Data Validation Package

August 2009
Water Sampling at the
Tuba City, Arizona, Disposal Site

December 2009

U.S. DEPARTMENT OF ENERGY | Legacy Management

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Contents

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Sampling Event Summary

Site: Tuba City, Arizona, Disposal Site

Sampling Period: August 10-13, 2009

The groundwater compliance strategy for the Tuba City Disposal Site is defined in the 1999 *Phase I Ground Water Compliance Action Plan for the Tuba City, Arizona, UMTRA Site.* Samples are collected and analyzed on a semiannual basis to evaluate the performance of the Phase I remediation system.

Sampling and analysis was conducted as specified in *Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites* (LMS/PLN/S04351, continually updated).

U.S. Environmental Protection Agency (EPA) groundwater standards were exceeded in samples collected from monitor wells as listed in Table 1.

The data from this sampling event are generally consistent with previously obtained values and are acceptable for general use as qualified. Data anomalies are not significant with respect to the known nature and extent of contamination and progress of remedial action at the site. The data from this sampling event will be incorporated into the annual performance evaluation report that will present a comprehensive hydrologic summary and evaluation of groundwater remