/2013	U, D	0.0225	mg/l	0.0	0	3.0E-07	1.52E-08	44.56631	-104.95694	750	Unk	EPA 200.8	IND	IML
22X-19	1Q13	3/12/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.56631	-104.95694	750	Unk	EPA 200.8	IND	IML
22X-19	1Q13	3/12/2013	Gross Alpha	52.6	pCi/l	4	5.7	NA	5.26E-08	44.56631	-104.95694	750	Unk	SM 7110B	IND	IML
22X-19	1Q13	3/12/2013	Gross Beta	14.1	pCi/l	7	4.2	NA	1.41E-08	44.56631	-104.95694	750	Unk	SM 7110B	IND	IML
ABWELL01	4Q12	11/13/2012	Pb-210, D	1.5	pCi/l	1	0.6	1.0E-08	1.50E-09	44.60350	-104.99661	Unk	Unk	OTW01	DOM, STK	IML
ABWELL01	4Q12	11/13/2012	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.60350	-104.99661	Unk	Unk	OTW01	DOM, STK	IML
ABWELL01	4Q12	11/13/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.60350	-104.99661	Unk	Unk	OTW01	DOM, STK	IML
ABWELL01	4Q12	11/13/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60350	-104.99661	Unk	Unk	OTW01	DOM, STK	IML
ABWELL01	4Q12	11/13/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60350	-104.99661	Unk	Unk	SM 7500 Ra-B	DOM, STK	IML
ABWELL01	4Q12	11/13/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60350	-104.99661	Unk	Unk	SM 7500 Ra-B	DOM, STK	IML
ABWELL01	4Q12	11/13/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60350	-104.99661	Unk	Unk	Ga-Tech	DOM, STK	IML
ABWELL01	4Q12	11/13/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60350	-104.99661	Unk	Unk	ACW10	DOM, STK	IML
ABWELL01	4Q12	11/13/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60350	-104.99661	Unk	Unk	ACW10	DOM, STK	IML
ABWELL01	4Q12	11/13/2012	U, D	0.0014	mg/l	0.0003	0	3.0E-07	9.48E-10	44.60350	-104.99661	Unk	Unk	EPA 200.8	DOM, STK	IML
ABWELL01	4Q12	11/13/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60350	-104.99661	Unk	Unk	EPA 200.8	DOM, STK	IML
ABWELL01	4Q12	11/13/2012	Gross Alpha	3.3	pCi/l	3	1.7	NA	3.30E-09	44.60350	-104.99661	Unk	Unk	SM 7110B	DOM, STK	IML
ABWELL01	4Q12	11/13/2012	Gross Beta	<5	pCi/l	5		NA	NA	44.60350	-104.99661	Unk	Unk	SM 7110B	DOM, STK	IML
ABWELL01	1Q13	1/23/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.60350	-104.99661	Unk	Unk	OTW01	DOM, STK	IML
ABWELL01	1Q13	1/23/2013	Pb-210, S	1.3	pCi/l	1	0.4	1.0E-08	1.30E-09	44.60350	-104.99661	Unk	Unk	OTW01	DOM, STK	IML
ABWELL01	1Q13	1/23/2013	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.60350	-104.99661	Unk	Unk	OTW01	DOM, STK	IML
ABWELL01	1Q13	1/23/2013	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.60350	-104.99661	Unk	Unk	OTW01	DOM, STK	IML
ABWELL01	1Q13	1/23/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60350	-104.99661	Unk	Unk	SM 7500 Ra-B	DOM, STK	IML
ABWELL01	1Q13	1/23/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60350	-104.99661	Unk	Unk	SM 7500 Ra-B	DOM, STK	IML
ABWELL01	1Q13	1/23/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60350	-104.99661	Unk	Unk	Ga-Tech	DOM, STK	IML
ABWELL01	1Q13	1/23/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60350	-104.99661	Unk	Unk	ACW10	DOM, STK	IML
ABWELL01	1Q13	1/23/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60350	-104.99661	Unk	Unk	ACW10	DOM, STK	IML
ABWELL01	1Q13	1/23/2013	U, D	0.0008	mg/l	0.0003	0	3.0E-07	5.42E-10	44.60350	-104.99661	Unk	Unk	EPA 200.8	DOM, STK	IML
ABWELL01	1Q13	1/23/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60350	-104.99661	Unk	Unk	EPA 200.8	DOM, STK	IML
ABWELL01	1Q13	1/23/2013	Gross Alpha	2.3	pCi/l	2	1.6	NA	2.30E-09	44.60350	-104.99661	Unk	Unk	SM 7110B	DOM, STK	IML
ABWELL01	1Q13	1/23/2013	Gross Beta	<5	pCi/l	5	0	NA	NA	44.60350	-104.99661	Unk	Unk	SM 7110B	DOM, STK	IML
ABWELL01	2Q14	6/25/2014	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.60350	-104.99661	Unk	Unk	EPA 901.1M	DOM, STK	IML
ABWELL01	2Q14	6/25/2014	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.60350	-104.99661	Unk	Unk	OTW01	DOM, STK	IML
ABWELL01	2Q14	6/25/2014	Pb-210, S	1.1	pCi/l	1.0	0.4	1.0E-08	1.10E-09	44.60350	-104.99661	Unk	Unk	OTW01	DOM, STK	IML
ABWELL01	2Q14	6/25/2014	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.60350	-104.99661	Unk	Unk	OTW01	DOM, STK	IML
ABWELL01	2Q14	6/25/2014	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.60350	-104.99661	Unk	Unk	OTW01	DOM, STK	IML
ABWELL01	2Q14	6/25/2014	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60350	-104.99661	Unk	Unk	SM 7500 Ra-B	DOM, STK	IML
ABWELL01	2Q14	6/25/2014	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60350	-104.99661	Unk	Unk	SM 7500 Ra-B	DOM, STK	IML
ABWELL01	2Q14	6/25/2014	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60350	-104.99661	Unk	Unk	Ga-Tech	DOM, STK	IML
ABWELL01	2Q14	6/25/2014	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60350	-104.99661	Unk	Unk	ACW10	DOM, STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
ABWELL01	2Q14	6/25/2014	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60350	-104.99661	Unk	Unk	ACW10	DOM, STK	IML
ABWELL01	2Q14	6/25/2014	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60350	-104.99661	Unk	Unk	EPA 200.8	DOM, STK	IML
ABWELL01	2Q14	6/25/2014	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60350	-104.99661	Unk	Unk	EPA 200.8	DOM, STK	IML
ABWELL01	2Q14	6/25/2014	Gross Alpha	2.5	pCi/l	2	1.3	NA	2.50E-09	44.60350	-104.99661	Unk	Unk	SM 7110B	DOM, STK	IML
ABWELL01	2Q14	6/25/2014	Gross Beta	4.8	pCi/l	3	2	NA	4.80E-09	44.60350	-104.99661	Unk	Unk	SM 7110B	DOM, STK	IML
ARH02	4Q11	11/21/2011	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.59927	-104.92243	Unk	Unk	SM 7500-Ra B	DOM, STK	IML
ARH02	4Q11	11/21/2011	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.59927	-104.92243	Unk	Unk	Ra-05	DOM, STK	IML
ARH02	4Q11	11/21/2011	U, D	0.0325	mg/l	0.0003	0	3.0E-07	2.20E-08	44.59927	-104.92243	Unk	Unk	EPA 200.8	DOM, STK	IML
ARH02	4Q11	11/21/2011	Gross Alpha	15.2	pCi/l	6	4.5	NA	1.52E-08	44.59927	-104.92243	Unk	Unk	SM 7110B	DOM, STK	IML
ARH02	4Q11	11/21/2011	Gross Beta	13.8	pCi/l	8	4.8	NA	1.38E-08	44.59927	-104.92243	Unk	Unk	SM 7110B	DOM, STK	IML
ARH02	1Q12	2/27/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.59927	-104.92243	Unk	Unk	SM 7500-Ra B	DOM, STK	IML
ARH02	1Q12	2/27/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.59927	-104.92243	Unk	Unk	Ra-05	DOM, STK	IML
ARH02	1Q12	2/27/2012	U, D	0.034	mg/l	0.0	0	3.0E-07	2.30E-08	44.59927	-104.92243	Unk	Unk	EPA 200.8	DOM, STK	IML
ARH02	1Q12	2/27/2012	Gross Alpha	19.2	pCi/l	3.0	3.7	NA	1.92E-08	44.59927	-104.92243	Unk	Unk	SM 7110B	DOM, STK	IML
ARH02	1Q12	2/27/2012	Gross Beta	10.9	pCi/l	8.0	4.5	NA	1.09E-08	44.59927	-104.92243	Unk	Unk	SM 7110B	DOM, STK	IML
ARH02	3Q12	9/12/2012	Pb-210, D	1.6	pCi/l	1.0	0.5	1.0E-08	1.60E-09	44.59927	-104.92243	Unk	Unk	OTW01	DOM, STK	IML
ARH02	3Q12	9/12/2012	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.59927	-104.92243	Unk	Unk	OTW01	DOM, STK	IML
ARH02	3Q12	9/12/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.59927	-104.92243	Unk	Unk	OTW01	DOM, STK	IML
ARH02	3Q12	9/12/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.59927	-104.92243	Unk	Unk	OTW01	DOM, STK	IML
ARH02	3Q12	9/12/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.59927	-104.92243	Unk	Unk	SM 7500 Ra-B	DOM, STK	IML
ARH02	3Q12	9/12/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.59927	-104.92243	Unk	Unk	SM 7500 Ra-B	DOM, STK	IML
ARH02	3Q12	9/12/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.59927	-104.92243	Unk	Unk	Ga-Tech	DOM, STK	IML
ARH02	3Q12	9/12/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.59927	-104.92243	Unk	Unk	ACW10	DOM, STK	IML
ARH02	3Q12	9/12/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.59927	-104.92243	Unk	Unk	ACW10	DOM, STK	IML
ARH02	3Q12	9/12/2012	U, D	0.0316	mg/l	0.0003	0	3.0E-07	2.14E-08	44.59927	-104.92243	Unk	Unk	EPA 200.8	DOM, STK	IML
ARH02	3Q12	9/12/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.59927	-104.92243	Unk	Unk	EPA 200.8	DOM, STK	IML
ARH02	3Q12	9/12/2012	Gross Alpha	25.2	pCi/l	5.0	4.8	NA	2.52E-08	44.59927	-104.92243	Unk	Unk	SM 7110B	DOM, STK	IML
ARH02	3Q12	9/12/2012	Gross Beta	<9	pCi/l	9.0	0	NA	NA	44.59927	-104.92243	Unk	Unk	SM 7110B	DOM, STK	IML
ARH02	1Q13	2/7/2013	Gross Gamma	<50	pCi/l	50.0	0	NA	NA	44.59927	-104.92243	Unk	Unk	EPA 901.1M	DOM, STK	IML
ARH02	1Q13	2/7/2013	Pb-210, D	<1	pCi/l	1.0	0	1.0E-08	NA	44.59927	-104.92243	Unk	Unk	OTW01	DOM, STK	IML
ARH02	1Q13	2/7/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.59927	-104.92243	Unk	Unk	OTW01	DOM, STK	IML
ARH02	1Q13	2/7/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.59927	-104.92243	Unk	Unk	OTW01	DOM, STK	IML
ARH02	1Q13	2/7/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.59927	-104.92243	Unk	Unk	OTW01	DOM, STK	IML
ARH02	1Q13	2/7/2013	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.59927	-104.92243	Unk	Unk	SM 7500 Ra-B	DOM, STK	IML
ARH02	1Q13	2/7/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.59927	-104.92243	Unk	Unk	SM 7500 Ra-B	DOM, STK	IML
ARH02	1Q13	2/7/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.59927	-104.92243	Unk	Unk	Ga-Tech	DOM, STK	IML
ARH02	1Q13	2/7/2013	Th-230, D	0.4	pCi/l	0.2	0.2	1.0E-07	4.00E-10	44.59927	-104.92243	Unk	Unk	ACW10	DOM, STK	IML
ARH02	1Q13	2/7/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.59927	-104.92243	Unk	Unk	ACW10	DOM, STK	IML
ARH02	1Q13	2/7/2013	U, D	0.0317	mg/l	0.0	0	3.0E-07	2.15E-08	44.59927	-104.92243	Unk	Unk	EPA 200.8	DOM, STK	IML
ARH02	1Q13	2/7/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.59927	-104.92243	Unk	Unk	EPA 200.8	DOM, STK	IML
ARH02	1Q13	2/7/2013	Gross Alpha	20.4	pCi/l	2	3.5	NA	2.04E-08	44.59927	-104.92243	Unk	Unk	SM 7110B	DOM, STK	IML
ARH02	1Q13	2/7/2013	Gross Beta	10.8	pCi/l	3	3.5	NA	1.08E-08	44.59927	-104.92243	Unk	Unk	SM 7110B	DOM, STK	IML
ARL01	4Q11	11/21/2011	Ra-226, D	1.3	pCi/l	0.2	0.1	6.0E-08	1.30E-09	44.60499	-104.93496	Unk	Unk	SM 7500-Ra B	DOM, STK	IML
ARL01	4Q11	11/21/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60499	-104.93496	Unk	Unk	Ra-05	DOM, STK	IML
ARL01	4Q11	11/21/2011	U, D	0.0616	mg/l	0.0	0	3.0E-07	4.17E-08	44.60499	-104.93496	Unk	Unk	EPA 200.8	DOM, STK	IML
ARL01	4Q11	11/21/2011	Gross Alpha	37.5	pCi/l	4.0	4.3	NA	3.75E-08	44.60499	-104.93496	Unk	Unk	SM 7110B	DOM, STK	IML
ARL01	4Q11	11/21/2011	Gross Beta	29.8	pCi/l	5.0	3.4	NA	2.98E-08	44.60499	-104.93496	Unk	Unk	SM 7110B	DOM, STK	IML
ARL01	3Q12	9/12/2012	Pb-210, D	2.2	pCi/l	1.0	0.5	1.0E-08	2.20E-09	44.60499	-104.93496	Unk	Unk	OTW01	DOM, STK	IML
ARL01	3Q12	9/12/2012	Pb-210, S	1.2	pCi/l	1	0.5	1.0E-08	1.20E-09	44.60499	-104.93496	Unk	Unk	OTW01	DOM, STK	IML
ARL01	3Q12	9/12/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.60499	-104.93496	Unk	Unk	OTW01	DOM, STK	IML
ARL01	3Q12	9/12/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60499	-104.93496	Unk	Unk	OTW01	DOM, STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
ARL01	3Q12	9/12/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60499	-104.93496	Unk	Unk	SM 7500 Ra-B	DOM, STK	IML
ARL01	3Q12	9/12/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60499	-104.93496	Unk	Unk	SM 7500 Ra-B	DOM, STK	IML
ARL01	3Q12	9/12/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60499	-104.93496	Unk	Unk	Ga-Tech	DOM, STK	IML
ARL01	3Q12	9/12/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60499	-104.93496	Unk	Unk	ACW10	DOM, STK	IML
ARL01	3Q12	9/12/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60499	-104.93496	Unk	Unk	ACW10	DOM, STK	IML
ARL01	3Q12	9/12/2012	U, D	0.0487	mg/l	0.0	0	3.0E-07	3.30E-08	44.60499	-104.93496	Unk	Unk	EPA 200.8	DOM, STK	IML
ARL01	3Q12	9/12/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60499	-104.93496	Unk	Unk	EPA 200.8	DOM, STK	IML
ARL01	3Q12	9/12/2012	Gross Alpha	27.3	pCi/l	4	4.3	NA	2.73E-08	44.60499	-104.93496	Unk	Unk	SM 7110B	DOM, STK	IML
ARL01	3Q12	9/12/2012	Gross Beta	13.9	pCi/l	7	4.2	NA	1.39E-08	44.60499	-104.93496	Unk	Unk	SM 7110B	DOM, STK	IML
CSWELL01	1Q11	2/10/2011	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.56977	-104.94045	330	Unk	SM 7500-Ra B	DOM, STK	IML
CSWELL01	1Q11	2/10/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.56977	-104.94045	330	Unk	Ra-05	DOM, STK	IML
CSWELL01	1Q11	2/10/2011	U, D	0.004	mg/l	0.001	0	3.0E-07	2.71E-09	44.56977	-104.94045	330	Unk	EPA 200.8	DOM, STK	IML
CSWELL01	1Q11	2/10/2011	Gross Alpha	<5	pCi/l	5	0	NA	NA	44.56977	-104.94045	330	Unk	SM 7110B	DOM, STK	IML
CSWELL01	1Q11	2/10/2011	Gross Beta	<7	pCi/l	7	0	NA	NA	44.56977	-104.94045	330	Unk	SM 7110B	DOM, STK	IML
CSWELL01	2Q11	5/16/2011	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.56977	-104.94045	330	Unk	OTW01	DOM, STK	IML
CSWELL01	2Q11	5/16/2011	Pb-210, S	<1	pCi/l	1.0	0	1.0E-08	NA	44.56977	-104.94045	330	Unk	OTW01	DOM, STK	IML
CSWELL01	2Q11	5/16/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.56977	-104.94045	330	Unk	OTW01	DOM, STK	IML
CSWELL01	2Q11	5/16/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.56977	-104.94045	330	Unk	OTW01	DOM, STK	IML
CSWELL01	2Q11	5/16/2011	Ra-226, D	0.8	pCi/l	0.2	0.1	6.0E-08	8.00E-10	44.56977	-104.94045	330	Unk	SM 7500-Ra B	DOM, STK	IML
CSWELL01	2Q11	5/16/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.56977	-104.94045	330	Unk	SM 7500-Ra B	DOM, STK	IML
CSWELL01	2Q11	5/16/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.56977	-104.94045	330	Unk	Ra-05	DOM, STK	IML
CSWELL01	2Q11	5/16/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56977	-104.94045	330	Unk	ACW10	DOM, STK	IML
CSWELL01	2Q11	5/16/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56977	-104.94045	330	Unk	ACW10	DOM, STK	IML
CSWELL01	2Q11	5/16/2011	U, D	0.0317	mg/l	0.0	0	3.0E-07	2.15E-08	44.56977	-104.94045	330	Unk	EPA 200.8	DOM, STK	IML
CSWELL01	2Q11	5/16/2011	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.56977	-104.94045	330	Unk	EPA 200.8	DOM, STK	IML
CSWELL01	2Q11	5/16/2011	Gross Alpha	23.9	pCi/l	5	4.6	NA	2.39E-08	44.56977	-104.94045	330	Unk	SM 7110B	DOM, STK	IML
CSWELL01	2Q11	5/16/2011	Gross Beta	18.3	pCi/l	7	4.3	NA	1.83E-08	44.56977	-104.94045	330	Unk	SM 7110B	DOM, STK	IML
CSWELL01	4Q11	11/21/2011	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.56977	-104.94045	330	Unk	SM 7500-Ra B	DOM, STK	IML
CSWELL01	4Q11	11/21/2011	Ra-228, D	1	pCi/l	1	1.1	6.0E-08	1.00E-09	44.56977	-104.94045	330	Unk	Ra-05	DOM, STK	IML
CSWELL01	4Q11	11/21/2011	U, D	0.014	mg/l	0.0003	0	3.0E-07	9.48E-09	44.56977	-104.94045	330	Unk	EPA 200.8	DOM, STK	IML
CSWELL01	4Q11	11/21/2011	Gross Alpha	12.7	pCi/l	5	3.9	NA	1.27E-08	44.56977	-104.94045	330	Unk	SM 7110B	DOM, STK	IML
CSWELL01	4Q11	11/21/2011	Gross Beta	12.7	pCi/l	7	4.2	NA	1.27E-08	44.56977	-104.94045	330	Unk	SM 7110B	DOM, STK	IML
CSWELL01	1Q12	3/16/2012	Ra-226, D	0.6	pCi/l	0.2	0.1	6.0E-08	6.00E-10	44.56977	-104.94045	330	Unk	SM 7500-Ra B	DOM, STK	IML
CSWELL01	1Q12	3/16/2012	Ra-228, D	1.2	pCi/l	1.0	1	6.0E-08	1.20E-09	44.56977	-104.94045	330	Unk	Ra-05	DOM, STK	IML
CSWELL01	1Q12	3/16/2012	U, D	0.0151	mg/l	0.0003	0	3.0E-07	1.02E-08	44.56977	-104.94045	330	Unk	EPA 200.8	DOM, STK	IML
CSWELL01	1Q12	3/16/2012	Gross Alpha	15.3	pCi/l	5	4.1	NA	1.53E-08	44.56977	-104.94045	330	Unk	SM 7110B	DOM, STK	IML
CSWELL01	1Q12	3/16/2012	Gross Beta	12.2	pCi/l	8	4.9	NA	1.22E-08	44.56977	-104.94045	330	Unk	SM 7110B	DOM, STK	IML
CSWELL01	3Q12	8/2/2012	Ra-226, D	0.6	pCi/l	0.2	0.1	6.0E-08	6.00E-10	44.56977	-104.94045	330	Unk	SM 7500 Ra-B	DOM, STK	IML
CSWELL01	3Q12	8/2/2012	Ra-228, D	1.69	pCi/l	1.0	0.89	6.0E-08	1.69E-09	44.56977	-104.94045	330	Unk	Ga-Tech	DOM, STK	IML
CSWELL01	3Q12	8/2/2012	U, D	0.0089	mg/l	0.0	0	3.0E-07	6.03E-09	44.56977	-104.94045	330	Unk	EPA 200.8	DOM, STK	IML
CSWELL01	3Q12	8/2/2012	Gross Alpha	13.4	pCi/l	4	3.6	NA	1.34E-08	44.56977	-104.94045	330	Unk	SM 7110B	DOM, STK	IML
CSWELL01	3Q12	8/2/2012	Gross Beta	11	pCi/l	7	4.2	NA	1.10E-08	44.56977	-104.94045	330	Unk	SM 7110B	DOM, STK	IML
CSWELL01	1Q13	3/13/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.56977	-104.94045	330	Unk	OTW01	DOM, STK	IML
CSWELL01	1Q13	3/13/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.56977	-104.94045	330	Unk	OTW01	DOM, STK	IML
CSWELL01	1Q13	3/13/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.56977	-104.94045	330	Unk	OTW01	DOM, STK	IML
CSWELL01	1Q13	3/13/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.56977	-104.94045	330	Unk	OTW01	DOM, STK	IML
CSWELL01	1Q13	3/13/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.56977	-104.94045	330	Unk	SM 7500 Ra-B	DOM, STK	IML
CSWELL01	1Q13	3/13/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.56977	-104.94045	330	Unk	SM 7500 Ra-B	DOM, STK	IML
CSWELL01	1Q13	3/13/2013	Ra-228, D	1.3	pCi/l	1	0.9	6.0E-08	1.30E-09	44.56977	-104.94045	330	Unk	Ga-Tech	DOM, STK	IML
CSWELL01	1Q13	3/13/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56977	-104.94045	330	Unk	ACW10	DOM, STK	IML
CSWELL01	1Q13	3/13/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56977	-104.94045	330	Unk	ACW10	DOM, STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
CSWELL01	1Q13	3/13/2013	U, D	0.003	mg/l	0.0	0	3.0E-07	2.03E-09	44.56977	-104.94045	330	Unk	EPA 200.8	DOM, STK	IML
CSWELL01	1Q13	3/13/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.56977	-104.94045	330	Unk	EPA 200.8	DOM, STK	IML
CSWELL01	1Q13	3/13/2013	Gross Alpha	7.9	pCi/l	2	2	NA	7.90E-09	44.56977	-104.94045	330	Unk	SM 7110B	DOM, STK	IML
CSWELL01	1Q13	3/13/2013	Gross Beta	8.3	pCi/l	7	2.3	NA	8.30E-09	44.56977	-104.94045	330	Unk	SM 7110B	DOM, STK	IML
CSWELL03	2Q11	5/16/2011	Pb-210, D	<1	pCi/l	1.0	0	1.0E-08	NA	44.55489	-104.94768	120	Unk	OTW01	STK	IML
CSWELL03	2Q11	5/16/2011	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.55489	-104.94768	120	Unk	OTW01	STK	IML
CSWELL03	2Q11	5/16/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.55489	-104.94768	120	Unk	OTW01	STK	IML
CSWELL03	2Q11	5/16/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.55489	-104.94768	120	Unk	OTW01	STK	IML
CSWELL03	2Q11	5/16/2011	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.55489	-104.94768	120	Unk	SM 7500-Ra B	STK	IML
CSWELL03	2Q11	5/16/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.55489	-104.94768	120	Unk	SM 7500-Ra B	STK	IML
CSWELL03	2Q11	5/16/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.55489	-104.94768	120	Unk	Ra-05	STK	IML
CSWELL03	2Q11	5/16/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.55489	-104.94768	120	Unk	ACW10	STK	IML
CSWELL03	2Q11	5/16/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.55489	-104.94768	120	Unk	ACW10	STK	IML
CSWELL03	2Q11	5/16/2011	U, D	0.0017	mg/l	0.0003	0	3.0E-07	1.15E-09	44.55489	-104.94768	120	Unk	EPA 200.8	STK	IML
CSWELL03	2Q11	5/16/2011	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.55489	-104.94768	120	Unk	EPA 200.8	STK	IML
CSWELL03	2Q11	5/16/2011	Gross Alpha	2.9	pCi/l	2.0	0.8	NA	2.90E-09	44.55489	-104.94768	120	Unk	SM 7110B	STK	IML
CSWELL03	2Q11	5/16/2011	Gross Beta	6.7	pCi/l	3.0	1.1	NA	6.70E-09	44.55489	-104.94768	120	Unk	SM 7110B	STK	IML
CSWELL03	1Q12	3/16/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.55489	-104.94768	120	Unk	SM 7500-Ra B	STK	IML
CSWELL03	1Q12	3/16/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.55489	-104.94768	120	Unk	Ra-05	STK	IML
CSWELL03	1Q12	3/16/2012	U, D	0.0003	mg/l	0.0003	0	3.0E-07	2.03E-10	44.55489	-104.94768	120	Unk	EPA 200.8	STK	IML
CSWELL03	1Q12	3/16/2012	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.55489	-104.94768	120	Unk	SM 7110B	STK	IML
CSWELL03	1Q12	3/16/2012	Gross Beta	5.8	pCi/l	3	1.3	NA	5.80E-09	44.55489	-104.94768	120	Unk	SM 7110B	STK	IML
CSWELL03	3Q12	8/2/2012	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.55489	-104.94768	120	Unk	SM 7500 Ra-B	STK	IML
CSWELL03	3Q12	8/2/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.55489	-104.94768	120	Unk	Ga-Tech	STK	IML
CSWELL03	3Q12	8/2/2012	U, D	0.0007	mg/l	0.0003	0	3.0E-07	4.74E-10	44.55489	-104.94768	120	Unk	EPA 200.8	STK	IML
CSWELL03	3Q12	8/2/2012	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.55489	-104.94768	120	Unk	SM 7110B	STK	IML
CSWELL03	3Q12	8/2/2012	Gross Beta	8	pCi/l	3.0	1.2	NA	8.00E-09	44.55489	-104.94768	120	Unk	SM 7110B	STK	IML
CSWELL03	1Q13	3/13/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.55489	-104.94768	120	Unk	OTW01	STK	IML
CSWELL03	1Q13	3/13/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.55489	-104.94768	120	Unk	OTW01	STK	IML
CSWELL03	1Q13	3/13/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.55489	-104.94768	120	Unk	OTW01	STK	IML
CSWELL03	1Q13	3/13/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.55489	-104.94768	120	Unk	OTW01	STK	IML
CSWELL03	1Q13	3/13/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.55489	-104.94768	120	Unk	SM 7500 Ra-B	STK	IML
CSWELL03	1Q13	3/13/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.55489	-104.94768	120	Unk	SM 7500 Ra-B	STK	IML
CSWELL03	1Q13	3/13/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.55489	-104.94768	120	Unk	Ga-Tech	STK	IML
CSWELL03	1Q13	3/13/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.55489	-104.94768	120	Unk	ACW10	STK	IML
CSWELL03	1Q13	3/13/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.55489	-104.94768	120	Unk	ACW10	STK	IML
CSWELL03	1Q13	3/13/2013	U, D	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.55489	-104.94768	120	Unk	EPA 200.8	STK	IML
CSWELL03	1Q13	3/13/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.55489	-104.94768	120	Unk	EPA 200.8	STK	IML
CSWELL03	1Q13	3/13/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.55489	-104.94768	120	Unk	SM 7110B	STK	IML
CSWELL03	1Q13	3/13/2013	Gross Beta	6.5	pCi/l	3	1.2	NA	6.50E-09	44.55489	-104.94768	120	Unk	SM 7110B	STK	IML
DWWELL01	1Q11	2/15/2011	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.58006	-104.93779	Unk	Unk	SM 7500-Ra B	DOM	IML
DWWELL01	1Q11	2/15/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58006	-104.93779	Unk	Unk	Ra-05	DOM	IML
DWWELL01	1Q11	2/15/2011	U, D	<0.001	mg/l	0.001	0	3.0E-07	NA	44.58006	-104.93779	Unk	Unk	EPA 200.8	DOM	IML
DWWELL01	1Q11	2/15/2011	Gross Alpha	5.2	pCi/l	5	5.2	NA	5.20E-09	44.58006	-104.93779	Unk	Unk	SM 7110B	DOM	IML
DWWELL01	1Q11	2/15/2011	Gross Beta	<8	pCi/l	8	0	NA	NA	44.58006	-104.93779	Unk	Unk	SM 7110B	DOM	IML
DWWELL01	2Q11	5/17/2011	Pb-210, D	1	pCi/l	1	0.4	1.0E-08	1.00E-09	44.58006	-104.93779	Unk	Unk	OTW01	DOM	IML
DWWELL01	2Q11	5/17/2011	Pb-210, S	1.4	pCi/l	1	0.4	1.0E-08	1.40E-09	44.58006	-104.93779	Unk	Unk	OTW01	DOM	IML
DWWELL01	2Q11	5/17/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.58006	-104.93779	Unk	Unk	OTW01	DOM	IML
DWWELL01	2Q11	5/17/2011	Po-210, S	6.7	pCi/l	1	1.1	4.0E-08	6.70E-09	44.58006	-104.93779	Unk	Unk	OTW01	DOM	IML
DWWELL01	2Q11	5/17/2011	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.58006	-104.93779	Unk	Unk	SM 7500-Ra B	DOM	IML
DWWELL01	2Q11	5/17/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.58006	-104.93779	Unk	Unk	SM 7500-Ra B	DOM	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
DWWELL01	2Q11	5/17/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58006	-104.93779	Unk	Unk	Ra-05	DOM	IML
DWWELL01	2Q11	5/17/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58006	-104.93779	Unk	Unk	ACW10	DOM	IML
DWWELL01	2Q11	5/17/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58006	-104.93779	Unk	Unk	ACW10	DOM	IML
DWWELL01	2Q11	5/17/2011	U, D	0.0009	mg/l	0.0003	0	3.0E-07	6.09E-10	44.58006	-104.93779	Unk	Unk	EPA 200.8	DOM	IML
DWWELL01	2Q11	5/17/2011	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.58006	-104.93779	Unk	Unk	EPA 200.8	DOM	IML
DWWELL01	2Q11	5/17/2011	Gross Alpha	3.3	pCi/l	3.0	1.9	NA	3.30E-09	44.58006	-104.93779	Unk	Unk	SM 7110B	DOM	IML
DWWELL01	2Q11	5/17/2011	Gross Beta	7	pCi/l	7.0	4.3	NA	7.00E-09	44.58006	-104.93779	Unk	Unk	SM 7110B	DOM	IML
DWWELL01	3Q11	8/17/2011	Pb-210, D	<1	pCi/l	1.0	0	1.0E-08	NA	44.58006	-104.93779	Unk	Unk	OTW01	DOM	IML
DWWELL01	3Q11	8/17/2011	Pb-210, S	1.8	pCi/l	1	0.5	1.0E-08	1.80E-09	44.58006	-104.93779	Unk	Unk	OTW01	DOM	IML
DWWELL01	3Q11	8/17/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.58006	-104.93779	Unk	Unk	OTW01	DOM	IML
DWWELL01	3Q11	8/17/2011	Po-210, S	1.9	pCi/l	1	0.6	4.0E-08	1.90E-09	44.58006	-104.93779	Unk	Unk	OTW01	DOM	IML
DWWELL01	3Q11	8/17/2011	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.58006	-104.93779	Unk	Unk	SM 7500-Ra B	DOM	IML
DWWELL01	3Q11	8/17/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.58006	-104.93779	Unk	Unk	SM 7500-Ra B	DOM	IML
DWWELL01	3Q11	8/17/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58006	-104.93779	Unk	Unk	Ra-05	DOM	IML
DWWELL01	3Q11	8/17/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58006	-104.93779	Unk	Unk	ACW10	DOM	IML
DWWELL01	3Q11	8/17/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58006	-104.93779	Unk	Unk	ACW10	DOM	IML
DWWELL01	3Q11	8/17/2011	U, D	0.0005	mg/l	0.0003	0	3.0E-07	3.39E-10	44.58006	-104.93779	Unk	Unk	EPA 200.8	DOM	IML
DWWELL01	3Q11	8/17/2011	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.58006	-104.93779	Unk	Unk	EPA 200.8	DOM	IML
DWWELL01	3Q11	8/17/2011	Gross Alpha	<4	pCi/l	4.0	0	NA	NA	44.58006	-104.93779	Unk	Unk	SM 7110B	DOM	IML
DWWELL01	3Q11	8/17/2011	Gross Beta	8.5	pCi/l	7.0	4.2	NA	8.50E-09	44.58006	-104.93779	Unk	Unk	SM 7110B	DOM	IML
DWWELL01	4Q11	11/22/2011	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.58006	-104.93779	Unk	Unk	SM 7500-Ra B	DOM	IML
DWWELL01	4Q11	11/22/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58006	-104.93779	Unk	Unk	Ra-05	DOM	IML
DWWELL01	4Q11	11/22/2011	U, D	0.0005	mg/l	0.0003	0	3.0E-07	3.39E-10	44.58006	-104.93779	Unk	Unk	EPA 200.8	DOM	IML
DWWELL01	4Q11	11/22/2011	Gross Alpha	<6	pCi/l	6	0	NA	NA	44.58006	-104.93779	Unk	Unk	SM 7110B	DOM	IML
DWWELL01	4Q11	11/22/2011	Gross Beta	9.7	pCi/l	8	4.7	NA	9.70E-09	44.58006	-104.93779	Unk	Unk	SM 7110B	DOM	IML
DWWELL01	1Q12	2/27/2012	Ra-226, D	0.7	pCi/l	0.2	0.1	6.0E-08	7.00E-10	44.58006	-104.93779	Unk	Unk	SM 7500-Ra B	DOM	IML
DWWELL01	1Q12	2/27/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58006	-104.93779	Unk	Unk	Ra-05	DOM	IML
DWWELL01	1Q12	2/27/2012	U, D	0.0026	mg/l	0.0003	0	3.0E-07	1.76E-09	44.58006	-104.93779	Unk	Unk	EPA 200.8	DOM	IML
DWWELL01	1Q12	2/27/2012	Gross Alpha	<6	pCi/l	6	0	NA	NA	44.58006	-104.93779	Unk	Unk	SM 7110B	DOM	IML
DWWELL01	1Q12	2/27/2012	Gross Beta	<8	pCi/l	8.0	0	NA	NA	44.58006	-104.93779	Unk	Unk	SM 7110B	DOM	IML
DWWELL01	3Q12	8/2/2012	Ra-226, D	1.6	pCi/l	0.2	0.2	6.0E-08	1.60E-09	44.58006	-104.93779	Unk	Unk	SM 7500 Ra-B	DOM	IML
DWWELL01	3Q12	8/2/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58006	-104.93779	Unk	Unk	Ga-Tech	DOM	IML
DWWELL01	3Q12	8/2/2012	U, D	0.0034	mg/l	0.0003	0	3.0E-07	2.30E-09	44.58006	-104.93779	Unk	Unk	EPA 200.8	DOM	IML
DWWELL01	3Q12	8/2/2012	Gross Alpha	12.1	pCi/l	3	3.1	NA	1.21E-08	44.58006	-104.93779	Unk	Unk	SM 7110B	DOM	IML
DWWELL01	3Q12	8/2/2012	Gross Beta	17	pCi/l	7.0	4.5	NA	1.70E-08	44.58006	-104.93779	Unk	Unk	SM 7110B	DOM	IML
DWWELL01	1Q13	3/14/2013	Pb-210, D	1.8	pCi/l	1	0.6	1.0E-08	1.80E-09	44.58006	-104.93779	Unk	Unk	OTW01	DOM	IML
DWWELL01	1Q13	3/14/2013	Pb-210, S	2.2	pCi/l	1	0.4	1.0E-08	2.20E-09	44.58006	-104.93779	Unk	Unk	OTW01	DOM	IML
DWWELL01	1Q13	3/14/2013	Po-210, D	6.9	pCi/l	1	1.2	4.0E-08	6.90E-09	44.58006	-104.93779	Unk	Unk	OTW01	DOM	IML
DWWELL01	1Q13	3/14/2013	Po-210, S	4.1	pCi/l	1	1.4	4.0E-08	4.10E-09	44.58006	-104.93779	Unk	Unk	OTW01	DOM	IML
DWWELL01	1Q13	3/14/2013	Ra-226, D	3.6	pCi/l	0.2	0.2	6.0E-08	3.60E-09	44.58006	-104.93779	Unk	Unk	SM 7500 Ra-B	DOM	IML
DWWELL01	1Q13	3/14/2013	Ra-226, S	1.3	pCi/l	0.2	0.2	6.0E-08	1.30E-09	44.58006	-104.93779	Unk	Unk	SM 7500 Ra-B	DOM	IML
DWWELL01	1Q13	3/14/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58006	-104.93779	Unk	Unk	Ga-Tech	DOM	IML
DWWELL01	1Q13	3/14/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58006	-104.93779	Unk	Unk	ACW10	DOM	IML
DWWELL01	1Q13	3/14/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58006	-104.93779	Unk	Unk	ACW10	DOM	IML
DWWELL01	1Q13	3/14/2013	U, D	0.0078	mg/l	0.0	0	3.0E-07	5.28E-09	44.58006	-104.93779	Unk	Unk	EPA 200.8	DOM	IML
DWWELL01	1Q13	3/14/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.58006	-104.93779	Unk	Unk	EPA 200.8	DOM	IML
DWWELL01	1Q13	3/14/2013	Gross Alpha	31.2	pCi/l	5	5.1	NA	3.12E-08	44.58006	-104.93779	Unk	Unk	SM 7110B	DOM	IML
DWWELL01	1Q13	3/14/2013	Gross Beta	23.5	pCi/l	7	4.7	NA	2.35E-08	44.58006	-104.93779	Unk	Unk	SM 7110B	DOM	IML
HBWELL01	3Q12	9/11/2012	Pb-210, D	<1	pCi/l	1.0	0	1.0E-08	NA	44.61378	-104.94567	207	Unk	OTW01	STK	IML
HBWELL01	3Q12	9/11/2012	Pb-210, S	1	pCi/l	1	0.4	1.0E-08	1.00E-09	44.61378	-104.94567	207	Unk	OTW01	STK	IML
HBWELL01	3Q12	9/11/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.61378	-104.94567	207	Unk	OTW01	STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
HBWELL01	3Q12	9/11/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.61378	-104.94567	207	Unk	OTW01	STK	IML
HBWELL01	3Q12	9/11/2012	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.61378	-104.94567	207	Unk	SM 7500 Ra-B	STK	IML
HBWELL01	3Q12	9/11/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.61378	-104.94567	207	Unk	SM 7500 Ra-B	STK	IML
HBWELL01	3Q12	9/11/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.61378	-104.94567	207	Unk	Ga-Tech	STK	IML
HBWELL01	3Q12	9/11/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.61378	-104.94567	207	Unk	ACW10	STK	IML
HBWELL01	3Q12	9/11/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.61378	-104.94567	207	Unk	ACW10	STK	IML
HBWELL01	3Q12	9/11/2012	U, D	0.0121	mg/l	0.0003	0	3.0E-07	8.19E-09	44.61378	-104.94567	207	Unk	EPA 200.8	STK	IML
HBWELL01	3Q12	9/11/2012	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.61378	-104.94567	207	Unk	EPA 200.8	STK	IML
HBWELL01	3Q12	9/11/2012	Gross Alpha	8.8	pCi/l	2	2.4	NA	8.80E-09	44.61378	-104.94567	207	Unk	SM 7110B	STK	IML
HBWELL01	3Q12	9/11/2012	Gross Beta	16	pCi/l	3	2.4	NA	1.60E-08	44.61378	-104.94567	207	Unk	SM 7110B	STK	IML
HBWELL01	1Q13	2/6/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.61378	-104.94567	207	Unk	EPA 901.1M	STK	IML
HBWELL01	1Q13	2/6/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.61378	-104.94567	207	Unk	OTW01	STK	IML
HBWELL01	1Q13	2/6/2013	Pb-210, S	1.3	pCi/l	1	0.4	1.0E-08	1.30E-09	44.61378	-104.94567	207	Unk	OTW01	STK	IML
HBWELL01	1Q13	2/6/2013	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.61378	-104.94567	207	Unk	OTW01	STK	IML
HBWELL01	1Q13	2/6/2013	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.61378	-104.94567	207	Unk	OTW01	STK	IML
HBWELL01	1Q13	2/6/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.61378	-104.94567	207	Unk	SM 7500 Ra-B	STK	IML
HBWELL01	1Q13	2/6/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.61378	-104.94567	207	Unk	SM 7500 Ra-B	STK	IML
HBWELL01	1Q13	2/6/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.61378	-104.94567	207	Unk	Ga-Tech	STK	IML
HBWELL01	1Q13	2/6/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.61378	-104.94567	207	Unk	ACW10	STK	IML
HBWELL01	1Q13	2/6/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.61378	-104.94567	207	Unk	ACW10	STK	IML
HBWELL01	1Q13	2/6/2013	U, D	0.0087	mg/l	0.0003	0	3.0E-07	5.89E-09	44.61378	-104.94567	207	Unk	EPA 200.8	STK	IML
HBWELL01	1Q13	2/6/2013	U, S	0.0006	mg/l	0.0003	0	3.0E-07	4.06E-10	44.61378	-104.94567	207	Unk	EPA 200.8	STK	IML
HBWELL01	1Q13	2/6/2013	Gross Alpha	8.2	pCi/l	2	1.9	NA	8.20E-09	44.61378	-104.94567	207	Unk	SM 7110B	STK	IML
HBWELL01	1Q13	2/6/2013	Gross Beta	16.5	pCi/l	3	2.2	NA	1.65E-08	44.61378	-104.94567	207	Unk	SM 7110B	STK	IML
HBWELL03	1Q11	2/10/2011	Ra-226, D	0.7	pCi/l	0.2	0.1	6.0E-08	7.00E-10	44.60058	-104.9392	160	Unk	SM 7500-Ra B	STK	IML
HBWELL03	1Q11	2/10/2011	Ra-228, D	1.1	pCi/l	1	2.2	6.0E-08	1.10E-09	44.60058	-104.9392	160	Unk	Ra-05	STK	IML
HBWELL03	1Q11	2/10/2011	U, D	0.002	mg/l	0.0	0	3.0E-07	1.35E-09	44.60058	-104.9392	160	Unk	EPA 200.8	STK	IML
HBWELL03	1Q11	2/10/2011	Gross Alpha	<4	pCi/l	4.0	0	NA	NA	44.60058	-104.9392	160	Unk	SM 7110B	STK	IML
HBWELL03	1Q11	2/10/2011	Gross Beta	12.5	pCi/l	7.0	3.8	NA	1.25E-08	44.60058	-104.9392	160	Unk	SM 7110B	STK	IML
HBWELL03	2Q11	6/29/2011	Pb-210, D	1.3	pCi/l	1.0	0.5	1.0E-08	1.30E-09	44.60058	-104.9392	160	Unk	OTW01	STK	IML
HBWELL03	2Q11	6/29/2011	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.60058	-104.9392	160	Unk	OTW01	STK	IML
HBWELL03	2Q11	6/29/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.60058	-104.9392	160	Unk	OTW01	STK	IML
HBWELL03	2Q11	6/29/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60058	-104.9392	160	Unk	OTW01	STK	IML
HBWELL03	2Q11	6/29/2011	Ra-226, D	0.5	pCi/l	0.2	0.1	6.0E-08	5.00E-10	44.60058	-104.9392	160	Unk	SM 7500-Ra B	STK	IML
HBWELL03	2Q11	6/29/2011	Ra-226, S	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.60058	-104.9392	160	Unk	SM 7500-Ra B	STK	IML
HBWELL03	2Q11	6/29/2011	Ra-228, D	1.1	pCi/l	1	0.9	6.0E-08	1.10E-09	44.60058	-104.9392	160	Unk	Ra-05	STK	IML
HBWELL03	2Q11	6/29/2011	Th-230, D	<0.2	pCi/l	0	0	1.0E-07	NA	44.60058	-104.9392	160	Unk	ACW10	STK	IML
HBWELL03	2Q11	6/29/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60058	-104.9392	160	Unk	ACW10	STK	IML
HBWELL03	2Q11	6/29/2011	U, D	0.004	mg/l	0.0003	0	3.0E-07	2.71E-09	44.60058	-104.9392	160	Unk	EPA 200.8	STK	IML
HBWELL03	2Q11	6/29/2011	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.60058	-104.9392	160	Unk	EPA 200.8	STK	IML
HBWELL03	2Q11	6/29/2011	Gross Alpha	<5	pCi/l	5.0	0	NA	NA	44.60058	-104.9392	160	Unk	SM 7110B	STK	IML
HBWELL03	2Q11	6/29/2011	Gross Beta	16	pCi/l	8.0	4.7	NA	1.60E-08	44.60058	-104.9392	160	Unk	SM 7110B	STK	IML
HBWELL03	3Q11	8/12/2011	Pb-210, D	<1	pCi/l	1.0	0	1.0E-08	NA	44.60058	-104.9392	160	Unk	OTW01	STK	IML
HBWELL03	3Q11	8/12/2011	Pb-210, S	1.1	pCi/l	1	0.4	1.0E-08	1.10E-09	44.60058	-104.9392	160	Unk	OTW01	STK	IML
HBWELL03	3Q11	8/12/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.60058	-104.9392	160	Unk	OTW01	STK	IML
HBWELL03	3Q11	8/12/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60058	-104.9392	160	Unk	OTW01	STK	IML
HBWELL03	3Q11	8/12/2011	Ra-226, D	0.5	pCi/l	0.2	0.1	6.0E-08	5.00E-10	44.60058	-104.9392	160	Unk	SM 7500-Ra B	STK	IML
HBWELL03	3Q11	8/12/2011	Ra-226, S	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.60058	-104.9392	160	Unk	SM 7500-Ra B	STK	IML
HBWELL03	3Q11	8/12/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60058	-104.9392	160	Unk	Ra-05	STK	IML
HBWELL03	3Q11	8/12/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60058	-104.9392	160	Unk	ACW10	STK	IML
HBWELL03	3Q11	8/12/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60058	-104.9392	160	Unk	ACW10	STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
HBWELL03	3Q11	8/12/2011	U, D	0.0033	mg/l	0.0	0	3.0E-07	2.23E-09	44.60058	-104.9392	160	Unk	EPA 200.8	STK	IML
HBWELL03	3Q11	8/12/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60058	-104.9392	160	Unk	EPA 200.8	STK	IML
HBWELL03	3Q11	8/12/2011	Gross Alpha	5.6	pCi/l	3	2.4	NA	5.60E-09	44.60058	-104.9392	160	Unk	SM 7110B	STK	IML
HBWELL03	3Q11	8/12/2011	Gross Beta	13.4	pCi/l	7	4.2	NA	1.34E-08	44.60058	-104.9392	160	Unk	SM 7110B	STK	IML
HBWELL03	4Q11	11/21/2011	Ra-226, D	0.6	pCi/l	0.2	0.1	6.0E-08	6.00E-10	44.60058	-104.9392	160	Unk	SM 7500-Ra B	STK	IML
HBWELL03	4Q11	11/21/2011	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.60058	-104.9392	160	Unk	Ra-05	STK	IML
HBWELL03	4Q11	11/21/2011	U, D	0.0018	mg/l	0.0003	0	3.0E-07	1.22E-09	44.60058	-104.9392	160	Unk	EPA 200.8	STK	IML
HBWELL03	4Q11	11/21/2011	Gross Alpha	<4	pCi/l	4	0	NA	NA	44.60058	-104.9392	160	Unk	SM 7110B	STK	IML
HBWELL03	4Q11	11/21/2011	Gross Beta	18.2	pCi/l	5	3	NA	1.82E-08	44.60058	-104.9392	160	Unk	SM 7110B	STK	IML
HBWELL03	3Q12	8/1/2012	Ra-226, D	0.9	pCi/l	0.2	0.1	6.0E-08	9.00E-10	44.60058	-104.9392	160	Unk	SM 7500 Ra-B	STK	IML
HBWELL03	3Q12	8/1/2012	Ra-228, D	1.41	pCi/l	1.0	0.98	6.0E-08	1.41E-09	44.60058	-104.9392	160	Unk	Ga-Tech	STK	IML
HBWELL03	3Q12	8/1/2012	U, D	0.0021	mg/l	0.0003	0	3.0E-07	1.42E-09	44.60058	-104.9392	160	Unk	EPA 200.8	STK	IML
HBWELL03	3Q12	8/1/2012	Gross Alpha	<4	pCi/l	4	0	NA	NA	44.60058	-104.9392	160	Unk	SM 7110B	STK	IML
HBWELL03	3Q12	8/1/2012	Gross Beta	15.9	pCi/l	8	4.8	NA	1.59E-08	44.60058	-104.9392	160	Unk	SM 7110B	STK	IML
HBWELL04	2Q11	6/29/2011	Pb-210, D	1.8	pCi/l	1.0	0.5	1.0E-08	1.80E-09	44.60000	-104.93557	100	Unk	OTW01	STK	IML
HBWELL04	2Q11	6/29/2011	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.60000	-104.93557	100	Unk	OTW01	STK	IML
HBWELL04	2Q11	6/29/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.60000	-104.93557	100	Unk	OTW01	STK	IML
HBWELL04	2Q11	6/29/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60000	-104.93557	100	Unk	OTW01	STK	IML
HBWELL04	2Q11	6/29/2011	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.60000	-104.93557	100	Unk	SM 7500-Ra B	STK	IML
HBWELL04	2Q11	6/29/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60000	-104.93557	100	Unk	SM 7500-Ra B	STK	IML
HBWELL04	2Q11	6/29/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60000	-104.93557	100	Unk	Ra-05	STK	IML
HBWELL04	2Q11	6/29/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60000	-104.93557	100	Unk	ACW10	STK	IML
HBWELL04	2Q11	6/29/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60000	-104.93557	100	Unk	ACW10	STK	IML
HBWELL04	2Q11	6/29/2011	U, D	0.029	mg/l	0.0003	0	3.0E-07	1.96E-08	44.60000	-104.93557	100	Unk	EPA 200.8	STK	IML
HBWELL04	2Q11	6/29/2011	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.60000	-104.93557	100	Unk	EPA 200.8	STK	IML
HBWELL04	2Q11	6/29/2011	Gross Alpha	20.9	pCi/l	4.0	4.1	NA	2.09E-08	44.60000	-104.93557	100	Unk	SM 7110B	STK	IML
HBWELL04	2Q11	6/29/2011	Gross Beta	9.6	pCi/l	8	4.8	NA	9.60E-09	44.60000	-104.93557	100	Unk	SM 7110B	STK	IML
HBWELL04	3Q11	8/12/2011	Pb-210, D	1.2	pCi/l	1	0.5	1.0E-08	1.20E-09	44.60000	-104.93557	100	Unk	OTW01	STK	IML
HBWELL04	3Q11	8/12/2011	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.60000	-104.93557	100	Unk	OTW01	STK	IML
HBWELL04	3Q11	8/12/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.60000	-104.93557	100	Unk	OTW01	STK	IML
HBWELL04	3Q11	8/12/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60000	-104.93557	100	Unk	OTW01	STK	IML
HBWELL04	3Q11	8/12/2011	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.60000	-104.93557	100	Unk	SM 7500-Ra B	STK	IML
HBWELL04	3Q11	8/12/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60000	-104.93557	100	Unk	SM 7500-Ra B	STK	IML
HBWELL04	3Q11	8/12/2011	Ra-228, D	1.2	pCi/l	1	1	6.0E-08	1.20E-09	44.60000	-104.93557	100	Unk	Ra-05	STK	IML
HBWELL04	3Q11	8/12/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60000	-104.93557	100	Unk	ACW10	STK	IML
HBWELL04	3Q11	8/12/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60000	-104.93557	100	Unk	ACW10	STK	IML
HBWELL04	3Q11	8/12/2011	U, D	0.0291	mg/l	0.0	0	3.0E-07	1.97E-08	44.60000	-104.93557	100	Unk	EPA 200.8	STK	IML
HBWELL04	3Q11	8/12/2011	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.60000	-104.93557	100	Unk	EPA 200.8	STK	IML
HBWELL04	3Q11	8/12/2011	Gross Alpha	19.6	pCi/l	3	3.6	NA	1.96E-08	44.60000	-104.93557	100	Unk	SM 7110B	STK	IML
HBWELL04	3Q11	8/12/2011	Gross Beta	14.4	pCi/l	7	4.4	NA	1.44E-08	44.60000	-104.93557	100	Unk	SM 7110B	STK	IML
HBWELL04	4Q11	11/21/2011	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.60000	-104.93557	100	Unk	SM 7500-Ra B	STK	IML
HBWELL04	4Q11	11/21/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60000	-104.93557	100	Unk	Ra-05	STK	IML
HBWELL04	4Q11	11/21/2011	U, D	0.0301	mg/l	0.0003	0	3.0E-07	2.04E-08	44.60000	-104.93557	100	Unk	EPA 200.8	STK	IML
HBWELL04	4Q11	11/21/2011	Gross Alpha	16.6	pCi/l	3	3	NA	1.66E-08	44.60000	-104.93557	100	Unk	SM 7110B	STK	IML
HBWELL04	4Q11	11/21/2011	Gross Beta	10.3	pCi/l	4	2.7	NA	1.03E-08	44.60000	-104.93557	100	Unk	SM 7110B	STK	IML
HBWELL04	1Q12	2/27/2012	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.60000	-104.93557	100	Unk	SM 7500-Ra B	STK	IML
HBWELL04	1Q12	2/27/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60000	-104.93557	100	Unk	Ra-05	STK	IML
HBWELL04	1Q12	2/27/2012	U, D	0.0318	mg/l	0.0	0	3.0E-07	2.15E-08	44.60000	-104.93557	100	Unk	EPA 200.8	STK	IML
HBWELL04	1Q12	2/27/2012	Gross Alpha	18.9	pCi/l	3.0	3.3	NA	1.89E-08	44.60000	-104.93557	100	Unk	SM 7110B	STK	IML
HBWELL04	1Q12	2/27/2012	Gross Beta	10.8	pCi/l	5.0	3	NA	1.08E-08	44.60000	-104.93557	100	Unk	SM 7110B	STK	IML
HBWELL04	3Q12	8/1/2012	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.60000	-104.93557	100	Unk	SM 7500 Ra-B	STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
HBWELL04	3Q12	8/1/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60000	-104.93557	100	Unk	Ga-Tech	STK	IML
HBWELL04	3Q12	8/1/2012	U, D	0.0282	mg/l	0.0003	0	3.0E-07	1.91E-08	44.60000	-104.93557	100	Unk	EPA 200.8	STK	IML
HBWELL04	3Q12	8/1/2012	Gross Alpha	22.2	pCi/l	4	4	NA	2.22E-08	44.60000	-104.93557	100	Unk	SM 7110B	STK	IML
HBWELL04	3Q12	8/1/2012	Gross Beta	14.8	pCi/l	7	4.5	NA	1.48E-08	44.60000	-104.93557	100	Unk	SM 7110B	STK	IML
HBWELL04	1Q13	3/13/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.60000	-104.93557	100	Unk	OTW01	STK	IML
HBWELL04	1Q13	3/13/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.60000	-104.93557	100	Unk	OTW01	STK	IML
HBWELL04	1Q13	3/13/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.60000	-104.93557	100	Unk	OTW01	STK	IML
HBWELL04	1Q13	3/13/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60000	-104.93557	100	Unk	OTW01	STK	IML
HBWELL04	1Q13	3/13/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.60000	-104.93557	100	Unk	SM 7500 Ra-B	STK	IML
HBWELL04	1Q13	3/13/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60000	-104.93557	100	Unk	SM 7500 Ra-B	STK	IML
HBWELL04	1Q13	3/13/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60000	-104.93557	100	Unk	Ga-Tech	STK	IML
HBWELL04	1Q13	3/13/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60000	-104.93557	100	Unk	ACW10	STK	IML
HBWELL04	1Q13	3/13/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60000	-104.93557	100	Unk	ACW10	STK	IML
HBWELL04	1Q13	3/13/2013	U, D	0.0359	mg/l	0.0	0	3.0E-07	2.43E-08	44.60000	-104.93557	100	Unk	EPA 200.8	STK	IML
HBWELL04	1Q13	3/13/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60000	-104.93557	100	Unk	EPA 200.8	STK	IML
HBWELL04	1Q13	3/13/2013	Gross Alpha	23.2	pCi/l	3	3.9	NA	2.32E-08	44.60000	-104.93557	100	Unk	SM 7110B	STK	IML
HBWELL04	1Q13	3/13/2013	Gross Beta	20.2	pCi/l	7	4.5	NA	2.02E-08	44.6	-104.93557	100	Unk	SM 7110B	STK	IML
HBWELL05	1Q11	2/10/2011	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.58573	-104.93722	150	Unk	SM 7500-Ra B	DOM, STK	IML
HBWELL05	1Q11	2/10/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58573	-104.93722	150	Unk	Ra-05	DOM, STK	IML
HBWELL05	1Q11	2/10/2011	U, D	0.013	mg/l	0.0	0	3.0E-07	8.80E-09	44.58573	-104.93722	150	Unk	EPA 200.8	DOM, STK	IML
HBWELL05	1Q11	2/10/2011	Gross Alpha	7.7	pCi/l	5.0	5.1	NA	7.70E-09	44.58573	-104.93722	150	Unk	SM 7110B	DOM, STK	IML
HBWELL05	1Q11	2/10/2011	Gross Beta	<8	pCi/l	8.0	0	NA	NA	44.58573	-104.93722	150	Unk	SM 7110B	DOM, STK	IML
HBWELL05	2Q11	6/29/2011	Pb-210, D	1.4	pCi/l	1.0	0.5	1.0E-08	1.40E-09	44.58573	-104.93722	150	Unk	OTW01	DOM, STK	IML
HBWELL05	2Q11	6/29/2011	Pb-210, S	1.7	pCi/l	1	0.5	1.0E-08	1.70E-09	44.58573	-104.93722	150	Unk	OTW01	DOM, STK	IML
HBWELL05	2Q11	6/29/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.58573	-104.93722	150	Unk	OTW01	DOM, STK	IML
HBWELL05	2Q11	6/29/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.58573	-104.93722	150	Unk	OTW01	DOM, STK	IML
HBWELL05	2Q11	6/29/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.58573	-104.93722	150	Unk	SM 7500-Ra B	DOM, STK	IML
HBWELL05	2Q11	6/29/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.58573	-104.93722	150	Unk	SM 7500-Ra B	DOM, STK	IML
HBWELL05	2Q11	6/29/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58573	-104.93722	150	Unk	Ra-05	DOM, STK	IML
HBWELL05	2Q11	6/29/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58573	-104.93722	150	Unk	ACW10	DOM, STK	IML
HBWELL05	2Q11	6/29/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58573	-104.93722	150	Unk	ACW10	DOM, STK	IML
HBWELL05	2Q11	6/29/2011	U, D	0.0106	mg/l	0.0	0	3.0E-07	7.18E-09	44.58573	-104.93722	150	Unk	EPA 200.8	DOM, STK	IML
HBWELL05	2Q11	6/29/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.58573	-104.93722	150	Unk	EPA 200.8	DOM, STK	IML
HBWELL05	2Q11	6/29/2011	Gross Alpha	9.6	pCi/l	4	3.3	NA	9.60E-09	44.58573	-104.93722	150	Unk	SM 7110B	DOM, STK	IML
HBWELL05	2Q11	6/29/2011	Gross Beta	12.1	pCi/l	8	4.6	NA	1.21E-08	44.58573	-104.93722	150	Unk	SM 7110B	DOM, STK	IML
HBWELL05	3Q11	8/12/2011	Pb-210, D	1	pCi/l	1	0.5	1.0E-08	1.00E-09	44.58573	-104.93722	150	Unk	OTW01	DOM, STK	IML
HBWELL05	3Q11	8/12/2011	Pb-210, S	6.8	pCi/l	1	0.7	1.0E-08	6.80E-09	44.58573	-104.93722	150	Unk	OTW01	DOM, STK	IML
HBWELL05	3Q11	8/12/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.58573	-104.93722	150	Unk	OTW01	DOM, STK	IML
HBWELL05	3Q11	8/12/2011	Po-210, S	1.5	pCi/l	1.0	0.5	4.0E-08	1.50E-09	44.58573	-104.93722	150	Unk	OTW01	DOM, STK	IML
HBWELL05	3Q11	8/12/2011	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.58573	-104.93722	150	Unk	SM 7500-Ra B	DOM, STK	IML
HBWELL05	3Q11	8/12/2011	Ra-226, S	1.2	pCi/l	0.2	0.1	6.0E-08	1.20E-09	44.58573	-104.93722	150	Unk	SM 7500-Ra B	DOM, STK	IML
HBWELL05	3Q11	8/12/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58573	-104.93722	150	Unk	Ra-05	DOM, STK	IML
HBWELL05	3Q11	8/12/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58573	-104.93722	150	Unk	ACW10	DOM, STK	IML
HBWELL05	3Q11	8/12/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58573	-104.93722	150	Unk	ACW10	DOM, STK	IML
HBWELL05	3Q11	8/12/2011	U, D	0.0108	mg/l	0.0003	0	3.0E-07	7.31E-09	44.58573	-104.93722	150	Unk	EPA 200.8	DOM, STK	IML
HBWELL05	3Q11	8/12/2011	U, S	0.0029	mg/l	0.0003	0	3.0E-07	1.96E-09	44.58573	-104.93722	150	Unk	EPA 200.8	DOM, STK	IML
HBWELL05	3Q11	8/12/2011	Gross Alpha	10	pCi/l	3	2.8	NA	1.00E-08	44.58573	-104.93722	150	Unk	SM 7110B	DOM, STK	IML
HBWELL05	3Q11	8/12/2011	Gross Beta	7.4	pCi/l	7	4.3	NA	7.40E-09	44.58573	-104.93722	150	Unk	SM 7110B	DOM, STK	IML
HBWELL05	4Q11	11/21/2011	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.58573	-104.93722	150	Unk	SM 7500-Ra B	DOM, STK	IML
HBWELL05	4Q11	11/21/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58573	-104.93722	150	Unk	Ra-05	DOM, STK	IML
HBWELL05	4Q11	11/21/2011	U, D	0.0119	mg/l	0.0	0	3.0E-07	8.06E-09	44.58573	-104.93722	150	Unk	EPA 200.8	DOM, STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
HBWELL05	4Q11	11/21/2011	Gross Alpha	9.2	pCi/l	3.0	2.3	NA	9.20E-09	44.58573	-104.93722	150	Unk	SM 7110B	DOM, STK	IML
HBWELL05	4Q11	11/21/2011	Gross Beta	8	pCi/l	4.0	2.7	NA	8.00E-09	44.58573	-104.93722	150	Unk	SM 7110B	DOM, STK	IML
HBWELL05	1Q12	2/27/2012	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.58573	-104.93722	150	Unk	SM 7500-Ra B	DOM, STK	IML
HBWELL05	1Q12	2/27/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58573	-104.93722	150	Unk	Ra-05	DOM, STK	IML
HBWELL05	1Q12	2/27/2012	U, D	0.0138	mg/l	0.0003	0	3.0E-07	9.34E-09	44.58573	-104.93722	150	Unk	EPA 200.8	DOM, STK	IML
HBWELL05	1Q12	2/27/2012	Gross Alpha	9	pCi/l	4	2.7	NA	9.00E-09	44.58573	-104.93722	150	Unk	SM 7110B	DOM, STK	IML
HBWELL05	1Q12	2/27/2012	Gross Beta	6.4	pCi/l	5	2.9	NA	6.40E-09	44.58573	-104.93722	150	Unk	SM 7110B	DOM, STK	IML
HBWELL05	3Q12	8/15/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.58573	-104.93722	150	Unk	SM 7500 Ra-B	DOM, STK	IML
HBWELL05	3Q12	8/15/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58573	-104.93722	150	Unk	Ga-Tech	DOM, STK	IML
HBWELL05	3Q12	8/15/2012	U, D	0.0114	mg/l	0.0003	0	3.0E-07	7.72E-09	44.58573	-104.93722	150	Unk	EPA 200.8	DOM, STK	IML
HBWELL05	3Q12	8/15/2012	Gross Alpha	10.7	pCi/l	2	2.2	NA	1.07E-08	44.58573	-104.93722	150	Unk	SM 7110B	DOM, STK	IML
HBWELL05	3Q12	8/15/2012	Gross Beta	10.5	pCi/l	4.0	2.7	NA	1.05E-08	44.58573	-104.93722	150	Unk	SM 7110B	DOM, STK	IML
HBWELL05	1Q13	3/14/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.58573	-104.93722	150	Unk	OTW01	DOM, STK	IML
HBWELL05	1Q13	3/14/2013	Pb-210, S	1.2	pCi/l	1	0.4	1.0E-08	1.20E-09	44.58573	-104.93722	150	Unk	OTW01	DOM, STK	IML
HBWELL05	1Q13	3/14/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.58573	-104.93722	150	Unk	OTW01	DOM, STK	IML
HBWELL05	1Q13	3/14/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.58573	-104.93722	150	Unk	OTW01	DOM, STK	IML
HBWELL05	1Q13	3/14/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.58573	-104.93722	150	Unk	SM 7500 Ra-B	DOM, STK	IML
HBWELL05	1Q13	3/14/2013	Ra-226, S	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.58573	-104.93722	150	Unk	SM 7500 Ra-B	DOM, STK	IML
HBWELL05	1Q13	3/14/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58573	-104.93722	150	Unk	Ga-Tech	DOM, STK	IML
HBWELL05	1Q13	3/14/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58573	-104.93722	150	Unk	ACW10	DOM, STK	IML
HBWELL05	1Q13	3/14/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58573	-104.93722	150	Unk	ACW10	DOM, STK	IML
HBWELL05	1Q13	3/14/2013	U, D	0.0113	mg/l	0.0	0	3.0E-07	7.65E-09	44.58573	-104.93722	150	Unk	EPA 200.8	DOM, STK	IML
HBWELL05	1Q13	3/14/2013	U, S	0.0004	mg/l	0.0003	0	3.0E-07	2.71E-10	44.58573	-104.93722	150	Unk	EPA 200.8	DOM, STK	IML
HBWELL05	1Q13	3/14/2013	Gross Alpha	9.1	pCi/l	4	3.1	NA	9.10E-09	44.58573	-104.93722	150	Unk	SM 7110B	DOM, STK	IML
HBWELL05	1Q13	3/14/2013	Gross Beta	11.4	pCi/l	7	4.4	NA	1.14E-08	44.58573	-104.93722	150	Unk	SM 7110B	DOM, STK	IML
P144030W	3Q11	8/16/2011	Pb-210, D	1.3	pCi/l	1	0.4	1.0E-08	1.30E-09	44.55942	-104.99803	401	Unk	OTW01	DOM, STK	IML
P144030W	3Q11	8/16/2011	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.55942	-104.99803	401	Unk	OTW01	DOM, STK	IML
P144030W	3Q11	8/16/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.55942	-104.99803	401	Unk	OTW01	DOM, STK	IML
P144030W	3Q11	8/16/2011	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.55942	-104.99803	401	Unk	OTW01	DOM, STK	IML
P144030W	3Q11	8/16/2011	Ra-226, D	0.9	pCi/l	0.2	0.1	6.0E-08	9.00E-10	44.55942	-104.99803	401	Unk	SM 7500-Ra B	DOM, STK	IML
P144030W	3Q11	8/16/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.55942	-104.99803	401	Unk	SM 7500-Ra B	DOM, STK	IML
P144030W	3Q11	8/16/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.55942	-104.99803	401	Unk	Ra-05	DOM, STK	IML
P144030W	3Q11	8/16/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.55942	-104.99803	401	Unk	ACW10	DOM, STK	IML
P144030W	3Q11	8/16/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.55942	-104.99803	401	Unk	ACW10	DOM, STK	IML
P144030W	3Q11	8/16/2011	U, D	0.0274	mg/l	0.0003	0	3.0E-07	1.85E-08	44.55942	-104.99803	401	Unk	EPA 200.8	DOM, STK	IML
P144030W	3Q11	8/16/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.55942	-104.99803	401	Unk	EPA 200.8	DOM, STK	IML
P144030W	3Q11	8/16/2011	Gross Alpha	20.4	pCi/l	2	2.5	NA	2.04E-08	44.55942	-104.99803	401	Unk	SM 7110B	DOM, STK	IML
P144030W	3Q11	8/16/2011	Gross Beta	17.2	pCi/l	4	2.4	NA	1.72E-08	44.55942	-104.99803	401	Unk	SM 7110B	DOM, STK	IML
P1440W	1Q13	2/7/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.50793	-104.99809	1363	Unk	EPA 901.1M	IND	IML
P1440W	1Q13	2/7/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.50793	-104.99809	1363	Unk	OTW01	IND	IML
P1440W	1Q13	2/7/2013	Pb-210, S	<1	pCi/l	1.0	0	1.0E-08	NA	44.50793	-104.99809	1363	Unk	OTW01	IND	IML
P1440W	1Q13	2/7/2013	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.50793	-104.99809	1363	Unk	OTW01	IND	IML
P1440W	1Q13	2/7/2013	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.50793	-104.99809	1363	Unk	OTW01	IND	IML
P1440W	1Q13	2/7/2013	Ra-226, D	0.5	pCi/l	0.2	0.1	6.0E-08	5.00E-10	44.50793	-104.99809	1363	Unk	SM 7500 Ra-B	IND	IML
P1440W	1Q13	2/7/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.50793	-104.99809	1363	Unk	SM 7500 Ra-B	IND	IML
P1440W	1Q13	2/7/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.50793	-104.99809	1363	Unk	Ga-Tech	IND	IML
P1440W	1Q13	2/7/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.50793	-104.99809	1363	Unk	ACW10	IND	IML
P1440W	1Q13	2/7/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.50793	-104.99809	1363	Unk	ACW10	IND	IML
P1440W	1Q13	2/7/2013	U, D	0.0051	mg/l	0.0003	0	3.0E-07	3.45E-09	44.50793	-104.99809	1363	Unk	EPA 200.8	IND	IML
P1440W	1Q13	2/7/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.50793	-104.99809	1363	Unk	EPA 200.8	IND	IML
P1440W	1Q13	2/7/2013	Gross Alpha	12.2	pCi/l	2	2.2	NA	1.22E-08	44.50793	-104.99809	1363	Unk	SM 7110B	IND	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
P1440W	1Q13	2/7/2013	Gross Beta	4	pCi/l	3	2.1	NA	4.00E-09	44.50793	-104.99809	1363	Unk	SM 7110B	IND	IML
P1440W	2Q14	6/24/2014	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.50793	-104.99809	1363	Unk	EPA 901.1M	IND	IML
P1440W	2Q14	6/24/2014	Pb-210, D	1.1	pCi/l	1	0.4	1.0E-08	1.10E-09	44.50793	-104.99809	1363	Unk	OTW01	IND	IML
P1440W	2Q14	6/24/2014	Pb-210, S	1.3	pCi/l	1.0	0.5	1.0E-08	1.30E-09	44.50793	-104.99809	1363	Unk	OTW01	IND	IML
P1440W	2Q14	6/24/2014	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.50793	-104.99809	1363	Unk	OTW01	IND	IML
P1440W	2Q14	6/24/2014	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.50793	-104.99809	1363	Unk	OTW01	IND	IML
P1440W	2Q14	6/24/2014	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.50793	-104.99809	1363	Unk	SM 7500 Ra-B	IND	IML
P1440W	2Q14	6/24/2014	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.50793	-104.99809	1363	Unk	SM 7500 Ra-B	IND	IML
P1440W	2Q14	6/24/2014	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.50793	-104.99809	1363	Unk	Ga-Tech	IND	IML
P1440W	2Q14	6/24/2014	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.50793	-104.99809	1363	Unk	ACW10	IND	IML
P1440W	2Q14	6/24/2014	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.50793	-104.99809	1363	Unk	ACW10	IND	IML
P1440W	2Q14	6/24/2014	U, D	0.0051	mg/l	0.0003	0	3.0E-07	3.45E-09	44.50793	-104.99809	1363	Unk	EPA 200.8	IND	IML
P1440W	2Q14	6/24/2014	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.50793	-104.99809	1363	Unk	EPA 200.8	IND	IML
P1440W	2Q14	6/24/2014	Gross Alpha	10.1	pCi/l	2	2.7	NA	1.01E-08	44.50793	-104.99809	1363	Unk	SM 7110B	IND	IML
P1440W	2Q14	6/24/2014	Gross Beta	<3	pCi/l	3	0	NA	NA	44.50793	-104.99809	1363	Unk	SM 7110B	IND	IML
P150187W	1Q13	2/7/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.50388	-104.98981	1539	Unk	EPA 901.1M	IND	IML
P150187W	1Q13	2/7/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.50388	-104.98981	1539	Unk	OTW01	IND	IML
P150187W	1Q13	2/7/2013	Pb-210, S	1.3	pCi/l	1.0	0.4	1.0E-08	1.30E-09	44.50388	-104.98981	1539	Unk	OTW01	IND	IML
P150187W	1Q13	2/7/2013	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.50388	-104.98981	1539	Unk	OTW01	IND	IML
P150187W	1Q13	2/7/2013	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.50388	-104.98981	1539	Unk	OTW01	IND	IML
P150187W	1Q13	2/7/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.50388	-104.98981	1539	Unk	SM 7500 Ra-B	IND	IML
P150187W	1Q13	2/7/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.50388	-104.98981	1539	Unk	SM 7500 Ra-B	IND	IML
P150187W	1Q13	2/7/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.50388	-104.98981	1539	Unk	Ga-Tech	IND	IML
P150187W	1Q13	2/7/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.50388	-104.98981	1539	Unk	ACW10	IND	IML
P150187W	1Q13	2/7/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.50388	-104.98981	1539	Unk	ACW10	IND	IML
P150187W	1Q13	2/7/2013	U, D	0.0004	mg/l	0.0003	0	3.0E-07	2.71E-10	44.50388	-104.98981	1539	Unk	EPA 200.8	IND	IML
P150187W	1Q13	2/7/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.50388	-104.98981	1539	Unk	EPA 200.8	IND	IML
P150187W	1Q13	2/7/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.50388	-104.98981	1539	Unk	SM 7110B	IND	IML
P150187W	1Q13	2/7/2013	Gross Beta	<3	pCi/l	3	0	NA	NA	44.50388	-104.98981	1539	Unk	SM 7110B	IND	IML
P17177W	1Q11	3/1/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60905	-104.97663	180	Unk	SM 7500-Ra B	STK	IML
P17177W	1Q11	3/1/2011	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.60905	-104.97663	180	Unk	Ra-05	STK	IML
P17177W	1Q11	3/1/2011	U, D	0.0214	mg/l	0.0	0	3.0E-07	1.45E-08	44.60905	-104.97663	180	Unk	EPA 200.8	STK	IML
P17177W	1Q11	3/1/2011	Gross Alpha	17.1	pCi/l	5.0	5.6	NA	1.71E-08	44.60905	-104.97663	180	Unk	SM 7110B	STK	IML
P17177W	1Q11	3/1/2011	Gross Beta	13.6	pCi/l	7	3.9	NA	1.36E-08	44.60905	-104.97663	180	Unk	SM 7110B	STK	IML
P17177W	2Q11	5/17/2011	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.60905	-104.97663	180	Unk	OTW01	STK	IML
P17177W	2Q11	5/17/2011	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.60905	-104.97663	180	Unk	OTW01	STK	IML
P17177W	2Q11	5/17/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.60905	-104.97663	180	Unk	OTW01	STK	IML
P17177W	2Q11	5/17/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60905	-104.97663	180	Unk	OTW01	STK	IML
P17177W	2Q11	5/17/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60905	-104.97663	180	Unk	SM 7500-Ra B	STK	IML
P17177W	2Q11	5/17/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60905	-104.97663	180	Unk	SM 7500-Ra B	STK	IML
P17177W	2Q11	5/17/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60905	-104.97663	180	Unk	Ra-05	STK	IML
P17177W	2Q11	5/17/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60905	-104.97663	180	Unk	ACW10	STK	IML
P17177W	2Q11	5/17/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60905	-104.97663	180	Unk	ACW10	STK	IML
P17177W	2Q11	5/17/2011	U, D	0.0263	mg/l	0.0003	0	3.0E-07	1.78E-08	44.60905	-104.97663	180	Unk	EPA 200.8	STK	IML
P17177W	2Q11	5/17/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60905	-104.97663	180	Unk	EPA 200.8	STK	IML
P17177W	2Q11	5/17/2011	Gross Alpha	12.9	pCi/l	2	2.2	NA	1.29E-08	44.60905	-104.97663	180	Unk	SM 7110B	STK	IML
P17177W	2Q11	5/17/2011	Gross Beta	10	pCi/l	4	2.4	NA	1.00E-08	44.60905	-104.97663	180	Unk	SM 7110B	STK	IML
P17177W	3Q11	8/17/2011	Pb-210, D	<1	pCi/l	1.0	0	1.0E-08	NA	44.60905	-104.97663	180	Unk	OTW01	STK	IML
P17177W	3Q11	8/17/2011	Pb-210, S	1.8	pCi/l	1.0	0.5	1.0E-08	1.80E-09	44.60905	-104.97663	180	Unk	OTW01	STK	IML
P17177W	3Q11	8/17/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.60905	-104.97663	180	Unk	OTW01	STK	IML
P17177W	3Q11	8/17/2011	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.60905	-104.97663	180	Unk	OTW01	STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
P17177W	3Q11	8/17/2011	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.60905	-104.97663	180	Unk	SM 7500-Ra B	STK	IML
P17177W	3Q11	8/17/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60905	-104.97663	180	Unk	SM 7500-Ra B	STK	IML
P17177W	3Q11	8/17/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60905	-104.97663	180	Unk	Ra-05	STK	IML
P17177W	3Q11	8/17/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60905	-104.97663	180	Unk	ACW10	STK	IML
P17177W	3Q11	8/17/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60905	-104.97663	180	Unk	ACW10	STK	IML
P17177W	3Q11	8/17/2011	U, D	0.023	mg/l	0.0003	0	3.0E-07	1.56E-08	44.60905	-104.97663	180	Unk	EPA 200.8	STK	IML
P17177W	3Q11	8/17/2011	U, S	<0.0003	mg/l	0	0	3.0E-07	NA	44.60905	-104.97663	180	Unk	EPA 200.8	STK	IML
P17177W	3Q11	8/17/2011	Gross Alpha	11.6	pCi/l	2	2.2	NA	1.16E-08	44.60905	-104.97663	180	Unk	SM 7110B	STK	IML
P17177W	3Q11	8/17/2011	Gross Beta	4.1	pCi/l	4	2.3	NA	4.10E-09	44.60905	-104.97663	180	Unk	SM 7110B	STK	IML
P17177W	4Q11	12/6/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60905	-104.97663	180	Unk	SM 7500-Ra B	STK	IML
P17177W	4Q11	12/6/2011	Ra-228, D	<1.0	pCi/l	1.0	0	6.0E-08	NA	44.60905	-104.97663	180	Unk	Ra-05	STK	IML
P17177W	4Q11	12/6/2011	U, D	0.0189	mg/l	0.0	0	3.0E-07	1.28E-08	44.60905	-104.97663	180	Unk	EPA 200.8	STK	IML
P17177W	4Q11	12/6/2011	Gross Alpha	5.8	pCi/l	2.0	1.5	NA	5.80E-09	44.60905	-104.97663	180	Unk	SM 7110B	STK	IML
P17177W	4Q11	12/6/2011	Gross Beta	7.4	pCi/l	3	1.3	NA	7.40E-09	44.60905	-104.97663	180	Unk	SM 7110B	STK	IML
P17177W	1Q12	3/14/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60905	-104.97663	180	Unk	SM 7500-Ra B	STK	IML
P17177W	1Q12	3/14/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60905	-104.97663	180	Unk	Ra-05	STK	IML
P17177W	1Q12	3/14/2012	U, D	0.0181	mg/l	0.0003	0	3.0E-07	1.23E-08	44.60905	-104.97663	180	Unk	EPA 200.8	STK	IML
P17177W	1Q12	3/14/2012	Gross Alpha	7	pCi/l	2	1.6	NA	7.00E-09	44.60905	-104.97663	180	Unk	SM 7110B	STK	IML
P17177W	1Q12	3/14/2012	Gross Beta	6.6	pCi/l	3	1.3	NA	6.60E-09	44.60905	-104.97663	180	Unk	SM 7110B	STK	IML
P17177W	3Q12	8/15/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60905	-104.97663	180	Unk	SM 7500 Ra-B	STK	IML
P17177W	3Q12	8/15/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60905	-104.97663	180	Unk	Ga-Tech	STK	IML
P17177W	3Q12	8/15/2012	U, D	0.0135	mg/l	0.0	0	3.0E-07	9.14E-09	44.60905	-104.97663	180	Unk	EPA 200.8	STK	IML
P17177W	3Q12	8/15/2012	Gross Alpha	7.1	pCi/l	2	1.3	NA	7.10E-09	44.60905	-104.97663	180	Unk	SM 7110B	STK	IML
P17177W	3Q12	8/15/2012	Gross Beta	7.3	pCi/l	3	1.5	NA	7.30E-09	44.60905	-104.97663	180	Unk	SM 7110B	STK	IML
P17177W	1Q13	2/7/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.60905	-104.97663	180	Unk	EPA 901.1M	STK	IML
P17177W	1Q13	2/7/2013	Pb-210, D	1	pCi/l	1	0.4	1.0E-08	1.00E-09	44.60905	-104.97663	180	Unk	OTW01	STK	IML
P17177W	1Q13	2/7/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.60905	-104.97663	180	Unk	OTW01	STK	IML
P17177W	1Q13	2/7/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.60905	-104.97663	180	Unk	OTW01	STK	IML
P17177W	1Q13	2/7/2013	Po-210, S	1.1	pCi/l	1	0.8	4.0E-08	1.10E-09	44.60905	-104.97663	180	Unk	OTW01	STK	IML
P17177W	1Q13	2/7/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60905	-104.97663	180	Unk	SM 7500 Ra-B	STK	IML
P17177W	1Q13	2/7/2013	Ra-226, S	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.60905	-104.97663	180	Unk	SM 7500 Ra-B	STK	IML
P17177W	1Q13	2/7/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60905	-104.97663	180	Unk	Ga-Tech	STK	IML
P17177W	1Q13	2/7/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60905	-104.97663	180	Unk	ACW10	STK	IML
P17177W	1Q13	2/7/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60905	-104.97663	180	Unk	ACW10	STK	IML
P17177W	1Q13	2/7/2013	U, D	0.0119	mg/l	0.0	0	3.0E-07	8.06E-09	44.60905	-104.97663	180	Unk	EPA 200.8	STK	IML
P17177W	1Q13	2/7/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60905	-104.97663	180	Unk	EPA 200.8	STK	IML
P17177W	1Q13	2/7/2013	Gross Alpha	10.7	pCi/l	2	1.5	NA	1.07E-08	44.60905	-104.97663	180	Unk	SM 7110B	STK	IML
P17177W	1Q13	2/7/2013	Gross Beta	5.8	pCi/l	3	1.5	NA	5.80E-09	44.60905	-104.97663	180	Unk	SM 7110B	STK	IML
P20521W	3Q12	9/13/2012	Pb-210, D	1.5	pCi/l	1	0.4	1.0E-08	1.50E-09	44.52694	-105.00071	482	Unk	OTW01	DOM, STK	IML
P20521W	3Q12	9/13/2012	Pb-210, S	27.8	pCi/l	1	1.3	1.0E-08	2.78E-08	44.52694	-105.00071	482	Unk	OTW01	DOM, STK	IML
P20521W	3Q12	9/13/2012	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.52694	-105.00071	482	Unk	OTW01	DOM, STK	IML
P20521W	3Q12	9/13/2012	Po-210, S	2.7	pCi/l	1.0	0.6	4.0E-08	2.70E-09	44.52694	-105.00071	482	Unk	OTW01	DOM, STK	IML
P20521W	3Q12	9/13/2012	Ra-226, D	1.1	pCi/l	0.2	0.1	6.0E-08	1.10E-09	44.52694	-105.00071	482	Unk	SM 7500 Ra-B	DOM, STK	IML
P20521W	3Q12	9/13/2012	Ra-226, S	3.1	pCi/l	0.2	0.2	6.0E-08	3.10E-09	44.52694	-105.00071	482	Unk	SM 7500 Ra-B	DOM, STK	IML
P20521W	3Q12	9/13/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.52694	-105.00071	482	Unk	Ga-Tech	DOM, STK	IML
P20521W	3Q12	9/13/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52694	-105.00071	482	Unk	ACW10	DOM, STK	IML
P20521W	3Q12	9/13/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52694	-105.00071	482	Unk	ACW10	DOM, STK	IML
P20521W	3Q12	9/13/2012	U, D	0.0177	mg/l	0.0003	0	3.0E-07	1.20E-08	44.52694	-105.00071	482	Unk	EPA 200.8	DOM, STK	IML
P20521W	3Q12	9/13/2012	U, S	0.0012	mg/l	0.0003	0	3.0E-07	8.12E-10	44.52694	-105.00071	482	Unk	EPA 200.8	DOM, STK	IML
P20521W	3Q12	9/13/2012	Gross Alpha	11.2	pCi/l	2	1.7	NA	1.12E-08	44.52694	-105.00071	482	Unk	SM 7110B	DOM, STK	IML
P20521W	3Q12	9/13/2012	Gross Beta	8.8	pCi/l	3	1.5	NA	8.80E-09	44.52694	-105.00071	482	Unk	SM 7110B	DOM, STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
P20521W	2Q14	6/25/2014	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.52694	-105.00071	482	Unk	EPA 901.1M	DOM, STK	IML
P20521W	2Q14	6/25/2014	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.52694	-105.00071	482	Unk	OTW01	DOM, STK	IML
P20521W	2Q14	6/25/2014	Pb-210, S	1.5	pCi/l	1	0.5	1.0E-08	1.50E-09	44.52694	-105.00071	482	Unk	OTW01	DOM, STK	IML
P20521W	2Q14	6/25/2014	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.52694	-105.00071	482	Unk	OTW01	DOM, STK	IML
P20521W	2Q14	6/25/2014	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.52694	-105.00071	482	Unk	OTW01	DOM, STK	IML
P20521W	2Q14	6/25/2014	Ra-226, D	1.2	pCi/l	0.2	0.2	6.0E-08	1.20E-09	44.52694	-105.00071	482	Unk	SM 7500 Ra-B	DOM, STK	IML
P20521W	2Q14	6/25/2014	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.52694	-105.00071	482	Unk	SM 7500 Ra-B	DOM, STK	IML
P20521W	2Q14	6/25/2014	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.52694	-105.00071	482	Unk	Ga-Tech	DOM, STK	IML
P20521W	2Q14	6/25/2014	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52694	-105.00071	482	Unk	ACW10	DOM, STK	IML
P20521W	2Q14	6/25/2014	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52694	-105.00071	482	Unk	ACW10	DOM, STK	IML
P20521W	2Q14	6/25/2014	U, D	0.0168	mg/l	0.0003	0	3.0E-07	1.14E-08	44.52694	-105.00071	482	Unk	EPA 200.8	DOM, STK	IML
P20521W	2Q14	6/25/2014	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.52694	-105.00071	482	Unk	EPA 200.8	DOM, STK	IML
P20521W	2Q14	6/25/2014	Gross Alpha	9.3	pCi/l	2	1.5	NA	9.30E-09	44.52694	-105.00071	482	Unk	SM 7110B	DOM, STK	IML
P20521W	2Q14	6/25/2014	Gross Beta	7.6	pCi/l	3	1.3	NA	7.60E-09	44.52694	-105.00071	482	Unk	SM 7110B	DOM, STK	IML
P21130P	4Q12	10/31/2012	Pb-210, D	1.3	pCi/l	1	0.5	1.0E-08	1.30E-09	44.55046	-104.99354	250	Unk	OTW01	STK	IML
P21130P	4Q12	10/31/2012	Pb-210, S	1.2	pCi/l	1	0.4	1.0E-08	1.20E-09	44.55046	-104.99354	250	Unk	OTW01	STK	IML
P21130P	4Q12	10/31/2012	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.55046	-104.99354	250	Unk	OTW01	STK	IML
P21130P	4Q12	10/31/2012	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.55046	-104.99354	250	Unk	OTW01	STK	IML
P21130P	4Q12	10/31/2012	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.55046	-104.99354	250	Unk	SM 7500 Ra-B	STK	IML
P21130P	4Q12	10/31/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.55046	-104.99354	250	Unk	SM 7500 Ra-B	STK	IML
P21130P	4Q12	10/31/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.55046	-104.99354	250	Unk	Ga-Tech	STK	IML
P21130P	4Q12	10/31/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.55046	-104.99354	250	Unk	ACW10	STK	IML
P21130P	4Q12	10/31/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.55046	-104.99354	250	Unk	ACW10	STK	IML
P21130P	4Q12	10/31/2012	U, D	0.013	mg/l	0.0003	0	3.0E-07	8.80E-09	44.55046	-104.99354	250	Unk	EPA 200.8	STK	IML
P21130P	4Q12	10/31/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.55046	-104.99354	250	Unk	EPA 200.8	STK	IML
P21130P	4Q12	10/31/2012	Gross Alpha	9.1	pCi/l	2	1.6	NA	9.10E-09	44.55046	-104.99354	250	Unk	SM 7110B	STK	IML
P21130P	4Q12	10/31/2012	Gross Beta	13.1	pCi/l	3	1.7	NA	1.31E-08	44.55046	-104.99354	250	Unk	SM 7110B	STK	IML
P22582P	2Q11	6/29/2011	Pb-210, D	1.6	pCi/l	1	0.5	1.0E-08	1.60E-09	44.55855	-104.96187	150	Unk	OTW01	STK	IML
P22582P	2Q11	6/29/2011	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.55855	-104.96187	150	Unk	OTW01	STK	IML
P22582P	2Q11	6/29/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.55855	-104.96187	150	Unk	OTW01	STK	IML
P22582P	2Q11	6/29/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.55855	-104.96187	150	Unk	OTW01	STK	IML
P22582P	2Q11	6/29/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.55855	-104.96187	150	Unk	SM 7500-Ra B	STK	IML
P22582P	2Q11	6/29/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.55855	-104.96187	150	Unk	SM 7500-Ra B	STK	IML
P22582P	2Q11	6/29/2011	Ra-228, D	1.6	pCi/l	1.0	0.9	6.0E-08	1.60E-09	44.55855	-104.96187	150	Unk	Ra-05	STK	IML
P22582P	2Q11	6/29/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.55855	-104.96187	150	Unk	ACW10	STK	IML
P22582P	2Q11	6/29/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.55855	-104.96187	150	Unk	ACW10	STK	IML
P22582P	2Q11	6/29/2011	U, D	0.0035	mg/l	0.0003	0	3.0E-07	2.37E-09	44.55855	-104.96187	150	Unk	EPA 200.8	STK	IML
P22582P	2Q11	6/29/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.55855	-104.96187	150	Unk	EPA 200.8	STK	IML
P22582P	2Q11	6/29/2011	Gross Alpha	3.3	pCi/l	2	1.3	NA	3.30E-09	44.55855	-104.96187	150	Unk	SM 7110B	STK	IML
P22582P	2Q11	6/29/2011	Gross Beta	5.9	pCi/l	4	2.2	NA	5.90E-09	44.55855	-104.96187	150	Unk	SM 7110B	STK	IML
P22582P	3Q11	8/16/2011	Pb-210, D	1.1	pCi/l	1	0.4	1.0E-08	1.10E-09	44.55855	-104.96187	150	Unk	OTW01	STK	IML
P22582P	3Q11	8/16/2011	Pb-210, S	3.6	pCi/l	1	0.6	1.0E-08	3.60E-09	44.55855	-104.96187	150	Unk	OTW01	STK	IML
P22582P	3Q11	8/16/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.55855	-104.96187	150	Unk	OTW01	STK	IML
P22582P	3Q11	8/16/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.55855	-104.96187	150	Unk	OTW01	STK	IML
P22582P	3Q11	8/16/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.55855	-104.96187	150	Unk	SM 7500-Ra B	STK	IML
P22582P	3Q11	8/16/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.55855	-104.96187	150	Unk	SM 7500-Ra B	STK	IML
P22582P	3Q11	8/16/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.55855	-104.96187	150	Unk	Ra-05	STK	IML
P22582P	3Q11	8/16/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.55855	-104.96187	150	Unk	ACW10	STK	IML
P22582P	3Q11	8/16/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.55855	-104.96187	150	Unk	ACW10	STK	IML
P22582P	3Q11	8/16/2011	U, D	0.004	mg/l	0.0	0	3.0E-07	2.71E-09	44.55855	-104.96187	150	Unk	EPA 200.8	STK	IML
P22582P	3Q11	8/16/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.55855	-104.96187	150	Unk	EPA 200.8	STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
P22582P	3Q11	8/16/2011	Gross Alpha	3.9	pCi/l	2	1.3	NA	3.90E-09	44.55855	-104.96187	150	Unk	SM 7110B	STK	IML
P22582P	3Q11	8/16/2011	Gross Beta	4.7	pCi/l	4	2.2	NA	4.70E-09	44.55855	-104.96187	150	Unk	SM 7110B	STK	IML
P22583P	4Q12	10/30/2012	Pb-210, D	1.3	pCi/l	1	0.5	1.0E-08	1.30E-09	44.52795	-104.96209	150	Unk	OTW01	STK	IML
P22583P	4Q12	10/30/2012	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.52795	-104.96209	150	Unk	OTW01	STK	IML
P22583P	4Q12	10/30/2012	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.52795	-104.96209	150	Unk	OTW01	STK	IML
P22583P	4Q12	10/30/2012	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.52795	-104.96209	150	Unk	OTW01	STK	IML
P22583P	4Q12	10/30/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.52795	-104.96209	150	Unk	SM 7500 Ra-B	STK	IML
P22583P	4Q12	10/30/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.52795	-104.96209	150	Unk	SM 7500 Ra-B	STK	IML
P22583P	4Q12	10/30/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.52795	-104.96209	150	Unk	Ga-Tech	STK	IML
P22583P	4Q12	10/30/2012	Th-230, D	-0.2	pCi/l	0.2	1.3	1.0E-07	-2.00E-10	44.52795	-104.96209	150	Unk	ACW10	STK	IML
P22583P	4Q12	10/30/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52795	-104.96209	150	Unk	ACW10	STK	IML
P22583P	4Q12	10/30/2012	U, D	0.0004	mg/l	0.0003	0	3.0E-07	2.71E-10	44.52795	-104.96209	150	Unk	EPA 200.8	STK	IML
P22583P	4Q12	10/30/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.52795	-104.96209	150	Unk	EPA 200.8	STK	IML
P22583P	4Q12	10/30/2012	Gross Alpha	<5	pCi/l	5	0	NA	NA	44.52795	-104.96209	150	Unk	SM 7110B	STK	IML
P22583P	4Q12	10/30/2012	Gross Beta	<7	pCi/l	7	0	NA	NA	44.52795	-104.96209	150	Unk	SM 7110B	STK	IML
P22584P	1Q13	1/24/2013	Pb-210, D	1.2	pCi/l	1	0.4	1.0E-08	1.20E-09	44.54375	-104.96616	386	Unk	OTW01	DOM, STK	IML
P22584P	1Q13	1/24/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.54375	-104.96616	386	Unk	OTW01	DOM, STK	IML
P22584P	1Q13	1/24/2013	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.54375	-104.96616	386	Unk	OTW01	DOM, STK	IML
P22584P	1Q13	1/24/2013	Po-210, S	1.5	pCi/l	1.0	0.9	4.0E-08	1.50E-09	44.54375	-104.96616	386	Unk	OTW01	DOM, STK	IML
P22584P	1Q13	1/24/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.54375	-104.96616	386	Unk	SM 7500 Ra-B	DOM, STK	IML
P22584P	1Q13	1/24/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.54375	-104.96616	386	Unk	SM 7500 Ra-B	DOM, STK	IML
P22584P	1Q13	1/24/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.54375	-104.96616	386	Unk	Ga-Tech	DOM, STK	IML
P22584P	1Q13	1/24/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.54375	-104.96616	386	Unk	ACW10	DOM, STK	IML
P22584P	1Q13	1/24/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.54375	-104.96616	386	Unk	ACW10	DOM, STK	IML
P22584P	1Q13	1/24/2013	U, D	0.0183	mg/l	0.0003	0	3.0E-07	1.24E-08	44.54375	-104.96616	386	Unk	EPA 200.8	DOM, STK	IML
P22584P	1Q13	1/24/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.54375	-104.96616	386	Unk	EPA 200.8	DOM, STK	IML
P22584P	1Q13	1/24/2013	Gross Alpha	24.7	pCi/l	2	2.9	NA	2.47E-08	44.54375	-104.96616	386	Unk	SM 7110B	DOM, STK	IML
P22584P	1Q13	1/24/2013	Gross Beta	9.9	pCi/l	4	1.3	NA	9.90E-09	44.54375	-104.96616	386	Unk	SM 7110B	DOM, STK	IML
P31770W	3Q12	9/12/2012	Pb-210, D	<1	pCi/l	1.0	0	1.0E-08	NA	44.52372	-104.95643	600	Unk	OTW01	DOM	IML
P31770W	3Q12	9/12/2012	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.52372	-104.95643	600	Unk	OTW01	DOM	IML
P31770W	3Q12	9/12/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.52372	-104.95643	600	Unk	OTW01	DOM	IML
P31770W	3Q12	9/12/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.52372	-104.95643	600	Unk	OTW01	DOM	IML
P31770W	3Q12	9/12/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.52372	-104.95643	600	Unk	SM 7500 Ra-B	DOM	IML
P31770W	3Q12	9/12/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.52372	-104.95643	600	Unk	SM 7500 Ra-B	DOM	IML
P31770W	3Q12	9/12/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.52372	-104.95643	600	Unk	Ga-Tech	DOM	IML
P31770W	3Q12	9/12/2012	Th-230, D	<0.2	pCi/l	0	0	1.0E-07	NA	44.52372	-104.95643	600	Unk	ACW10	DOM	IML
P31770W	3Q12	9/12/2012	Th-230, S	<0.2	pCi/l	0	0	1.0E-07	NA	44.52372	-104.95643	600	Unk	ACW10	DOM	IML
P31770W	3Q12	9/12/2012	U, D	0.0031	mg/l	0.0003	0	3.0E-07	2.10E-09	44.52372	-104.95643	600	Unk	EPA 200.8	DOM	IML
P31770W	3Q12	9/12/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.52372	-104.95643	600	Unk	EPA 200.8	DOM	IML
P31770W	3Q12	9/12/2012	Gross Alpha	4.4	pCi/l	4	2.7	NA	4.40E-09	44.52372	-104.95643	600	Unk	SM 7110B	DOM	IML
P31770W	3Q12	9/12/2012	Gross Beta	<8	pCi/l	8.0	0	NA	NA	44.52372	-104.95643	600	Unk	SM 7110B	DOM	IML
P31770W	1Q13	1/23/2013	Pb-210, D	<1	pCi/l	1.0	0	1.0E-08	NA	44.52372	-104.95643	600	Unk	OTW01	DOM	IML
P31770W	1Q13	1/23/2013	Pb-210, S	<1	pCi/l	1.0	0	1.0E-08	NA	44.52372	-104.95643	600	Unk	OTW01	DOM	IML
P31770W	1Q13	1/23/2013	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.52372	-104.95643	600	Unk	OTW01	DOM	IML
P31770W	1Q13	1/23/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.52372	-104.95643	600	Unk	OTW01	DOM	IML
P31770W	1Q13	1/23/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.52372	-104.95643	600	Unk	SM 7500 Ra-B	DOM	IML
P31770W	1Q13	1/23/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.52372	-104.95643	600	Unk	SM 7500 Ra-B	DOM	IML
P31770W	1Q13	1/23/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.52372	-104.95643	600	Unk	Ga-Tech	DOM	IML
P31770W	1Q13	1/23/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52372	-104.95643	600	Unk	ACW10	DOM	IML
P31770W	1Q13	1/23/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52372	-104.95643	600	Unk	ACW10	DOM	IML
P31770W	1Q13	1/23/2013	U, D	0.0026	mg/l	0.0003	0	3.0E-07	1.76E-09	44.52372	-104.95643	600	Unk	EPA 200.8	DOM	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
P31770W	1Q13	1/23/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.52372	-104.95643	600	Unk	EPA 200.8	DOM	IML
P31770W	1Q13	1/23/2013	Gross Alpha	<4	pCi/l	4.0	0	NA	NA	44.52372	-104.95643	600	Unk	SM 7110B	DOM	IML
P31770W	1Q13	1/23/2013	Gross Beta	10.6	pCi/l	7	4.2	NA	1.06E-08	44.52372	-104.95643	600	Unk	SM 7110B	DOM	IML
P42868W	2Q11	6/7/2011	Pb-210, D	<1	pCi/l	1.0	0	1.0E-08	NA	44.57654	-104.99278	243	Unk	OTW01	DOM, STK	IML
P42868W	2Q11	6/7/2011	Pb-210, S	1.2	pCi/l	1.0	0.7	1.0E-08	1.20E-09	44.57654	-104.99278	243	Unk	OTW01	DOM, STK	IML
P42868W	2Q11	6/7/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.57654	-104.99278	243	Unk	OTW01	DOM, STK	IML
P42868W	2Q11	6/7/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.57654	-104.99278	243	Unk	OTW01	DOM, STK	IML
P42868W	2Q11	6/7/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.57654	-104.99278	243	Unk	SM 7500-Ra B	DOM, STK	IML
P42868W	2Q11	6/7/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.57654	-104.99278	243	Unk	SM 7500-Ra B	DOM, STK	IML
P42868W	2Q11	6/7/2011	Ra-228, D	1.8	pCi/l	1	1.2	6.0E-08	1.80E-09	44.57654	-104.99278	243	Unk	Ra-05	DOM, STK	IML
P42868W	2Q11	6/7/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57654	-104.99278	243	Unk	ACW10	DOM, STK	IML
P42868W	2Q11	6/7/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57654	-104.99278	243	Unk	ACW10	DOM, STK	IML
P42868W	2Q11	6/7/2011	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.57654	-104.99278	243	Unk	EPA 200.8	DOM, STK	IML
P42868W	2Q11	6/7/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.57654	-104.99278	243	Unk	EPA 200.8	DOM, STK	IML
P42868W	2Q11	6/7/2011	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.57654	-104.99278	243	Unk	SM 7110B	DOM, STK	IML
P42868W	2Q11	6/7/2011	Gross Beta	<4	pCi/l	4	0	NA	NA	44.57654	-104.99278	243	Unk	SM 7110B	DOM, STK	IML
P42868W	3Q11	8/16/2011	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.57654	-104.99278	243	Unk	OTW01	DOM, STK	IML
P42868W	3Q11	8/16/2011	Pb-210, S	<1	pCi/l	1.0	0	1.0E-08	NA	44.57654	-104.99278	243	Unk	OTW01	DOM, STK	IML
P42868W	3Q11	8/16/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.57654	-104.99278	243	Unk	OTW01	DOM, STK	IML
P42868W	3Q11	8/16/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.57654	-104.99278	243	Unk	OTW01	DOM, STK	IML
P42868W	3Q11	8/16/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.57654	-104.99278	243	Unk	SM 7500-Ra B	DOM, STK	IML
P42868W	3Q11	8/16/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.57654	-104.99278	243	Unk	SM 7500-Ra B	DOM, STK	IML
P42868W	3Q11	8/16/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.57654	-104.99278	243	Unk	Ra-05	DOM, STK	IML
P42868W	3Q11	8/16/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57654	-104.99278	243	Unk	ACW10	DOM, STK	IML
P42868W	3Q11	8/16/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57654	-104.99278	243	Unk	ACW10	DOM, STK	IML
P42868W	3Q11	8/16/2011	U, D	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.57654	-104.99278	243	Unk	EPA 200.8	DOM, STK	IML
P42868W	3Q11	8/16/2011	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.57654	-104.99278	243	Unk	EPA 200.8	DOM, STK	IML
P42868W	3Q11	8/16/2011	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.57654	-104.99278	243	Unk	SM 7110B	DOM, STK	IML
P42868W	3Q11	8/16/2011	Gross Beta	<4	pCi/l	4	0	NA	NA	44.57654	-104.99278	243	Unk	SM 7110B	DOM, STK	IML
P42868W	1Q12	3/28/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.57654	-104.99278	243	Unk	SM 7500-Ra B	DOM, STK	IML
P42868W	1Q12	3/28/2012	Ra-228, D	1.2	pCi/l	1	1.1	6.0E-08	1.20E-09	44.57654	-104.99278	243	Unk	Ra-05	DOM, STK	IML
P42868W	1Q12	3/28/2012	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.57654	-104.99278	243	Unk	EPA 200.8	DOM, STK	IML
P42868W	1Q12	3/28/2012	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.57654	-104.99278	243	Unk	SM 7110B	DOM, STK	IML
P42868W	1Q12	3/28/2012	Gross Beta	5.6	pCi/l	3	2.1	NA	5.60E-09	44.57654	-104.99278	243	Unk	SM 7110B	DOM, STK	IML
P42868W	3Q12	9/13/2012	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.57654	-104.99278	243	Unk	OTW01	DOM, STK	IML
P42868W	3Q12	9/13/2012	Pb-210, S	1	pCi/l	1.0	0.5	1.0E-08	1.00E-09	44.57654	-104.99278	243	Unk	OTW01	DOM, STK	IML
P42868W	3Q12	9/13/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.57654	-104.99278	243	Unk	OTW01	DOM, STK	IML
P42868W	3Q12	9/13/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.57654	-104.99278	243	Unk	OTW01	DOM, STK	IML
P42868W	3Q12	9/13/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.57654	-104.99278	243	Unk	SM 7500 Ra-B	DOM, STK	IML
P42868W	3Q12	9/13/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.57654	-104.99278	243	Unk	SM 7500 Ra-B	DOM, STK	IML
P42868W	3Q12	9/13/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.57654	-104.99278	243	Unk	Ga-Tech	DOM, STK	IML
P42868W	3Q12	9/13/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57654	-104.99278	243	Unk	ACW10	DOM, STK	IML
P42868W	3Q12	9/13/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57654	-104.99278	243	Unk	ACW10	DOM, STK	IML
P42868W	3Q12	9/13/2012	U, D	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.57654	-104.99278	243	Unk	EPA 200.8	DOM, STK	IML
P42868W	3Q12	9/13/2012	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.57654	-104.99278	243	Unk	EPA 200.8	DOM, STK	IML
P42868W	3Q12	9/13/2012	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.57654	-104.99278	243	Unk	SM 7110B	DOM, STK	IML
P42868W	3Q12	9/13/2012	Gross Beta	<4	pCi/l	4	0	NA	NA	44.57654	-104.99278	243	Unk	SM 7110B	DOM, STK	IML
P50113W	1Q11	3/1/2011	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.60974	-104.99184	40	Unk	SM 7500-Ra B	STK	IML
P50113W	1Q11	3/1/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60974	-104.99184	40	Unk	Ra-05	STK	IML
P50113W	1Q11	3/1/2011	U, D	0.191	mg/l	0.0003	0	3.0E-07	1.29E-07	44.60974	-104.99184	40	Unk	EPA 200.8	STK	IML
P50113W	1Q11	3/1/2011	Gross Alpha	117	pCi/l	6	9.6	NA	1.17E-07	44.60974	-104.99184	40	Unk	SM 7110B	STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
P50113W	1Q11	3/1/2011	Gross Beta	51.9	pCi/l	8.0	4.8	NA	5.19E-08	44.60974	-104.99184	40	Unk	SM 7110B	STK	IML
P50113W	2Q11	5/17/2011	Pb-210, D	<1	pCi/l	1.0	0	1.0E-08	NA	44.60974	-104.99184	40	Unk	OTW01	STK	IML
P50113W	2Q11	5/17/2011	Pb-210, S	1	pCi/l	1.0	0.4	1.0E-08	1.00E-09	44.60974	-104.99184	40	Unk	OTW01	STK	IML
P50113W	2Q11	5/17/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.60974	-104.99184	40	Unk	OTW01	STK	IML
P50113W	2Q11	5/17/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60974	-104.99184	40	Unk	OTW01	STK	IML
P50113W	2Q11	5/17/2011	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.60974	-104.99184	40	Unk	SM 7500-Ra B	STK	IML
P50113W	2Q11	5/17/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60974	-104.99184	40	Unk	SM 7500-Ra B	STK	IML
P50113W	2Q11	5/17/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60974	-104.99184	40	Unk	Ra-05	STK	IML
P50113W	2Q11	5/17/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60974	-104.99184	40	Unk	ACW10	STK	IML
P50113W	2Q11	5/17/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60974	-104.99184	40	Unk	ACW10	STK	IML
P50113W	2Q11	5/17/2011	U, D	0.207	mg/l	0.0003	0	3.0E-07	1.40E-07	44.60974	-104.99184	40	Unk	EPA 200.8	STK	IML
P50113W	2Q11	5/17/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60974	-104.99184	40	Unk	EPA 200.8	STK	IML
P50113W	2Q11	5/17/2011	Gross Alpha	101	pCi/l	4	7.6	NA	1.01E-07	44.60974	-104.99184	40	Unk	SM 7110B	STK	IML
P50113W	2Q11	5/17/2011	Gross Beta	40.7	pCi/l	8	5.1	NA	4.07E-08	44.60974	-104.99184	40	Unk	SM 7110B	STK	IML
P50113W	3Q11	8/17/2011	Pb-210, D	2.2	pCi/l	1.0	0.4	1.0E-08	2.20E-09	44.60974	-104.99184	40	Unk	OTW01	STK	IML
P50113W	3Q11	8/17/2011	Pb-210, S	1.4	pCi/l	1.0	0.5	1.0E-08	1.40E-09	44.60974	-104.99184	40	Unk	OTW01	STK	IML
P50113W	3Q11	8/17/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.60974	-104.99184	40	Unk	OTW01	STK	IML
P50113W	3Q11	8/17/2011	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.60974	-104.99184	40	Unk	OTW01	STK	IML
P50113W	3Q11	8/17/2011	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.60974	-104.99184	40	Unk	SM 7500-Ra B	STK	IML
P50113W	3Q11	8/17/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60974	-104.99184	40	Unk	SM 7500-Ra B	STK	IML
P50113W	3Q11	8/17/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60974	-104.99184	40	Unk	Ra-05	STK	IML
P50113W	3Q11	8/17/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60974	-104.99184	40	Unk	ACW10	STK	IML
P50113W	3Q11	8/17/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60974	-104.99184	40	Unk	ACW10	STK	IML
P50113W	3Q11	8/17/2011	U, D	0.174	mg/l	0.0003	0	3.0E-07	1.18E-07	44.60974	-104.99184	40	Unk	EPA 200.8	STK	IML
P50113W	3Q11	8/17/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60974	-104.99184	40	Unk	EPA 200.8	STK	IML
P50113W	3Q11	8/17/2011	Gross Alpha	69.7	pCi/l	3	5.1	NA	6.97E-08	44.60974	-104.99184	40	Unk	SM 7110B	STK	IML
P50113W	3Q11	8/17/2011	Gross Beta	27.1	pCi/l	4.0	2.8	NA	2.71E-08	44.60974	-104.99184	40	Unk	SM 7110B	STK	IML
P50113W	4Q11	12/6/2011	Ra-226, D	0.5	pCi/l	0.2	0.1	6.0E-08	5.00E-10	44.60974	-104.99184	40	Unk	SM 7500-Ra B	STK	IML
P50113W	4Q11	12/6/2011	Ra-228, D	<1.0	pCi/l	1	0	6.0E-08	NA	44.60974	-104.99184	40	Unk	Ra-05	STK	IML
P50113W	4Q11	12/6/2011	U, D	0.181	mg/l	0.0003	0	3.0E-07	1.23E-07	44.60974	-104.99184	40	Unk	EPA 200.8	STK	IML
P50113W	4Q11	12/6/2011	Gross Alpha	73.3	pCi/l	4	5.8	NA	7.33E-08	44.60974	-104.99184	40	Unk	SM 7110B	STK	IML
P50113W	4Q11	12/6/2011	Gross Beta	33.1	pCi/l	5	3.4	NA	3.31E-08	44.60974	-104.99184	40	Unk	SM 7110B	STK	IML
P50113W	1Q12	3/14/2012	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.60974	-104.99184	40	Unk	SM 7500-Ra B	STK	IML
P50113W	1Q12	3/14/2012	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.60974	-104.99184	40	Unk	Ra-05	STK	IML
P50113W	1Q12	3/14/2012	U, D	0.159	mg/l	0.0	0	3.0E-07	1.08E-07	44.60974	-104.99184	40	Unk	EPA 200.8	STK	IML
P50113W	1Q12	3/14/2012	Gross Alpha	68.9	pCi/l	2.0	5	NA	6.89E-08	44.60974	-104.99184	40	Unk	SM 7110B	STK	IML
P50113W	1Q12	3/14/2012	Gross Beta	34.9	pCi/l	4	2.9	NA	3.49E-08	44.60974	-104.99184	40	Unk	SM 7110B	STK	IML
P50113W	3Q12	8/15/2012	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.60974	-104.99184	40	Unk	SM 7500 Ra-B	STK	IML
P50113W	3Q12	8/15/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60974	-104.99184	40	Unk	Ga-Tech	STK	IML
P50113W	3Q12	8/15/2012	U, D	0.178	mg/l	0.0003	0	3.0E-07	1.21E-07	44.60974	-104.99184	40	Unk	EPA 200.8	STK	IML
P50113W	3Q12	8/15/2012	Gross Alpha	73.8	pCi/l	2	5.2	NA	7.38E-08	44.60974	-104.99184	40	Unk	SM 7110B	STK	IML
P50113W	3Q12	8/15/2012	Gross Beta	49.2	pCi/l	5	3.6	NA	4.92E-08	44.60974	-104.99184	40	Unk	SM 7110B	STK	IML
P50113W	1Q13	2/7/2013	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.60974	-104.99184	40	Unk	EPA 901.1M	STK	IML
P50113W	1Q13	2/7/2013	Pb-210, D	2.5	pCi/l	1	0.4	1.0E-08	2.50E-09	44.60974	-104.99184	40	Unk	OTW01	STK	IML
P50113W	1Q13	2/7/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.60974	-104.99184	40	Unk	OTW01	STK	IML
P50113W	1Q13	2/7/2013	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.60974	-104.99184	40	Unk	OTW01	STK	IML
P50113W	1Q13	2/7/2013	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.60974	-104.99184	40	Unk	OTW01	STK	IML
P50113W	1Q13	2/7/2013	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.60974	-104.99184	40	Unk	SM 7500 Ra-B	STK	IML
P50113W	1Q13	2/7/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60974	-104.99184	40	Unk	SM 7500 Ra-B	STK	IML
P50113W	1Q13	2/7/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60974	-104.99184	40	Unk	Ga-Tech	STK	IML
P50113W	1Q13	2/7/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60974	-104.99184	40	Unk	ACW10	STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
P50113W	1Q13	2/7/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60974	-104.99184	40	Unk	ACW10	STK	IML
P50113W	1Q13	2/7/2013	U, D	0.183	mg/l	0.0003	0	3.0E-07	1.24E-07	44.60974	-104.99184	40	Unk	EPA 200.8	STK	IML
P50113W	1Q13	2/7/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60974	-104.99184	40	Unk	EPA 200.8	STK	IML
P50113W	1Q13	2/7/2013	Gross Alpha	77.2	pCi/l	2	5.2	NA	7.72E-08	44.60974	-104.99184	40	Unk	SM 7110B	STK	IML
P50113W	1Q13	2/7/2013	Gross Beta	31	pCi/l	3	2.7	NA	3.10E-08	44.60974	-104.99184	40	Unk	SM 7110B	STK	IML
P50883W	2Q11	6/29/2011	Pb-210, D	3.5	pCi/l	1	0.6	1.0E-08	3.50E-09	44.5696	-104.9706	150	Unk	OTW01	STK	IML
P50883W	2Q11	6/29/2011	Pb-210, S	3.4	pCi/l	1	0.5	1.0E-08	3.40E-09	44.5696	-104.9706	150	Unk	OTW01	STK	IML
P50883W	2Q11	6/29/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.5696	-104.9706	150	Unk	OTW01	STK	IML
P50883W	2Q11	6/29/2011	Po-210, S	1.2	pCi/l	1.0	0.5	4.0E-08	1.20E-09	44.5696	-104.9706	150	Unk	OTW01	STK	IML
P50883W	2Q11	6/29/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5696	-104.9706	150	Unk	SM 7500-Ra B	STK	IML
P50883W	2Q11	6/29/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5696	-104.9706	150	Unk	SM 7500-Ra B	STK	IML
P50883W	2Q11	6/29/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.5696	-104.9706	150	Unk	Ra-05	STK	IML
P50883W	2Q11	6/29/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5696	-104.9706	150	Unk	ACW10	STK	IML
P50883W	2Q11	6/29/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5696	-104.9706	150	Unk	ACW10	STK	IML
P50883W	2Q11	6/29/2011	U, D	0.0278	mg/l	0.0003	0	3.0E-07	1.88E-08	44.5696	-104.9706	150	Unk	EPA 200.8	STK	IML
P50883W	2Q11	6/29/2011	U, S	0.0003	mg/l	0.0003	0	3.0E-07	2.03E-10	44.5696	-104.9706	150	Unk	EPA 200.8	STK	IML
P50883W	2Q11	6/29/2011	Gross Alpha	14.8	pCi/l	2	2.2	NA	1.48E-08	44.5696	-104.9706	150	Unk	SM 7110B	STK	IML
P50883W	2Q11	6/29/2011	Gross Beta	12.3	pCi/l	4	2.4	NA	1.23E-08	44.5696	-104.9706	150	Unk	SM 7110B	STK	IML
P50883W	3Q11	8/16/2011	Pb-210, D	2.3	pCi/l	1	0.5	1.0E-08	2.30E-09	44.5696	-104.9706	150	Unk	OTW01	STK	IML
P50883W	3Q11	8/16/2011	Pb-210, S	3.5	pCi/l	1	0.5	1.0E-08	3.50E-09	44.5696	-104.9706	150	Unk	OTW01	STK	IML
P50883W	3Q11	8/16/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.5696	-104.9706	150	Unk	OTW01	STK	IML
P50883W	3Q11	8/16/2011	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.5696	-104.9706	150	Unk	OTW01	STK	IML
P50883W	3Q11	8/16/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5696	-104.9706	150	Unk	SM 7500-Ra B	STK	IML
P50883W	3Q11	8/16/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5696	-104.9706	150	Unk	SM 7500-Ra B	STK	IML
P50883W	3Q11	8/16/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.5696	-104.9706	150	Unk	Ra-05	STK	IML
P50883W	3Q11	8/16/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5696	-104.9706	150	Unk	ACW10	STK	IML
P50883W	3Q11	8/16/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5696	-104.9706	150	Unk	ACW10	STK	IML
P50883W	3Q11	8/16/2011	U, D	0.0325	mg/l	0.0003	0	3.0E-07	2.20E-08	44.5696	-104.9706	150	Unk	EPA 200.8	STK	IML
P50883W	3Q11	8/16/2011	U, S	0.0015	mg/l	0.0003	0	3.0E-07	1.02E-09	44.5696	-104.9706	150	Unk	EPA 200.8	STK	IML
P50883W	3Q11	8/16/2011	Gross Alpha	18.8	pCi/l	2	2.6	NA	1.88E-08	44.5696	-104.9706	150	Unk	SM 7110B	STK	IML
P50883W	3Q11	8/16/2011	Gross Beta	13.1	pCi/l	4	2.5	NA	1.31E-08	44.5696	-104.9706	150	Unk	SM 7110B	STK	IML
P58961W	4Q12	10/10/2012	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.62701	-104.94081	110	Unk	OTW01	STK	IML
P58961W	4Q12	10/10/2012	Pb-210, S	1.2	pCi/l	1	0.4	1.0E-08	1.20E-09	44.62701	-104.94081	110	Unk	OTW01	STK	IML
P58961W	4Q12	10/10/2012	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.62701	-104.94081	110	Unk	OTW01	STK	IML
P58961W	4Q12	10/10/2012	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.62701	-104.94081	110	Unk	OTW01	STK	IML
P58961W	4Q12	10/10/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.62701	-104.94081	110	Unk	SM 7500 Ra-B	STK	IML
P58961W	4Q12	10/10/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.62701	-104.94081	110	Unk	SM 7500 Ra-B	STK	IML
P58961W	4Q12	10/10/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.62701	-104.94081	110	Unk	Ga-Tech	STK	IML
P58961W	4Q12	10/10/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.62701	-104.94081	110	Unk	ACW10	STK	IML
P58961W	4Q12	10/10/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.62701	-104.94081	110	Unk	ACW10	STK	IML
P58961W	4Q12	10/10/2012	U, D	0.0004	mg/l	0.0003	0	3.0E-07	2.71E-10	44.62701	-104.94081	110	Unk	EPA 200.8	STK	IML
P58961W	4Q12	10/10/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.62701	-104.94081	110	Unk	EPA 200.8	STK	IML
P58961W	4Q12	10/10/2012	Gross Alpha	2.5	pCi/l	2	1.2	NA	2.50E-09	44.62701	-104.94081	110	Unk	SM 7110B	STK	IML
P58961W	4Q12	10/10/2012	Gross Beta	4.9	pCi/l	4	2.1	NA	4.90E-09	44.62701	-104.94081	110	Unk	SM 7110B	STK	IML
P61006W	1Q11	2/16/2011	Ra-226, D	0.6	pCi/l	0.2	0	6.0E-08	6.00E-10	44.57683	-105.02216	335	Unk	SM 7500-Ra B	DOM, STK	IML
P61006W	1Q11	2/16/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.57683	-105.02216	335	Unk	Ra-05	DOM, STK	IML
P61006W	1Q11	2/16/2011	U, D	0.0019	mg/l	0.0	0	3.0E-07	1.29E-09	44.57683	-105.02216	335	Unk	EPA 200.8	DOM, STK	IML
P61006W	1Q11	2/16/2011	Gross Alpha	6.9	pCi/l	2.0	2.8	NA	6.90E-09	44.57683	-105.02216	335	Unk	SM 7110B	DOM, STK	IML
P61006W	1Q11	2/16/2011	Gross Beta	10.3	pCi/l	4.0	2	NA	1.03E-08	44.57683	-105.02216	335	Unk	SM 7110B	DOM, STK	IML
P61006W	2Q11	6/7/2011	Pb-210, D	<1	pCi/l	1.0	0	1.0E-08	NA	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML
P61006W	2Q11	6/7/2011	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
P61006W	2Q11	6/7/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML
P61006W	2Q11	6/7/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML
P61006W	2Q11	6/7/2011	Ra-226, D	0.6	pCi/l	0.2	0.1	6.0E-08	6.00E-10	44.57683	-105.02216	335	Unk	SM 7500-Ra B	DOM, STK	IML
P61006W	2Q11	6/7/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.57683	-105.02216	335	Unk	SM 7500-Ra B	DOM, STK	IML
P61006W	2Q11	6/7/2011	Ra-228, D	3.2	pCi/l	1	1.2	6.0E-08	3.20E-09	44.57683	-105.02216	335	Unk	Ra-05	DOM, STK	IML
P61006W	2Q11	6/7/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57683	-105.02216	335	Unk	ACW10	DOM, STK	IML
P61006W	2Q11	6/7/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57683	-105.02216	335	Unk	ACW10	DOM, STK	IML
P61006W	2Q11	6/7/2011	U, D	0.0016	mg/l	0.0	0	3.0E-07	1.08E-09	44.57683	-105.02216	335	Unk	EPA 200.8	DOM, STK	IML
P61006W	2Q11	6/7/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.57683	-105.02216	335	Unk	EPA 200.8	DOM, STK	IML
P61006W	2Q11	6/7/2011	Gross Alpha	5.2	pCi/l	2	1.7	NA	5.20E-09	44.57683	-105.02216	335	Unk	SM 7110B	DOM, STK	IML
P61006W	2Q11	6/7/2011	Gross Beta	5.3	pCi/l	4	2.5	NA	5.30E-09	44.57683	-105.02216	335	Unk	SM 7110B	DOM, STK	IML
P61006W	3Q11	8/16/2011	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML
P61006W	3Q11	8/16/2011	Pb-210, S	2.2	pCi/l	1.0	0.4	1.0E-08	2.20E-09	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML
P61006W	3Q11	8/16/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML
P61006W	3Q11	8/16/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML
P61006W	3Q11	8/16/2011	Ra-226, D	0.8	pCi/l	0.2	0.1	6.0E-08	8.00E-10	44.57683	-105.02216	335	Unk	SM 7500-Ra B	DOM, STK	IML
P61006W	3Q11	8/16/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.57683	-105.02216	335	Unk	SM 7500-Ra B	DOM, STK	IML
P61006W	3Q11	8/16/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.57683	-105.02216	335	Unk	Ra-05	DOM, STK	IML
P61006W	3Q11	8/16/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57683	-105.02216	335	Unk	ACW10	DOM, STK	IML
P61006W	3Q11	8/16/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57683	-105.02216	335	Unk	ACW10	DOM, STK	IML
P61006W	3Q11	8/16/2011	U, D	0.0021	mg/l	0.0	0	3.0E-07	1.42E-09	44.57683	-105.02216	335	Unk	EPA 200.8	DOM, STK	IML
P61006W	3Q11	8/16/2011	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.57683	-105.02216	335	Unk	EPA 200.8	DOM, STK	IML
P61006W	3Q11	8/16/2011	Gross Alpha	7.4	pCi/l	2	1.8	NA	7.40E-09	44.57683	-105.02216	335	Unk	SM 7110B	DOM, STK	IML
P61006W	3Q11	8/16/2011	Gross Beta	7.3	pCi/l	4	2.2	NA	7.30E-09	44.57683	-105.02216	335	Unk	SM 7110B	DOM, STK	IML
P61006W	4Q11	12/7/2011	Ra-226, D	0.8	pCi/l	0.2	0.1	6.0E-08	8.00E-10	44.57683	-105.02216	335	Unk	SM 7500-Ra B	DOM, STK	IML
P61006W	4Q11	12/7/2011	Ra-228, D	<1.0	pCi/l	1	0	6.0E-08	NA	44.57683	-105.02216	335	Unk	Ra-05	DOM, STK	IML
P61006W	4Q11	12/7/2011	U, D	0.0023	mg/l	0.0003	0	3.0E-07	1.56E-09	44.57683	-105.02216	335	Unk	EPA 200.8	DOM, STK	IML
P61006W	4Q11	12/7/2011	Gross Alpha	<3.0	pCi/l	3	0	NA	NA	44.57683	-105.02216	335	Unk	SM 7110B	DOM, STK	IML
P61006W	4Q11	12/7/2011	Gross Beta	10.1	pCi/l	4	2.3	NA	1.01E-08	44.57683	-105.02216	335	Unk	SM 7110B	DOM, STK	IML
P61006W	1Q12	3/28/2012	Ra-226, D	0.7	pCi/l	0.2	0.1	6.0E-08	7.00E-10	44.57683	-105.02216	335	Unk	SM 7500-Ra B	DOM, STK	IML
P61006W	1Q12	3/28/2012	Ra-228, D	1.7	pCi/l	1	1.2	6.0E-08	1.70E-09	44.57683	-105.02216	335	Unk	Ra-05	DOM, STK	IML
P61006W	1Q12	3/28/2012	U, D	0.0022	mg/l	0.0	0	3.0E-07	1.49E-09	44.57683	-105.02216	335	Unk	EPA 200.8	DOM, STK	IML
P61006W	1Q12	3/28/2012	Gross Alpha	6.3	pCi/l	2.0	1.6	NA	6.30E-09	44.57683	-105.02216	335	Unk	SM 7110B	DOM, STK	IML
P61006W	1Q12	3/28/2012	Gross Beta	6.8	pCi/l	4.0	2.4	NA	6.80E-09	44.57683	-105.02216	335	Unk	SM 7110B	DOM, STK	IML
P61006W	3Q12	9/13/2012	Pb-210, D	<1	pCi/l	1.0	0	1.0E-08	NA	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML
P61006W	3Q12	9/13/2012	Pb-210, S	1.3	pCi/l	1	0.4	1.0E-08	1.30E-09	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML
P61006W	3Q12	9/13/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML
P61006W	3Q12	9/13/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML
P61006W	3Q12	9/13/2012	Ra-226, D	0.9	pCi/l	0.2	0.1	6.0E-08	9.00E-10	44.57683	-105.02216	335	Unk	SM 7500 Ra-B	DOM, STK	IML
P61006W	3Q12	9/13/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.57683	-105.02216	335	Unk	SM 7500 Ra-B	DOM, STK	IML
P61006W	3Q12	9/13/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.57683	-105.02216	335	Unk	Ga-Tech	DOM, STK	IML
P61006W	3Q12	9/13/2012	Th-230, D	0.03	pCi/l	0.2	0.04	1.0E-07	3.00E-11	44.57683	-105.02216	335	Unk	ACW10	DOM, STK	IML
P61006W	3Q12	9/13/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57683	-105.02216	335	Unk	ACW10	DOM, STK	IML
P61006W	3Q12	9/13/2012	U, D	0.0019	mg/l	0.0	0	3.0E-07	1.29E-09	44.57683	-105.02216	335	Unk	EPA 200.8	DOM, STK	IML
P61006W	3Q12	9/13/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.57683	-105.02216	335	Unk	EPA 200.8	DOM, STK	IML
P61006W	3Q12	9/13/2012	Gross Alpha	2.1	pCi/l	2	1.5	NA	2.10E-09	44.57683	-105.02216	335	Unk	SM 7110B	DOM, STK	IML
P61006W	3Q12	9/13/2012	Gross Beta	5.8	pCi/l	4	2.2	NA	5.80E-09	44.57683	-105.02216	335	Unk	SM 7110B	DOM, STK	IML
P61006W	1Q13	1/23/2013	Pb-210, D	1.1	pCi/l	1	0.4	1.0E-08	1.10E-09	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML
P61006W	1Q13	1/23/2013	Pb-210, S	1.3	pCi/l	1	0.4	1.0E-08	1.30E-09	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML
P61006W	1Q13	1/23/2013	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML
P61006W	1Q13	1/23/2013	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.57683	-105.02216	335	Unk	OTW01	DOM, STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
P61006W	1Q13	1/23/2013	Ra-226, D	0.7	pCi/l	0.2	0.1	6.0E-08	7.00E-10	44.57683	-105.02216	335	Unk	SM 7500 Ra-B	DOM, STK	IML
P61006W	1Q13	1/23/2013	Ra-226, S	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.57683	-105.02216	335	Unk	SM 7500 Ra-B	DOM, STK	IML
P61006W	1Q13	1/23/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.57683	-105.02216	335	Unk	Ga-Tech	DOM, STK	IML
P61006W	1Q13	1/23/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57683	-105.02216	335	Unk	ACW10	DOM, STK	IML
P61006W	1Q13	1/23/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57683	-105.02216	335	Unk	ACW10	DOM, STK	IML
P61006W	1Q13	1/23/2013	U, D	0.0018	mg/l	0.0003	0	3.0E-07	1.22E-09	44.57683	-105.02216	335	Unk	EPA 200.8	DOM, STK	IML
P61006W	1Q13	1/23/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.57683	-105.02216	335	Unk	EPA 200.8	DOM, STK	IML
P61006W	1Q13	1/23/2013	Gross Alpha	5.7	pCi/l	2	1.7	NA	5.70E-09	44.57683	-105.02216	335	Unk	SM 7110B	DOM, STK	IML
P61006W	1Q13	1/23/2013	Gross Beta	5.2	pCi/l	4	2.4	NA	5.20E-09	44.57683	-105.02216	335	Unk	SM 7110B	DOM, STK	IML
P61007W	1Q11	2/16/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5764	-105.02391	304	Unk	SM 7500-Ra B	STK	IML
P61007W	1Q11	2/16/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.5764	-105.02391	304	Unk	Ra-05	STK	IML
P61007W	1Q11	2/16/2011	U, D	0.0021	mg/l	0.0003	0	3.0E-07	1.42E-09	44.5764	-105.02391	304	Unk	EPA 200.8	STK	IML
P61007W	1Q11	2/16/2011	Gross Alpha	2.8	pCi/l	2	2.5	NA	2.80E-09	44.5764	-105.02391	304	Unk	SM 7110B	STK	IML
P61007W	1Q11	2/16/2011	Gross Beta	<4	pCi/l	4	0	NA	NA	44.5764	-105.02391	304	Unk	SM 7110B	STK	IML
P61007W	2Q11	6/7/2011	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.5764	-105.02391	304	Unk	OTW01	STK	IML
P61007W	2Q11	6/7/2011	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.5764	-105.02391	304	Unk	OTW01	STK	IML
P61007W	2Q11	6/7/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.5764	-105.02391	304	Unk	OTW01	STK	IML
P61007W	2Q11	6/7/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.5764	-105.02391	304	Unk	OTW01	STK	IML
P61007W	2Q11	6/7/2011	Ra-226, D	1.4	pCi/l	0.2	0.1	6.0E-08	1.40E-09	44.5764	-105.02391	304	Unk	SM 7500-Ra B	STK	IML
P61007W	2Q11	6/7/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5764	-105.02391	304	Unk	SM 7500-Ra B	STK	IML
P61007W	2Q11	6/7/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.5764	-105.02391	304	Unk	Ra-05	STK	IML
P61007W	2Q11	6/7/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5764	-105.02391	304	Unk	ACW10	STK	IML
P61007W	2Q11	6/7/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5764	-105.02391	304	Unk	ACW10	STK	IML
P61007W	2Q11	6/7/2011	U, D	0.0041	mg/l	0.0	0	3.0E-07	2.78E-09	44.5764	-105.02391	304	Unk	EPA 200.8	STK	IML
P61007W	2Q11	6/7/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.5764	-105.02391	304	Unk	EPA 200.8	STK	IML
P61007W	2Q11	6/7/2011	Gross Alpha	5.2	pCi/l	2	1.4	NA	5.20E-09	44.5764	-105.02391	304	Unk	SM 7110B	STK	IML
P61007W	2Q11	6/7/2011	Gross Beta	<4	pCi/l	4	0	NA	NA	44.5764	-105.02391	304	Unk	SM 7110B	STK	IML
P61007W	4Q11	12/7/2011	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.5764	-105.02391	304	Unk	SM 7500-Ra B	STK	IML
P61007W	4Q11	12/7/2011	Ra-228, D	<1.0	pCi/l	1.0	0	6.0E-08	NA	44.5764	-105.02391	304	Unk	Ra-05	STK	IML
P61007W	4Q11	12/7/2011	U, D	0.0051	mg/l	0.0003	0	3.0E-07	3.45E-09	44.5764	-105.02391	304	Unk	EPA 200.8	STK	IML
P61007W	4Q11	12/7/2011	Gross Alpha	3.9	pCi/l	3	2	NA	3.90E-09	44.5764	-105.02391	304	Unk	SM 7110B	STK	IML
P61007W	4Q11	12/7/2011	Gross Beta	5	pCi/l	4	2.4	NA	5.00E-09	44.5764	-105.02391	304	Unk	SM 7110B	STK	IML
P61007W	1Q12	3/28/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5764	-105.02391	304	Unk	SM 7500-Ra B	STK	IML
P61007W	1Q12	3/28/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.5764	-105.02391	304	Unk	Ra-05	STK	IML
P61007W	1Q12	3/28/2012	U, D	0.0102	mg/l	0.0	0	3.0E-07	6.91E-09	44.5764	-105.02391	304	Unk	EPA 200.8	STK	IML
P61007W	1Q12	3/28/2012	Gross Alpha	9.3	pCi/l	2.0	1.8	NA	9.30E-09	44.5764	-105.02391	304	Unk	SM 7110B	STK	IML
P61007W	1Q12	3/28/2012	Gross Beta	6.9	pCi/l	4.0	2.2	NA	6.90E-09	44.5764	-105.02391	304	Unk	SM 7110B	STK	IML
P61007W	3Q12	9/13/2012	Pb-210, D	1.5	pCi/l	1.0	0.4	1.0E-08	1.50E-09	44.5764	-105.02391	304	Unk	OTW01	STK	IML
P61007W	3Q12	9/13/2012	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.5764	-105.02391	304	Unk	OTW01	STK	IML
P61007W	3Q12	9/13/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.5764	-105.02391	304	Unk	OTW01	STK	IML
P61007W	3Q12	9/13/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.5764	-105.02391	304	Unk	OTW01	STK	IML
P61007W	3Q12	9/13/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5764	-105.02391	304	Unk	SM 7500 Ra-B	STK	IML
P61007W	3Q12	9/13/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5764	-105.02391	304	Unk	SM 7500 Ra-B	STK	IML
P61007W	3Q12	9/13/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.5764	-105.02391	304	Unk	Ga-Tech	STK	IML
P61007W	3Q12	9/13/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5764	-105.02391	304	Unk	ACW10	STK	IML
P61007W	3Q12	9/13/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5764	-105.02391	304	Unk	ACW10	STK	IML
P61007W	3Q12	9/13/2012	U, D	0.0131	mg/l	0.0003	0	3.0E-07	8.87E-09	44.5764	-105.02391	304	Unk	EPA 200.8	STK	IML
P61007W	3Q12	9/13/2012	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.5764	-105.02391	304	Unk	EPA 200.8	STK	IML
P61007W	3Q12	9/13/2012	Gross Alpha	10.9	pCi/l	2.0	2	NA	1.09E-08	44.5764	-105.02391	304	Unk	SM 7110B	STK	IML
P61007W	3Q12	9/13/2012	Gross Beta	4.3	pCi/l	4.0	2.3	NA	4.30E-09	44.5764	-105.02391	304	Unk	SM 7110B	STK	IML
P61007W	1Q13	1/23/2013	Pb-210, D	<1	pCi/l	1.0	0	1.0E-08	NA	44.5764	-105.02391	304	Unk	OTW01	STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
P61007W	1Q13	1/23/2013	Pb-210, S	3.9	pCi/l	1	0.6	1.0E-08	3.90E-09	44.5764	-105.02391	304	Unk	OTW01	STK	IML
P61007W	1Q13	1/23/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.5764	-105.02391	304	Unk	OTW01	STK	IML
P61007W	1Q13	1/23/2013	Po-210, S	4.2	pCi/l	1	1.2	4.0E-08	4.20E-09	44.5764	-105.02391	304	Unk	OTW01	STK	IML
P61007W	1Q13	1/23/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5764	-105.02391	304	Unk	SM 7500 Ra-B	STK	IML
P61007W	1Q13	1/23/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5764	-105.02391	304	Unk	SM 7500 Ra-B	STK	IML
P61007W	1Q13	1/23/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.5764	-105.02391	304	Unk	Ga-Tech	STK	IML
P61007W	1Q13	1/23/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5764	-105.02391	304	Unk	ACW10	STK	IML
P61007W	1Q13	1/23/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5764	-105.02391	304	Unk	ACW10	STK	IML
P61007W	1Q13	1/23/2013	U, D	0.0105	mg/l	0.0	0	3.0E-07	7.11E-09	44.5764	-105.02391	304	Unk	EPA 200.8	STK	IML
P61007W	1Q13	1/23/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.5764	-105.02391	304	Unk	EPA 200.8	STK	IML
P61007W	1Q13	1/23/2013	Gross Alpha	9.8	pCi/l	2	1.9	NA	9.80E-09	44.5764	-105.02391	304	Unk	SM 7110B	STK	IML
P61007W	1Q13	1/23/2013	Gross Beta	5.9	pCi/l	4	2.1	NA	5.90E-09	44.5764	-105.02391	304	Unk	SM 7110B	STK	IML
P71108W	1Q11	3/1/2011	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.60776	-104.98548	220	Unk	SM 7500-Ra B	STK	IML
P71108W	1Q11	3/1/2011	Ra-228, D	1.2	pCi/l	1	1.7	6.0E-08	1.20E-09	44.60776	-104.98548	220	Unk	Ra-05	STK	IML
P71108W	1Q11	3/1/2011	U, D	0.0639	mg/l	0.0003	0	3.0E-07	4.33E-08	44.60776	-104.98548	220	Unk	EPA 200.8	STK	IML
P71108W	1Q11	3/1/2011	Gross Alpha	37.9	pCi/l	5	6.4	NA	3.79E-08	44.60776	-104.98548	220	Unk	SM 7110B	STK	IML
P71108W	1Q11	3/1/2011	Gross Beta	16.3	pCi/l	7	4	NA	1.63E-08	44.60776	-104.98548	220	Unk	SM 7110B	STK	IML
P71108W	2Q11	5/17/2011	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.60776	-104.98548	220	Unk	OTW01	STK	IML
P71108W	2Q11	5/17/2011	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.60776	-104.98548	220	Unk	OTW01	STK	IML
P71108W	2Q11	5/17/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.60776	-104.98548	220	Unk	OTW01	STK	IML
P71108W	2Q11	5/17/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60776	-104.98548	220	Unk	OTW01	STK	IML
P71108W	2Q11	5/17/2011	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.60776	-104.98548	220	Unk	SM 7500-Ra B	STK	IML
P71108W	2Q11	5/17/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60776	-104.98548	220	Unk	SM 7500-Ra B	STK	IML
P71108W	2Q11	5/17/2011	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.60776	-104.98548	220	Unk	Ra-05	STK	IML
P71108W	2Q11	5/17/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60776	-104.98548	220	Unk	ACW10	STK	IML
P71108W	2Q11	5/17/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60776	-104.98548	220	Unk	ACW10	STK	IML
P71108W	2Q11	5/17/2011	U, D	0.097	mg/l	0.0003	0	3.0E-07	6.57E-08	44.60776	-104.98548	220	Unk	EPA 200.8	STK	IML
P71108W	2Q11	5/17/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60776	-104.98548	220	Unk	EPA 200.8	STK	IML
P71108W	2Q11	5/17/2011	Gross Alpha	50.2	pCi/l	4	5.4	NA	5.02E-08	44.60776	-104.98548	220	Unk	SM 7110B	STK	IML
P71108W	2Q11	5/17/2011	Gross Beta	20.9	pCi/l	7	4.6	NA	2.09E-08	44.60776	-104.98548	220	Unk	SM 7110B	STK	IML
P71108W	4Q11	12/6/2011	Ra-226, D	0.2	pCi/l	0	0.1	6.0E-08	2.00E-10	44.60776	-104.98548	220	Unk	SM 7500-Ra B	STK	IML
P71108W	4Q11	12/6/2011	Ra-228, D	<1.0	pCi/l	1	0	6.0E-08	NA	44.60776	-104.98548	220	Unk	Ra-05	STK	IML
P71108W	4Q11	12/6/2011	U, D	0.0974	mg/l	0.0003	0	3.0E-07	6.59E-08	44.60776	-104.98548	220	Unk	EPA 200.8	STK	IML
P71108W	4Q11	12/6/2011	Gross Alpha	54.4	pCi/l	3	4.9	NA	5.44E-08	44.60776	-104.98548	220	Unk	SM 7110B	STK	IML
P71108W	4Q11	12/6/2011	Gross Beta	22.7	pCi/l	5.0	3.3	NA	2.27E-08	44.60776	-104.98548	220	Unk	SM 7110B	STK	IML
P71108W	1Q12	3/14/2012	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.60776	-104.98548	220	Unk	SM 7500-Ra B	STK	IML
P71108W	1Q12	3/14/2012	Ra-228, D	1.3	pCi/l	1.0	1.3	6.0E-08	1.30E-09	44.60776	-104.98548	220	Unk	Ra-05	STK	IML
P71108W	1Q12	3/14/2012	U, D	0.0853	mg/l	0.0	0	3.0E-07	5.77E-08	44.60776	-104.98548	220	Unk	EPA 200.8	STK	IML
P71108W	1Q12	3/14/2012	Gross Alpha	61.6	pCi/l	4	5.4	NA	6.16E-08	44.60776	-104.98548	220	Unk	SM 7110B	STK	IML
P71108W	1Q12	3/14/2012	Gross Beta	23.8	pCi/l	4	2.8	NA	2.38E-08	44.60776	-104.98548	220	Unk	SM 7110B	STK	IML
P71108W	3Q12	8/15/2012	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.60776	-104.98548	220	Unk	SM 7500 Ra-B	STK	IML
P71108W	3Q12	8/15/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60776	-104.98548	220	Unk	Ga-Tech	STK	IML
P71108W	3Q12	8/15/2012	U, D	0.0695	mg/l	0.0003	0	3.0E-07	4.71E-08	44.60776	-104.98548	220	Unk	EPA 200.8	STK	IML
P71108W	3Q12	8/15/2012	Gross Alpha	55.5	pCi/l	3	5.6	NA	5.55E-08	44.60776	-104.98548	220	Unk	SM 7110B	STK	IML
P71108W	3Q12	8/15/2012	Gross Beta	33.3	pCi/l	7	4.6	NA	3.33E-08	44.60776	-104.98548	220	Unk	SM 7110B	STK	IML
P71108W	1Q13	3/14/2013	Pb-210, D	1.3	pCi/l	1	0.4	1.0E-08	1.30E-09	44.60776	-104.98548	220	Unk	OTW01	STK	IML
P71108W	1Q13	3/14/2013	Pb-210, S	<1	pCi/l	1.0	0	1.0E-08	NA	44.60776	-104.98548	220	Unk	OTW01	STK	IML
P71108W	1Q13	3/14/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.60776	-104.98548	220	Unk	OTW01	STK	IML
P71108W	1Q13	3/14/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60776	-104.98548	220	Unk	OTW01	STK	IML
P71108W	1Q13	3/14/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.60776	-104.98548	220	Unk	SM 7500 Ra-B	STK	IML
P71108W	1Q13	3/14/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60776	-104.98548	220	Unk	SM 7500 Ra-B	STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
P71108W	1Q13	3/14/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60776	-104.98548	220	Unk	Ga-Tech	STK	IML
P71108W	1Q13	3/14/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60776	-104.98548	220	Unk	ACW10	STK	IML
P71108W	1Q13	3/14/2013	Th-230, S	1	pCi/l	0.2	0.2	1.0E-07	1.00E-09	44.60776	-104.98548	220	Unk	ACW10	STK	IML
P71108W	1Q13	3/14/2013	U, D	0.0648	mg/l	0.0	0	3.0E-07	4.39E-08	44.60776	-104.98548	220	Unk	EPA 200.8	STK	IML
P71108W	1Q13	3/14/2013	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.60776	-104.98548	220	Unk	EPA 200.8	STK	IML
P71108W	1Q13	3/14/2013	Gross Alpha	42.6	pCi/l	3	4	NA	4.26E-08	44.60776	-104.98548	220	Unk	SM 7110B	STK	IML
P71108W	1Q13	3/14/2013	Gross Beta	22.8	pCi/l	4	3	NA	2.28E-08	44.60776	-104.98548	220	Unk	SM 7110B	STK	IML
P72048W	1Q13	1/24/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.54736	-104.95088	720	Unk	OTW01	IND	IML
P72048W	1Q13	1/24/2013	Pb-210, S	1.2	pCi/l	1	0.4	1.0E-08	1.20E-09	44.54736	-104.95088	720	Unk	OTW01	IND	IML
P72048W	1Q13	1/24/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.54736	-104.95088	720	Unk	OTW01	IND	IML
P72048W	1Q13	1/24/2013	Po-210, S	1.6	pCi/l	1	0.8	4.0E-08	1.60E-09	44.54736	-104.95088	720	Unk	OTW01	IND	IML
P72048W	1Q13	1/24/2013	Ra-226, D	3.6	pCi/l	0.2	0.2	6.0E-08	3.60E-09	44.54736	-104.95088	720	Unk	SM 7500 Ra-B	IND	IML
P72048W	1Q13	1/24/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.54736	-104.95088	720	Unk	SM 7500 Ra-B	IND	IML
P72048W	1Q13	1/24/2013	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.54736	-104.95088	720	Unk	Ga-Tech	IND	IML
P72048W	1Q13	1/24/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.54736	-104.95088	720	Unk	ACW10	IND	IML
P72048W	1Q13	1/24/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.54736	-104.95088	720	Unk	ACW10	IND	IML
P72048W	1Q13	1/24/2013	U, D	0.0007	mg/l	0.0003	0	3.0E-07	4.74E-10	44.54736	-104.95088	720	Unk	EPA 200.8	IND	IML
P72048W	1Q13	1/24/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.54736	-104.95088	720	Unk	EPA 200.8	IND	IML
P72048W	1Q13	1/24/2013	Gross Alpha	12.5	pCi/l	10	6.7	NA	1.25E-08	44.54736	-104.95088	720	Unk	SM 7110B	IND	IML
P72048W	1Q13	1/24/2013	Gross Beta	<20	pCi/l	20	0	NA	NA	44.54736	-104.95088	720	Unk	SM 7110B	IND	IML
P72048W	2Q14	6/24/2014	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.54736	-104.95088	720	Unk	EPA 901.1M	IND	IML
P72048W	2Q14	6/24/2014	Pb-210, D	<1	pCi/l	1.0	0	1.0E-08	NA	44.54736	-104.95088	720	Unk	OTW01	IND	IML
P72048W	2Q14	6/24/2014	Pb-210, S	1.3	pCi/l	1	0.5	1.0E-08	1.30E-09	44.54736	-104.95088	720	Unk	OTW01	IND	IML
P72048W	2Q14	6/24/2014	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.54736	-104.95088	720	Unk	OTW01	IND	IML
P72048W	2Q14	6/24/2014	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.54736	-104.95088	720	Unk	OTW01	IND	IML
P72048W	2Q14	6/24/2014	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.54736	-104.95088	720	Unk	SM 7500 Ra-B	IND	IML
P72048W	2Q14	6/24/2014	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.54736	-104.95088	720	Unk	SM 7500 Ra-B	IND	IML
P72048W	2Q14	6/24/2014	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.54736	-104.95088	720	Unk	Ga-Tech	IND	IML
P72048W	2Q14	6/24/2014	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.54736	-104.95088	720	Unk	ACW10	IND	IML
P72048W	2Q14	6/24/2014	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.54736	-104.95088	720	Unk	ACW10	IND	IML
P72048W	2Q14	6/24/2014	U, D	0.0013	mg/l	0.0	0	3.0E-07	8.80E-10	44.54736	-104.95088	720	Unk	EPA 200.8	IND	IML
P72048W	2Q14	6/24/2014	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.54736	-104.95088	720	Unk	EPA 200.8	IND	IML
P72048W	2Q14	6/24/2014	Gross Alpha	2.2	pCi/l	2	1.4	NA	2.20E-09	44.54736	-104.95088	720	Unk	SM 7110B	IND	IML
P72048W	2Q14	6/24/2014	Gross Beta	3.3	pCi/l	3	2.1	NA	3.30E-09	44.54736	-104.95088	720	Unk	SM 7110B	IND	IML
P84665W	1Q11	3/1/2011	Ra-226, D	0.5	pCi/l	0.2	0.1	6.0E-08	5.00E-10	44.61077	-105.00074	50	Unk	SM 7500-Ra B	STK	IML
P84665W	1Q11	3/1/2011	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.61077	-105.00074	50	Unk	Ra-05	STK	IML
P84665W	1Q11	3/1/2011	U, D	0.0612	mg/l	0.0003	0	3.0E-07	4.14E-08	44.61077	-105.00074	50	Unk	EPA 200.8	STK	IML
P84665W	1Q11	3/1/2011	Gross Alpha	32.5	pCi/l	2	3.7	NA	3.25E-08	44.61077	-105.00074	50	Unk	SM 7110B	STK	IML
P84665W	1Q11	3/1/2011	Gross Beta	11	pCi/l	4	2	NA	1.10E-08	44.61077	-105.00074	50	Unk	SM 7110B	STK	IML
P84665W	2Q11	5/17/2011	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.61077	-105.00074	50	Unk	OTW01	STK	IML
P84665W	2Q11	5/17/2011	Pb-210, S	1.4	pCi/l	1	0.4	1.0E-08	1.40E-09	44.61077	-105.00074	50	Unk	OTW01	STK	IML
P84665W	2Q11	5/17/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.61077	-105.00074	50	Unk	OTW01	STK	IML
P84665W	2Q11	5/17/2011	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.61077	-105.00074	50	Unk	OTW01	STK	IML
P84665W	2Q11	5/17/2011	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.61077	-105.00074	50	Unk	SM 7500-Ra B	STK	IML
P84665W	2Q11	5/17/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.61077	-105.00074	50	Unk	SM 7500-Ra B	STK	IML
P84665W	2Q11	5/17/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.61077	-105.00074	50	Unk	Ra-05	STK	IML
P84665W	2Q11	5/17/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.61077	-105.00074	50	Unk	ACW10	STK	IML
P84665W	2Q11	5/17/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.61077	-105.00074	50	Unk	ACW10	STK	IML
P84665W	2Q11	5/17/2011	U, D	0.0688	mg/l	0.0003	0	3.0E-07	4.66E-08	44.61077	-105.00074	50	Unk	EPA 200.8	STK	IML
P84665W	2Q11	5/17/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.61077	-105.00074	50	Unk	EPA 200.8	STK	IML
P84665W	2Q11	5/17/2011	Gross Alpha	41.1	pCi/l	2	4	NA	4.11E-08	44.61077	-105.00074	50	Unk	SM 7110B	STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
P84665W	2Q11	5/17/2011	Gross Beta	17.6	pCi/l	4	2.4	NA	1.76E-08	44.61077	-105.00074	50	Unk	SM 7110B	STK	IML
P84665W	3Q11	8/17/2011	Pb-210, D	4	pCi/l	1	0.5	1.0E-08	4.00E-09	44.61077	-105.00074	50	Unk	OTW01	STK	IML
P84665W	3Q11	8/17/2011	Pb-210, S	1.7	pCi/l	1	0.6	1.0E-08	1.70E-09	44.61077	-105.00074	50	Unk	OTW01	STK	IML
P84665W	3Q11	8/17/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.61077	-105.00074	50	Unk	OTW01	STK	IML
P84665W	3Q11	8/17/2011	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.61077	-105.00074	50	Unk	OTW01	STK	IML
P84665W	3Q11	8/17/2011	Ra-226, D	0.7	pCi/l	0.2	0.1	6.0E-08	7.00E-10	44.61077	-105.00074	50	Unk	SM 7500-Ra B	STK	IML
P84665W	3Q11	8/17/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.61077	-105.00074	50	Unk	SM 7500-Ra B	STK	IML
P84665W	3Q11	8/17/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.61077	-105.00074	50	Unk	Ra-05	STK	IML
P84665W	3Q11	8/17/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.61077	-105.00074	50	Unk	ACW10	STK	IML
P84665W	3Q11	8/17/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.61077	-105.00074	50	Unk	ACW10	STK	IML
P84665W	3Q11	8/17/2011	U, D	0.0617	mg/l	0.0003	0	3.0E-07	4.18E-08	44.61077	-105.00074	50	Unk	EPA 200.8	STK	IML
P84665W	3Q11	8/17/2011	U, S	0.0009	mg/l	0.0003	0	3.0E-07	6.09E-10	44.61077	-105.00074	50	Unk	EPA 200.8	STK	IML
P84665W	3Q11	8/17/2011	Gross Alpha	29.5	pCi/l	3	3.5	NA	2.95E-08	44.61077	-105.00074	50	Unk	SM 7110B	STK	IML
P84665W	3Q11	8/17/2011	Gross Beta	23	pCi/l	4	2.8	NA	2.30E-08	44.61077	-105.00074	50	Unk	SM 7110B	STK	IML
P84665W	4Q11	12/6/2011	Ra-226, D	0.5	pCi/l	0.2	0.1	6.0E-08	5.00E-10	44.61077	-105.00074	50	Unk	SM 7500-Ra B	STK	IML
P84665W	4Q11	12/6/2011	Ra-228, D	<1.0	pCi/l	1.0	0	6.0E-08	NA	44.61077	-105.00074	50	Unk	Ra-05	STK	IML
P84665W	4Q11	12/6/2011	U, D	0.0576	mg/l	0.0003	0	3.0E-07	3.90E-08	44.61077	-105.00074	50	Unk	EPA 200.8	STK	IML
P84665W	4Q11	12/6/2011	Gross Alpha	27.8	pCi/l	3	3.3	NA	2.78E-08	44.61077	-105.00074	50	Unk	SM 7110B	STK	IML
P84665W	4Q11	12/6/2011	Gross Beta	14.5	pCi/l	4	2.6	NA	1.45E-08	44.61077	-105.00074	50	Unk	SM 7110B	STK	IML
P84665W	1Q12	3/14/2012	Ra-226, D	1	pCi/l	0.2	0.1	6.0E-08	1.00E-09	44.61077	-105.00074	50	Unk	SM 7500-Ra B	STK	IML
P84665W	1Q12	3/14/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.61077	-105.00074	50	Unk	Ra-05	STK	IML
P84665W	1Q12	3/14/2012	U, D	0.0627	mg/l	0.0	0	3.0E-07	4.24E-08	44.61077	-105.00074	50	Unk	EPA 200.8	STK	IML
P84665W	1Q12	3/14/2012	Gross Alpha	36.9	pCi/l	2.0	3.1	NA	3.69E-08	44.61077	-105.00074	50	Unk	SM 7110B	STK	IML
P84665W	1Q12	3/14/2012	Gross Beta	16.7	pCi/l	3.0	1.7	NA	1.67E-08	44.61077	-105.00074	50	Unk	SM 7110B	STK	IML
P84665W	3Q12	8/15/2012	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.61077	-105.00074	50	Unk	SM 7500 Ra-B	STK	IML
P84665W	3Q12	8/15/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.61077	-105.00074	50	Unk	Ga-Tech	STK	IML
P84665W	3Q12	8/15/2012	U, D	0.0626	mg/l	0.0003	0	3.0E-07	4.24E-08	44.61077	-105.00074	50	Unk	EPA 200.8	STK	IML
P84665W	3Q12	8/15/2012	Gross Alpha	31.5	pCi/l	2	3.1	NA	3.15E-08	44.61077	-105.00074	50	Unk	SM 7110B	STK	IML
P84665W	3Q12	8/15/2012	Gross Beta	15.6	pCi/l	3	2.3	NA	1.56E-08	44.61077	-105.00074	50	Unk	SM 7110B	STK	IML
P84665W	1Q13	3/14/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.61077	-105.00074	50	Unk	OTW01	STK	IML
P84665W	1Q13	3/14/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.61077	-105.00074	50	Unk	OTW01	STK	IML
P84665W	1Q13	3/14/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.61077	-105.00074	50	Unk	OTW01	STK	IML
P84665W	1Q13	3/14/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.61077	-105.00074	50	Unk	OTW01	STK	IML
P84665W	1Q13	3/14/2013	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.61077	-105.00074	50	Unk	SM 7500 Ra-B	STK	IML
P84665W	1Q13	3/14/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.61077	-105.00074	50	Unk	SM 7500 Ra-B	STK	IML
P84665W	1Q13	3/14/2013	Ra-228, D	1.6	pCi/l	1.0	1.1	6.0E-08	1.60E-09	44.61077	-105.00074	50	Unk	Ga-Tech	STK	IML
P84665W	1Q13	3/14/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.61077	-105.00074	50	Unk	ACW10	STK	IML
P84665W	1Q13	3/14/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.61077	-105.00074	50	Unk	ACW10	STK	IML
P84665W	1Q13	3/14/2013	U, D	0.0624	mg/l	0.0003	0	3.0E-07	4.22E-08	44.61077	-105.00074	50	Unk	EPA 200.8	STK	IML
P84665W	1Q13	3/14/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.61077	-105.00074	50	Unk	EPA 200.8	STK	IML
P84665W	1Q13	3/14/2013	Gross Alpha	36	pCi/l	3	3.6	NA	3.60E-08	44.61077	-105.00074	50	Unk	SM 7110B	STK	IML
P84665W	1Q13	3/14/2013	Gross Beta	19.1	pCi/l	4	2.7	NA	1.91E-08	44.61077	-105.00074	50	Unk	SM 7110B	STK	IML
SBWELL01	1Q11	3/1/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	SM 7500-Ra B	STK	IML
SBWELL01	1Q11	3/1/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	Ra-05	STK	IML
SBWELL01	1Q11	3/1/2011	U, D	0.0014	mg/l	0.0003	0	3.0E-07	9.48E-10	44.60825	-104.99336	Unk	Unk	EPA 200.8	STK	IML
SBWELL01	1Q11	3/1/2011	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.60825	-104.99336	Unk	Unk	SM 7110B	STK	IML
SBWELL01	1Q11	3/1/2011	Gross Beta	<4	pCi/l	4.0	0	NA	NA	44.60825	-104.99336	Unk	Unk	SM 7110B	STK	IML
SBWELL01	2Q11	5/17/2011	Pb-210, D	1.2	pCi/l	1.0	0.4	1.0E-08	1.20E-09	44.60825	-104.99336	Unk	Unk	OTW01	STK	IML
SBWELL01	2Q11	5/17/2011	Pb-210, S	<1	pCi/l	1.0	0	1.0E-08	NA	44.60825	-104.99336	Unk	Unk	OTW01	STK	IML
SBWELL01	2Q11	5/17/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.60825	-104.99336	Unk	Unk	OTW01	STK	IML
SBWELL01	2Q11	5/17/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60825	-104.99336	Unk	Unk	OTW01	STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
SBWELL01	2Q11	5/17/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	SM 7500-Ra B	STK	IML
SBWELL01	2Q11	5/17/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	SM 7500-Ra B	STK	IML
SBWELL01	2Q11	5/17/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	Ra-05	STK	IML
SBWELL01	2Q11	5/17/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60825	-104.99336	Unk	Unk	ACW10	STK	IML
SBWELL01	2Q11	5/17/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60825	-104.99336	Unk	Unk	ACW10	STK	IML
SBWELL01	2Q11	5/17/2011	U, D	0.0014	mg/l	0	0	3.0E-07	9.48E-10	44.60825	-104.99336	Unk	Unk	EPA 200.8	STK	IML
SBWELL01	2Q11	5/17/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60825	-104.99336	Unk	Unk	EPA 200.8	STK	IML
SBWELL01	2Q11	5/17/2011	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.60825	-104.99336	Unk	Unk	SM 7110B	STK	IML
SBWELL01	2Q11	5/17/2011	Gross Beta	<4	pCi/l	4.0	0	NA	NA	44.60825	-104.99336	Unk	Unk	SM 7110B	STK	IML
SBWELL01	3Q11	8/17/2011	Pb-210, D	<1	pCi/l	1.0	0	1.0E-08	NA	44.60825	-104.99336	Unk	Unk	OTW01	STK	IML
SBWELL01	3Q11	8/17/2011	Pb-210, S	1.1	pCi/l	1.0	0.5	1.0E-08	1.10E-09	44.60825	-104.99336	Unk	Unk	OTW01	STK	IML
SBWELL01	3Q11	8/17/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.60825	-104.99336	Unk	Unk	OTW01	STK	IML
SBWELL01	3Q11	8/17/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60825	-104.99336	Unk	Unk	OTW01	STK	IML
SBWELL01	3Q11	8/17/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	SM 7500-Ra B	STK	IML
SBWELL01	3Q11	8/17/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	SM 7500-Ra B	STK	IML
SBWELL01	3Q11	8/17/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	Ra-05	STK	IML
SBWELL01	3Q11	8/17/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60825	-104.99336	Unk	Unk	ACW10	STK	IML
SBWELL01	3Q11	8/17/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60825	-104.99336	Unk	Unk	ACW10	STK	IML
SBWELL01	3Q11	8/17/2011	U, D	0.0014	mg/l	0.0003	0	3.0E-07	9.48E-10	44.60825	-104.99336	Unk	Unk	EPA 200.8	STK	IML
SBWELL01	3Q11	8/17/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60825	-104.99336	Unk	Unk	EPA 200.8	STK	IML
SBWELL01	3Q11	8/17/2011	Gross Alpha	<3	pCi/l	3.0	0	NA	NA	44.60825	-104.99336	Unk	Unk	SM 7110B	STK	IML
SBWELL01	3Q11	8/17/2011	Gross Beta	<4	pCi/l	4	0	NA	NA	44.60825	-104.99336	Unk	Unk	SM 7110B	STK	IML
SBWELL01	4Q11	12/6/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	SM 7500-Ra B	STK	IML
SBWELL01	4Q11	12/6/2011	Ra-228, D	<1.0	pCi/l	1	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	Ra-05	STK	IML
SBWELL01	4Q11	12/6/2011	U, D	0.0012	mg/l	0.0003	0	3.0E-07	8.12E-10	44.60825	-104.99336	Unk	Unk	EPA 200.8	STK	IML
SBWELL01	4Q11	12/6/2011	Gross Alpha	<3.0	pCi/l	3	0	NA	NA	44.60825	-104.99336	Unk	Unk	SM 7110B	STK	IML
SBWELL01	4Q11	12/6/2011	Gross Beta	<4.0	pCi/l	4.0	0	NA	NA	44.60825	-104.99336	Unk	Unk	SM 7110B	STK	IML
SBWELL01	1Q12	3/14/2012	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.60825	-104.99336	Unk	Unk	SM 7500-Ra B	STK	IML
SBWELL01	1Q12	3/14/2012	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	Ra-05	STK	IML
SBWELL01	1Q12	3/14/2012	U, D	0.0017	mg/l	0.0	0	3.0E-07	1.15E-09	44.60825	-104.99336	Unk	Unk	EPA 200.8	STK	IML
SBWELL01	1Q12	3/14/2012	Gross Alpha	<3	pCi/l	3	0	NA	NA	44.60825	-104.99336	Unk	Unk	SM 7110B	STK	IML
SBWELL01	1Q12	3/14/2012	Gross Beta	<4	pCi/l	4	0	NA	NA	44.60825	-104.99336	Unk	Unk	SM 7110B	STK	IML
SBWELL01	3Q12	8/15/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	SM 7500 Ra-B	STK	IML
SBWELL01	3Q12	8/15/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	Ga-Tech	STK	IML
SBWELL01	3Q12	8/15/2012	U, D	0.0013	mg/l	0.0003	0	3.0E-07	8.80E-10	44.60825	-104.99336	Unk	Unk	EPA 200.8	STK	IML
SBWELL01	3Q12	8/15/2012	Gross Alpha	2.3	pCi/l	2	1.2	NA	2.30E-09	44.60825	-104.99336	Unk	Unk	SM 7110B	STK	IML
SBWELL01	3Q12	8/15/2012	Gross Beta	5.3	pCi/l	3	2.1	NA	5.30E-09	44.60825	-104.99336	Unk	Unk	SM 7110B	STK	IML
SBWELL01	1Q13	3/14/2013	Pb-210, D	2.7	pCi/l	1	0.4	1.0E-08	2.70E-09	44.60825	-104.99336	Unk	Unk	OTW01	STK	IML
SBWELL01	1Q13	3/14/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.60825	-104.99336	Unk	Unk	OTW01	STK	IML
SBWELL01	1Q13	3/14/2013	Po-210, D	1.5	pCi/l	1.0	0.8	4.0E-08	1.50E-09	44.60825	-104.99336	Unk	Unk	OTW01	STK	IML
SBWELL01	1Q13	3/14/2013	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.60825	-104.99336	Unk	Unk	OTW01	STK	IML
SBWELL01	1Q13	3/14/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	SM 7500 Ra-B	STK	IML
SBWELL01	1Q13	3/14/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	SM 7500 Ra-B	STK	IML
SBWELL01	1Q13	3/14/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60825	-104.99336	Unk	Unk	Ga-Tech	STK	IML
SBWELL01	1Q13	3/14/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60825	-104.99336	Unk	Unk	ACW10	STK	IML
SBWELL01	1Q13	3/14/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60825	-104.99336	Unk	Unk	ACW10	STK	IML
SBWELL01	1Q13	3/14/2013	U, D	0.0006	mg/l	0.0003	0	3.0E-07	4.06E-10	44.60825	-104.99336	Unk	Unk	EPA 200.8	STK	IML
SBWELL01	1Q13	3/14/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60825	-104.99336	Unk	Unk	EPA 200.8	STK	IML
SBWELL01	1Q13	3/14/2013	Gross Alpha	2.3	pCi/l	2	1.3	NA	2.30E-09	44.60825	-104.99336	Unk	Unk	SM 7110B	STK	IML
SBWELL01	1Q13	3/14/2013	Gross Beta	4.3	pCi/l	3	2	NA	4.30E-09	44.60825	-104.99336	Unk	Unk	SM 7110B	STK	IML
SBWELL02	2Q11	5/17/2011	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.60425	-104.96445	Unk	Unk	OTW01	STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
SBWELL02	2Q11	5/17/2011	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.60425	-104.96445	Unk	Unk	OTW01	STK	IML
SBWELL02	2Q11	5/17/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.60425	-104.96445	Unk	Unk	OTW01	STK	IML
SBWELL02	2Q11	5/17/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60425	-104.96445	Unk	Unk	OTW01	STK	IML
SBWELL02	2Q11	5/17/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60425	-104.96445	Unk	Unk	SM 7500-Ra B	STK	IML
SBWELL02	2Q11	5/17/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60425	-104.96445	Unk	Unk	SM 7500-Ra B	STK	IML
SBWELL02	2Q11	5/17/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60425	-104.96445	Unk	Unk	Ra-05	STK	IML
SBWELL02	2Q11	5/17/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60425	-104.96445	Unk	Unk	ACW10	STK	IML
SBWELL02	2Q11	5/17/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60425	-104.96445	Unk	Unk	ACW10	STK	IML
SBWELL02	2Q11	5/17/2011	U, D	0.0004	mg/l	0.0	0	3.0E-07	2.71E-10	44.60425	-104.96445	Unk	Unk	EPA 200.8	STK	IML
SBWELL02	2Q11	5/17/2011	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.60425	-104.96445	Unk	Unk	EPA 200.8	STK	IML
SBWELL02	2Q11	5/17/2011	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.60425	-104.96445	Unk	Unk	SM 7110B	STK	IML
SBWELL02	2Q11	5/17/2011	Gross Beta	8.4	pCi/l	4	2.3	NA	8.40E-09	44.60425	-104.96445	Unk	Unk	SM 7110B	STK	IML
SBWELL02	3Q11	8/17/2011	Pb-210, D	1.1	pCi/l	1	0.4	1.0E-08	1.10E-09	44.60425	-104.96445	Unk	Unk	OTW01	STK	IML
SBWELL02	3Q11	8/17/2011	Pb-210, S	2.1	pCi/l	1	0.6	1.0E-08	2.10E-09	44.60425	-104.96445	Unk	Unk	OTW01	STK	IML
SBWELL02	3Q11	8/17/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.60425	-104.96445	Unk	Unk	OTW01	STK	IML
SBWELL02	3Q11	8/17/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60425	-104.96445	Unk	Unk	OTW01	STK	IML
SBWELL02	3Q11	8/17/2011	Ra-226, D	<0.2	pCi/l	0	0	6.0E-08	NA	44.60425	-104.96445	Unk	Unk	SM 7500-Ra B	STK	IML
SBWELL02	3Q11	8/17/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60425	-104.96445	Unk	Unk	SM 7500-Ra B	STK	IML
SBWELL02	3Q11	8/17/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60425	-104.96445	Unk	Unk	Ra-05	STK	IML
SBWELL02	3Q11	8/17/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60425	-104.96445	Unk	Unk	ACW10	STK	IML
SBWELL02	3Q11	8/17/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60425	-104.96445	Unk	Unk	ACW10	STK	IML
SBWELL02	3Q11	8/17/2011	U, D	0.0004	mg/l	0.0	0	3.0E-07	2.71E-10	44.60425	-104.96445	Unk	Unk	EPA 200.8	STK	IML
SBWELL02	3Q11	8/17/2011	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.60425	-104.96445	Unk	Unk	EPA 200.8	STK	IML
SBWELL02	3Q11	8/17/2011	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.60425	-104.96445	Unk	Unk	SM 7110B	STK	IML
SBWELL02	3Q11	8/17/2011	Gross Beta	10	pCi/l	4	2.3	NA	1.00E-08	44.60425	-104.96445	Unk	Unk	SM 7110B	STK	IML
SBWELL02	4Q11	12/6/2011	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.60425	-104.96445	Unk	Unk	SM 7500-Ra B	STK	IML
SBWELL02	4Q11	12/6/2011	Ra-228, D	<1.0	pCi/l	1	0	6.0E-08	NA	44.60425	-104.96445	Unk	Unk	Ra-05	STK	IML
SBWELL02	4Q11	12/6/2011	U, D	0.005	mg/l	0.0003	0	3.0E-07	3.39E-09	44.60425	-104.96445	Unk	Unk	EPA 200.8	STK	IML
SBWELL02	4Q11	12/6/2011	Gross Alpha	3.7	pCi/l	2	1.3	NA	3.70E-09	44.60425	-104.96445	Unk	Unk	SM 7110B	STK	IML
SBWELL02	4Q11	12/6/2011	Gross Beta	13.3	pCi/l	3	1.4	NA	1.33E-08	44.60425	-104.96445	Unk	Unk	SM 7110B	STK	IML
SBWELL02	1Q12	3/14/2012	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.60425	-104.96445	Unk	Unk	SM 7500-Ra B	STK	IML
SBWELL02	1Q12	3/14/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60425	-104.96445	Unk	Unk	Ra-05	STK	IML
SBWELL02	1Q12	3/14/2012	U, D	0.0051	mg/l	0.0	0	3.0E-07	3.45E-09	44.60425	-104.96445	Unk	Unk	EPA 200.8	STK	IML
SBWELL02	1Q12	3/14/2012	Gross Alpha	3.7	pCi/l	2.0	1.3	NA	3.70E-09	44.60425	-104.96445	Unk	Unk	SM 7110B	STK	IML
SBWELL02	1Q12	3/14/2012	Gross Beta	14.4	pCi/l	3.0	1.4	NA	1.44E-08	44.60425	-104.96445	Unk	Unk	SM 7110B	STK	IML
SBWELL02	3Q12	8/15/2012	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.60425	-104.96445	Unk	Unk	SM 7500 Ra-B	STK	IML
SBWELL02	3Q12	8/15/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60425	-104.96445	Unk	Unk	Ga-Tech	STK	IML
SBWELL02	3Q12	8/15/2012	U, D	0.008	mg/l	0.0003	0	3.0E-07	5.42E-09	44.60425	-104.96445	Unk	Unk	EPA 200.8	STK	IML
SBWELL02	3Q12	8/15/2012	Gross Alpha	3.2	pCi/l	2	1	NA	3.20E-09	44.60425	-104.96445	Unk	Unk	SM 7110B	STK	IML
SBWELL02	3Q12	8/15/2012	Gross Beta	14.3	pCi/l	3	1.7	NA	1.43E-08	44.60425	-104.96445	Unk	Unk	SM 7110B	STK	IML
SBWELL02	1Q13	3/14/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.60425	-104.96445	Unk	Unk	OTW01	STK	IML
SBWELL02	1Q13	3/14/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.60425	-104.96445	Unk	Unk	OTW01	STK	IML
SBWELL02	1Q13	3/14/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.60425	-104.96445	Unk	Unk	OTW01	STK	IML
SBWELL02	1Q13	3/14/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60425	-104.96445	Unk	Unk	OTW01	STK	IML
SBWELL02	1Q13	3/14/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60425	-104.96445	Unk	Unk	SM 7500 Ra-B	STK	IML
SBWELL02	1Q13	3/14/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60425	-104.96445	Unk	Unk	SM 7500 Ra-B	STK	IML
SBWELL02	1Q13	3/14/2013	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.60425	-104.96445	Unk	Unk	Ga-Tech	STK	IML
SBWELL02	1Q13	3/14/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60425	-104.96445	Unk	Unk	ACW10	STK	IML
SBWELL02	1Q13	3/14/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60425	-104.96445	Unk	Unk	ACW10	STK	IML
SBWELL02	1Q13	3/14/2013	U, D	0.0006	mg/l	0.0003	0	3.0E-07	4.06E-10	44.60425	-104.96445	Unk	Unk	EPA 200.8	STK	IML
SBWELL02	1Q13	3/14/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60425	-104.96445	Unk	Unk	EPA 200.8	STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
SBWELL02	1Q13	3/14/2013	Gross Alpha	2	pCi/l	2	1.2	NA	2.00E-09	44.60425	-104.96445	Unk	Unk	SM 7110B	STK	IML
SBWELL02	1Q13	3/14/2013	Gross Beta	8	pCi/l	3	2.1	NA	8.00E-09	44.60425	-104.96445	Unk	Unk	SM 7110B	STK	IML
TDWELL01	3Q12	9/12/2012	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.51168	-104.9569	Unk	Unk	OTW01	DOM	IML
TDWELL01	3Q12	9/12/2012	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.51168	-104.9569	Unk	Unk	OTW01	DOM	IML
TDWELL01	3Q12	9/12/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.51168	-104.9569	Unk	Unk	OTW01	DOM	IML
TDWELL01	3Q12	9/12/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.51168	-104.9569	Unk	Unk	OTW01	DOM	IML
TDWELL01	3Q12	9/12/2012	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.51168	-104.9569	Unk	Unk	SM 7500 Ra-B	DOM	IML
TDWELL01	3Q12	9/12/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.51168	-104.9569	Unk	Unk	SM 7500 Ra-B	DOM	IML
TDWELL01	3Q12	9/12/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.51168	-104.9569	Unk	Unk	Ga-Tech	DOM	IML
TDWELL01	3Q12	9/12/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.51168	-104.9569	Unk	Unk	ACW10	DOM	IML
TDWELL01	3Q12	9/12/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.51168	-104.9569	Unk	Unk	ACW10	DOM	IML
TDWELL01	3Q12	9/12/2012	U, D	0.0211	mg/l	0.0	0	3.0E-07	1.43E-08	44.51168	-104.9569	Unk	Unk	EPA 200.8	DOM	IML
TDWELL01	3Q12	9/12/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.51168	-104.9569	Unk	Unk	EPA 200.8	DOM	IML
TDWELL01	3Q12	9/12/2012	Gross Alpha	15.2	pCi/l	3	2.7	NA	1.52E-08	44.51168	-104.9569	Unk	Unk	SM 7110B	DOM	IML
TDWELL01	3Q12	9/12/2012	Gross Beta	5.3	pCi/l	4	2.4	NA	5.30E-09	44.51168	-104.9569	Unk	Unk	SM 7110B	DOM	IML
TDWELL01	1Q13	1/23/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.51168	-104.9569	Unk	Unk	OTW01	DOM	IML
TDWELL01	1Q13	1/23/2013	Pb-210, S	<1	pCi/l	1.0	0	1.0E-08	NA	44.51168	-104.9569	Unk	Unk	OTW01	DOM	IML
TDWELL01	1Q13	1/23/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.51168	-104.9569	Unk	Unk	OTW01	DOM	IML
TDWELL01	1Q13	1/23/2013	Po-210, S	3.1	pCi/l	1	1.1	4.0E-08	3.10E-09	44.51168	-104.9569	Unk	Unk	OTW01	DOM	IML
TDWELL01	1Q13	1/23/2013	Ra-226, D	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.51168	-104.9569	Unk	Unk	SM 7500 Ra-B	DOM	IML
TDWELL01	1Q13	1/23/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.51168	-104.9569	Unk	Unk	SM 7500 Ra-B	DOM	IML
TDWELL01	1Q13	1/23/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.51168	-104.9569	Unk	Unk	Ga-Tech	DOM	IML
TDWELL01	1Q13	1/23/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.51168	-104.9569	Unk	Unk	ACW10	DOM	IML
TDWELL01	1Q13	1/23/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.51168	-104.9569	Unk	Unk	ACW10	DOM	IML
TDWELL01	1Q13	1/23/2013	U, D	0.0168	mg/l	0.0	0	3.0E-07	1.14E-08	44.51168	-104.9569	Unk	Unk	EPA 200.8	DOM	IML
TDWELL01	1Q13	1/23/2013	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.51168	-104.9569	Unk	Unk	EPA 200.8	DOM	IML
TDWELL01	1Q13	1/23/2013	Gross Alpha	13.4	pCi/l	2	2.3	NA	1.34E-08	44.51168	-104.9569	Unk	Unk	SM 7110B	DOM	IML
TDWELL01	1Q13	1/23/2013	Gross Beta	5.7	pCi/l	4	2.1	NA	5.70E-09	44.51168	-104.9569	Unk	Unk	SM 7110B	DOM	IML
TDWELL01	2Q14	6/24/2014	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.51168	-104.9569	Unk	Unk	EPA 901.1M	DOM	IML
TDWELL01	2Q14	6/24/2014	Pb-210, D	1.1	pCi/l	1	0.4	1.0E-08	1.10E-09	44.51168	-104.9569	Unk	Unk	OTW01	DOM	IML
TDWELL01	2Q14	6/24/2014	Pb-210, S	1.1	pCi/l	1	0.4	1.0E-08	1.10E-09	44.51168	-104.9569	Unk	Unk	OTW01	DOM	IML
TDWELL01	2Q14	6/24/2014	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.51168	-104.9569	Unk	Unk	OTW01	DOM	IML
TDWELL01	2Q14	6/24/2014	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.51168	-104.9569	Unk	Unk	OTW01	DOM	IML
TDWELL01	2Q14	6/24/2014	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.51168	-104.9569	Unk	Unk	SM 7500 Ra-B	DOM	IML
TDWELL01	2Q14	6/24/2014	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.51168	-104.9569	Unk	Unk	SM 7500 Ra-B	DOM	IML
TDWELL01	2Q14	6/24/2014	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.51168	-104.9569	Unk	Unk	Ga-Tech	DOM	IML
TDWELL01	2Q14	6/24/2014	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.51168	-104.9569	Unk	Unk	ACW10	DOM	IML
TDWELL01	2Q14	6/24/2014	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.51168	-104.9569	Unk	Unk	ACW10	DOM	IML
TDWELL01	2Q14	6/24/2014	U, D	0.0132	mg/l	0.0	0	3.0E-07	8.94E-09	44.51168	-104.9569	Unk	Unk	EPA 200.8	DOM	IML
TDWELL01	2Q14	6/24/2014	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.51168	-104.9569	Unk	Unk	EPA 200.8	DOM	IML
TDWELL01	2Q14	6/24/2014	Gross Alpha	3.4	pCi/l	2	0.8	NA	3.40E-09	44.51168	-104.9569	Unk	Unk	SM 7110B	DOM	IML
TDWELL01	2Q14	6/24/2014	Gross Beta	3.5	pCi/l	3	1	NA	3.50E-09	44.51168	-104.9569	Unk	Unk	SM 7110B	DOM	IML
TW01	1Q11	2/10/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.59156	-104.94633	200	Unk	SM 7500-Ra B	DOM, STK	IML
TW01	1Q11	2/10/2011	Ra-228, D	2.5	pCi/l	1	2.2	6.0E-08	2.50E-09	44.59156	-104.94633	200	Unk	Ra-05	DOM, STK	IML
TW01	1Q11	2/10/2011	U, D	<0.001	mg/l	0.001	0	3.0E-07	NA	44.59156	-104.94633	200	Unk	EPA 200.8	DOM, STK	IML
TW01	1Q11	2/10/2011	Gross Alpha	<4	pCi/l	4	0	NA	NA	44.59156	-104.94633	200	Unk	SM 7110B	DOM, STK	IML
TW01	1Q11	2/10/2011	Gross Beta	<7	pCi/l	7	0	NA	NA	44.59156	-104.94633	200	Unk	SM 7110B	DOM, STK	IML
TW01	2Q11	5/5/2011	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.59156	-104.94633	200	Unk	OTW01	DOM, STK	IML
TW01	2Q11	5/5/2011	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.59156	-104.94633	200	Unk	OTW01	DOM, STK	IML
TW01	2Q11	5/5/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.59156	-104.94633	200	Unk	OTW01	DOM, STK	IML
TW01	2Q11	5/5/2011	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.59156	-104.94633	200	Unk	OTW01	DOM, STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
TW01	2Q11	5/5/2011	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.59156	-104.94633	200	Unk	SM 7500-Ra B	DOM, STK	IML
TW01	2Q11	5/5/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.59156	-104.94633	200	Unk	SM 7500-Ra B	DOM, STK	IML
TW01	2Q11	5/5/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.59156	-104.94633	200	Unk	Ra-05	DOM, STK	IML
TW01	2Q11	5/5/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.59156	-104.94633	200	Unk	ACW10	DOM, STK	IML
TW01	2Q11	5/5/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.59156	-104.94633	200	Unk	ACW10	DOM, STK	IML
TW01	2Q11	5/5/2011	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.59156	-104.94633	200	Unk	EPA 200.8	DOM, STK	IML
TW01	2Q11	5/5/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.59156	-104.94633	200	Unk	EPA 200.8	DOM, STK	IML
TW01	2Q11	5/5/2011	Gross Alpha	<4	pCi/l	4	0	NA	NA	44.59156	-104.94633	200	Unk	SM 7110B	DOM, STK	IML
TW01	2Q11	5/5/2011	Gross Beta	<7	pCi/l	7	0	NA	NA	44.59156	-104.94633	200	Unk	SM 7110B	DOM, STK	IML
TW01	3Q11	8/11/2011	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.59156	-104.94633	200	Unk	OTW01	DOM, STK	IML
TW01	3Q11	8/11/2011	Pb-210, S	1.3	pCi/l	1	0.5	1.0E-08	1.30E-09	44.59156	-104.94633	200	Unk	OTW01	DOM, STK	IML
TW01	3Q11	8/11/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.59156	-104.94633	200	Unk	OTW01	DOM, STK	IML
TW01	3Q11	8/11/2011	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.59156	-104.94633	200	Unk	OTW01	DOM, STK	IML
TW01	3Q11	8/11/2011	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.59156	-104.94633	200	Unk	SM 7500-Ra B	DOM, STK	IML
TW01	3Q11	8/11/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.59156	-104.94633	200	Unk	SM 7500-Ra B	DOM, STK	IML
TW01	3Q11	8/11/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.59156	-104.94633	200	Unk	Ra-05	DOM, STK	IML
TW01	3Q11	8/11/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.59156	-104.94633	200	Unk	ACW10	DOM, STK	IML
TW01	3Q11	8/11/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.59156	-104.94633	200	Unk	ACW10	DOM, STK	IML
TW01	3Q11	8/11/2011	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.59156	-104.94633	200	Unk	EPA 200.8	DOM, STK	IML
TW01	3Q11	8/11/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.59156	-104.94633	200	Unk	EPA 200.8	DOM, STK	IML
TW01	3Q11	8/11/2011	Gross Alpha	<4	pCi/l	4	0	NA	NA	44.59156	-104.94633	200	Unk	SM 7110B	DOM, STK	IML
TW01	3Q11	8/11/2011	Gross Beta	<7	pCi/l	7	0	NA	NA	44.59156	-104.94633	200	Unk	SM 7110B	DOM, STK	IML
TW01	4Q11	11/21/2011	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.59156	-104.94633	200	Unk	SM 7500-Ra B	DOM, STK	IML
TW01	4Q11	11/21/2011	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.59156	-104.94633	200	Unk	Ra-05	DOM, STK	IML
TW01	4Q11	11/21/2011	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.59156	-104.94633	200	Unk	EPA 200.8	DOM, STK	IML
TW01	4Q11	11/21/2011	Gross Alpha	4.8	pCi/l	3	2.4	NA	4.80E-09	44.59156	-104.94633	200	Unk	SM 7110B	DOM, STK	IML
TW01	4Q11	11/21/2011	Gross Beta	<8	pCi/l	8	0	NA	NA	44.59156	-104.94633	200	Unk	SM 7110B	DOM, STK	IML
TW01	1Q12	3/14/2012	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.59156	-104.94633	200	Unk	SM 7500-Ra B	DOM, STK	IML
TW01	1Q12	3/14/2012	Ra-228, D	1.2	pCi/l	1	1.2	6.0E-08	1.20E-09	44.59156	-104.94633	200	Unk	Ra-05	DOM, STK	IML
TW01	1Q12	3/14/2012	U, D	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.59156	-104.94633	200	Unk	EPA 200.8	DOM, STK	IML
TW01	1Q12	3/14/2012	Gross Alpha	<7	pCi/l	7.0	0	NA	NA	44.59156	-104.94633	200	Unk	SM 7110B	DOM, STK	IML
TW01	1Q12	3/14/2012	Gross Beta	14.7	pCi/l	6.0	4.5	NA	1.47E-08	44.59156	-104.94633	200	Unk	SM 7110B	DOM, STK	IML
TW01	3Q12	8/1/2012	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.59156	-104.94633	200	Unk	SM 7500 Ra-B	DOM, STK	IML
TW01	3Q12	8/1/2012	Ra-228, D	1.13	pCi/l	1	0.98	6.0E-08	1.13E-09	44.59156	-104.94633	200	Unk	Ga-Tech	DOM, STK	IML
TW01	3Q12	8/1/2012	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.59156	-104.94633	200	Unk	EPA 200.8	DOM, STK	IML
TW01	3Q12	8/1/2012	Gross Alpha	4	pCi/l	3	2.2	NA	4.00E-09	44.59156	-104.94633	200	Unk	SM 7110B	DOM, STK	IML
TW01	3Q12	8/1/2012	Gross Beta	<7	pCi/l	7	0	NA	NA	44.59156	-104.94633	200	Unk	SM 7110B	DOM, STK	IML
TW01	1Q13	3/14/2013	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.59156	-104.94633	200	Unk	OTW01	DOM, STK	IML
TW01	1Q13	3/14/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.59156	-104.94633	200	Unk	OTW01	DOM, STK	IML
TW01	1Q13	3/14/2013	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.59156	-104.94633	200	Unk	OTW01	DOM, STK	IML
TW01	1Q13	3/14/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.59156	-104.94633	200	Unk	OTW01	DOM, STK	IML
TW01	1Q13	3/14/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.59156	-104.94633	200	Unk	SM 7500 Ra-B	DOM, STK	IML
TW01	1Q13	3/14/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.59156	-104.94633	200	Unk	SM 7500 Ra-B	DOM, STK	IML
TW01	1Q13	3/14/2013	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.59156	-104.94633	200	Unk	Ga-Tech	DOM, STK	IML
TW01	1Q13	3/14/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.59156	-104.94633	200	Unk	ACW10	DOM, STK	IML
TW01	1Q13	3/14/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.59156	-104.94633	200	Unk	ACW10	DOM, STK	IML
TW01	1Q13	3/14/2013	U, D	0.0003	mg/l	0.0003	0	3.0E-07	2.03E-10	44.59156	-104.94633	200	Unk	EPA 200.8	DOM, STK	IML
TW01	1Q13	3/14/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.59156	-104.94633	200	Unk	EPA 200.8	DOM, STK	IML
TW01	1Q13	3/14/2013	Gross Alpha	<4	pCi/l	4	0	NA	NA	44.59156	-104.94633	200	Unk	SM 7110B	DOM, STK	IML
TW01	1Q13	3/14/2013	Gross Beta	10.2	pCi/l	7	4.1	NA	1.02E-08	44.59156	-104.94633	200	Unk	SM 7110B	DOM, STK	IML
TW02	1Q11	2/10/2011	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.58744	-104.93854	160	Unk	SM 7500-Ra B	DOM, STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
TW02	1Q11	2/10/2011	Ra-228, D	1.3	pCi/l	1	2.2	6.0E-08	1.30E-09	44.58744	-104.93854	160	Unk	Ra-05	DOM, STK	IML
TW02	1Q11	2/10/2011	U, D	<0.001	mg/l	0.001	0	3.0E-07	NA	44.58744	-104.93854	160	Unk	EPA 200.8	DOM, STK	IML
TW02	1Q11	2/10/2011	Gross Alpha	<5	pCi/l	5	0	NA	NA	44.58744	-104.93854	160	Unk	SM 7110B	DOM, STK	IML
TW02	1Q11	2/10/2011	Gross Beta	<8	pCi/l	8	0	NA	NA	44.58744	-104.93854	160	Unk	SM 7110B	DOM, STK	IML
TW02	2Q11	5/4/2011	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.58744	-104.93854	160	Unk	OTW01	DOM, STK	IML
TW02	2Q11	5/4/2011	Pb-210, S	1.2	pCi/l	1	0.4	1.0E-08	1.20E-09	44.58744	-104.93854	160	Unk	OTW01	DOM, STK	IML
TW02	2Q11	5/4/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.58744	-104.93854	160	Unk	OTW01	DOM, STK	IML
TW02	2Q11	5/4/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.58744	-104.93854	160	Unk	OTW01	DOM, STK	IML
TW02	2Q11	5/4/2011	Ra-226, D	0.6	pCi/l	0.2	0.1	6.0E-08	6.00E-10	44.58744	-104.93854	160	Unk	SM 7500-Ra B	DOM, STK	IML
TW02	2Q11	5/4/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.58744	-104.93854	160	Unk	SM 7500-Ra B	DOM, STK	IML
TW02	2Q11	5/4/2011	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.58744	-104.93854	160	Unk	Ra-05	DOM, STK	IML
TW02	2Q11	5/4/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58744	-104.93854	160	Unk	ACW10	DOM, STK	IML
TW02	2Q11	5/4/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58744	-104.93854	160	Unk	ACW10	DOM, STK	IML
TW02	2Q11	5/4/2011	U, D	0.0004	mg/l	0.0003	0	3.0E-07	2.71E-10	44.58744	-104.93854	160	Unk	EPA 200.8	DOM, STK	IML
TW02	2Q11	5/4/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.58744	-104.93854	160	Unk	EPA 200.8	DOM, STK	IML
TW02	2Q11	5/4/2011	Gross Alpha	<4	pCi/l	4	0	NA	NA	44.58744	-104.93854	160	Unk	SM 7110B	DOM, STK	IML
TW02	2Q11	5/4/2011	Gross Beta	9.6	pCi/l	7	4	NA	9.60E-09	44.58744	-104.93854	160	Unk	SM 7110B	DOM, STK	IML
TW02	3Q11	8/12/2011	Pb-210, D	1.2	pCi/l	1	0.5	1.0E-08	1.20E-09	44.58744	-104.93854	160	Unk	OTW01	DOM, STK	IML
TW02	3Q11	8/12/2011	Pb-210, S	1	pCi/l	1	0.4	1.0E-08	1.00E-09	44.58744	-104.93854	160	Unk	OTW01	DOM, STK	IML
TW02	3Q11	8/12/2011	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.58744	-104.93854	160	Unk	OTW01	DOM, STK	IML
TW02	3Q11	8/12/2011	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.58744	-104.93854	160	Unk	OTW01	DOM, STK	IML
TW02	3Q11	8/12/2011	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.58744	-104.93854	160	Unk	SM 7500-Ra B	DOM, STK	IML
TW02	3Q11	8/12/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.58744	-104.93854	160	Unk	SM 7500-Ra B	DOM, STK	IML
TW02	3Q11	8/12/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58744	-104.93854	160	Unk	Ra-05	DOM, STK	IML
TW02	3Q11	8/12/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58744	-104.93854	160	Unk	ACW10	DOM, STK	IML
TW02	3Q11	8/12/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58744	-104.93854	160	Unk	ACW10	DOM, STK	IML
TW02	3Q11	8/12/2011	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.58744	-104.93854	160	Unk	EPA 200.8	DOM, STK	IML
TW02	3Q11	8/12/2011	U, S	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.58744	-104.93854	160	Unk	EPA 200.8	DOM, STK	IML
TW02	3Q11	8/12/2011	Gross Alpha	6.6	pCi/l	3.0	2.5	NA	6.60E-09	44.58744	-104.93854	160	Unk	SM 7110B	DOM, STK	IML
TW02	3Q11	8/12/2011	Gross Beta	9.6	pCi/l	7.0	4.2	NA	9.60E-09	44.58744	-104.93854	160	Unk	SM 7110B	DOM, STK	IML
TW02	3Q12	8/1/2012	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.58744	-104.93854	160	Unk	SM 7500 Ra-B	DOM, STK	IML
TW02	3Q12	8/1/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58744	-104.93854	160	Unk	Ga-Tech	DOM, STK	IML
TW02	3Q12	8/1/2012	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.58744	-104.93854	160	Unk	EPA 200.8	DOM, STK	IML
TW02	3Q12	8/1/2012	Gross Alpha	<3	pCi/l	3	0	NA	NA	44.58744	-104.93854	160	Unk	SM 7110B	DOM, STK	IML
TW02	3Q12	8/1/2012	Gross Beta	9.1	pCi/l	7	4.3	NA	9.10E-09	44.58744	-104.93854	160	Unk	SM 7110B	DOM, STK	IML
TW02	1Q13	3/14/2013	Pb-210, D	2	pCi/l	1	1	1.0E-08	2.00E-09	44.58744	-104.93854	160	Unk	OTW01	DOM, STK	IML
TW02	1Q13	3/14/2013	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.58744	-104.93854	160	Unk	OTW01	DOM, STK	IML
TW02	1Q13	3/14/2013	Po-210, D	4.4	pCi/l	1	0.7	4.0E-08	4.40E-09	44.58744	-104.93854	160	Unk	OTW01	DOM, STK	IML
TW02	1Q13	3/14/2013	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.58744	-104.93854	160	Unk	OTW01	DOM, STK	IML
TW02	1Q13	3/14/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.58744	-104.93854	160	Unk	SM 7500 Ra-B	DOM, STK	IML
TW02	1Q13	3/14/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.58744	-104.93854	160	Unk	SM 7500 Ra-B	DOM, STK	IML
TW02	1Q13	3/14/2013	Ra-228, D	<1	pCi/l	1.0	0	6.0E-08	NA	44.58744	-104.93854	160	Unk	Ga-Tech	DOM, STK	IML
TW02	1Q13	3/14/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58744	-104.93854	160	Unk	ACW10	DOM, STK	IML
TW02	1Q13	3/14/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58744	-104.93854	160	Unk	ACW10	DOM, STK	IML
TW02	1Q13	3/14/2013	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.58744	-104.93854	160	Unk	EPA 200.8	DOM, STK	IML
TW02	1Q13	3/14/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.58744	-104.93854	160	Unk	EPA 200.8	DOM, STK	IML
TW02	1Q13	3/14/2013	Gross Alpha	<3	pCi/l	3	0	NA	NA	44.58744	-104.93854	160	Unk	SM 7110B	DOM, STK	IML
TW02	1Q13	3/14/2013	Gross Beta	9.8	pCi/l	7	4.2	NA	9.80E-09	44.58744	-104.93854	160	Unk	SM 7110B	DOM, STK	IML
TWWELL03	2Q11	5/5/2011	Pb-210, D	1.2	pCi/l	1	0.4	1.0E-08	1.20E-09	44.58910	-104.96760	Unk	Unk	OTW01	STK	IML
TWWELL03	2Q11	5/5/2011	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.58910	-104.96760	Unk	Unk	OTW01	STK	IML
TWWELL03	2Q11	5/5/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.58910	-104.96760	Unk	Unk	OTW01	STK	IML

Kendrick Expansion Area
Existing Water Supply Well Data

Well ID	Quarter	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Well Depth (feet)	Depth to Water (feet)	Method	Well Type	Contract Laboratory
TWWELL03	2Q11	5/5/2011	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.58910	-104.96760	Unk	Unk	OTW01	STK	IML
TWWELL03	2Q11	5/5/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.58910	-104.96760	Unk	Unk	SM 7500-Ra B	STK	IML
TWWELL03	2Q11	5/5/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.58910	-104.96760	Unk	Unk	SM 7500-Ra B	STK	IML
TWWELL03	2Q11	5/5/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58910	-104.96760	Unk	Unk	Ra-05	STK	IML
TWWELL03	2Q11	5/5/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58910	-104.96760	Unk	Unk	ACW10	STK	IML
TWWELL03	2Q11	5/5/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58910	-104.96760	Unk	Unk	ACW10	STK	IML
TWWELL03	2Q11	5/5/2011	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.58910	-104.96760	Unk	Unk	EPA 200.8	STK	IML
TWWELL03	2Q11	5/5/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.58910	-104.96760	Unk	Unk	EPA 200.8	STK	IML
TWWELL03	2Q11	5/5/2011	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.58910	-104.96760	Unk	Unk	SM 7110B	STK	IML
TWWELL03	2Q11	5/5/2011	Gross Beta	<4	pCi/l	4	0	NA	NA	44.58910	-104.96760	Unk	Unk	SM 7110B	STK	IML
TWWELL03	3Q11	8/11/2011	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.58910	-104.96760	Unk	Unk	OTW01	STK	IML
TWWELL03	3Q11	8/11/2011	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.58910	-104.96760	Unk	Unk	OTW01	STK	IML
TWWELL03	3Q11	8/11/2011	Po-210, D	<1	pCi/l	1.0	0	4.0E-08	NA	44.58910	-104.96760	Unk	Unk	OTW01	STK	IML
TWWELL03	3Q11	8/11/2011	Po-210, S	<1	pCi/l	1.0	0	4.0E-08	NA	44.58910	-104.96760	Unk	Unk	OTW01	STK	IML
TWWELL03	3Q11	8/11/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.58910	-104.96760	Unk	Unk	SM 7500-Ra B	STK	IML
TWWELL03	3Q11	8/11/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.58910	-104.96760	Unk	Unk	SM 7500-Ra B	STK	IML
TWWELL03	3Q11	8/11/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58910	-104.96760	Unk	Unk	Ra-05	STK	IML
TWWELL03	3Q11	8/11/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58910	-104.96760	Unk	Unk	ACW10	STK	IML
TWWELL03	3Q11	8/11/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.58910	-104.96760	Unk	Unk	ACW10	STK	IML
TWWELL03	3Q11	8/11/2011	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.58910	-104.96760	Unk	Unk	EPA 200.8	STK	IML
TWWELL03	3Q11	8/11/2011	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.58910	-104.96760	Unk	Unk	EPA 200.8	STK	IML
TWWELL03	3Q11	8/11/2011	Gross Alpha	<3	pCi/l	3	0	NA	NA	44.58910	-104.96760	Unk	Unk	SM 7110B	STK	IML
TWWELL03	3Q11	8/11/2011	Gross Beta	<7	pCi/l	7	0	NA	NA	44.58910	-104.96760	Unk	Unk	SM 7110B	STK	IML
TWWELL03	3Q12	8/1/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.58910	-104.96760	Unk	Unk	SM 7500 Ra-B	STK	IML
TWWELL03	3Q12	8/1/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.58910	-104.96760	Unk	Unk	Ga-Tech	STK	IML
TWWELL03	3Q12	8/1/2012	U, D	<0.0003	mg/l	0.0	0	3.0E-07	NA	44.58910	-104.96760	Unk	Unk	EPA 200.8	STK	IML
TWWELL03	3Q12	8/1/2012	Gross Alpha	2.1	pCi/l	2.0	1.5	NA	2.10E-09	44.58910	-104.96760	Unk	Unk	SM 7110B	STK	IML
TWWELL03	3Q12	8/1/2012	Gross Beta	<5	pCi/l	5.0	0	NA	NA	44.58910	-104.96760	Unk	Unk	SM 7110B	STK	IML
P22584P	4Q11	11/21/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.54375	-104.96616	386	Unk	SM 7500-Ra B	DOM, STK	IML
P22584P	4Q11	11/21/2011	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.54375	-104.96616	386	Unk	Ra-05	DOM, STK	IML
P22584P	4Q11	11/21/2011	U, D	0.0168	mg/l	0.0003	0	3.0E-07	1.14E-08	44.54375	-104.96616	386	Unk	EPA 200.8	DOM, STK	IML
P22584P	4Q11	11/21/2011	Gross Alpha	19.1	pCi/l	2	2.3	NA	1.91E-08	44.54375	-104.96616	386	Unk	SM 7110B	DOM, STK	IML
P22584P	4Q11	11/21/2011	Gross Beta	5.9	pCi/l	3	1.6	NA	5.90E-09	44.54375	-104.96616	386	Unk	SM 7110B	DOM, STK	IML
P22584P	3Q12	9/11/2012	Pb-210, D	2.1	pCi/l	1	0.5	1.0E-08	2.10E-09	44.54375	-104.96616	386	Unk	OTW01	DOM, STK	IML
P22584P	3Q12	9/11/2012	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.54375	-104.96616	386	Unk	OTW01	DOM, STK	IML
P22584P	3Q12	9/11/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.54375	-104.96616	386	Unk	OTW01	DOM, STK	IML
P22584P	3Q12	9/11/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.54375	-104.96616	386	Unk	OTW01	DOM, STK	IML
P22584P	3Q12	9/11/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.54375	-104.96616	386	Unk	SM 7500 Ra-B	DOM, STK	IML
P22584P	3Q12	9/11/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.54375	-104.96616	386	Unk	SM 7500 Ra-B	DOM, STK	IML
P22584P	3Q12	9/11/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.54375	-104.96616	386	Unk	Ga-Tech	DOM, STK	IML
P22584P	3Q12	9/11/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.54375	-104.96616	386	Unk	ACW10	DOM, STK	IML
P22584P	3Q12	9/11/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.54375	-104.96616	386	Unk	ACW10	DOM, STK	IML
P22584P	3Q12	9/11/2012	U, D	0.017	mg/l	0.0	0	3.0E-07	1.15E-08	44.54375	-104.96616	386	Unk	EPA 200.8	DOM, STK	IML
P22584P	3Q12	9/11/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.54375	-104.96616	386	Unk	EPA 200.8	DOM, STK	IML
P22584P	3Q12	9/11/2012	Gross Alpha	24.3	pCi/l	2	4	NA	2.43E-08	44.54375	-104.96616	386	Unk	SM 7110B	DOM, STK	IML
P22584P	3Q12	9/11/2012	Gross Beta	10	pCi/l	3	3.1	NA	1.00E-08	44.54375	-104.96616	386	Unk	SM 7110B	DOM, STK	IML

SURFACE WATER

Kendrick Expansion Area
Surface Water Station Data

Surface Water ID	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Method	Type	Contract Laboratory
SW-1	3/16/2011	Gross Alpha	7	pCi/l	3	2.1	NA	7.00E-09	44.58760	-104.94265	SM 7110B	SW Station	IML
SW-1	3/16/2011	Gross Beta	8.1	pCi/l	4	2.3	NA	8.10E-09	44.58760	-104.94265	SM 7110B	SW Station	IML
SW-1	3/16/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.58760	-104.94265	SM 7500-Ra B	SW Station	IML
SW-1	3/16/2011	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.58760	-104.94265	Ra-05	SW Station	IML
SW-1	3/16/2011	U, D	0.014	mg/l	0.0003	0	3.E-07	9.48E-09	44.58760	-104.94265	EPA 200.8	SW Station	IML
SW-1	4/6/2011	Gross Alpha	8.5	pCi/l	2	1.7	NA	8.50E-09	44.58760	-104.94265	SM 7110B	SW Station	IML
SW-1	4/6/2011	Gross Beta	12	pCi/l	4	2.2	NA	1.20E-08	44.58760	-104.94265	SM 7110B	SW Station	IML
SW-1	4/6/2011	Pb-210, D	<1	pCi/l	1	0	1.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	4/6/2011	Pb-210, S	<1	pCi/l	1	0	1.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	4/6/2011	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	4/6/2011	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	4/6/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.58760	-104.94265	SM 7500-Ra B	SW Station	IML
SW-1	4/6/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.58760	-104.94265	SM 7500-Ra B	SW Station	IML
SW-1	4/6/2011	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.58760	-104.94265	Ra-05	SW Station	IML
SW-1	4/6/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.58760	-104.94265	ACW10	SW Station	IML
SW-1	4/6/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.58760	-104.94265	ACW10	SW Station	IML
SW-1	4/6/2011	U, S	0.0017	mg/l	0.0003	0	3.E-07	1.15E-09	44.58760	-104.94265	EPA 200.8	SW Station	IML
SW-1	4/6/2011	U, D	0.0093	mg/l	0.0003	0	3.E-07	6.30E-09	44.58760	-104.94265	EPA 200.8	SW Station	IML
SW-1	5/4/2011	Gross Alpha	10.5	pCi/l	2	1.8	NA	1.05E-08	44.58760	-104.94265	SM 7110B	SW Station	IML
SW-1	5/4/2011	Gross Beta	11.4	pCi/l	4	2.3	NA	1.14E-08	44.58760	-104.94265	SM 7110B	SW Station	IML
SW-1	5/4/2011	Pb-210, D	1.3	pCi/l	1	0.6	1.E-08	1.30E-09	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	5/4/2011	Pb-210, S	1.2	pCi/l	1	0.4	1.E-08	1.20E-09	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	5/4/2011	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	5/4/2011	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	5/4/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.58760	-104.94265	SM 7500-Ra B	SW Station	IML
SW-1	5/4/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.58760	-104.94265	SM 7500-Ra B	SW Station	IML
SW-1	5/4/2011	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.58760	-104.94265	Ra-05	SW Station	IML
SW-1	5/4/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.58760	-104.94265	ACW10	SW Station	IML
SW-1	5/4/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.58760	-104.94265	ACW10	SW Station	IML
SW-1	5/4/2011	U, S	<0.001	mg/l	0.001	0	3.E-07	NA	44.58760	-104.94265	EPA 200.8	SW Station	IML
SW-1	5/4/2011	U, D	0.0102	mg/l	0.0003	0	3.E-07	6.91E-09	44.58760	-104.94265	EPA 200.8	SW Station	IML
SW-1	5/23/2011	Gross Alpha	5.9	pCi/l	2	1.1	NA	5.90E-09	44.58760	-104.94265	SM 7110B	SW Station	IML
SW-1	5/23/2011	Gross Beta	9.3	pCi/l	3	1.2	NA	9.30E-09	44.58760	-104.94265	SM 7110B	SW Station	IML
SW-1	5/23/2011	Pb-210, D	1.2	pCi/l	1	0.6	1.E-08	1.20E-09	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	5/23/2011	Pb-210, S	<1	pCi/l	1	0	1.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	5/23/2011	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	5/23/2011	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	5/23/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.58760	-104.94265	SM 7500-Ra B	SW Station	IML
SW-1	5/23/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.58760	-104.94265	SM 7500-Ra B	SW Station	IML
SW-1	5/23/2011	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.58760	-104.94265	Ra-05	SW Station	IML
SW-1	5/23/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.58760	-104.94265	ACW10	SW Station	IML
SW-1	5/23/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.58760	-104.94265	ACW10	SW Station	IML
SW-1	5/23/2011	U, S	<0.0003	mg/l	0.0003	0	3.E-07	NA	44.58760	-104.94265	EPA 200.8	SW Station	IML
SW-1	5/23/2011	U, D	0.0093	mg/l	0.0003	0	3.E-07	6.30E-09	44.58760	-104.94265	EPA 200.8	SW Station	IML

Kendrick Expansion Area
Surface Water Station Data

Surface Water ID	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Method	Type	Contract Laboratory
SW-1	6/8/2011	Gross Alpha	5.1	pCi/l	2	1.6	NA	5.10E-09	44.58760	-104.94265	SM 7110B	SW Station	IML
SW-1	6/8/2011	Gross Beta	8.7	pCi/l	4	2.5	NA	8.70E-09	44.58760	-104.94265	SM 7110B	SW Station	IML
SW-1	6/8/2011	Pb-210, D	<1	pCi/l	1	0	1.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	6/8/2011	Pb-210, S	1	pCi/l	1	0.6	1.E-08	1.00E-09	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	6/8/2011	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	6/8/2011	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	6/8/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.58760	-104.94265	SM 7500-Ra B	SW Station	IML
SW-1	6/8/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.58760	-104.94265	SM 7500-Ra B	SW Station	IML
SW-1	6/8/2011	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.58760	-104.94265	Ra-05	SW Station	IML
SW-1	6/8/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.58760	-104.94265	ACW10	SW Station	IML
SW-1	6/8/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.58760	-104.94265	ACW10	SW Station	IML
SW-1	6/8/2011	U, S	<0.0003	mg/l	0.0003	0	3.E-07	NA	44.58760	-104.94265	EPA 200.8	SW Station	IML
SW-1	6/8/2011	U, D	0.008	mg/l	0.0003	0	3.E-07	5.42E-09	44.58760	-104.94265	EPA 200.8	SW Station	IML
SW-1	8/11/2011	Gross Alpha	3.3	pCi/l	2	1.3	NA	3.30E-09	44.58760	-104.94265	SM 7110B	SW Station	IML
SW-1	8/11/2011	Gross Beta	8.7	pCi/l	3	2.1	NA	8.70E-09	44.58760	-104.94265	SM 7110B	SW Station	IML
SW-1	8/11/2011	Pb-210, D	1.9	pCi/l	1	0.6	1.E-08	1.90E-09	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	8/11/2011	Pb-210, S	<1	pCi/l	1	0	1.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	8/11/2011	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	8/11/2011	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	6/21/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.58760	-104.94265	SM 7500 Ra-B	SW Station	IML
SW-1	6/21/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.58760	-104.94265	SM 7500 Ra-B	SW Station	IML
SW-1	6/21/2013	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.58760	-104.94265	Ga-Tech	SW Station	IML
SW-1	6/21/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.58760	-104.94265	ACW10	SW Station	IML
SW-1	6/21/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.58760	-104.94265	ACW10	SW Station	IML
SW-1	6/21/2013	U, S	<0.0003	mg/l	0.0003	0	3.E-07	NA	44.58760	-104.94265	EPA 200.8	SW Station	IML
SW-1	6/21/2013	U, D	0.0091	mg/l	0.0003	0	3.E-07	6.16E-09	44.58760	-104.94265	EPA 200.8	SW Station	IML
SW-1	8/4/2013	Pb-210, D	<1	pCi/l	1	0	1.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	8/4/2013	Pb-210, S	1.9	pCi/l	1	0.5	1.E-08	1.90E-09	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	8/4/2013	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	8/4/2013	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.58760	-104.94265	OTW01	SW Station	IML
SW-1	8/4/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.58760	-104.94265	SM 7500 Ra-B	SW Station	IML
SW-1	8/4/2013	Ra-226, S	0.3	pCi/l	0.2	0.1	6.E-08	3.00E-10	44.58760	-104.94265	SM 7500 Ra-B	SW Station	IML
SW-1	8/4/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.58760	-104.94265	ACW10	SW Station	IML
SW-1	8/4/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.58760	-104.94265	ACW10	SW Station	IML
SW-1	8/4/2013	U, S	<0.0003	mg/l	0.0003	0	3.E-07	NA	44.58760	-104.94265	EPA 200.8	SW Station	IML
SW-1	8/4/2013	U, D	0.0043	mg/l	0.0003	0	3.E-07	2.91E-09	44.58760	-104.94265	EPA 200.8	SW Station	IML
SW-2	3/16/2011	Gross Alpha	2.5	pCi/l	2	0.9	NA	2.50E-09	44.56992	-104.96157	SM 7110B	SW Station	IML
SW-2	3/16/2011	Gross Beta	4.6	pCi/l	3	1.2	NA	4.60E-09	44.56992	-104.96157	SM 7110B	SW Station	IML
SW-2	3/16/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.56992	-104.96157	SM 7500-Ra B	SW Station	IML
SW-2	3/16/2011	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.56992	-104.96157	Ra-05	SW Station	IML
SW-2	3/16/2011	U, D	0.0029	mg/l	0.0003	0	3.E-07	1.96E-09	44.56992	-104.96157	EPA 200.8	SW Station	IML
SW-2	4/6/2011	Gross Alpha	8.6	pCi/l	2	1.7	NA	8.60E-09	44.56992	-104.96157	SM 7110B	SW Station	IML
SW-2	4/6/2011	Gross Beta	6.4	pCi/l	4	2.2	NA	6.40E-09	44.56992	-104.96157	SM 7110B	SW Station	IML
SW-2	4/6/2011	Pb-210, D	1.4	pCi/l	1	0.4	1.E-08	1.40E-09	44.56992	-104.96157	OTW01	SW Station	IML

Kendrick Expansion Area
Surface Water Station Data

Surface Water ID	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Method	Type	Contract Laboratory
SW-2	4/6/2011	Pb-210, S	<1	pCi/l	1	0	1.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	4/6/2011	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	4/6/2011	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	4/6/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.56992	-104.96157	SM 7500-Ra B	SW Station	IML
SW-2	4/6/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.56992	-104.96157	SM 7500-Ra B	SW Station	IML
SW-2	4/6/2011	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.56992	-104.96157	Ra-05	SW Station	IML
SW-2	4/6/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.56992	-104.96157	ACW10	SW Station	IML
SW-2	4/6/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.56992	-104.96157	ACW10	SW Station	IML
SW-2	4/6/2011	U, S	<0.0003	mg/l	0.0003	0	3.E-07	NA	44.56992	-104.96157	EPA 200.8	SW Station	IML
SW-2	4/6/2011	U, D	0.0131	mg/l	0.0003	0	3.E-07	8.87E-09	44.56992	-104.96157	EPA 200.8	SW Station	IML
SW-2	5/4/2011	Gross Alpha	5.7	pCi/l	2	1.8	NA	5.70E-09	44.56992	-104.96157	SM 7110B	SW Station	IML
SW-2	5/4/2011	Gross Beta	8.2	pCi/l	4	2.3	NA	8.20E-09	44.56992	-104.96157	SM 7110B	SW Station	IML
SW-2	5/4/2011	Pb-210, D	1.1	pCi/l	1	0.5	1.E-08	1.10E-09	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	5/4/2011	Pb-210, S	<1	pCi/l	1	0	1.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	5/4/2011	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	5/4/2011	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	5/4/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.56992	-104.96157	SM 7500-Ra B	SW Station	IML
SW-2	5/4/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.56992	-104.96157	SM 7500-Ra B	SW Station	IML
SW-2	5/4/2011	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.56992	-104.96157	Ra-05	SW Station	IML
SW-2	5/4/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.56992	-104.96157	ACW10	SW Station	IML
SW-2	5/4/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.56992	-104.96157	ACW10	SW Station	IML
SW-2	5/4/2011	U, S	<0.001	mg/l	0.001	0	3.E-07	NA	44.56992	-104.96157	EPA 200.8	SW Station	IML
SW-2	5/4/2011	U, D	0.013	mg/l	0.0003	0	3.E-07	8.80E-09	44.56992	-104.96157	EPA 200.8	SW Station	IML
SW-2	5/23/2011	Gross Alpha	6.5	pCi/l	2	1.2	NA	6.50E-09	44.56992	-104.96157	SM 7110B	SW Station	IML
SW-2	5/23/2011	Gross Beta	8.6	pCi/l	3	1.2	NA	8.60E-09	44.56992	-104.96157	SM 7110B	SW Station	IML
SW-2	5/23/2011	Pb-210, D	<1	pCi/l	1	0	1.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	5/23/2011	Pb-210, S	<1	pCi/l	1	0	1.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	5/23/2011	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	5/23/2011	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	5/23/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.56992	-104.96157	SM 7500-Ra B	SW Station	IML
SW-2	5/23/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.56992	-104.96157	SM 7500-Ra B	SW Station	IML
SW-2	5/23/2011	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.56992	-104.96157	Ra-05	SW Station	IML
SW-2	5/23/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.56992	-104.96157	ACW10	SW Station	IML
SW-2	5/23/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.56992	-104.96157	ACW10	SW Station	IML
SW-2	5/23/2011	U, S	<0.0003	mg/l	0.0003	0	3.E-07	NA	44.56992	-104.96157	EPA 200.8	SW Station	IML
SW-2	5/23/2011	U, D	0.0121	mg/l	0.0003	0	3.E-07	8.19E-09	44.56992	-104.96157	EPA 200.8	SW Station	IML
SW-2	6/8/2011	Gross Alpha	2.4	pCi/l	2	1.6	NA	2.40E-09	44.56992	-104.96157	SM 7110B	SW Station	IML
SW-2	6/8/2011	Gross Beta	4.7	pCi/l	3	2.1	NA	4.70E-09	44.56992	-104.96157	SM 7110B	SW Station	IML
SW-2	6/8/2011	Pb-210, D	<1	pCi/l	1	0	1.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	6/8/2011	Pb-210, S	<1	pCi/l	1	0	1.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	6/8/2011	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	6/8/2011	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	6/8/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.56992	-104.96157	SM 7500-Ra B	SW Station	IML
SW-2	6/8/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.56992	-104.96157	SM 7500-Ra B	SW Station	IML

Kendrick Expansion Area
Surface Water Station Data

Surface Water ID	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Method	Type	Contract Laboratory
SW-2	6/8/2011	Ra-228, D	1.7	pCi/l	1	1	6.E-08	1.70E-09	44.56992	-104.96157	Ra-05	SW Station	IML
SW-2	6/8/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.56992	-104.96157	ACW10	SW Station	IML
SW-2	6/8/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.56992	-104.96157	ACW10	SW Station	IML
SW-2	6/8/2011	U, S	<0.0003	mg/l	0.0003	0	3.E-07	NA	44.56992	-104.96157	EPA 200.8	SW Station	IML
SW-2	6/8/2011	U, D	0.0036	mg/l	0.0003	0	3.E-07	2.44E-09	44.56992	-104.96157	EPA 200.8	SW Station	IML
SW-2	8/11/2011	Gross Alpha	4.5	pCi/l	3	2.2	NA	4.50E-09	44.56992	-104.96157	SM 7110B	SW Station	IML
SW-2	8/11/2011	Gross Beta	9.4	pCi/l	7	4.4	NA	9.40E-09	44.56992	-104.96157	SM 7110B	SW Station	IML
SW-2	8/11/2011	Pb-210, D	2	pCi/l	1	0.8	1.E-08	2.00E-09	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	8/11/2011	Pb-210, S	<1	pCi/l	1	0	1.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	8/11/2011	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	8/11/2011	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.56992	-104.96157	OTW01	SW Station	IML
SW-2	8/11/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.56992	-104.96157	SM 7500-Ra B	SW Station	IML
SW-2	8/11/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.56992	-104.96157	SM 7500-Ra B	SW Station	IML
SW-2	8/11/2011	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.56992	-104.96157	Ra-05	SW Station	IML
SW-2	8/11/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.56992	-104.96157	ACW10	SW Station	IML
SW-2	8/11/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.56992	-104.96157	ACW10	SW Station	IML
SW-2	8/11/2011	U, S	<0.0003	mg/l	0.0003	0	3.E-07	NA	44.56992	-104.96157	EPA 200.8	SW Station	IML
SW-2	8/11/2011	U, D	0.0036	mg/l	0.0003	0	3.E-07	2.44E-09	44.56992	-104.96157	EPA 200.8	SW Station	IML
SW-2	3/15/2012	Gross Alpha	7.2	pCi/l	2	1.4	NA	7.20E-09	44.56992	-104.96157	SM 7110B	SW Station	IML
SW-2	3/15/2012	Gross Beta	10.9	pCi/l	3	1.8	NA	1.09E-08	44.56992	-104.96157	SM 7110B	SW Station	IML
SW-2	3/15/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.56992	-104.96157	SM 7500-Ra B	SW Station	IML
SW-2	3/15/2012	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.56992	-104.96157	Ra-05	SW Station	IML
SW-2	3/15/2012	U, D	0.0098	mg/l	0.0003	0	3.E-07	6.63E-09	44.56992	-104.96157	EPA 200.8	SW Station	IML
SW-3	3/16/2011	Gross Alpha	4.6	pCi/l	2	1	NA	4.60E-09	44.57545	-104.96854	SM 7110B	SW Station	IML
SW-3	3/16/2011	Gross Beta	5.2	pCi/l	3	1.1	NA	5.20E-09	44.57545	-104.96854	SM 7110B	SW Station	IML
SW-3	3/16/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.57545	-104.96854	SM 7500-Ra B	SW Station	IML
SW-3	3/16/2011	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.57545	-104.96854	Ra-05	SW Station	IML
SW-3	3/16/2011	U, D	0.01	mg/l	0.0003	0	3.E-07	6.77E-09	44.57545	-104.96854	EPA 200.8	SW Station	IML
SW-3	4/6/2011	Gross Alpha	14.9	pCi/l	2	2.1	NA	1.49E-08	44.57545	-104.96854	SM 7110B	SW Station	IML
SW-3	4/6/2011	Gross Beta	9.9	pCi/l	4	2.2	NA	9.90E-09	44.57545	-104.96854	SM 7110B	SW Station	IML
SW-3	4/6/2011	Pb-210, D	3.3	pCi/l	1	0.7	1.E-08	3.30E-09	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	4/6/2011	Pb-210, S	<1	pCi/l	1	0	1.E-08	NA	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	4/6/2011	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	4/6/2011	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	4/6/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.57545	-104.96854	SM 7500-Ra B	SW Station	IML
SW-3	4/6/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.57545	-104.96854	SM 7500-Ra B	SW Station	IML
SW-3	4/6/2011	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.57545	-104.96854	Ra-05	SW Station	IML
SW-3	4/6/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.57545	-104.96854	ACW10	SW Station	IML
SW-3	4/6/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.57545	-104.96854	ACW10	SW Station	IML
SW-3	4/6/2011	U, S	<0.0003	mg/l	0.0003	0	3.E-07	NA	44.57545	-104.96854	EPA 200.8	SW Station	IML
SW-3	4/6/2011	U, D	0.0239	mg/l	0.0003	0	3.E-07	1.62E-08	44.57545	-104.96854	EPA 200.8	SW Station	IML
SW-3	5/4/2011	Gross Alpha	10.3	pCi/l	2	2.1	NA	1.03E-08	44.57545	-104.96854	SM 7110B	SW Station	IML
SW-3	5/4/2011	Gross Beta	10.3	pCi/l	4	2.4	NA	1.03E-08	44.57545	-104.96854	SM 7110B	SW Station	IML
SW-3	5/4/2011	Pb-210, D	1.7	pCi/l	1	0.5	1.E-08	1.70E-09	44.57545	-104.96854	OTW01	SW Station	IML

Kendrick Expansion Area
Surface Water Station Data

Surface Water ID	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Method	Type	Contract Laboratory
SW-3	5/4/2011	Pb-210, S	1.5	pCi/l	1	0.7	1.E-08	1.50E-09	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	5/4/2011	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	5/4/2011	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	5/4/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.57545	-104.96854	SM 7500-Ra B	SW Station	IML
SW-3	5/4/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.57545	-104.96854	SM 7500-Ra B	SW Station	IML
SW-3	5/4/2011	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.57545	-104.96854	Ra-05	SW Station	IML
SW-3	5/4/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.57545	-104.96854	ACW10	SW Station	IML
SW-3	5/4/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.57545	-104.96854	ACW10	SW Station	IML
SW-3	5/4/2011	U, S	<0.001	mg/l	0.001	0	3.E-07	NA	44.57545	-104.96854	EPA 200.8	SW Station	IML
SW-3	5/4/2011	U, D	0.0176	mg/l	0.0003	0	3.E-07	1.19E-08	44.57545	-104.96854	EPA 200.8	SW Station	IML
SW-3	5/23/2011	Gross Alpha	12.7	pCi/l	2	2.1	NA	1.27E-08	44.57545	-104.96854	SM 7110B	SW Station	IML
SW-3	5/23/2011	Gross Beta	9.5	pCi/l	4	2.3	NA	9.50E-09	44.57545	-104.96854	SM 7110B	SW Station	IML
SW-3	5/23/2011	Pb-210, D	<1	pCi/l	1	0	1.E-08	NA	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	5/23/2011	Pb-210, S	1.2	pCi/l	1	0.4	1.E-08	1.20E-09	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	5/23/2011	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	5/23/2011	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	5/23/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.57545	-104.96854	SM 7500-Ra B	SW Station	IML
SW-3	5/23/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.57545	-104.96854	SM 7500-Ra B	SW Station	IML
SW-3	5/23/2011	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.57545	-104.96854	Ra-05	SW Station	IML
SW-3	5/23/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.57545	-104.96854	ACW10	SW Station	IML
SW-3	5/23/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.57545	-104.96854	ACW10	SW Station	IML
SW-3	5/23/2011	U, S	<0.0003	mg/l	0.0003	0	3.E-07	NA	44.57545	-104.96854	EPA 200.8	SW Station	IML
SW-3	5/23/2011	U, D	0.0152	mg/l	0.0003	0	3.E-07	1.03E-08	44.57545	-104.96854	EPA 200.8	SW Station	IML
SW-3	6/8/2011	Gross Alpha	15	pCi/l	4	3.7	NA	1.50E-08	44.57545	-104.96854	SM 7110B	SW Station	IML
SW-3	6/8/2011	Gross Beta	12.4	pCi/l	7	4.3	NA	1.24E-08	44.57545	-104.96854	SM 7110B	SW Station	IML
SW-3	6/8/2011	Pb-210, D	<1	pCi/l	1	0	1.E-08	NA	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	6/8/2011	Pb-210, S	<1	pCi/l	1	0	1.E-08	NA	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	6/8/2011	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	6/8/2011	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	6/8/2011	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.57545	-104.96854	SM 7500-Ra B	SW Station	IML
SW-3	6/8/2011	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.57545	-104.96854	SM 7500-Ra B	SW Station	IML
SW-3	6/8/2011	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.57545	-104.96854	Ra-05	SW Station	IML
SW-3	6/8/2011	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.57545	-104.96854	ACW10	SW Station	IML
SW-3	6/8/2011	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.57545	-104.96854	ACW10	SW Station	IML
SW-3	6/8/2011	U, S	<0.0003	mg/l	0.0003	0	3.E-07	NA	44.57545	-104.96854	EPA 200.8	SW Station	IML
SW-3	6/8/2011	U, D	0.0098	mg/l	0.0003	0	3.E-07	6.63E-09	44.57545	-104.96854	EPA 200.8	SW Station	IML
SW-3	3/15/2012	Gross Alpha	4.5	pCi/l	2	0.9	NA	4.50E-09	44.57545	-104.96854	SM 7110B	SW Station	IML
SW-3	3/15/2012	Gross Beta	8	pCi/l	3	1.1	NA	8.00E-09	44.57545	-104.96854	SM 7110B	SW Station	IML
SW-3	3/15/2012	Ra-226, D	0.2	pCi/l	0.2	0.1	6.E-08	2.00E-10	44.57545	-104.96854	SM 7500-Ra B	SW Station	IML
SW-3	3/15/2012	Ra-228, D	1.3	pCi/l	1	0.9	6.E-08	1.30E-09	44.57545	-104.96854	Ra-05	SW Station	IML
SW-3	3/15/2012	U, D	0.0076	mg/l	0.0003	0	3.E-07	5.15E-09	44.57545	-104.96854	EPA 200.8	SW Station	IML
SW-3	6/21/2013	Pb-210, D	1.3	pCi/l	1	0.5	1.E-08	1.30E-09	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	6/21/2013	Pb-210, S	1.2	pCi/l	1	0.5	1.E-08	1.20E-09	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	6/21/2013	Po-210, D	<1	pCi/l	1	0	4.E-08	NA	44.57545	-104.96854	OTW01	SW Station	IML

Kendrick Expansion Area
Surface Water Station Data

Surface Water ID	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Method	Type	Contract Laboratory
SW-3	6/21/2013	Po-210, S	<1	pCi/l	1	0	4.E-08	NA	44.57545	-104.96854	OTW01	SW Station	IML
SW-3	6/21/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.E-08	3.00E-10	44.57545	-104.96854	SM 7500 Ra-B	SW Station	IML
SW-3	6/21/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.57545	-104.96854	SM 7500 Ra-B	SW Station	IML
SW-3	6/21/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.57545	-104.96854	ACW10	SW Station	IML
SW-3	6/21/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.57545	-104.96854	ACW10	SW Station	IML
SW-3	6/21/2013	U, S	<0.0003	mg/l	0.0003	0	3.E-07	NA	44.57545	-104.96854	EPA 200.8	SW Station	IML
SW-3	6/21/2013	U, D	0.0027	mg/l	0.0003	0	3.E-07	1.83E-09	44.57545	-104.96854	EPA 200.8	SW Station	IML
SW-4	5/30/2013	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.60712	-104.96953	SM 7110B	SW Station	IML
SW-4	5/30/2013	Gross Beta	9.8	pCi/l	3	1.2	NA	9.80E-09	44.60712	-104.96953	SM 7110B	SW Station	IML
SW-4	5/30/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.E-08	NA	44.60712	-104.96953	SM 7500 Ra-B	SW Station	IML
SW-4	5/30/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.E-08	NA	44.60712	-104.96953	SM 7500 Ra-B	SW Station	IML
SW-4	5/30/2013	Ra-228, D	<1	pCi/l	1	0	6.E-08	NA	44.60712	-104.96953	Ga-Tech	SW Station	IML
SW-4	5/30/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.E-07	NA	44.60712	-104.96953	ACW10	SW Station	IML
SW-4	5/30/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.E-07	NA	44.60712	-104.96953	ACW10	SW Station	IML
SW-4	5/30/2013	U, S	<0.0003	mg/l	0.0003	0	3.E-07	NA	44.60712	-104.96953	EPA 200.8	SW Station	IML
SW-4	5/30/2013	U, D	<0.0003	mg/l	0.0003	0	3.E-07	NA	44.60712	-104.96953	EPA 200.8	SW Station	IML

Kendrick Expansion Area
Grab Sample Sites and Reservoir Data

Surface Water ID	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Method	Type	Contract Laboratory
GS-1	6/11/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.60426	-104.94567	SM 7500 Ra-B	Grab Station	IML
GS-1	6/11/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60426	-104.94567	SM 7500 Ra-B	Grab Station	IML
GS-1	6/11/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60426	-104.94567	Ga-Tech	Grab Station	IML
GS-1	6/11/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60426	-104.94567	ACW10	Grab Station	IML
GS-1	6/11/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60426	-104.94567	ACW10	Grab Station	IML
GS-1	6/11/2013	U, D	0.0076	mg/l	0.0003	0	3.0E-07	5.15E-09	44.60426	-104.94567	EPA 200.8	Grab Station	IML
GS-1	6/11/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60426	-104.94567	EPA 200.8	Grab Station	IML
GS-1	6/11/2013	Gross Alpha	6.9	pCi/l	3	1.9	NA	6.90E-09	44.60426	-104.94567	SM 7110B	Grab Station	IML
GS-1	6/11/2013	Gross Beta	10.1	pCi/l	4	2.3	NA	1.01E-08	44.60426	-104.94567	SM 7110B	Grab Station	IML
GS-1	9/16/2014	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.60426	-104.94567	EPA 901.1M	Grab Station	IML
GS-1	9/16/2014	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.60426	-104.94567	OTW01	Grab Station	IML
GS-1	9/16/2014	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.60426	-104.94567	OTW01	Grab Station	IML
GS-1	9/16/2014	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.60426	-104.94567	OTW01	Grab Station	IML
GS-1	9/16/2014	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.60426	-104.94567	OTW01	Grab Station	IML
GS-1	9/16/2014	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60426	-104.94567	SM 7500 Ra-B	Grab Station	IML
GS-1	9/16/2014	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.60426	-104.94567	SM 7500 Ra-B	Grab Station	IML
GS-1	9/16/2014	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.60426	-104.94567	Ga-Tech	Grab Station	IML
GS-1	9/16/2014	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60426	-104.94567	ACW10	Grab Station	IML
GS-1	9/16/2014	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.60426	-104.94567	ACW10	Grab Station	IML
GS-1	9/16/2014	U, D	0.0016	mg/l	0.0003	0	3.0E-07	1.08E-09	44.60426	-104.94567	EPA 200.8	Grab Station	IML
GS-1	9/16/2014	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.60426	-104.94567	EPA 200.8	Grab Station	IML
GS-1	9/16/2014	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.60426	-104.94567	SM 7110B	Grab Station	IML
GS-1	9/16/2014	Gross Beta	14.6	pCi/l	3	1.9	NA	1.46E-08	44.60426	-104.94567	SM 7110B	Grab Station	IML
GS-3	9/17/2014	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.53246	-105.00981	EPA 901.1M	Grab Station	IML
GS-3	9/17/2014	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.53246	-105.00981	OTW01	Grab Station	IML
GS-3	9/17/2014	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.53246	-105.00981	OTW01	Grab Station	IML
GS-3	9/17/2014	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.53246	-105.00981	OTW01	Grab Station	IML
GS-3	9/17/2014	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.53246	-105.00981	OTW01	Grab Station	IML
GS-3	9/17/2014	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.53246	-105.00981	SM 7500 Ra-B	Grab Station	IML
GS-3	9/17/2014	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.53246	-105.00981	SM 7500 Ra-B	Grab Station	IML
GS-3	9/17/2014	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.53246	-105.00981	Ga-Tech	Grab Station	IML
GS-3	9/17/2014	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.53246	-105.00981	ACW10	Grab Station	IML
GS-3	9/17/2014	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.53246	-105.00981	ACW10	Grab Station	IML
GS-3	9/17/2014	U, D	0.0006	mg/l	0.0003	0	3.0E-07	4.06E-10	44.53246	-105.00981	EPA 200.8	Grab Station	IML
GS-3	9/17/2014	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.53246	-105.00981	EPA 200.8	Grab Station	IML
GS-3	9/17/2014	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.53246	-105.00981	SM 7110B	Grab Station	IML
GS-3	9/17/2014	Gross Beta	15.7	pCi/l	3	1.7	NA	1.57E-08	44.53246	-105.00981	SM 7110B	Grab Station	IML
GS-4	9/17/2014	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.52381	-105.00792	EPA 901.1M	Grab Station	IML
GS-4	9/17/2014	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.52381	-105.00792	OTW01	Grab Station	IML
GS-4	9/17/2014	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.52381	-105.00792	OTW01	Grab Station	IML
GS-4	9/17/2014	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.52381	-105.00792	OTW01	Grab Station	IML
GS-4	9/17/2014	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.52381	-105.00792	OTW01	Grab Station	IML
GS-4	9/17/2014	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.52381	-105.00792	SM 7500 Ra-B	Grab Station	IML
GS-4	9/17/2014	Ra-226, S	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.52381	-105.00792	SM 7500 Ra-B	Grab Station	IML
GS-4	9/17/2014	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.52381	-105.00792	Ga-Tech	Grab Station	IML

Kendrick Expansion Area
Grab Sample Sites and Reservoir Data

Surface Water ID	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Method	Type	Contract Laboratory
GS-4	9/17/2014	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52381	-105.00792	ACW10	Grab Station	IML
GS-4	9/17/2014	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52381	-105.00792	ACW10	Grab Station	IML
GS-4	9/17/2014	U, D	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.52381	-105.00792	EPA 200.8	Grab Station	IML
GS-4	9/17/2014	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.52381	-105.00792	EPA 200.8	Grab Station	IML
GS-4	9/17/2014	Gross Alpha	2	pCi/l	2	1.7	NA	2.00E-09	44.52381	-105.00792	SM 7110B	Grab Station	IML
GS-4	9/17/2014	Gross Beta	45.4	pCi/l	3	6.5	NA	4.54E-08	44.52381	-105.00792	SM 7110B	Grab Station	IML
CSRES06	11/1/2012	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.55269	-104.95217	OTW01	Stock Reservoir	IML
CSRES06	11/1/2012	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.55269	-104.95217	OTW01	Stock Reservoir	IML
CSRES06	11/1/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.55269	-104.95217	OTW01	Stock Reservoir	IML
CSRES06	11/1/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.55269	-104.95217	OTW01	Stock Reservoir	IML
CSRES06	11/1/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.55269	-104.95217	SM 7500 Ra-B	Stock Reservoir	IML
CSRES06	11/1/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.55269	-104.95217	SM 7500 Ra-B	Stock Reservoir	IML
CSRES06	11/1/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.55269	-104.95217	Ga-Tech	Stock Reservoir	IML
CSRES06	11/1/2012	Th-230, D	0.8	pCi/l	0.2	1.5	1.0E-07	8.00E-10	44.55269	-104.95217	ACW10	Stock Reservoir	IML
CSRES06	11/1/2012	Th-230, S	0.7	pCi/l	0.2	0.2	1.0E-07	7.00E-10	44.55269	-104.95217	ACW10	Stock Reservoir	IML
CSRES06	11/1/2012	U, D	0.0015	mg/l	0.0003	0	3.0E-07	1.02E-09	44.55269	-104.95217	EPA 200.8	Stock Reservoir	IML
CSRES06	11/1/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.55269	-104.95217	EPA 200.8	Stock Reservoir	IML
CSRES06	11/1/2012	Gross Alpha	<2	pCi/l	2	0	NA	NA	44.55269	-104.95217	SM 7110B	Stock Reservoir	IML
CSRES06	11/1/2012	Gross Beta	10.7	pCi/l	3	1.2	NA	1.07E-08	44.55269	-104.95217	SM 7110B	Stock Reservoir	IML
P4010S	6/12/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.51161	-104.98314	SM 7500 Ra-B	Stock Reservoir	IML
P4010S	6/12/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.51161	-104.98314	SM 7500 Ra-B	Stock Reservoir	IML
P4010S	6/12/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.51161	-104.98314	Ga-Tech	Stock Reservoir	IML
P4010S	6/12/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.51161	-104.98314	ACW10	Stock Reservoir	IML
P4010S	6/12/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.51161	-104.98314	ACW10	Stock Reservoir	IML
P4010S	6/12/2013	U, D	0.0171	mg/l	0.0003	0	3.0E-07	1.16E-08	44.51161	-104.98314	EPA 200.8	Stock Reservoir	IML
P4010S	6/12/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.51161	-104.98314	EPA 200.8	Stock Reservoir	IML
P4010S	6/12/2013	Gross Alpha	11	pCi/l	2	2	NA	1.10E-08	44.51161	-104.98314	SM 7110B	Stock Reservoir	IML
P4010S	6/12/2013	Gross Beta	10.1	pCi/l	3	2.2	NA	1.01E-08	44.51161	-104.98314	SM 7110B	Stock Reservoir	IML
P4010S	9/17/2014	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.51161	-104.98314	EPA 901.1M	Stock Reservoir	IML
P4010S	9/17/2014	Pb-210, D	2.1	pCi/l	1	0.4	1.0E-08	2.10E-09	44.51161	-104.98314	OTW01	Stock Reservoir	IML
P4010S	9/17/2014	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.51161	-104.98314	OTW01	Stock Reservoir	IML
P4010S	9/17/2014	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.51161	-104.98314	OTW01	Stock Reservoir	IML
P4010S	9/17/2014	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.51161	-104.98314	OTW01	Stock Reservoir	IML
P4010S	9/17/2014	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.51161	-104.98314	SM 7500 Ra-B	Stock Reservoir	IML
P4010S	9/17/2014	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.51161	-104.98314	SM 7500 Ra-B	Stock Reservoir	IML
P4010S	9/17/2014	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.51161	-104.98314	Ga-Tech	Stock Reservoir	IML
P4010S	9/17/2014	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.51161	-104.98314	ACW10	Stock Reservoir	IML
P4010S	9/17/2014	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.51161	-104.98314	ACW10	Stock Reservoir	IML
P4010S	9/17/2014	U, D	0.0055	mg/l	0.0003	0	3.0E-07	3.72E-09	44.51161	-104.98314	EPA 200.8	Stock Reservoir	IML
P4010S	9/17/2014	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.51161	-104.98314	EPA 200.8	Stock Reservoir	IML
P4010S	9/17/2014	Gross Alpha	2.3	pCi/l	2	0.9	NA	2.30E-09	44.51161	-104.98314	SM 7110B	Stock Reservoir	IML
P4010S	9/17/2014	Gross Beta	13.6	pCi/l	3	1.7	NA	1.36E-08	44.51161	-104.98314	SM 7110B	Stock Reservoir	IML
P4483S	10/30/2012	Pb-210, D	2.2	pCi/l	1	0.7	1.0E-08	2.20E-09	44.52811	-104.97307	OTW01	Stock Reservoir	IML
P4483S	10/30/2012	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.52811	-104.97307	OTW01	Stock Reservoir	IML
P4483S	10/30/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.52811	-104.97307	OTW01	Stock Reservoir	IML

Kendrick Expansion Area
Grab Sample Sites and Reservoir Data

Surface Water ID	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Method	Type	Contract Laboratory
P4483S	10/30/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.52811	-104.97307	OTW01	Stock Reservoir	IML
P4483S	10/30/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.52811	-104.97307	SM 7500 Ra-B	Stock Reservoir	IML
P4483S	10/30/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.52811	-104.97307	SM 7500 Ra-B	Stock Reservoir	IML
P4483S	10/30/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.52811	-104.97307	Ga-Tech	Stock Reservoir	IML
P4483S	10/30/2012	Th-230, D	1.1	pCi/l	0.2	1.5	1.0E-07	1.10E-09	44.52811	-104.97307	ACW10	Stock Reservoir	IML
P4483S	10/30/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52811	-104.97307	ACW10	Stock Reservoir	IML
P4483S	10/30/2012	U, D	0.0335	mg/l	0.0003	0	3.0E-07	2.27E-08	44.52811	-104.97307	EPA 200.8	Stock Reservoir	IML
P4483S	10/30/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.52811	-104.97307	EPA 200.8	Stock Reservoir	IML
P4483S	10/30/2012	Gross Alpha	26.7	pCi/l	2	3.1	NA	2.67E-08	44.52811	-104.97307	SM 7110B	Stock Reservoir	IML
P4483S	10/30/2012	Gross Beta	16.7	pCi/l	3	2.5	NA	1.67E-08	44.52811	-104.97307	SM 7110B	Stock Reservoir	IML
P4869S	10/31/2012	Pb-210, D	4.8	pCi/l	1	1.5	1.0E-08	4.80E-09	44.5526	-104.98745	OTW01	Stock Reservoir	IML
P4869S	10/31/2012	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.5526	-104.98745	OTW01	Stock Reservoir	IML
P4869S	10/31/2012	Po-210, D	1.8	pCi/l	1	1.1	4.0E-08	1.80E-09	44.5526	-104.98745	OTW01	Stock Reservoir	IML
P4869S	10/31/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.5526	-104.98745	OTW01	Stock Reservoir	IML
P4869S	10/31/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5526	-104.98745	SM 7500 Ra-B	Stock Reservoir	IML
P4869S	10/31/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5526	-104.98745	SM 7500 Ra-B	Stock Reservoir	IML
P4869S	10/31/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.5526	-104.98745	Ga-Tech	Stock Reservoir	IML
P4869S	10/31/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5526	-104.98745	ACW10	Stock Reservoir	IML
P4869S	10/31/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5526	-104.98745	ACW10	Stock Reservoir	IML
P4869S	10/31/2012	U, D	0.0128	mg/l	0.0003	0	3.0E-07	8.67E-09	44.5526	-104.98745	EPA 200.8	Stock Reservoir	IML
P4869S	10/31/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.5526	-104.98745	EPA 200.8	Stock Reservoir	IML
P4869S	10/31/2012	Gross Alpha	10.3	pCi/l	2	1.3	NA	1.03E-08	44.5526	-104.98745	SM 7110B	Stock Reservoir	IML
P4869S	10/31/2012	Gross Beta	14.8	pCi/l	3	1.3	NA	1.48E-08	44.5526	-104.98745	SM 7110B	Stock Reservoir	IML
P4869S	6/12/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5526	-104.98745	SM 7500 Ra-B	Stock Reservoir	IML
P4869S	6/12/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5526	-104.98745	SM 7500 Ra-B	Stock Reservoir	IML
P4869S	6/12/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.5526	-104.98745	Ga-Tech	Stock Reservoir	IML
P4869S	6/12/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5526	-104.98745	ACW10	Stock Reservoir	IML
P4869S	6/12/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5526	-104.98745	ACW10	Stock Reservoir	IML
P4869S	6/12/2013	U, D	0.0036	mg/l	0.0003	0	3.0E-07	2.44E-09	44.5526	-104.98745	EPA 200.8	Stock Reservoir	IML
P4869S	6/12/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.5526	-104.98745	EPA 200.8	Stock Reservoir	IML
P4869S	6/12/2013	Gross Alpha	3.9	pCi/l	2	0.8	NA	3.90E-09	44.5526	-104.98745	SM 7110B	Stock Reservoir	IML
P4869S	6/12/2013	Gross Beta	10.4	pCi/l	3	1.2	NA	1.04E-08	44.5526	-104.98745	SM 7110B	Stock Reservoir	IML
P4869S	9/16/2014	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.5526	-104.98745	EPA 901.1M	Stock Reservoir	IML
P4869S	9/16/2014	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.5526	-104.98745	OTW01	Stock Reservoir	IML
P4869S	9/16/2014	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.5526	-104.98745	OTW01	Stock Reservoir	IML
P4869S	9/16/2014	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.5526	-104.98745	OTW01	Stock Reservoir	IML
P4869S	9/16/2014	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.5526	-104.98745	OTW01	Stock Reservoir	IML
P4869S	9/16/2014	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5526	-104.98745	SM 7500 Ra-B	Stock Reservoir	IML
P4869S	9/16/2014	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.5526	-104.98745	SM 7500 Ra-B	Stock Reservoir	IML
P4869S	9/16/2014	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.5526	-104.98745	Ga-Tech	Stock Reservoir	IML
P4869S	9/16/2014	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5526	-104.98745	ACW10	Stock Reservoir	IML
P4869S	9/16/2014	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.5526	-104.98745	ACW10	Stock Reservoir	IML
P4869S	9/16/2014	U, D	0.0025	mg/l	0.0003	0	3.0E-07	1.69E-09	44.5526	-104.98745	EPA 200.8	Stock Reservoir	IML
P4869S	9/16/2014	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.5526	-104.98745	EPA 200.8	Stock Reservoir	IML
P4869S	9/16/2014	Gross Alpha	2.1	pCi/l	2	0.7	NA	2.10E-09	44.5526	-104.98745	SM 7110B	Stock Reservoir	IML

Kendrick Expansion Area
Grab Sample Sites and Reservoir Data

Surface Water ID	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Method	Type	Contract Laboratory
P4869S	9/16/2014	Gross Beta	7.4	pCi/l	3	1.6	NA	7.40E-09	44.5526	-104.98745	SM 7110B	Stock Reservoir	IML
P514S	10/31/2012	Pb-210, D	1.3	pCi/l	1	0.6	1.0E-08	1.30E-09	44.54652	-104.98428	OTW01	Stock Reservoir	IML
P514S	10/31/2012	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.54652	-104.98428	OTW01	Stock Reservoir	IML
P514S	10/31/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.54652	-104.98428	OTW01	Stock Reservoir	IML
P514S	10/31/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.54652	-104.98428	OTW01	Stock Reservoir	IML
P514S	10/31/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.54652	-104.98428	SM 7500 Ra-B	Stock Reservoir	IML
P514S	10/31/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.54652	-104.98428	SM 7500 Ra-B	Stock Reservoir	IML
P514S	10/31/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.54652	-104.98428	Ga-Tech	Stock Reservoir	IML
P514S	10/31/2012	Th-230, D	0.3	pCi/l	0.2	1.1	1.0E-07	3.00E-10	44.54652	-104.98428	ACW10	Stock Reservoir	IML
P514S	10/31/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.54652	-104.98428	ACW10	Stock Reservoir	IML
P514S	10/31/2012	U, D	0.021	mg/l	0.0003	0	3.0E-07	1.42E-08	44.54652	-104.98428	EPA 200.8	Stock Reservoir	IML
P514S	10/31/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.54652	-104.98428	EPA 200.8	Stock Reservoir	IML
P514S	10/31/2012	Gross Alpha	17	pCi/l	2	1.6	NA	1.70E-08	44.54652	-104.98428	SM 7110B	Stock Reservoir	IML
P514S	10/31/2012	Gross Beta	15.3	pCi/l	3	1.3	NA	1.53E-08	44.54652	-104.98428	SM 7110B	Stock Reservoir	IML
P514S	6/12/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.54652	-104.98428	SM 7500 Ra-B	Stock Reservoir	IML
P514S	6/12/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.54652	-104.98428	SM 7500 Ra-B	Stock Reservoir	IML
P514S	6/12/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.54652	-104.98428	Ga-Tech	Stock Reservoir	IML
P514S	6/12/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.54652	-104.98428	ACW10	Stock Reservoir	IML
P514S	6/12/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.54652	-104.98428	ACW10	Stock Reservoir	IML
P514S	6/12/2013	U, D	0.0137	mg/l	0.0003	0	3.0E-07	9.27E-09	44.54652	-104.98428	EPA 200.8	Stock Reservoir	IML
P514S	6/12/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.54652	-104.98428	EPA 200.8	Stock Reservoir	IML
P514S	6/12/2013	Gross Alpha	8.6	pCi/l	2	1.2	NA	8.60E-09	44.54652	-104.98428	SM 7110B	Stock Reservoir	IML
P514S	6/12/2013	Gross Beta	10.5	pCi/l	3	1.2	NA	1.05E-08	44.54652	-104.98428	SM 7110B	Stock Reservoir	IML
P514S	9/16/2014	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.54652	-104.98428	EPA 901.1M	Stock Reservoir	IML
P514S	9/16/2014	Pb-210, D	1	pCi/l	1	0.6	1.0E-08	1.00E-09	44.54652	-104.98428	OTW01	Stock Reservoir	IML
P514S	9/16/2014	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.54652	-104.98428	OTW01	Stock Reservoir	IML
P514S	9/16/2014	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.54652	-104.98428	OTW01	Stock Reservoir	IML
P514S	9/16/2014	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.54652	-104.98428	OTW01	Stock Reservoir	IML
P514S	9/16/2014	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.54652	-104.98428	SM 7500 Ra-B	Stock Reservoir	IML
P514S	9/16/2014	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.54652	-104.98428	SM 7500 Ra-B	Stock Reservoir	IML
P514S	9/16/2014	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.54652	-104.98428	Ga-Tech	Stock Reservoir	IML
P514S	9/16/2014	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.54652	-104.98428	ACW10	Stock Reservoir	IML
P514S	9/16/2014	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.54652	-104.98428	ACW10	Stock Reservoir	IML
P514S	9/16/2014	U, D	0.0061	mg/l	0.0003	0	3.0E-07	4.13E-09	44.54652	-104.98428	EPA 200.8	Stock Reservoir	IML
P514S	9/16/2014	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.54652	-104.98428	EPA 200.8	Stock Reservoir	IML
P514S	9/16/2014	Gross Alpha	4	pCi/l	2	1.1	NA	4.00E-09	44.54652	-104.98428	SM 7110B	Stock Reservoir	IML
P514S	9/16/2014	Gross Beta	12.4	pCi/l	3	1.8	NA	1.24E-08	44.54652	-104.98428	SM 7110B	Stock Reservoir	IML
P8531R	10/30/2012	Pb-210, D	4.3	pCi/l	1	0.9	1.0E-08	4.30E-09	44.52387	-104.9587	OTW01	Reservoir	IML
P8531R	10/30/2012	Pb-210, S	1.3	pCi/l	1	0.4	1.0E-08	1.30E-09	44.52387	-104.9587	OTW01	Reservoir	IML
P8531R	10/30/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.52387	-104.9587	OTW01	Reservoir	IML
P8531R	10/30/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.52387	-104.9587	OTW01	Reservoir	IML
P8531R	10/30/2012	Ra-226, D	0.6	pCi/l	0.2	0.1	6.0E-08	6.00E-10	44.52387	-104.9587	SM 7500 Ra-B	Reservoir	IML
P8531R	10/30/2012	Ra-226, S	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.52387	-104.9587	SM 7500 Ra-B	Reservoir	IML
P8531R	10/30/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.52387	-104.9587	Ga-Tech	Reservoir	IML
P8531R	10/30/2012	Th-230, D	0.5	pCi/l	0.2	1.3	1.0E-07	5.00E-10	44.52387	-104.9587	ACW10	Reservoir	IML

Kendrick Expansion Area
Grab Sample Sites and Reservoir Data

Surface Water ID	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Method	Type	Contract Laboratory
P8531R	10/30/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52387	-104.9587	ACW10	Reservoir	IML
P8531R	10/30/2012	U, D	0.0662	mg/l	0.0003	0	3.0E-07	4.48E-08	44.52387	-104.9587	EPA 200.8	Reservoir	IML
P8531R	10/30/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.52387	-104.9587	EPA 200.8	Reservoir	IML
P8531R	10/30/2012	Gross Alpha	56.2	pCi/l	2	6	NA	5.62E-08	44.52387	-104.9587	SM 7110B	Reservoir	IML
P8531R	10/30/2012	Gross Beta	33.1	pCi/l	3	4.9	NA	3.31E-08	44.52387	-104.9587	SM 7110B	Reservoir	IML
P8531R	6/12/2013	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.52387	-104.9587	SM 7500 Ra-B	Reservoir	IML
P8531R	6/12/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.52387	-104.9587	SM 7500 Ra-B	Reservoir	IML
P8531R	6/12/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.52387	-104.9587	Ga-Tech	Reservoir	IML
P8531R	6/12/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52387	-104.9587	ACW10	Reservoir	IML
P8531R	6/12/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52387	-104.9587	ACW10	Reservoir	IML
P8531R	6/12/2013	U, D	0.0519	mg/l	0.0003	0	3.0E-07	3.51E-08	44.52387	-104.9587	EPA 200.8	Reservoir	IML
P8531R	6/12/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.52387	-104.9587	EPA 200.8	Reservoir	IML
P8531R	6/12/2013	Gross Alpha	37.4	pCi/l	2	3.6	NA	3.74E-08	44.52387	-104.9587	SM 7110B	Reservoir	IML
P8531R	6/12/2013	Gross Beta	21.6	pCi/l	4	2.7	NA	2.16E-08	44.52387	-104.9587	SM 7110B	Reservoir	IML
P8531R	9/16/2014	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.52387	-104.9587	EPA 901.1M	Reservoir	IML
P8531R	9/16/2014	Pb-210, D	2.5	pCi/l	1	0.5	1.0E-08	2.50E-09	44.52387	-104.9587	OTW01	Reservoir	IML
P8531R	9/16/2014	Pb-210, S	1.8	pCi/l	1	0.6	1.0E-08	1.80E-09	44.52387	-104.9587	OTW01	Reservoir	IML
P8531R	9/16/2014	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.52387	-104.9587	OTW01	Reservoir	IML
P8531R	9/16/2014	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.52387	-104.9587	OTW01	Reservoir	IML
P8531R	9/16/2014	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.52387	-104.9587	SM 7500 Ra-B	Reservoir	IML
P8531R	9/16/2014	Ra-226, S	0.2	pCi/l	0.2	0.1	6.0E-08	2.00E-10	44.52387	-104.9587	SM 7500 Ra-B	Reservoir	IML
P8531R	9/16/2014	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.52387	-104.9587	Ga-Tech	Reservoir	IML
P8531R	9/16/2014	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52387	-104.9587	ACW10	Reservoir	IML
P8531R	9/16/2014	Th-230, S	1	pCi/l	0.2	0.3	1.0E-07	1.00E-09	44.52387	-104.9587	ACW10	Reservoir	IML
P8531R	9/16/2014	U, D	0.0438	mg/l	0.0003	0	3.0E-07	2.97E-08	44.52387	-104.9587	EPA 200.8	Reservoir	IML
P8531R	9/16/2014	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.52387	-104.9587	EPA 200.8	Reservoir	IML
P8531R	9/16/2014	Gross Alpha	24.7	pCi/l	2	3	NA	2.47E-08	44.52387	-104.9587	SM 7110B	Reservoir	IML
P8531R	9/16/2014	Gross Beta	27.2	pCi/l	3	2.3	NA	2.72E-08	44.52387	-104.9587	SM 7110B	Reservoir	IML
P9183R	10/30/2012	Pb-210, D	1.4	pCi/l	1	0.5	1.0E-08	1.40E-09	44.52507	-104.96469	OTW01	Reservoir	IML
P9183R	10/30/2012	Pb-210, S	1.2	pCi/l	1	0.4	1.0E-08	1.20E-09	44.52507	-104.96469	OTW01	Reservoir	IML
P9183R	10/30/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.52507	-104.96469	OTW01	Reservoir	IML
P9183R	10/30/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.52507	-104.96469	OTW01	Reservoir	IML
P9183R	10/30/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.52507	-104.96469	SM 7500 Ra-B	Reservoir	IML
P9183R	10/30/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.52507	-104.96469	SM 7500 Ra-B	Reservoir	IML
P9183R	10/30/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.52507	-104.96469	Ga-Tech	Reservoir	IML
P9183R	10/30/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52507	-104.96469	ACW10	Reservoir	IML
P9183R	10/30/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52507	-104.96469	ACW10	Reservoir	IML
P9183R	10/30/2012	U, D	0.0101	mg/l	0.0003	0	3.0E-07	6.84E-09	44.52507	-104.96469	EPA 200.8	Reservoir	IML
P9183R	10/30/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.52507	-104.96469	EPA 200.8	Reservoir	IML
P9183R	10/30/2012	Gross Alpha	9.1	pCi/l	2	1.7	NA	9.10E-09	44.52507	-104.96469	SM 7110B	Reservoir	IML
P9183R	10/30/2012	Gross Beta	9.3	pCi/l	3	1.8	NA	9.30E-09	44.52507	-104.96469	SM 7110B	Reservoir	IML
P9184R	10/30/2012	Pb-210, D	1.9	pCi/l	1	0.7	1.0E-08	1.90E-09	44.52705	-104.96764	OTW01	Reservoir	IML
P9184R	10/30/2012	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.52705	-104.96764	OTW01	Reservoir	IML
P9184R	10/30/2012	Po-210, D	1.3	pCi/l	1	0.4	4.0E-08	1.30E-09	44.52705	-104.96764	OTW01	Reservoir	IML
P9184R	10/30/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.52705	-104.96764	OTW01	Reservoir	IML

Kendrick Expansion Area
Grab Sample Sites and Reservoir Data

Surface Water ID	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Method	Type	Contract Laboratory
P9184R	10/30/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.52705	-104.96764	SM 7500 Ra-B	Reservoir	IML
P9184R	10/30/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.52705	-104.96764	SM 7500 Ra-B	Reservoir	IML
P9184R	10/30/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.52705	-104.96764	Ga-Tech	Reservoir	IML
P9184R	10/30/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52705	-104.96764	ACW10	Reservoir	IML
P9184R	10/30/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52705	-104.96764	ACW10	Reservoir	IML
P9184R	10/30/2012	U, D	0.0114	mg/l	0.0003	0	3.0E-07	7.72E-09	44.52705	-104.96764	EPA 200.8	Reservoir	IML
P9184R	10/30/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.52705	-104.96764	EPA 200.8	Reservoir	IML
P9184R	10/30/2012	Gross Alpha	8.9	pCi/l	2	1.6	NA	8.90E-09	44.52705	-104.96764	SM 7110B	Reservoir	IML
P9184R	10/30/2012	Gross Beta	8.9	pCi/l	3	1.7	NA	8.90E-09	44.52705	-104.96764	SM 7110B	Reservoir	IML
SCHRES01	6/12/2013	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.51772	-104.98109	SM 7500 Ra-B	Stock Reservoir	IML
SCHRES01	6/12/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.51772	-104.98109	SM 7500 Ra-B	Stock Reservoir	IML
SCHRES01	6/12/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.51772	-104.98109	Ga-Tech	Stock Reservoir	IML
SCHRES01	6/12/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.51772	-104.98109	ACW10	Stock Reservoir	IML
SCHRES01	6/12/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.51772	-104.98109	ACW10	Stock Reservoir	IML
SCHRES01	6/12/2013	U, D	0.0081	mg/l	0.0003	0	3.0E-07	5.48E-09	44.51772	-104.98109	EPA 200.8	Stock Reservoir	IML
SCHRES01	6/12/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.51772	-104.98109	EPA 200.8	Stock Reservoir	IML
SCHRES01	6/12/2013	Gross Alpha	5.9	pCi/l	2	1	NA	5.90E-09	44.51772	-104.98109	SM 7110B	Stock Reservoir	IML
SCHRES01	6/12/2013	Gross Beta	9	pCi/l	3	1.2	NA	9.00E-09	44.51772	-104.98109	SM 7110B	Stock Reservoir	IML
SCHRES01	9/17/2014	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.51772	-104.98109	EPA 901.1M	Stock Reservoir	IML
SCHRES01	9/17/2014	Pb-210, D	<1	pCi/l	1	0	1.0E-08	NA	44.51772	-104.98109	OTW01	Stock Reservoir	IML
SCHRES01	9/17/2014	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.51772	-104.98109	OTW01	Stock Reservoir	IML
SCHRES01	9/17/2014	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.51772	-104.98109	OTW01	Stock Reservoir	IML
SCHRES01	9/17/2014	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.51772	-104.98109	OTW01	Stock Reservoir	IML
SCHRES01	9/17/2014	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.51772	-104.98109	SM 7500 Ra-B	Stock Reservoir	IML
SCHRES01	9/17/2014	Ra-226, S	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.51772	-104.98109	SM 7500 Ra-B	Stock Reservoir	IML
SCHRES01	9/17/2014	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.51772	-104.98109	Ga-Tech	Stock Reservoir	IML
SCHRES01	9/17/2014	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.51772	-104.98109	ACW10	Stock Reservoir	IML
SCHRES01	9/17/2014	Th-230, S	0.2	pCi/l	0.2	0.1	1.0E-07	2.00E-10	44.51772	-104.98109	ACW10	Stock Reservoir	IML
SCHRES01	9/17/2014	U, D	0.0038	mg/l	0.0003	0	3.0E-07	2.57E-09	44.51772	-104.98109	EPA 200.8	Stock Reservoir	IML
SCHRES01	9/17/2014	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.51772	-104.98109	EPA 200.8	Stock Reservoir	IML
SCHRES01	9/17/2014	Gross Alpha	3.6	pCi/l	2	1.1	NA	3.60E-09	44.51772	-104.98109	SM 7110B	Stock Reservoir	IML
SCHRES01	9/17/2014	Gross Beta	11.8	pCi/l	3	1.7	NA	1.18E-08	44.51772	-104.98109	SM 7110B	Stock Reservoir	IML
TSRES01	10/31/2012	Pb-210, D	1.6	pCi/l	1	0.4	1.0E-08	1.60E-09	44.57736	-104.97475	OTW01	Stock Reservoir	IML
TSRES01	10/31/2012	Pb-210, S	1.3	pCi/l	1	0.4	1.0E-08	1.30E-09	44.57736	-104.97475	OTW01	Stock Reservoir	IML
TSRES01	10/31/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.57736	-104.97475	OTW01	Stock Reservoir	IML
TSRES01	10/31/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.57736	-104.97475	OTW01	Stock Reservoir	IML
TSRES01	10/31/2012	Ra-226, D	0.4	pCi/l	0.2	0.1	6.0E-08	4.00E-10	44.57736	-104.97475	SM 7500 Ra-B	Stock Reservoir	IML
TSRES01	10/31/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.57736	-104.97475	SM 7500 Ra-B	Stock Reservoir	IML
TSRES01	10/31/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.57736	-104.97475	Ga-Tech	Stock Reservoir	IML
TSRES01	10/31/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57736	-104.97475	ACW10	Stock Reservoir	IML
TSRES01	10/31/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.57736	-104.97475	ACW10	Stock Reservoir	IML
TSRES01	10/31/2012	U, D	0.0257	mg/l	0.0003	0	3.0E-07	1.74E-08	44.57736	-104.97475	EPA 200.8	Stock Reservoir	IML
TSRES01	10/31/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.57736	-104.97475	EPA 200.8	Stock Reservoir	IML
TSRES01	10/31/2012	Gross Alpha	23.8	pCi/l	4	4	NA	2.38E-08	44.57736	-104.97475	SM 7110B	Stock Reservoir	IML
TSRES01	10/31/2012	Gross Beta	24	pCi/l	7	4.5	NA	2.40E-08	44.57736	-104.97475	SM 7110B	Stock Reservoir	IML

Kendrick Expansion Area
Grab Sample Sites and Reservoir Data

Surface Water ID	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Method	Type	Contract Laboratory
TSRES03	10/31/2012	Pb-210, D	1.3	pCi/l	1	0.4	1.0E-08	1.30E-09	44.56018	-104.98922	OTW01	Stock Reservoir	IML
TSRES03	10/31/2012	Pb-210, S	1.7	pCi/l	1	0.4	1.0E-08	1.70E-09	44.56018	-104.98922	OTW01	Stock Reservoir	IML
TSRES03	10/31/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.56018	-104.98922	OTW01	Stock Reservoir	IML
TSRES03	10/31/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.56018	-104.98922	OTW01	Stock Reservoir	IML
TSRES03	10/31/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.56018	-104.98922	SM 7500 Ra-B	Stock Reservoir	IML
TSRES03	10/31/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.56018	-104.98922	SM 7500 Ra-B	Stock Reservoir	IML
TSRES03	10/31/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.56018	-104.98922	Ga-Tech	Stock Reservoir	IML
TSRES03	10/31/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56018	-104.98922	ACW10	Stock Reservoir	IML
TSRES03	10/31/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56018	-104.98922	ACW10	Stock Reservoir	IML
TSRES03	10/31/2012	U, D	0.0201	mg/l	0.0003	0	3.0E-07	1.36E-08	44.56018	-104.98922	EPA 200.8	Stock Reservoir	IML
TSRES03	10/31/2012	U, S	0.0008	mg/l	0.0003	0	3.0E-07	5.42E-10	44.56018	-104.98922	EPA 200.8	Stock Reservoir	IML
TSRES03	10/31/2012	Gross Alpha	14.5	pCi/l	4	3.9	NA	1.45E-08	44.56018	-104.98922	SM 7110B	Stock Reservoir	IML
TSRES03	10/31/2012	Gross Beta	27.8	pCi/l	9	5.7	NA	2.78E-08	44.56018	-104.98922	SM 7110B	Stock Reservoir	IML
TSRES03	6/12/2013	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.56018	-104.98922	SM 7500 Ra-B	Stock Reservoir	IML
TSRES03	6/12/2013	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.56018	-104.98922	SM 7500 Ra-B	Stock Reservoir	IML
TSRES03	6/12/2013	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.56018	-104.98922	Ga-Tech	Stock Reservoir	IML
TSRES03	6/12/2013	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56018	-104.98922	ACW10	Stock Reservoir	IML
TSRES03	6/12/2013	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56018	-104.98922	ACW10	Stock Reservoir	IML
TSRES03	6/12/2013	U, D	0.0592	mg/l	0.0003	0	3.0E-07	4.01E-08	44.56018	-104.98922	EPA 200.8	Stock Reservoir	IML
TSRES03	6/12/2013	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.56018	-104.98922	EPA 200.8	Stock Reservoir	IML
TSRES03	6/12/2013	Gross Alpha	42.2	pCi/l	4	5.5	NA	4.22E-08	44.56018	-104.98922	SM 7110B	Stock Reservoir	IML
TSRES03	6/12/2013	Gross Beta	27.4	pCi/l	8	4.9	NA	2.74E-08	44.56018	-104.98922	SM 7110B	Stock Reservoir	IML
TSRES03	9/16/2014	Gross Gamma	<50	pCi/l	50	0	NA	NA	44.56018	-104.98922	EPA 901.1M	Stock Reservoir	IML
TSRES03	9/16/2014	Pb-210, D	1.6	pCi/l	1	0.4	1.0E-08	1.60E-09	44.56018	-104.98922	OTW01	Stock Reservoir	IML
TSRES03	9/16/2014	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.56018	-104.98922	OTW01	Stock Reservoir	IML
TSRES03	9/16/2014	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.56018	-104.98922	OTW01	Stock Reservoir	IML
TSRES03	9/16/2014	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.56018	-104.98922	OTW01	Stock Reservoir	IML
TSRES03	9/16/2014	Ra-226, D	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.56018	-104.98922	SM 7500 Ra-B	Stock Reservoir	IML
TSRES03	9/16/2014	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.56018	-104.98922	SM 7500 Ra-B	Stock Reservoir	IML
TSRES03	9/16/2014	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.56018	-104.98922	Ga-Tech	Stock Reservoir	IML
TSRES03	9/16/2014	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56018	-104.98922	ACW10	Stock Reservoir	IML
TSRES03	9/16/2014	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.56018	-104.98922	ACW10	Stock Reservoir	IML
TSRES03	9/16/2014	U, D	0.0228	mg/l	0.0003	0	3.0E-07	1.54E-08	44.56018	-104.98922	EPA 200.8	Stock Reservoir	IML
TSRES03	9/16/2014	U, S	0.0003	mg/l	0.0003	0	3.0E-07	2.03E-10	44.56018	-104.98922	EPA 200.8	Stock Reservoir	IML
TSRES03	9/16/2014	Gross Alpha	13.3	pCi/l	2	6.1	NA	1.33E-08	44.56018	-104.98922	SM 7110B	Stock Reservoir	IML
TSRES03	9/16/2014	Gross Beta	28.4	pCi/l	3	13	NA	2.84E-08	44.56018	-104.98922	SM 7110B	Stock Reservoir	IML
TSRES05	10/31/2012	Pb-210, D	9	pCi/l	1	2.8	1.0E-08	9.00E-09	44.54505	-104.97805	OTW01	Stock Reservoir	IML
TSRES05	10/31/2012	Pb-210, S	<1	pCi/l	1	0	1.0E-08	NA	44.54505	-104.97805	OTW01	Stock Reservoir	IML
TSRES05	10/31/2012	Po-210, D	3.8	pCi/l	1	0.3	4.0E-08	3.80E-09	44.54505	-104.97805	OTW01	Stock Reservoir	IML
TSRES05	10/31/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.54505	-104.97805	OTW01	Stock Reservoir	IML
TSRES05	10/31/2012	Ra-226, D	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.54505	-104.97805	SM 7500 Ra-B	Stock Reservoir	IML
TSRES05	10/31/2012	Ra-226, S	<0.2	pCi/l	0.2	0	6.0E-08	NA	44.54505	-104.97805	SM 7500 Ra-B	Stock Reservoir	IML
TSRES05	10/31/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.54505	-104.97805	Ga-Tech	Stock Reservoir	IML
TSRES05	10/31/2012	Th-230, D	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.54505	-104.97805	ACW10	Stock Reservoir	IML
TSRES05	10/31/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.54505	-104.97805	ACW10	Stock Reservoir	IML

Kendrick Expansion Area
Grab Sample Sites and Reservoir Data

Surface Water ID	Sample Date	Analyte*	Value	Units	Detect Limit	Error	10 CFR 20 MPC (µCi/ml)	Value in µCi/ml	Latitude	Longitude	Method	Type	Contract Laboratory
TSRES05	10/31/2012	U, D	0.0021	mg/l	0.0003	0	3.0E-07	1.42E-09	44.54505	-104.97805	EPA 200.8	Stock Reservoir	IML
TSRES05	10/31/2012	U, S	<0.0003	mg/l	0.0003	0	3.0E-07	NA	44.54505	-104.97805	EPA 200.8	Stock Reservoir	IML
TSRES05	10/31/2012	Gross Alpha	3.9	pCi/l	2	2.5	NA	3.90E-09	44.54505	-104.97805	SM 7110B	Stock Reservoir	IML
TSRES05	10/31/2012	Gross Beta	6.8	pCi/l	3	4.6	NA	6.80E-09	44.54505	-104.97805	SM 7110B	Stock Reservoir	IML
TSRES08	10/30/2012	Pb-210, D	3.7	pCi/l	1	0.7	1.0E-08	3.70E-09	44.52448	-104.96127	OTW01	Stock Reservoir	IML
TSRES08	10/30/2012	Pb-210, S	1.2	pCi/l	1	0.4	1.0E-08	1.20E-09	44.52448	-104.96127	OTW01	Stock Reservoir	IML
TSRES08	10/30/2012	Po-210, D	<1	pCi/l	1	0	4.0E-08	NA	44.52448	-104.96127	OTW01	Stock Reservoir	IML
TSRES08	10/30/2012	Po-210, S	<1	pCi/l	1	0	4.0E-08	NA	44.52448	-104.96127	OTW01	Stock Reservoir	IML
TSRES08	10/30/2012	Ra-226, D	0.9	pCi/l	0.2	0.1	6.0E-08	9.00E-10	44.52448	-104.96127	SM 7500 Ra-B	Stock Reservoir	IML
TSRES08	10/30/2012	Ra-226, S	0.3	pCi/l	0.2	0.1	6.0E-08	3.00E-10	44.52448	-104.96127	SM 7500 Ra-B	Stock Reservoir	IML
TSRES08	10/30/2012	Ra-228, D	<1	pCi/l	1	0	6.0E-08	NA	44.52448	-104.96127	Ga-Tech	Stock Reservoir	IML
TSRES08	10/30/2012	Th-230, D	2.7	pCi/l	0.2	7.6	1.0E-07	2.70E-09	44.52448	-104.96127	ACW10	Stock Reservoir	IML
TSRES08	10/30/2012	Th-230, S	<0.2	pCi/l	0.2	0	1.0E-07	NA	44.52448	-104.96127	ACW10	Stock Reservoir	IML
TSRES08	10/30/2012	U, D	0.123	mg/l	0.0003	0	3.0E-07	8.33E-08	44.52448	-104.96127	EPA 200.8	Stock Reservoir	IML
TSRES08	10/30/2012	U, S	0.0013	mg/l	0.0003	0	3.0E-07	8.80E-10	44.52448	-104.96127	EPA 200.8	Stock Reservoir	IML
TSRES08	10/30/2012	Gross Alpha	100	pCi/l	2	8.1	NA	1.00E-07	44.52448	-104.96127	SM 7110B	Stock Reservoir	IML
TSRES08	10/30/2012	Gross Beta	31.3	pCi/l	3	5	NA	3.13E-08	44.52448	-104.96127	SM 7110B	Stock Reservoir	IML

SEDIMENT

Inter-Mountain Labs
Your Environmental Monitoring Partner
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-001
ClientSample ID: SW-4
COC: 157068

WorkOrder: S1409379
CollectionDate: 9/16/2014 10:50:00 AM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	7.7	pCi/g		2	SM 7110	10/06/2014 2133	MB
Gross Alpha Precision (±)	0.6	pCi/g			SM 7110	10/06/2014 2133	MB
Lead 210	1.8	pCi/g		0.2	OTW01	10/09/2014 1114	MB
Lead 210 Precision (±)	0.7	pCi/g			OTW01	10/09/2014 1114	MB
Radium 226	0.8	pCi/g		0.2	E901.1 Mod.	10/07/2014 1551	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	10/07/2014 1551	MB
Thorium 230	0.9	pCi/g		0.2	ACW10	10/07/2014 1239	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/07/2014 1239	MB
Thorium229 Tracer (30-120)	70.3	%			ACW10	10/07/2014 1239	MB
Metals - Total							
Uranium	1.86	mg/Kg		0.02	EPA 200.8	09/25/2014 1355	MS

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
Your Environmental Monitoring Partner
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-002
ClientSample ID: GS-1/HBRES01
COC: 157068

WorkOrder: S1409379
CollectionDate: 9/16/2014 11:30:00 AM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	8.2	pCi/g		2	SM 7110	10/06/2014 2133	MB
Gross Alpha Precision (±)	0.6	pCi/g			SM 7110	10/06/2014 2133	MB
Lead 210	1.8	pCi/g		0.2	OTW01	10/09/2014 1114	MB
Lead 210 Precision (±)	0.6	pCi/g			OTW01	10/09/2014 1114	MB
Radium 226	1.0	pCi/g		0.2	E901.1 Mod.	10/07/2014 1611	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	10/07/2014 1611	MB
Thorium 230	0.6	pCi/g		0.2	ACW10	10/07/2014 1239	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/07/2014 1239	MB
Thorium229 Tracer (30-120)	93.0	%			ACW10	10/07/2014 1239	MB
Metals - Total							
Uranium	2.68	mg/Kg		0.02	EPA 200.8	09/25/2014 1419	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-003
ClientSample ID: SW-1
COC: 157068

WorkOrder: S1409379
CollectionDate: 9/16/2014 1:10:00 PM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	6.4	pCi/g		2	SM 7110	10/06/2014 2133	MB
Gross Alpha Precision (±)	0.5	pCi/g			SM 7110	10/06/2014 2133	MB
Lead 210	2.2	pCi/g		0.2	OTW01	10/09/2014 1114	MB
Lead 210 Precision (±)	0.7	pCi/g			OTW01	10/09/2014 1114	MB
Radium 226	0.8	pCi/g		0.2	E901.1 Mod.	10/07/2014 1632	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	10/07/2014 1632	MB
Thorium 230	0.7	pCi/g		0.2	ACW10	10/07/2014 1239	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/07/2014 1239	MB
Thorium229 Tracer (30-120)	102	%			ACW10	10/07/2014 1239	MB
Metals - Total							
Uranium	1.25	mg/Kg		0.02	EPA 200.8	09/25/2014 1425	MS

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-004
ClientSample ID: SW-5
COC: 157068

WorkOrder: S1409379
CollectionDate: 9/16/2014 1:40:00 PM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	9.5	pCi/g		2	SM 7110	10/06/2014 2133	MB
Gross Alpha Precision (±)	0.7	pCi/g			SM 7110	10/06/2014 2133	MB
Lead 210	1.2	pCi/g		0.2	OTW01	10/09/2014 1114	MB
Lead 210 Precision (±)	0.5	pCi/g			OTW01	10/09/2014 1114	MB
Radium 226	1.0	pCi/g		0.2	E901.1 Mod.	10/07/2014 1653	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	10/07/2014 1653	MB
Thorium 230	1.0	pCi/g		0.2	ACW10	10/07/2014 1239	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/07/2014 1239	MB
Thorium229 Tracer (30-120)	83.2	%			ACW10	10/07/2014 1239	MB
Metals - Total							
Uranium	3.82	mg/Kg		0.02	EPA 200.8	09/25/2014 1430	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL or is less than LCL
- O Outside the Range of Dilutions
- X Matrix Effect
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-005
ClientSample ID: P8531R
COC: 157068

WorkOrder: S1409379
CollectionDate: 9/16/2014 2:10:00 PM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	5.9	pCi/g		2	SM 7110	10/06/2014 2133	MB
Gross Alpha Precision (±)	0.6	pCi/g			SM 7110	10/06/2014 2133	MB
Lead 210	0.7	pCi/g		0.2	OTW01	10/09/2014 1114	MB
Lead 210 Precision (±)	0.5	pCi/g			OTW01	10/09/2014 1114	MB
Radium 226	1.2	pCi/g		0.2	E901.1 Mod.	10/07/2014 1713	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	10/07/2014 1713	MB
Thorium 230	0.7	pCi/g		0.2	ACW10	10/07/2014 1239	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/07/2014 1239	MB
Thorium229 Tracer (30-120)	91.1	%			ACW10	10/07/2014 1239	MB
Metals - Total							
Uranium	1.30	mg/Kg		0.02	EPA 200.8	09/25/2014 1436	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-006
ClientSample ID: P4866S
COC: 157068

WorkOrder: S1409379
CollectionDate: 9/16/2014 3:20:00 PM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	8.3	pCi/g		2	SM 7110	10/06/2014 2133	MB
Gross Alpha Precision (±)	0.7	pCi/g			SM 7110	10/06/2014 2133	MB
Lead 210	1.4	pCi/g		0.2	OTW01	10/09/2014 1114	MB
Lead 210 Precision (±)	0.5	pCi/g			OTW01	10/09/2014 1114	MB
Radium 226	1.1	pCi/g		0.2	E901.1 Mod.	10/07/2014 1734	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	10/07/2014 1734	MB
Thorium 230	1.1	pCi/g		0.2	ACW10	10/07/2014 1239	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/07/2014 1239	MB
Thorium229 Tracer (30-120)	89.4	%			ACW10	10/07/2014 1239	MB
Metals - Total							
Uranium	2.02	mg/Kg		0.02	EPA 200.8	09/25/2014 1452	MS

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-007
ClientSample ID: P4869S
COC: 157068

WorkOrder: S1409379
CollectionDate: 9/16/2014 4:10:00 PM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	8.9	pCi/g		2	SM 7110	10/06/2014 2133	MB
Gross Alpha Precision (±)	0.6	pCi/g			SM 7110	10/06/2014 2133	MB
Lead 210	0.9	pCi/g		0.2	OTW01	10/09/2014 1114	MB
Lead 210 Precision (±)	0.4	pCi/g			OTW01	10/09/2014 1114	MB
Radium 226	1.1	pCi/g		0.2	E901.1 Mod.	10/07/2014 1755	MB
Radium 226 Precision (±)	0.3	pCi/g			E901.1 Mod.	10/07/2014 1755	MB
Thorium 230	0.9	pCi/g		0.2	ACW10	10/07/2014 1239	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/07/2014 1239	MB
Thorium229 Tracer (30-120)	84.2	%			ACW10	10/07/2014 1239	MB
Metals - Total							
Uranium	1.45	mg/Kg		0.02	EPA 200.8	09/25/2014 1457	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-008
ClientSample ID: TSRES03
COC: 157068

WorkOrder: S1409379
CollectionDate: 9/16/2014 5:10:00 PM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	9.5	pCi/g		2	SM 7110	10/06/2014 2133	MB
Gross Alpha Precision (±)	0.7	pCi/g			SM 7110	10/06/2014 2133	MB
Lead 210	1.6	pCi/g		0.2	OTW01	10/09/2014 1114	MB
Lead 210 Precision (±)	0.5	pCi/g			OTW01	10/09/2014 1114	MB
Radium 226	0.8	pCi/g		0.2	E901.1 Mod.	10/07/2014 1816	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	10/07/2014 1816	MB
Thorium 230	1.0	pCi/g		0.2	ACW10	10/07/2014 1239	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/07/2014 1239	MB
Thorium229 Tracer (30-120)	87.1	%			ACW10	10/07/2014 1239	MB
Metals - Total							
Uranium	3.70	mg/Kg		0.02	EPA 200.8	09/25/2014 1503	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-009
ClientSample ID: GS-3/P19695S
COC: 157068

WorkOrder: S1409379
CollectionDate: 9/17/2014 8:10:00 AM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	8.0	pCi/g		2	SM 7110	10/06/2014 2133	MB
Gross Alpha Precision (±)	0.6	pCi/g			SM 7110	10/06/2014 2133	MB
Lead 210	0.8	pCi/g		0.2	OTW01	10/09/2014 1114	MB
Lead 210 Precision (±)	0.5	pCi/g			OTW01	10/09/2014 1114	MB
Radium 226	0.9	pCi/g		0.2	E901.1 Mod.	10/07/2014 1836	MB
Radium 226 Precision (±)	0.3	pCi/g			E901.1 Mod.	10/07/2014 1836	MB
Thorium 230	0.9	pCi/g		0.2	ACW10	10/07/2014 1646	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/07/2014 1646	MB
Thorium229 Tracer (30-120)	86.3	%			ACW10	10/07/2014 1646	MB
Metals - Total							
Uranium	1.23	mg/Kg		0.02	EPA 200.8	09/25/2014 1508	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-010
ClientSample ID: GS-4/HAHNRES03
COC: 157068

WorkOrder: S1409379
CollectionDate: 9/17/2014 9:30:00 AM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	8.0	pCi/g		2	SM 7110	10/06/2014 2133	MB
Gross Alpha Precision (±)	0.6	pCi/g			SM 7110	10/06/2014 2133	MB
Lead 210	1.1	pCi/g		0.2	OTW01	10/09/2014 1114	MB
Lead 210 Precision (±)	0.5	pCi/g			OTW01	10/09/2014 1114	MB
Radium 226	1.0	pCi/g		0.2	E901.1 Mod.	10/07/2014 1857	MB
Radium 226 Precision (±)	0.3	pCi/g			E901.1 Mod.	10/07/2014 1857	MB
Thorium 230	0.9	pCi/g		0.2	ACW10	10/07/2014 1646	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/07/2014 1646	MB
Thorium229 Tracer (30-120)	87.5	%			ACW10	10/07/2014 1646	MB
Metals - Total							
Uranium	1.78	mg/Kg		0.02	EPA 200.8	09/25/2014 1514	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

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Your Environmental Monitoring Partner

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-011
ClientSample ID: SCHRES03
COC: 157068

WorkOrder: S1409379
CollectionDate: 9/17/2014 10:50:00 AM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	7.7	pCi/g		2	SM 7110	10/06/2014 2133	MB
Gross Alpha Precision (±)	0.6	pCi/g			SM 7110	10/06/2014 2133	MB
Lead 210	0.9	pCi/g		0.2	OTW01	10/09/2014 1114	MB
Lead 210 Precision (±)	0.5	pCi/g			OTW01	10/09/2014 1114	MB
Radium 226	1.4	pCi/g		0.2	E901.1 Mod.	10/07/2014 1918	MB
Radium 226 Precision (±)	0.3	pCi/g			E901.1 Mod.	10/07/2014 1918	MB
Thorium 230	1.1	pCi/g		0.2	ACW10	10/07/2014 1646	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/07/2014 1646	MB
Thorium229 Tracer (30-120)	89.2	%			ACW10	10/07/2014 1646	MB
Metals - Total							
Uranium	2.38	mg/Kg		0.02	EPA 200.8	09/25/2014 1519	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-012
ClientSample ID: SCHRES01
COC: 157068

WorkOrder: S1409379
CollectionDate: 9/17/2014 11:30:00 AM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	6.1	pCi/g		2	SM 7110	10/06/2014 2133	MB
Gross Alpha Precision (±)	0.7	pCi/g			SM 7110	10/06/2014 2133	MB
Lead 210	2.3	pCi/g		0.2	OTW01	10/09/2014 1321	MB
Lead 210 Precision (±)	0.5	pCi/g			OTW01	10/09/2014 1321	MB
Radium 226	2.1	pCi/g		0.2	E901.1 Mod.	10/07/2014 1938	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	10/07/2014 1938	MB
Thorium 230	1.8	pCi/g		0.2	ACW10	10/07/2014 1646	MB
Thorium230 Precision (±)	0.3	pCi/g			ACW10	10/07/2014 1646	MB
Thorium229 Tracer (30-120)	88.6	%			ACW10	10/07/2014 1646	MB
Metals - Total							
Uranium	2.73	mg/Kg		0.02	EPA 200.8	09/25/2014 1540	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-013
ClientSample ID: P4010S
COC: 157063

WorkOrder: S1409379
CollectionDate: 9/17/2014 12:30:00 PM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	8.0	pCi/g		2	SM 7110	10/07/2014 2133	MB
Gross Alpha Precision (±)	0.6	pCi/g			SM 7110	10/07/2014 2133	MB
Lead 210	1.8	pCi/g		0.2	OTW01	10/09/2014 1321	MB
Lead 210 Precision (±)	0.6	pCi/g			OTW01	10/09/2014 1321	MB
Radium 226	1.2	pCi/g		0.2	E901.1 Mod.	10/07/2014 1959	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	10/07/2014 1959	MB
Thorium 230	1.0	pCi/g		0.2	ACW10	10/07/2014 1646	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/07/2014 1646	MB
Thorium229 Tracer (30-120)	82.6	%			ACW10	10/07/2014 1646	MB
Metals - Total							
Uranium	1.87	mg/Kg		0.02	EPA 200.8	09/25/2014 1556	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

Company: Western Water Consultants
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Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-014
ClientSample ID: SW-3
COC: 157063

WorkOrder: S1409379
CollectionDate: 9/17/2014 1:40:00 PM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	8.6	pCi/g		2	SM 7110	10/07/2014 2133	MB
Gross Alpha Precision (±)	0.6	pCi/g			SM 7110	10/07/2014 2133	MB
Lead 210	1.6	pCi/g		0.2	OTW01	10/09/2014 1321	MB
Lead 210 Precision (±)	0.7	pCi/g			OTW01	10/09/2014 1321	MB
Radium 226	0.8	pCi/g		0.2	E901.1 Mod.	10/07/2014 2020	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	10/07/2014 2020	MB
Thorium 230	0.8	pCi/g		0.2	ACW10	10/07/2014 1646	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/07/2014 1646	MB
Thorium229 Tracer (30-120)	76.6	%			ACW10	10/07/2014 1646	MB
Metals - Total							
Uranium	3.92	mg/Kg		0.02	EPA 200.8	09/25/2014 1602	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-015
ClientSample ID: GS-2
COC: 157063

WorkOrder: S1409379
CollectionDate: 9/17/2014 2:00:00 PM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	6.7	pCi/g		2	SM 7110	10/07/2014 2133	MB
Gross Alpha Precision (±)	0.6	pCi/g			SM 7110	10/07/2014 2133	MB
Lead 210	1.3	pCi/g		0.2	OTW01	10/09/2014 1321	MB
Lead 210 Precision (±)	0.5	pCi/g			OTW01	10/09/2014 1321	MB
Radium 226	0.9	pCi/g		0.2	E901.1 Mod.	10/07/2014 2041	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	10/07/2014 2041	MB
Thorium 230	0.9	pCi/g		0.2	ACW10	10/07/2014 1646	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/07/2014 1646	MB
Thorium229 Tracer (30-120)	91.8	%			ACW10	10/07/2014 1646	MB
Metals - Total							
Uranium	1.82	mg/Kg		0.02	EPA 200.8	09/25/2014 1607	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/22/2014
Report ID S1409379002
(Replaces S1409379001)

ProjectName: Kendrick
Lab ID: S1409379-016
ClientSample ID: SW-2
COC: 157063

WorkOrder: S1409379
CollectionDate: 9/17/2014 2:20:00 PM
DateReceived: 9/18/2014 7:40:00 AM
FieldSampler: RF
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Gross Alpha	2.8	pCi/g		2	SM 7110	10/07/2014 2133	MB
Gross Alpha Precision (±)	0.5	pCi/g			SM 7110	10/07/2014 2133	MB
Lead 210	2.6	pCi/g		0.2	OTW01	10/09/2014 1321	MB
Lead 210 Precision (±)	0.6	pCi/g			OTW01	10/09/2014 1321	MB
Radium 226	0.4	pCi/g		0.2	E901.1 Mod.	10/07/2014 2101	MB
Radium 226 Precision (±)	0.3	pCi/g			E901.1 Mod.	10/07/2014 2101	MB
Thorium 230	0.5	pCi/g		0.2	ACW10	10/07/2014 1646	MB
Thorium230 Precision (±)	0.1	pCi/g			ACW10	10/07/2014 1646	MB
Thorium229 Tracer (30-120)	94.0	%			ACW10	10/07/2014 1646	MB
Metals - Total							
Uranium	1.04	mg/Kg		0.02	EPA 200.8	09/25/2014 1612	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

RADIONUCLIDE PARTICULATES IN AIR

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Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 5/17/2013
Report ID: S1304115001

ProjectName: Strata - Kendrick Amendment to Ross ISR
Lab ID: S1304115-001
ClientSample ID: OCH - Oshoto Community Church
COC: Web

WorkOrder: S1304115
CollectionDate: 3/22/2013 1:33:00 PM
DateReceived: 4/4/2013 3:30:00 PM
FieldSampler:
Matrix: Filter

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	5910751	Liters			Field	03/22/2013 1333	
Radionuclides - Filter							
Lead 210	112	pCi/Filter		2	OTW01	05/03/2013 1413	SH
Lead 210 Precision (±)	7.0	pCi/Filter			OTW01	05/03/2013 1413	SH
Lead 210	1.9E-14	µCi/mL		2.0E-15	Calculation	05/17/2013 1558	WN
Lead 210 Precision (±)	1.2E-15	µCi/mL			Calculation	05/17/2013 1558	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	05/06/2013 1535	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	05/06/2013 1535	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	05/17/2013 1558	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	05/17/2013 1558	WN
Thorium 230	0.2	pCi/Filter		0.2	ACW10	05/05/2013 1611	MB
Thorium 230 Precision (±)	0.2	pCi/Filter			ACW10	05/05/2013 1611	MB
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	05/17/2013 1558	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	05/17/2013 1558	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	04/18/2013 1314	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	05/17/2013 1558	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 5/17/2013
Report ID: S1304115001

ProjectName: Strata - Kendrick Amendment to Ross ISR
Lab ID: S1304115-002
ClientSample ID: Burch
COC: Web

WorkOrder: S1304115
CollectionDate: 3/22/2013 2:02:00 PM
DateReceived: 4/4/2013 3:30:00 PM
FieldSampler:
Matrix: Filter

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	3093918	Liters			Field	03/22/2013 1402	
Radionuclides - Filter							
Lead 210	60.2	pCi/Filter		2	OTW01	05/03/2013 1413	SH
Lead 210 Precision (±)	5.3	pCi/Filter			OTW01	05/03/2013 1413	SH
Lead 210	1.9E-14	µCi/mL		2.0E-15	Calculation	05/17/2013 1558	WN
Lead 210 Precision (±)	1.7E-15	µCi/mL			Calculation	05/17/2013 1558	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	05/06/2013 1742	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	05/06/2013 1742	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	05/17/2013 1558	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	05/17/2013 1558	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	05/05/2013 1611	MB
Thorium 230 Precision (±)	NA	pCi/Filter			ACW10	05/05/2013 1611	MB
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	05/17/2013 1558	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	05/17/2013 1558	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	04/18/2013 1343	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	05/17/2013 1558	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
C	Calculated Value	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
L	Analyzed by a contract laboratory	M	Value exceeds Monthly Ave or MCL
ND	Not Detected at the Reporting Limit	O	Outside the Range of Dilutions
S	Spike Recovery outside accepted recovery limits		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 5/17/2013
Report ID: S1304115001

ProjectName: Strata - Kendrick Amendment to Ross ISR
Lab ID: S1304115-003
ClientSample ID: Deadman
COC: Web

WorkOrder: S1304115
CollectionDate: 3/22/2013 2:22:00 PM
DateReceived: 4/4/2013 3:30:00 PM
FieldSampler:
Matrix: Filter

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	3293878	Liters			Field	03/22/2013 1422	
Radionuclides - Filter							
Lead 210	59.8	pCi/Filter		2	OTW01	05/03/2013 1413	SH
Lead 210 Precision (±)	5.3	pCi/Filter			OTW01	05/03/2013 1413	SH
Lead 210	1.8E-14	µCi/mL		2.0E-15	Calculation	05/17/2013 1558	WN
Lead 210 Precision (±)	1.6E-15	µCi/mL			Calculation	05/17/2013 1558	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	05/06/2013 1742	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	05/06/2013 1742	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	05/17/2013 1558	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	05/17/2013 1558	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	05/05/2013 1611	MB
Thorium 230 Precision (±)	NA	pCi/Filter			ACW10	05/05/2013 1611	MB
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	05/17/2013 1558	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	05/17/2013 1558	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	04/18/2013 1348	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	05/17/2013 1558	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
C	Calculated Value	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
L	Analyzed by a contract laboratory	M	Value exceeds Monthly Ave or MCL
ND	Not Detected at the Reporting Limit	O	Outside the Range of Dilutions
S	Spike Recovery outside accepted recovery limits		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 5/17/2013
Report ID: S1304115001

ProjectName: Strata - Kendrick Amendment to Ross ISR
Lab ID: S1304115-004
ClientSample ID: D-Road
COC: Web

WorkOrder: S1304115
CollectionDate: 3/22/2013 1:20:00 PM
DateReceived: 4/4/2013 3:30:00 PM
FieldSampler:
Matrix: Filter

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	3577722	Liters			Field	03/22/2013 1320	
Radionuclides - Filter							
Lead 210	67.5	pCi/Filter		2	OTW01	05/03/2013 1413	SH
Lead 210 Precision (±)	5.6	pCi/Filter			OTW01	05/03/2013 1413	SH
Lead 210	1.9E-14	µCi/mL		2.0E-15	Calculation	05/17/2013 1558	WN
Lead 210 Precision (±)	1.6E-15	µCi/mL			Calculation	05/17/2013 1558	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	05/06/2013 1742	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	05/06/2013 1742	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	05/17/2013 1558	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	05/17/2013 1558	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	05/05/2013 1611	MB
Thorium 230 Precision (±)	NA	pCi/Filter			ACW10	05/05/2013 1611	MB
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	05/17/2013 1558	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	05/17/2013 1558	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	04/18/2013 1353	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	05/17/2013 1558	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
C	Calculated Value	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
L	Analyzed by a contract laboratory	M	Value exceeds Monthly Ave or MCL
ND	Not Detected at the Reporting Limit	O	Outside the Range of Dilutions
S	Spike Recovery outside accepted recovery limits		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 5/17/2013
Report ID: S1304115001

ProjectName: Strata - Kendrick Amendment to Ross ISR
Lab ID: S1304115-005
ClientSample ID: Berger Hill
COC: Web

WorkOrder: S1304115
CollectionDate: 3/22/2013 1:44:00 PM
DateReceived: 4/4/2013 3:30:00 PM
FieldSampler:
Matrix: Filter

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	3040983	Liters			Field	03/22/2013 1344	
Radionuclides - Filter							
Lead 210	50.0	pCi/Filter		2	OTW01	05/03/2013 1413	SH
Lead 210 Precision (±)	5.0	pCi/Filter			OTW01	05/03/2013 1413	SH
Lead 210	1.6E-14	µCi/mL		2.0E-15	Calculation	05/17/2013 1558	WN
Lead 210 Precision (±)	1.6E-15	µCi/mL			Calculation	05/17/2013 1558	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	05/06/2013 1742	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	05/06/2013 1742	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	05/17/2013 1558	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	05/17/2013 1558	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	05/05/2013 1611	MB
Thorium 230 Precision (±)	NA	pCi/Filter			ACW10	05/05/2013 1611	MB
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	05/17/2013 1558	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	05/17/2013 1558	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	04/18/2013 1358	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	05/17/2013 1558	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
C	Calculated Value	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
L	Analyzed by a contract laboratory	M	Value exceeds Monthly Ave or MCL
ND	Not Detected at the Reporting Limit	O	Outside the Range of Dilutions
S	Spike Recovery outside accepted recovery limits		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 9/16/2013
Report ID: S1307303001

ProjectName: Strata-Kendrick Amendment to Ross ISR
Lab ID: S1307303-001
ClientSample ID: OCH-Oshoto Community Church
COC:

WorkOrder: S1307303
CollectionDate: 6/27/2013 12:31:00 PM
DateReceived: 7/18/2013 4:00:00 PM
FieldSampler:
Matrix: Filter

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	7043097	Liters			Field	06/27/2013 1231	
Radionuclides - Filter							
Lead 210	81.5	pCi/Filter		2	OTW01	08/14/2013 1210	SH
Lead 210 Precision (±)	5.9	pCi/Filter			OTW01	08/14/2013 1210	SH
Lead 210	1.2E-14	µCi/mL		2.0E-15	Calculation	09/16/2013 1239	WN
Lead 210 Precision (±)	8.4E-16	µCi/mL			Calculation	09/16/2013 1239	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	08/05/2013 1313	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	08/05/2013 1313	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	09/16/2013 1239	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	09/16/2013 1239	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	08/10/2013 1332	MB
Thorium-230 Precision (±)	NA	pCi/Filter			ACW10	08/10/2013 1332	MB
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	09/16/2013 1239	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	09/16/2013 1239	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	08/22/2013 1230	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	09/16/2013 1239	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 9/16/2013
Report ID: S1307303001

ProjectName: Strata-Kendrick Amendment to Ross ISR
Lab ID: S1307303-002
ClientSample ID: BURCH
COC:

WorkOrder: S1307303
CollectionDate: 6/27/2013 11:53:00 AM
DateReceived: 7/18/2013 4:00:00 PM
FieldSampler:
Matrix: Filter

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	3142203	Liters			Field	06/27/2013 1153	
Radionuclides - Filter							
Lead 210	35.4	pCi/Filter		2	OTW01	08/14/2013 1210	SH
Lead 210 Precision (±)	4.3	pCi/Filter			OTW01	08/14/2013 1210	SH
Lead 210	1.1E-14	µCi/mL		2.0E-15	Calculation	09/16/2013 1239	WN
Lead 210 Precision (±)	1.4E-15	µCi/mL			Calculation	09/16/2013 1239	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	08/05/2013 1313	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	08/05/2013 1313	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	09/16/2013 1239	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	09/16/2013 1239	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	08/10/2013 1332	MB
Thorium-230 Precision (±)	NA	pCi/Filter			ACW10	08/10/2013 1332	MB
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	09/16/2013 1239	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	09/16/2013 1239	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	08/22/2013 1319	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	09/16/2013 1239	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 9/16/2013
Report ID: S1307303001

ProjectName: Strata-Kendrick Amendment to Ross ISR
Lab ID: S1307303-003
ClientSample ID: DEADMAN
COC:

WorkOrder: S1307303
CollectionDate: 6/27/2013 11:40:00 AM
DateReceived: 7/18/2013 4:00:00 PM
FieldSampler:
Matrix: Filter

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	4056072	Liters			Field	06/27/2013 1140	
Radionuclides - Filter							
Lead 210	38.3	pCi/Filter		2	OTW01	08/14/2013 1210	SH
Lead 210 Precision (±)	4.3	pCi/Filter			OTW01	08/14/2013 1210	SH
Lead 210	9.4E-15	µCi/mL		2.0E-15	Calculation	09/16/2013 1239	WN
Lead 210 Precision (±)	1.1E-15	µCi/mL			Calculation	09/16/2013 1239	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	08/05/2013 1313	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	08/05/2013 1313	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	09/16/2013 1239	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	09/16/2013 1239	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	08/10/2013 541	MB
Thorium-230 Precision (±)	NA	pCi/Filter			ACW10	08/10/2013 541	MB
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	09/16/2013 1239	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	09/16/2013 1239	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	08/22/2013 1324	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	09/16/2013 1239	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 9/16/2013
Report ID: S1307303001

ProjectName: Strata-Kendrick Amendment to Ross ISR
Lab ID: S1307303-004
ClientSample ID: D-ROAD
COC:

WorkOrder: S1307303
CollectionDate: 6/27/2013 11:25:00 AM
DateReceived: 7/18/2013 4:00:00 PM
FieldSampler:
Matrix: Filter

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	3764688	Liters			Field	06/27/2013 1125	
Radionuclides - Filter							
Lead 210	34.6	pCi/Filter		2	OTW01	08/14/2013 1210	SH
Lead 210 Precision (±)	4.0	pCi/Filter			OTW01	08/14/2013 1210	SH
Lead 210	9.2E-15	µCi/mL		2.0E-15	Calculation	09/16/2013 1239	WN
Lead 210 Precision (±)	1.1E-15	µCi/mL			Calculation	09/16/2013 1239	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	08/05/2013 1313	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	08/05/2013 1313	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	09/16/2013 1239	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	09/16/2013 1239	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	08/10/2013 541	MB
Thorium-230 Precision (±)	NA	pCi/Filter			ACW10	08/10/2013 541	MB
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	09/16/2013 1239	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	09/16/2013 1239	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	08/22/2013 1330	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	09/16/2013 1239	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 9/16/2013
Report ID: S1307303001

ProjectName: Strata-Kendrick Amendment to Ross ISR
Lab ID: S1307303-005
ClientSample ID: BERGER HILL
COC:

WorkOrder: S1307303
CollectionDate: 6/27/2013 12:18:00 PM
DateReceived: 7/18/2013 4:00:00 PM
FieldSampler:
Matrix: Filter

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	3738155	Liters			Field	06/27/2013 1218	
Radionuclides - Filter							
Lead 210	40.4	pCi/Filter		2	OTW01	08/14/2013 1210	SH
Lead 210 Precision (±)	4.4	pCi/Filter			OTW01	08/14/2013 1210	SH
Lead 210	1.1E-14	µCi/mL		2.0E-15	Calculation	09/16/2013 1239	WN
Lead 210 Precision (±)	1.2E-15	µCi/mL			Calculation	09/16/2013 1239	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	09/04/2013 1141	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	09/04/2013 1141	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	09/16/2013 1239	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	09/16/2013 1239	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	08/10/2013 541	MB
Thorium-230 Precision (±)	NA	pCi/Filter			ACW10	08/10/2013 541	MB
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	09/16/2013 1239	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	09/16/2013 1239	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	08/22/2013 1335	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	09/16/2013 1239	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/29/2013
Report ID: S1310074001

ProjectName: Strata - Kendric - Amendment to Ross ISR
Lab ID: S1310074-001
ClientSample ID: OCH - Oshoto Community Church
COC: WEB

WorkOrder: S1310074
CollectionDate: 9/30/2013 1:31:00 PM
DateReceived: 10/3/2013 12:07:00 PM
FieldSampler: RS
Matrix: Filter

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	7940032	Liters			Field	09/30/2013 1331	
Radionuclides - Filter							
Lead 210	155	pCi/Filter		2	OTW01	10/21/2013 1752	SH
Lead 210 Precision (±)	7.1	pCi/Filter			OTW01	10/21/2013 1752	SH
Lead 210	2.0E-14	µCi/mL		2.0E-15	Calculation	10/29/2013 1515	WN
Lead 210 Precision (±)	8.9E-16	µCi/mL			Calculation	10/29/2013 1515	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	10/21/2013 000	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	10/21/2013 000	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	10/29/2013 1515	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	10/29/2013 1515	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	10/15/2013 850	MB
Thorium-230 Precision (±)	NA	pCi/Filter			ACW10	10/15/2013 850	MB
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	10/29/2013 1515	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	10/29/2013 1515	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	10/09/2013 2125	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	10/29/2013 1515	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/29/2013
Report ID: S1310074001

ProjectName: Strata - Kendric - Amendment to Ross ISR
Lab ID: S1310074-002
ClientSample ID: BURCH
COC: WEB

WorkOrder: S1310074
CollectionDate: 9/30/2013 12:32:00 PM
DateReceived: 10/3/2013 12:07:00 PM
FieldSampler: RS
Matrix: Filter

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	3265891	Liters			Field	09/30/2013 1232	
Radionuclides - Filter							
Lead 210	71.0	pCi/Filter		2	OTW01	10/21/2013 1752	SH
Lead 210 Precision (±)	4.8	pCi/Filter			OTW01	10/21/2013 1752	SH
Lead 210	2.2E-14	µCi/mL		2.0E-15	Calculation	10/29/2013 1515	WN
Lead 210 Precision (±)	1.5E-15	µCi/mL			Calculation	10/29/2013 1515	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	10/21/2013 000	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	10/21/2013 000	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	10/29/2013 1515	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	10/29/2013 1515	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	10/15/2013 850	MB
Thorium-230 Precision (±)	NA	pCi/Filter			ACW10	10/15/2013 850	MB
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	10/29/2013 1515	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	10/29/2013 1515	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	10/09/2013 2130	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	10/29/2013 1515	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/29/2013
Report ID: S1310074001

ProjectName: Strata - Kendric - Amendment to Ross ISR
Lab ID: S1310074-003
ClientSample ID: DEADMAN
COC: WEB

WorkOrder: S1310074
CollectionDate: 9/30/2013 12:17:00 PM
DateReceived: 10/3/2013 12:07:00 PM
FieldSampler: RS
Matrix: Filter

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	4108694	Liters			Field	09/30/2013 1217	
Radionuclides - Filter							
Lead 210	73.9	pCi/Filter		2	OTW01	10/21/2013 1752	SH
Lead 210 Precision (±)	4.9	pCi/Filter			OTW01	10/21/2013 1752	SH
Lead 210	1.8E-14	µCi/mL		2.0E-15	Calculation	10/29/2013 1515	WN
Lead 210 Precision (±)	1.2E-15	µCi/mL			Calculation	10/29/2013 1515	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	10/21/2013 000	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	10/21/2013 000	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	10/29/2013 1515	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	10/29/2013 1515	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	10/16/2013 751	MB
Thorium-230 Precision (±)	NA	pCi/Filter			ACW10	10/16/2013 751	MB
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	10/29/2013 1515	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	10/29/2013 1515	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	10/09/2013 2136	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	10/29/2013 1515	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/29/2013
Report ID: S1310074001

ProjectName: Strata - Kendric - Amendment to Ross ISR
Lab ID: S1310074-004
ClientSample ID: D-ROAD
COC: WEB

WorkOrder: S1310074
CollectionDate: 9/30/2013 12:00:00 PM
DateReceived: 10/3/2013 12:07:00 PM
FieldSampler: RS
Matrix: Filter

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	3520719	Liters			Field	09/30/2013 1200	
Radionuclides - Filter							
Lead 210	66.7	pCi/Filter		2	OTW01	10/21/2013 1752	SH
Lead 210 Precision (±)	4.7	pCi/Filter			OTW01	10/21/2013 1752	SH
Lead 210	1.9E-14	µCi/mL		2.0E-15	Calculation	10/29/2013 1515	WN
Lead 210 Precision (±)	1.3E-15	µCi/mL			Calculation	10/29/2013 1515	WN
Radium 226	0.4	pCi/Filter		0.3	SM 7500RAB	10/21/2013 000	SH
Radium 226 Precision (±)	0.1	pCi/Filter			SM 7500RAB	10/21/2013 000	SH
Radium 226	1.1E-16	µCi/mL		1.0E-16	Calculation	10/29/2013 1515	WN
Radium 226 Precision (±)	2.8E-17	µCi/mL			Calculation	10/29/2013 1515	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	10/16/2013 751	MB
Thorium-230 Precision (±)	NA	pCi/Filter			ACW10	10/16/2013 751	MB
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	10/29/2013 1515	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	10/29/2013 1515	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	10/09/2013 2141	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	10/29/2013 1515	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 10/29/2013
Report ID: S1310074001

ProjectName: Strata - Kendric - Amendment to Ross ISR
Lab ID: S1310074-005
ClientSample ID: BERGER HILL
COC: WEB

WorkOrder: S1310074
CollectionDate: 9/30/2013 1:14:00 PM
DateReceived: 10/3/2013 12:07:00 PM
FieldSampler: RS
Matrix: Filter

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	3545271	Liters			Field	09/30/2013 1314	
Radionuclides - Filter							
Lead 210	64.5	pCi/Filter		2	OTW01	10/21/2013 1752	SH
Lead 210 Precision (±)	4.7	pCi/Filter			OTW01	10/21/2013 1752	SH
Lead 210	1.8E-14	µCi/mL		2.0E-15	Calculation	10/29/2013 1515	WN
Lead 210 Precision (±)	1.3E-15	µCi/mL			Calculation	10/29/2013 1515	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	10/21/2013 000	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	10/21/2013 000	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	10/29/2013 1515	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	10/29/2013 1515	WN
Thorium 230	0.2	pCi/Filter		0.2	ACW10	10/16/2013 751	MB
Thorium-230 Precision (±)	0.2	pCi/Filter			ACW10	10/16/2013 751	MB
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	10/29/2013 1515	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	10/29/2013 1515	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	10/09/2013 2147	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	10/29/2013 1515	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 1/30/2014
Report ID S1401063001

ProjectName: Strata-Kendrick Amendment to Ross ISR
Lab ID: S1401063-001
ClientSample ID: OCH-Oshoto Community Church
COC: WEB

WorkOrder: S1401063
CollectionDate: 12/27/2013 11:13:00 AM
DateReceived: 1/7/2014 2:53:00 PM
FieldSampler:
Matrix: Filter

Comments 4th Qtr 2013

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	7845853	Liters			Field	12/27/2013 1113	
Radionuclides - Filter							
Lead 210	151	pCi/Filter		2	OTW01	01/17/2014 851	SH
Lead 210 Precision (±)	7.5	pCi/Filter			OTW01	01/17/2014 851	SH
Lead 210	1.9E-14	µCi/mL		2.0E-15	Calculation	01/30/2014 1225	WN
Lead 210 Precision (±)	9.6E-16	µCi/mL			Calculation	01/30/2014 1225	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	01/22/2014 1006	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	01/22/2014 1006	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	01/30/2014 1225	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	01/30/2014 1225	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	01/20/2014 938	SH
Thorium-230 Precision (±)	NA	pCi/Filter			ACW10	01/20/2014 938	SH
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	01/30/2014 1225	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	01/30/2014 1225	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	01/09/2014 2015	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	01/30/2014 1225	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 1/30/2014
Report ID S1401063001

ProjectName: Strata-Kendrick Amendment to Ross ISR
Lab ID: S1401063-002
ClientSample ID: BURCH
COC: WEB

WorkOrder: S1401063
CollectionDate: 12/27/2013 10:38:00 AM
DateReceived: 1/7/2014 2:53:00 PM
FieldSampler:
Matrix: Filter

Comments 4th Qtr 2013

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	3330275	Liters			Field	12/27/2013 1038	
Radionuclides - Filter							
Lead 210	58.5	pCi/Filter		2	OTW01	01/17/2014 851	SH
Lead 210 Precision (±)	4.4	pCi/Filter			OTW01	01/17/2014 851	SH
Lead 210	1.8E-14	µCi/mL		2.0E-15	Calculation	01/30/2014 1225	WN
Lead 210 Precision (±)	1.3E-15	µCi/mL			Calculation	01/30/2014 1225	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	01/22/2014 1006	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	01/22/2014 1006	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	01/30/2014 1225	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	01/30/2014 1225	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	01/20/2014 938	SH
Thorium-230 Precision (±)	NA	pCi/Filter			ACW10	01/20/2014 938	SH
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	01/30/2014 1225	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	01/30/2014 1225	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	01/09/2014 2036	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	01/30/2014 1225	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 1/30/2014
Report ID S1401063001

ProjectName: Strata-Kendrick Amendment to Ross ISR
Lab ID: S1401063-003
ClientSample ID: DEADMAN
COC: WEB

WorkOrder: S1401063
CollectionDate: 12/27/2013 10:10:00 AM
DateReceived: 1/7/2014 2:53:00 PM
FieldSampler:
Matrix: Filter

Comments 4th Qtr 2013

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	3324588	Liters			Field	12/27/2013 1010	
Radionuclides - Filter							
Lead 210	45.5	pCi/Filter		2	OTW01	01/17/2014 851	SH
Lead 210 Precision (±)	5.8	pCi/Filter			OTW01	01/17/2014 851	SH
Lead 210	1.4E-14	µCi/mL		2.0E-15	Calculation	01/30/2014 1225	WN
Lead 210 Precision (±)	1.7E-15	µCi/mL			Calculation	01/30/2014 1225	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	01/22/2014 1006	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	01/22/2014 1006	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	01/30/2014 1225	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	01/30/2014 1225	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	01/20/2014 938	SH
Thorium-230 Precision (±)	NA	pCi/Filter			ACW10	01/20/2014 938	SH
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	01/30/2014 1225	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	01/30/2014 1225	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	01/09/2014 2042	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	01/30/2014 1225	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 1/30/2014
Report ID S1401063001

ProjectName: Strata-Kendrick Amendment to Ross ISR
Lab ID: S1401063-004
ClientSample ID: D-ROAD
COC: WEB

WorkOrder: S1401063
CollectionDate: 12/27/2013 9:53:00 AM
DateReceived: 1/7/2014 2:53:00 PM
FieldSampler:
Matrix: Filter

Comments 4th Qtr 2013

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	3200320	Liters			Field	12/27/2013 953	
Radionuclides - Filter							
Lead 210	67.9	pCi/Filter		2	OTW01	01/17/2014 851	SH
Lead 210 Precision (±)	5.4	pCi/Filter			OTW01	01/17/2014 851	SH
Lead 210	2.1E-14	µCi/mL		2.0E-15	Calculation	01/30/2014 1225	WN
Lead 210 Precision (±)	1.7E-15	µCi/mL			Calculation	01/30/2014 1225	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	01/22/2014 1006	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	01/22/2014 1006	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	01/30/2014 1225	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	01/30/2014 1225	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	01/20/2014 938	SH
Thorium-230 Precision (±)	NA	pCi/Filter			ACW10	01/20/2014 938	SH
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	01/30/2014 1225	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	01/30/2014 1225	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	01/09/2014 2058	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	01/30/2014 1225	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits
B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL
O	Outside the Range of Dilutions

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 1/30/2014
Report ID S1401063001

ProjectName: Strata-Kendrick Amendment to Ross ISR
Lab ID: S1401063-005
ClientSample ID: BERGER HILL
COC: WEB

WorkOrder: S1401063
CollectionDate: 12/27/2013 10:57:00 AM
DateReceived: 1/7/2014 2:53:00 PM
FieldSampler:
Matrix: Filter

Comments 4th Qtr 2013

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Field							
Actual Volume	2941206	Liters			Field	12/27/2013 1057	
Radionuclides - Filter							
Lead 210	50.9	pCi/Filter		2	OTW01	01/17/2014 851	SH
Lead 210 Precision (±)	6.0	pCi/Filter			OTW01	01/17/2014 851	SH
Lead 210	1.7E-14	µCi/mL		2.0E-15	Calculation	01/30/2014 1225	WN
Lead 210 Precision (±)	2.0E-15	µCi/mL			Calculation	01/30/2014 1225	WN
Radium 226	ND	pCi/Filter		0.3	SM 7500RAB	01/22/2014 1006	SH
Radium 226 Precision (±)	NA	pCi/Filter			SM 7500RAB	01/22/2014 1006	SH
Radium 226	ND	µCi/mL		1.0E-16	Calculation	01/30/2014 1225	WN
Radium 226 Precision (±)	NA	µCi/mL			Calculation	01/30/2014 1225	WN
Thorium 230	ND	pCi/Filter		0.2	ACW10	01/20/2014 938	SH
Thorium-230 Precision (±)	NA	pCi/Filter			ACW10	01/20/2014 938	SH
Thorium 230	ND	µCi/mL		1.0E-16	Calculation	01/30/2014 1225	WN
Thorium 230 Precision (±)	NA	µCi/mL			Calculation	01/30/2014 1225	WN
Uranium	ND	pCi/Filter		0.3	EPA 200.8	01/09/2014 2104	MS
Uranium	ND	µCi/mL		1.0E-16	Calculation	01/30/2014 1225	WN

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
C	Calculated Value	E	Value above quantitation range
H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
L	Analyzed by a contract laboratory	M	Value exceeds Monthly Ave or MCL
ND	Not Detected at the Reporting Limit	O	Outside the Range of Dilutions
S	Spike Recovery outside accepted recovery limits		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

RADON IN AIR

Radon Monitoring Report

IML AIR SCIENCES
ATTN: RONN SMITH
555 ABSARAKA STREET
SHERIDAN, WY 82801

LANDAUER

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (800) 528-8327 Facsimile: (708) 755-7048

Acct. No. 0410256

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l-days	Avg. Radon Conc. pCi/l	
4844969	DRNF	03-JAN-13	02-APR-13	MET STATION	63.5 ±4.02	0.7 ±0.05	
4844970	DRNF	03-JAN-13	02-APR-13	WESLEY	53.3 ±3.52	0.6 ±0.04	
4844971	DRNF	20-DEC-12	02-APR-13	OCH	33.6 ±2.42	0.3 ±0.02	
4844972	DRNF	03-JAN-13	02-APR-13	BERGER HILL	45.3 ±3.09	0.5 ±0.03	
4844973	DRNF	20-DEC-12	02-APR-13	BURCH	27.7 ±2.05	0.3 ±0.02	
4845026	DRNF	20-DEC-12	02-APR-13	DEADMAN	91.3 ±5.24	0.9 ±0.05	
4845027	DRNF	20-DEC-12	02-APR-13	D-ROAD	72.0 ±4.42	0.7 ±0.04	
4845028	DRNF	09-JAN-13	02-APR-13	SITE 18	133.1 ±6.8	1.6 ±0.08	
4845029	DRNF	03-JAN-13	02-APR-13	SITE 19	92.3 ±5.31	1.0 ±0.06	
4845030	DRNF	03-JAN-13	02-APR-13	SITE 20	105.7 ±5.8	1.2 ±0.07	

① ② ③ ④ ⑤ ⑥ ⑦ ⑧

RESULTS RELATED ONLY TO MONITORS
AS RECEIVED BY LANDAUER.

Q.C. Release	Process No.	Report Date	Date Received
LMR	A22638	26-APR-13	09-APR-13

PAGE 1 OF 2

Radon Monitoring Report

IML AIR SCIENCES
ATTN: RONN SMITH
555 ABSARAKA STREET
SHERIDAN, WY 82801

LANDAUER

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (800) 528-8327 Facsimile: (708) 755-7048

Acct. No. 0410356

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l-days	Avg. Radon Conc. pCi/l	
4845041	DRNF	03-JAN-13	02-APR-13	SITE 21	51.2 ±3.40	0.6 ±0.04	
①	②	③	④		⑤	⑥	⑦ ⑧

RESULTS RELATED ONLY TO MONITORS
AS RECEIVED BY LANDAUER.

Q.C. Release	Process No.	Report Date	Date Received
LMR	A22638	26-APR-13	09-APR-13

PAGE 2 OF 2

Radon Monitoring Report

IML AIR SCIENCES
ATTN; RONN SMITH
555 ABSARAKA STREET
SHERIDAN, WY 82801

LANDAUER

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (800) 528-8327 Facsimile: (708) 755-7048

Acct. No. 0410356

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l-days	Avg. Radon Conc. pCi/l	
4845268	DRNF	02-APR-13	17-JUL-13	MET STATION	40.2 ±2.57	0.4 ±0.02	
4894430	DRNF	02-APR-13	17-JUL-13	WESLEY	46.6 ±3.80	0.4 ±0.04	
4894431	DRNF	02-APR-13	17-JUL-13	OCH	51.1 ±4.06	0.5 ±0.04	
4894432	DRNF	02-APR-13	17-JUL-13	BERGER HILL	24.0 ±2.29	0.2 ±0.02	
4894439	DRNF	02-APR-13	17-JUL-13	BURCH	54.5 ±4.25	0.5 ±0.04	
4894440	DRNF	02-APR-13	17-JUL-13	DEADMAN	51.6 ±4.09	0.5 ±0.04	
4894441	DRNF	02-APR-13	17-JUL-13	D-ROAD	16.7 ±1.70	0.2 ±0.02	
4897757	DRNF	02-APR-13	17-JUL-13	SITE 18	31.8 ±2.74	0.3 ±0.03	
4897758	DRNF	02-APR-13	17-JUL-13	SITE 19	12.7 ±1.27	0.1 ±0.01	
4897759	DRNF	02-APR-13	17-JUL-13	SITE 20	25.7 ±2.30	0.2 ±0.02	
①	②	③	④	⑤	⑥	⑦	⑧

RESULTS RELATED ONLY TO MONITORS
AS RECEIVED BY LANDAUER.

Q.C. Release	Process No.	Report Date	Date Received
KJT	A22780	02-AUG-13	23-JUL-13

PAGE 1 OF 2

Radon Monitoring Report

IML AIR SCIENCES
ATTN: RONN SMITH
555 ABSARAKA STREET
SHERIDAN, WY 82801

LANDAUER

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (800) 528-8327 Facsimile: (708) 755-7048

Acct. No. 0410356

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l-days	Avg. Radon Conc. pCi/l	
4897760	DRNF	02-APR-13	17-JUL-13	SITE 21	31.3 ±2.70	0.3 ±0.03	
①	②	③	④	⑤	⑥	⑦	⑧

RESULTS RELATED ONLY TO MONITORS AS RECEIVED BY LANDAUER.

Q.C. Release	Process No.	Report Date	Date Received
KJT	A22780	02-AUG-13	23-JUL-13

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Radon Monitoring Report

IML AIR SCIENCES
ATTN: RONN SMITH
555 ABSARAKA STREET
SHERIDAN, WY 82801

LICENSES: 101146AL,100584RT

Acct. No. 0410356

LANDAUER

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (800) 528-8327 Facsimile: (708) 755-7048

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l-days	Avg. Radon Conc. pCi/l	
4848028	DRNM	17-JUL-13	08-OCT-13	* - LESS THAN INDICATED VALUE MET STATION	* 6.0	* 0.07 ±0.01	
4848029	DRNM	17-JUL-13	08-OCT-13	* - LESS THAN INDICATED VALUE WESLEY	* 6.0	* 0.07 ±0.01	
4848030	DRNM	17-JUL-13	08-OCT-13	* - LESS THAN INDICATED VALUE OCH	* 6.0	* 0.07 ±0.01	
4848031	DRNM	17-JUL-13	08-OCT-13	* - LESS THAN INDICATED VALUE BERGER HILL	* 6.0	* 0.07 ±0.01	
4848078	DRNM	17-JUL-13	08-OCT-13	BURCH	13.9 ±0.88	0.2 ±0.01	
4848079	DRNM	17-JUL-13	08-OCT-13	* - LESS THAN INDICATED VALUE DEADMAN	* 6.0	* 0.07 ±0.01	
4848080	DRNM	17-JUL-13	08-OCT-13	* - LESS THAN INDICATED VALUE D-ROAD	* 6.0	* 0.07 ±0.01	
4848081	DRNM	17-JUL-13	08-OCT-13	* - LESS THAN INDICATED VALUE SITE 18	* 6.0	* 0.07 ±0.01	
4848082	DRNM	17-JUL-13	08-OCT-13	* - LESS THAN INDICATED VALUE SITE 19	* 6.0	* 0.07 ±0.01	
4870943	DRNM	17-JUL-13	08-OCT-13	SITE 20	61.5 ±4.12	0.7 ±0.05	
①	②	③	④	⑤	⑥	⑦	⑧

RESULTS RELATED ONLY TO MONITORS
AS RECEIVED BY LANDAUER.

Q.C. Release	Process No.	Report Date	Date Received
LMR	A22819	29-OCT-13	15-OCT-13

PAGE 1 OF 2

Radon Monitoring Report

IML AIR SCIENCES
ATTN; RONN SMITH
555 ABSARAKA STREET
SHERIDAN, WY 82801

LICENSES: 101146AL,100584RT

Acct. No. 0410356

LANDAUER

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (800) 528-8327 Facsimile: (708) 755-7048

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l-days	Avg. Radon Conc. pCi/l	
4870944	DRNM	17-JUL-13	08-OCT-13	SITE 21	64.4 ±4.26	0.8 ±0.05	
①	②	③	④	⑤	⑥	⑦	⑧

RESULTS RELATED ONLY TO MONITORS
AS RECEIVED BY LANDAUER.

Q.C. Release	Process No.	Report Date	Date Received
LMR	A22819	29-OCT-13	15-OCT-13

PAGE 2 OF 2

Radon Monitoring Report

IML AIR SCIENCES
ATTN: RONN SMITH
555 ABSARAKA STREET
SHERIDAN, WY 82801

LICENSES: 101146AL,100584RT

Acct. No. 0410356

LANDAUER

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (800) 528-8327 Facsimile: (708) 755-7048

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l-days	Avg. Racon Conc. pCi/l	
4948781	DRNF	09-JUL-14	07-OCT-14	OCH-GOOD CONDITION	61.0 ±4.63	0.7 ±0.05	
4948782	DRNF	14-JUL-14	07-OCT-14	BERGER HILL-GOOD CONDITION	55.8 ±4.36	0.7 ±0.05	
4948783	DRNF	14-JUL-14	07-OCT-14	BURCH-GOOD CONDITION	74.2 ±5.26	0.9 ±0.06	
4948784	DRNF	14-JUL-14	07-OCT-14	DEADMAN GOOD CONDITION	75.2 ±5.31	0.9 ±0.06	
4948785	DRNF	09-JUL-14	07-OCT-14	D-ROAD GOOD CONDITION	46.8 ±3.86	0.5 ±0.04	
4948786	DRNF	09-JUL-14	07-OCT-14	SITE 18-GOOD CONDITON	47.3 ±3.89	0.5 ±0.04	
4949190	DRNF	09-JUL-14	07-OCT-14	SITE 19-GOOD CONDITION	37.8 ±3.24	0.4 ±0.04	
①	②	③	④	⑤	⑥	⑦	⑧

RESULTS RELATED ONLY TO MONITORS AS RECEIVED BY LANDAUER. RADON IN AIR BY ALPHA TRACK - EPA 402-R92-004

Q.C. Release	Process No.	Report Date	Date Received
LMR	A23123	22-OCT-14	15-OCT-14

PAGE 1 OF 1

Radon Monitoring Report

IML AIR SCIENCES
ATTN: RONN SMITH
555 ABSARAKA STREET
SHERIDAN, WY 82801

LICENSES: 101146AL,100584RT

Acct. No. 0410356

LANDAUER

Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone: (800) 528-8327 Facsimile: (708) 755-7048

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l-days	Avg. Radon Conc. pCi/l	
4910570	DRNF	08-OCT-13	09-JAN-14	MET STATION	60.2 ±4.29	0.6 ±0.05	
4910571	DRNF	08-OCT-13	09-JAN-14	WESLEY	53.3 ±3.93	0.6 ±0.04	
4910572	DRNF	08-OCT-13	09-JAN-14	OCH	49.0 ±3.70	0.5 ±0.04	
4910573	DRNF	08-OCT-13	09-JAN-14	BERGER HILL	56.5 ±4.10	0.6 ±0.04	
4910574	DRNF	08-OCT-13	09-JAN-14	BURCH	52.8 ±3.90	0.6 ±0.04	
4910653	DRNF	08-OCT-13	09-JAN-14	DEADMAN	55.5 ±4.06	0.6 ±0.04	
4910654	DRNF	08-OCT-13	09-JAN-14	D-ROAD	47.0 ±3.60	0.5 ±0.04	
4910655	DRNF	08-OCT-13	09-JAN-14	SITE 18	44.9 ±3.48	0.5 ±0.04	
4910656	DRNF	08-OCT-13	09-JAN-14	SITE 19	40.7 ±3.23	0.4 ±0.03	
4910658	DRNF	08-OCT-13	09-JAN-14	SITE 21	45.5 ±3.51	0.5 ±0.04	
①	②	③	④	⑤	⑥	⑦	⑧

RESULTS RELATED ONLY TO MONITORS
AS RECEIVED BY LANDAUER.

Q.C. Release	Process No.	Report Date	Date Received
LMR	A22874	05-FEB-14	23-JAN-14

PAGE 1 OF 1

IML AIR SCIENCES
ATTN; RONN SMITH
555 ABSARAKA STREET
SHERIDAN, WY 82801

Radon Monitoring Report

LICENSES: 101146AL,100584RT

Acct. No. 0410356

LANDAUER®
Landauer, Inc. 2 Science Road Glenwood, Illinois 60425-1586
Telephone (800)528-8327 Facsimile (708) 755-7048

Detector Number	Detector Type	Starting Date	Ending Date	Field Data / Comments	Exposure pCi/l-days	Avg. Radon Conc. pCi/l	
4956421	DRN	07-OCT-14	19-DEC-14	SITE 20-GOOD CONDITION	71.4 ±5.39	0.2 ±0.02	
①	②	③	④	⑤	⑥	⑦	⑧

RESULTS RELATED ONLY TO MONITORS AS RECEIVED BY LANDAUER. RADON IN AIR BY ALPHA TRACK - EPA 402-R92-004.

Q.C. Release	Process No.	Report Date	Date Received
LMR	A23159	02-JAN-15	29-DEC-14

Mark Solosky
Radon Measurement Specialist

SOIL

Inter-Mountain Labs
Your Environmental Monitoring Partner
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-001
ClientSample ID: RB-1
COC: 157947

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.6	pCi/g		0.2	E901.1 Mod.	11/25/2014 912	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 912	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-002
ClientSample ID: RB-2
COC: 157947

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.8	pCi/g		0.2	E901.1 Mod.	11/25/2014 932	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 932	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
Your Environmental Monitoring Partner
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-003
ClientSample ID: RB-3
COC: 157947

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Lead 210	1.2	pCi/g		1	OTW01	11/15/2014 1510	MB
Lead 210 Precision (±)	0.6	pCi/g			OTW01	11/15/2014 1510	MB
Radium 226	1.7	pCi/g		0.2	E901.1 Mod.	11/25/2014 953	MB
Radium 226 Precision (±)	0.6	pCi/g			E901.1 Mod.	11/25/2014 953	MB
Thorium 230	1.5	pCi/g		0.2	ACW10	11/15/2014 1911	MB
Thorium230 Precision (±)	0.4	pCi/g			ACW10	11/15/2014 1911	MB
Thorium229 Tracer (30-120)	39.1	%		0.2	ACW10	11/15/2014 1911	MB
Metals - Total							
Uranium	ND	mg/Kg		0.00003	EPA 200.8	11/06/2014 1453	MS

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
Your Environmental Monitoring Partner
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-004
ClientSample ID: RB-4
COC: 157947

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.3	pCi/g		0.2	E901.1 Mod.	11/25/2014 1014	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 1014	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-005
ClientSample ID: RB-5
COC: 157947

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.5	pCi/g		0.2	E901.1 Mod.	11/25/2014 1035	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 1035	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-006
ClientSample ID: RB-6
COC: 157947

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.6	pCi/g		0.2	E901.1 Mod.	11/25/2014 1055	MB
Radium 226 Precision (±)	0.3	pCi/g			E901.1 Mod.	11/25/2014 1055	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-007
ClientSample ID: RB-7
COC: 157947

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	2.0	pCi/g		0.2	E901.1 Mod.	11/25/2014 1116	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 1116	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-008
ClientSample ID: RB-8
COC: 157947

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.7	pCi/g		0.2	E901.1 Mod.	11/25/2014 1137	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 1137	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-009
ClientSample ID: RB-9
COC: 157947

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.7	pCi/g		0.2	E901.1 Mod.	11/25/2014 1157	MB
Radium 226 Precision (±)	0.3	pCi/g			E901.1 Mod.	11/25/2014 1157	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-010
ClientSample ID: RB-10
COC: 157947

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	2.3	pCi/g		0.2	E901.1 Mod.	11/25/2014 1218	MB
Radium 226 Precision (±)	0.5	pCi/g			E901.1 Mod.	11/25/2014 1218	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-011
ClientSample ID: RB-11
COC: 157947

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	2.2	pCi/g		0.2	E901.1 Mod.	11/25/2014 1259	MB
Radium 226 Precision (±)	0.5	pCi/g			E901.1 Mod.	11/25/2014 1259	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Your Environmental Monitoring Partner

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-012
ClientSample ID: RB-12
COC: 157947

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.0	pCi/g		0.2	E901.1 Mod.	11/25/2014 1320	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 1320	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-013
ClientSample ID: RB-13
COC: 157947

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Lead 210	6.1	pCi/g		1	OTW01	11/15/2014 1510	MB
Lead 210 Precision (±)	0.8	pCi/g			OTW01	11/15/2014 1510	MB
Radium 226	2.3	pCi/g		0.2	E901.1 Mod.	11/25/2014 1341	MB
Radium 226 Precision (±)	0.5	pCi/g			E901.1 Mod.	11/25/2014 1341	MB
Thorium 230	2.7	pCi/g		0.2	ACW10	11/15/2014 1911	MB
Thorium230 Precision (±)	0.6	pCi/g			ACW10	11/15/2014 1911	MB
Thorium229 Tracer (30-120)	55.0	%		0.2	ACW10	11/15/2014 1911	MB
Metals - Total							
Uranium	ND	mg/Kg		0.00003	EPA 200.8	11/06/2014 1524	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:
- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- M Value exceeds Monthly Ave or MCL or is less than LCL
- O Outside the Range of Dilutions
- X Matrix Effect
- C Calculated Value
- H Holding times for preparation or analysis exceeded
- L Analyzed by a contract laboratory
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
Your Environmental Monitoring Partner
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-014
ClientSample ID: RB-14
COC: 157947

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.9	pCi/g		0.2	E901.1 Mod.	11/25/2014 1402	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 1402	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-015
ClientSample ID: RB-15
COC: 157948

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.5	pCi/g		0.2	E901.1 Mod.	11/25/2014 1422	MB
Radium 226 Precision (±)	0.3	pCi/g			E901.1 Mod.	11/25/2014 1422	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
Your Environmental Monitoring Partner
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-016
ClientSample ID: RB-16
COC: 157948

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.4	pCi/g		0.2	E901.1 Mod.	11/25/2014 1443	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 1443	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-017
ClientSample ID: RB-17
COC: 157948

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.6	pCi/g		0.2	E901.1 Mod.	11/25/2014 1504	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 1504	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-018
ClientSample ID: RB-18
COC: 157948

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.9	pCi/g		0.2	E901.1 Mod.	11/25/2014 1524	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 1524	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-019
ClientSample ID: RB-19
COC: 157948

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.2	pCi/g		0.2	E901.1 Mod.	11/25/2014 1545	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 1545	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by:
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-020
ClientSample ID: RB-20
COC: 157948

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.4	pCi/g		0.2	E901.1 Mod.	11/25/2014 1606	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 1606	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

Company: Western Water Consultants
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Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-021
ClientSample ID: RB-21
COC: 157948

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.4	pCi/g		0.2	E901.1 Mod.	11/25/2014 2041	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 2041	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-022
ClientSample ID: RB-22
COC: 157948

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.0	pCi/g		0.2	E901.1 Mod.	11/25/2014 2102	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 2102	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
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Sample Analysis Report

Company: Western Water Consultants
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Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-023
ClientSample ID: RB-23
COC: 157948

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Lead 210	6.0	pCi/g		1	OTW01	11/15/2014 1510	MB
Lead 210 Precision (±)	0.8	pCi/g			OTW01	11/15/2014 1510	MB
Radium 226	1.4	pCi/g		0.2	E901.1 Mod.	11/25/2014 2122	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 2122	MB
Thorium 230	0.9	pCi/g		0.2	ACW10	11/15/2014 1911	MB
Thorium230 Precision (±)	0.3	pCi/g			ACW10	11/15/2014 1911	MB
Thorium229 Tracer (30-120)	37.4	%		0.2	ACW10	11/15/2014 1911	MB
Metals - Total							
Uranium	ND	mg/Kg		0.00003	EPA 200.8	11/06/2014 1530	MS

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-024
ClientSample ID: RB-24
COC: 157948

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.8	pCi/g		0.2	E901.1 Mod.	11/25/2014 2143	MB
Radium 226 Precision (±)	0.3	pCi/g			E901.1 Mod.	11/25/2014 2143	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
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Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-025
ClientSample ID: RB-25
COC: 157948

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.8	pCi/g		0.2	E901.1 Mod.	11/25/2014 2204	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 2204	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
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Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-026
ClientSample ID: RB-26
COC: 157948

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.0	pCi/g		0.2	E901.1 Mod.	11/25/2014 2224	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 2224	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-027
ClientSample ID: RB-27
COC: 157948

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.0	pCi/g		0.2	E901.1 Mod.	11/25/2014 2245	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 2245	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL or is less than LCL
O	Outside the Range of Dilutions
X	Matrix Effect
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-028
ClientSample ID: RB-28
COC: 157948

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.2	pCi/g		0.2	E901.1 Mod.	11/25/2014 2306	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 2306	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

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1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-029
ClientSample ID: RB-29
COC: 157949

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.9	pCi/g		0.2	E901.1 Mod.	11/25/2014 2326	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 2326	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-030
ClientSample ID: RB-30
COC: 157949

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.1	pCi/g		0.2	E901.1 Mod.	11/25/2014 2347	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/25/2014 2347	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-031
ClientSample ID: RB-31
COC: 157949

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.6	pCi/g		0.2	E901.1 Mod.	11/26/2014 029	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/26/2014 029	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-032
ClientSample ID: RB-32
COC: 157949

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.5	pCi/g		0.2	E901.1 Mod.	11/26/2014 049	MB
Radium 226 Precision (±)	0.3	pCi/g			E901.1 Mod.	11/26/2014 049	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
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Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-033
ClientSample ID: RB-33
COC: 157949

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Lead 210	3.9	pCi/g		1	OTW01	11/15/2014 1510	MB
Lead 210 Precision (±)	0.7	pCi/g			OTW01	11/15/2014 1510	MB
Radium 226	1.5	pCi/g		0.2	E901.1 Mod.	11/26/2014 110	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/26/2014 110	MB
Thorium 230	1.9	pCi/g		0.2	ACW10	11/15/2014 1911	MB
Thorium230 Precision (±)	0.4	pCi/g			ACW10	11/15/2014 1911	MB
Thorium229 Tracer (30-120)	52.9	%		0.2	ACW10	11/15/2014 1911	MB
Metals - Total							
Uranium	ND	mg/Kg		0.00003	EPA 200.8	11/06/2014 1535	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-034
ClientSample ID: RB-34
COC: 157949

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.5	pCi/g		0.2	E901.1 Mod.	11/26/2014 131	MB
Radium 226 Precision (±)	0.3	pCi/g			E901.1 Mod.	11/26/2014 131	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
Your Environmental Monitoring Partner
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-035
ClientSample ID: RB-35
COC: 157949

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.8	pCi/g		0.2	E901.1 Mod.	11/26/2014 151	MB
Radium 226 Precision (±)	0.3	pCi/g			E901.1 Mod.	11/26/2014 151	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
Your Environmental Monitoring Partner
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/2/2014
Report ID S1410459001

ProjectName: Strata Kendrick RB
Lab ID: S1410459-036
ClientSample ID: RB-36
COC: 157949

WorkOrder: S1410459
CollectionDate: 10/29/2014
DateReceived: 10/30/2014 9:40:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.9	pCi/g		0.2	E901.1 Mod.	11/26/2014 212	MB
Radium 226 Precision (±)	0.3	pCi/g			E901.1 Mod.	11/26/2014 212	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
Your Environmental Monitoring Partner
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-001
ClientSample ID: RB-37
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	2.0	pCi/g		0.2	E901.1 Mod.	12/01/2014 1711	MB
Radium 226 Precision (±)	0.5	pCi/g			E901.1 Mod.	12/01/2014 1711	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-002
ClientSample ID: RB-38
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Lead 210	ND	pCi/g		1	OTW01	11/24/2014 1114	MB
Lead 210 Precision (±)	NA	pCi/g			OTW01	11/24/2014 1114	MB
Radium 226	1.5	pCi/g		0.2	E901.1 Mod.	12/01/2014 1731	MB
Radium 226 Precision (±)	0.5	pCi/g			E901.1 Mod.	12/01/2014 1731	MB
Thorium 230	0.4	pCi/g		0.2	ACW10	12/02/2014 1210	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	12/02/2014 1210	MB
Thorium229 Tracer (30-120)	54.5	pCi/g		0.2	ACW10	12/02/2014 1210	MB
Metals - Total							
Uranium	ND	mg/Kg		0.00003	EPA 200.8	11/14/2014 225	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
Your Environmental Monitoring Partner
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-003
ClientSample ID: RB-39
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.3	pCi/g		0.2	E901.1 Mod.	12/01/2014 1752	MB
Radium 226 Precision (±)	0.5	pCi/g			E901.1 Mod.	12/01/2014 1752	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-004
ClientSample ID: RB-40
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.4	pCi/g		0.2	E901.1 Mod.	12/01/2014 1813	MB
Radium 226 Precision (±)	0.5	pCi/g			E901.1 Mod.	12/01/2014 1813	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-005
ClientSample ID: HS-1 0-30cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.0	pCi/g		0.2	E901.1 Mod.	12/01/2014 1833	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	12/01/2014 1833	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-006
ClientSample ID: HS-1 30-60cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.8	pCi/g		0.2	E901.1 Mod.	12/01/2014 1854	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	12/01/2014 1854	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-007
ClientSample ID: HS-1 60-100cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.1	pCi/g		0.2	E901.1 Mod.	12/01/2014 1915	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	12/01/2014 1915	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-008
ClientSample ID: HS-2 0-30cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	2.2	pCi/g		0.2	E901.1 Mod.	12/01/2014 1936	MB
Radium 226 Precision (±)	0.6	pCi/g			E901.1 Mod.	12/01/2014 1936	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-009
ClientSample ID: HS-2 30-60cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.9	pCi/g		0.2	E901.1 Mod.	12/01/2014 1956	MB
Radium 226 Precision (±)	0.5	pCi/g			E901.1 Mod.	12/01/2014 1956	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-010
ClientSample ID: HS-2 60-100cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	3.4	pCi/g		0.2	E901.1 Mod.	12/01/2014 2017	MB
Radium 226 Precision (±)	0.7	pCi/g			E901.1 Mod.	12/01/2014 2017	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-011
ClientSample ID: HS-3 0-30cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	2.2	pCi/g		0.2	E901.1 Mod.	12/01/2014 2059	MB
Radium 226 Precision (±)	0.5	pCi/g			E901.1 Mod.	12/01/2014 2059	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-012
ClientSample ID: HS-3 30-60cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	2.6	pCi/g		0.2	E901.1 Mod.	12/01/2014 2119	MB
Radium 226 Precision (±)	0.5	pCi/g			E901.1 Mod.	12/01/2014 2119	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-013
ClientSample ID: HS-3 60-100cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	3.7	pCi/g		0.2	E901.1 Mod.	12/01/2014 2140	MB
Radium 226 Precision (±)	0.7	pCi/g			E901.1 Mod.	12/01/2014 2140	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-014
ClientSample ID: RB-1 0-30cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.9	pCi/g		0.2	E901.1 Mod.	12/01/2014 2201	MB
Radium 226 Precision (±)	0.5	pCi/g			E901.1 Mod.	12/01/2014 2201	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
Your Environmental Monitoring Partner
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Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-015
ClientSample ID: RB-1 30-60cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.5	pCi/g		0.2	E901.1 Mod.	12/01/2014 2221	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	12/01/2014 2221	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-016
ClientSample ID: RB-1 60-100cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.6	pCi/g		0.2	E901.1 Mod.	12/01/2014 2242	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	12/01/2014 2242	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-017
ClientSample ID: RB-16 0-30cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.5	pCi/g		0.2	E901.1 Mod.	12/01/2014 2303	MB
Radium 226 Precision (±)	0.5	pCi/g			E901.1 Mod.	12/01/2014 2303	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-018
ClientSample ID: RB-16 30-60cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.8	pCi/g		0.2	E901.1 Mod.	12/01/2014 2324	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	12/01/2014 2324	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-019
ClientSample ID: RB-16 60-100cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.5	pCi/g		0.2	E901.1 Mod.	12/02/2014 1548	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	12/02/2014 1548	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-020
ClientSample ID: D-Road 0-15cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.9	pCi/g		0.2	E901.1 Mod.	12/02/2014 1609	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	12/02/2014 1609	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-021
ClientSample ID: OCH 0-15cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.5	pCi/g		0.2	E901.1 Mod.	12/02/2014 1650	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	12/02/2014 1650	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-022
ClientSample ID: Burch 0-15cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	10.5	pCi/g		0.2	E901.1 Mod.	12/02/2014 1711	MB
Radium 226 Precision (±)	1.0	pCi/g			E901.1 Mod.	12/02/2014 1711	MB

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-023
ClientSample ID: Berger Hill 0-15cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	0.4	pCi/g		0.2	E901.1 Mod.	12/02/2014 1732	MB
Radium 226 Precision (±)	0.5	pCi/g			E901.1 Mod.	12/02/2014 1732	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 12/5/2014
Report ID S1411032001

ProjectName: Strata Kendrick RB
Lab ID: S1411032-024
ClientSample ID: Deadman 0-15cm
COC: 157865

WorkOrder: S1411032
CollectionDate: 11/3/2014
DateReceived: 11/4/2014 10:45:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Radium 226	1.2	pCi/g		0.2	E901.1 Mod.	12/02/2014 1753	MB
Radium 226 Precision (±)	0.5	pCi/g			E901.1 Mod.	12/02/2014 1753	MB

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
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Sample Analysis Report

Company: Western Water Consultants
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Sheridan, WY 82801

Date Reported 11/12/2014
Report ID S1410099001

ProjectName: Strata-Kendrick Amendment
Lab ID: S1410099-001
ClientSample ID: D Road-1
COC: 157858

WorkOrder: S1410099
CollectionDate: 10/6/2014
DateReceived: 10/7/2014 8:32:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Lead 210	0.8	pCi/g		0.2	OTW01	10/27/2014 1243	MB
Lead 210 Precision (±)	0.6	pCi/g			OTW01	10/27/2014 1243	MB
Radium 226	0.7	pCi/g		0.2	E901.1 Mod.	11/04/2014 1710	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/04/2014 1710	MB
Thorium 230	0.7	pCi/g		0.2	ACW10	10/24/2014 000	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/24/2014 000	MB
Thorium229 Tracer (30-120)	88.2	%		0.2	ACW10	10/24/2014 000	MB
Metals - Total							
Uranium	ND	mg/Kg		0.00003	EPA 200.8	10/14/2014 1756	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
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Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 11/12/2014
Report ID S1410099001

ProjectName: Strata-Kendrick Amendment
Lab ID: S1410099-002
ClientSample ID: Deadman-1
COC: 157858

WorkOrder: S1410099
CollectionDate: 10/6/2014
DateReceived: 10/7/2014 8:32:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Lead 210	2.3	pCi/g		0.2	OTW01	10/27/2014 1243	MB
Lead 210 Precision (±)	0.5	pCi/g			OTW01	10/27/2014 1243	MB
Radium 226	1.7	pCi/g		0.2	E901.1 Mod.	11/04/2014 1731	MB
Radium 226 Precision (±)	0.5	pCi/g			E901.1 Mod.	11/04/2014 1731	MB
Thorium 230	1.4	pCi/g		0.2	ACW10	10/24/2014 000	MB
Thorium230 Precision (±)	0.3	pCi/g			ACW10	10/24/2014 000	MB
Thorium229 Tracer (30-120)	81.3	%		0.2	ACW10	10/24/2014 000	MB
Metals - Total							
Uranium	ND	mg/Kg		0.00003	EPA 200.8	10/14/2014 1828	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 11/12/2014
Report ID S1410099001

ProjectName: Strata-Kendrick Amendment
Lab ID: S1410099-003
ClientSample ID: OCH-1
COC: 157858

WorkOrder: S1410099
CollectionDate: 10/6/2014
DateReceived: 10/7/2014 8:32:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Lead 210	1.4	pCi/g		0.2	OTW01	10/27/2014 1243	MB
Lead 210 Precision (±)	0.7	pCi/g			OTW01	10/27/2014 1243	MB
Radium 226	1.1	pCi/g		0.2	E901.1 Mod.	11/04/2014 1752	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/04/2014 1752	MB
Thorium 230	1.1	pCi/g		0.2	ACW10	10/24/2014 000	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/24/2014 000	MB
Thorium229 Tracer (30-120)	104	%		0.2	ACW10	10/24/2014 000	MB
Metals - Total							
Uranium	ND	mg/Kg		0.00003	EPA 200.8	10/14/2014 1833	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

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Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 11/12/2014
Report ID S1410099001

ProjectName: Strata-Kendrick Amendment
Lab ID: S1410099-004
ClientSample ID: Berger Hill-1
COC: 157858

WorkOrder: S1410099
CollectionDate: 10/6/2014
DateReceived: 10/7/2014 8:32:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Lead 210	2.2	pCi/g		0.2	OTW01	10/27/2014 1243	MB
Lead 210 Precision (±)	0.9	pCi/g			OTW01	10/27/2014 1243	MB
Radium 226	1.0	pCi/g		0.2	E901.1 Mod.	11/04/2014 1813	MB
Radium 226 Precision (±)	0.4	pCi/g			E901.1 Mod.	11/04/2014 1813	MB
Thorium 230	0.5	pCi/g		0.2	ACW10	10/24/2014 000	MB
Thorium230 Precision (±)	0.2	pCi/g			ACW10	10/24/2014 000	MB
Thorium229 Tracer (30-120)	87.2	%		0.2	ACW10	10/24/2014 000	MB
Metals - Total							
Uranium	ND	mg/Kg		0.00003	EPA 200.8	10/14/2014 1839	MS

These results apply only to the samples tested.

RL - Reporting Limit

Qualifiers:

B	Analyte detected in the associated Method Blank
E	Value above quantitation range
J	Analyte detected below quantitation limits
M	Value exceeds Monthly Ave or MCL or is less than LCL
O	Outside the Range of Dilutions
X	Matrix Effect
C	Calculated Value
H	Holding times for preparation or analysis exceeded
L	Analyzed by a contract laboratory
ND	Not Detected at the Reporting Limit
S	Spike Recovery outside accepted recovery limits

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Inter-Mountain Labs
Your Environmental Monitoring Partner
1673 Terra Avenue, Sheridan, Wyoming 82801 ph: (307) 672-8945

Sample Analysis Report

Company: Western Water Consultants
1849 Terra
Sheridan, WY 82801

Date Reported 11/12/2014
Report ID S1410099001

ProjectName: Strata-Kendrick Amendment
Lab ID: S1410099-005
ClientSample ID: Burch-1
COC: 157858

WorkOrder: S1410099
CollectionDate: 10/6/2014
DateReceived: 10/7/2014 8:32:00 AM
FieldSampler: CJ
Matrix: Soil

Comments

Analyses	Result	Units	Qual	RL	Method	Date Analyzed/Init	
Radionuclides - Total							
Lead 210	4.2	pCi/g		0.2	OTW01	10/27/2014 1243	MB
Lead 210 Precision (±)	0.6	pCi/g			OTW01	10/27/2014 1243	MB
Radium 226	10.5	pCi/g		0.2	E901.1 Mod.	11/04/2014 1833	MB
Radium 226 Precision (±)	1.0	pCi/g			E901.1 Mod.	11/04/2014 1833	MB
Thorium 230	7.9	pCi/g		0.2	ACW10	10/24/2014 000	MB
Thorium230 Precision (±)	0.9	pCi/g			ACW10	10/24/2014 000	MB
Thorium229 Tracer (30-120)	96.9	%		0.2	ACW10	10/24/2014 000	MB
Metals - Total							
Uranium	ND	mg/Kg		0.00003	EPA 200.8	10/14/2014 1844	MS

These results apply only to the samples tested. **RL - Reporting Limit**

Qualifiers:

B	Analyte detected in the associated Method Blank	C	Calculated Value
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	L	Analyzed by a contract laboratory
M	Value exceeds Monthly Ave or MCL or is less than LCL	ND	Not Detected at the Reporting Limit
O	Outside the Range of Dilutions	S	Spike Recovery outside accepted recovery limits
X	Matrix Effect		

Reviewed by: _____
Wade Nieuwsma, Assistant Laboratory Manager

Page 5 of 5

GAMMA FIELD SURVEY

(See Addendum 3.11-A for Complete SENES Report)

DIRECT RADIATION

LONG TERM STUDIES (OSLs)

IML AIR SCIENCE
ATTN RONN SMITH
555 ABSARAKA ST
SHERIDAN, WY 82801

Report Date (YYYY-MM-DD)	2013-07-25
Page	1 of 1
Dosimeter Received	2013-07-23
QC Release	LCA
Analytical Work Order	1320410115

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Customer Service: (800) 323-8830
Technical: (800) 438-3241

Environmental Dosimetry Report

Account : 291503 **Subaccount :** 1405707 **Series:** X9

Location ID Number	Dosimeter Type	Identifier (Client Supplied)	Exposure (Ambient Dose mrem)		Net Cumulative Totals (mrem)			Inception Date (YYYY-MM)	Serial Number
			Gross	Net	Quarter to Date	Year to Date	Permanent		
Monitoring Period:			2013-04-01 to	2013-06-30	Q2	2013			
00000	V03NH	Deploy Control						2011-01	EX000596599
	V03NH	Control Dose Used	27.4						
00069	V03NH		37.5	10.1	10.1	10.1	10.1	2013-04	EX00058349H
00070	V03NH		36.2	8.7	8.7	8.7	8.7	2013-04	EX00059714L
00071	V03NH		40.3	12.8	12.8	12.8	12.8	2013-04	EX000597886
00072	V03NH		38.6	11.2	11.2	11.2	11.2	2013-04	EX000091163
00073	V03NH		61.4	34.0	34.0	34.0	34.0	2013-04	EX00059417L
00074	V03NH		41.3	13.8	13.8	13.8	13.8	2013-04	EX00059248K
00075	V03NH		34.9	7.5	7.5	7.5	7.5	2013-04	EX00016358S
00076	V03NH		37.4	9.9	9.9	9.9	9.9	2013-04	EX000102936
00077	V03NH		37.5	10.1	10.1	10.1	10.1	2013-04	EX00022582Z
00078	V03NH		38.1	10.7	10.7	10.7	10.7	2013-04	EX00057711T
00079	V03NH		37.5	10.0	10.0	10.0	10.0	2013-04	EX000597977

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SHERIDAN, WY 82801

Report Date (YYYY-MM-DD)	2013-10-23
Page	1 of 1
Dosimeter Received	2013-10-16
QC Release	LCA
Analytical Work Order	1328811478

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Environmental Dosimetry Report

Account : 291503 **Subaccount :** 1405707 **Series:** X9

Location ID Number	Dosimeter Type	Identifier (Client Supplied)	Exposure (Ambient Dose mrem)		Net Cumulative Totals (mrem)			Inception Date (YYYY-MM)	Serial Number
			Gross	Net	Quarter to Date	Year to Date	Permanent		
Monitoring Period:			2013-07-01 to	2013-09-30	Q3	2013			
00000	V03NH	Deploy Control						2011-01	EX000124716
	V03NH	Control Dose Used	27.9						
00069	V03NH		37.4	9.5	9.5	19.5	19.5	2013-04	EX00061379J
00070	V03NH		34.5	6.6	6.6	15.3	15.3	2013-04	EX00011172B
00071	V03NH		37.4	9.5	9.5	22.3	22.3	2013-04	EX000091345
00072	V03NH		32.0	4.1	4.1	15.3	15.3	2013-04	EX000095222
00073	V03NH		49.7	21.8	21.8	55.8	55.8	2013-04	EX00061618L
00074	V03NH		35.5	7.5	7.5	21.4	21.4	2013-04	EX000094711
00075	V03NH		34.2	6.2	6.2	13.7	13.7	2013-04	EX00023941W
00076	V03NH		34.2	6.3	6.3	16.2	16.2	2013-04	EX00062976C
00077	V03NH		33.4	5.5	5.5	15.6	15.6	2013-04	EX00058643N
00078	V03NH		32.6	4.7	4.7	15.4	15.4	2013-04	EX00064741R
00079	V03NH		32.1	4.2	4.2	14.2	14.2	2013-04	EX00062923N

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Report Date (YYYY-MM-DD)	2014-01-31
Page	1 of 1
Dosimeter Received	2014-01-25
QC Release	SBA
Analytical Work Order	1402411097

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Technical: (800) 438-3241

Environmental Dosimetry Report

Account : 291503 Subaccount : 1405707 Series: X9

Location ID Number	Dosimeter Type	Identifier (Client Supplied)	Exposure (Ambient Dose mrem)		Net Cumulative Totals (mrem)			Inception Date (YYYY-MM)	Serial Number
			Gross	Net	Quarter to Date	Year to Date	Permanent		
Monitoring Period:			2013-10-01 to	2013-12-31	Q4	2013			
00000	V03NH	Deploy Control						2011-01	EX000127009
	V03NH	Control Dose Used	30.6						
00069	V03NH		41.1	10.5	10.5	30.1	30.1	2013-04	EX00001893V
00070	V03NH		40.2	9.6	9.6	24.9	24.9	2013-04	EX00020618U
00071	V03NH		40.3	9.7	9.7	32.0	32.0	2013-04	EX000560803
00073	V03NH		62.3	31.7	31.7	87.5	87.5	2013-04	EX00051344Y
00074	V03NH		40.2	9.6	9.6	31.0	31.0	2013-04	EX00056367L
00075	V03NH		39.7	9.1	9.1	22.9	22.9	2013-04	EX00062704R
00077	V03NH		38.4	7.9	7.9	23.5	23.5	2013-04	EX00024656Q
00079	V03NH		36.6	6.0	6.0	20.2	20.2	2013-04	EX00018424Z

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Report Date (YYYY-MM-DD)	2015-01-05
Page	1 of 1
Dosimeter Received	2014-12-30
QC Release	CHA
Analytical Work Order	1436310396

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Environmental Dosimetry Report

Account : 291503 **Subaccount :** 1405707 **Series:** X9

Location ID Number	Dosimeter Type	Identifier (Client Supplied)	Exposure (Ambient Dose mrem)		Net Cumulative Totals (mrem)			Inception Date (YYYY-MM)	Serial Number
			Gross	Net	Quarter to Date	Year to Date	Permanent		
Monitoring Period:			2014-10-01 to	2014-12-31	Q4	2014			
00000	V03NH	Deploy Control						2011-01	EX00064535O
	V03NH	Control Dose Used	18.2						
00080	V03NH		24.2	6.0				2014-10	EX00062756I
00081	V03NH		24.0	5.7				2014-10	EX00064658E
00082	V03NH		22.1	3.8				2014-10	EX00059238L

ADDENDUM 3.11-C

BASELINE RADIOLOGICAL MONITORING RESULTS AND FINAL CONCLUSIONS

(1ST QTR 2015)

(Will be provided on or before May 29, 2015)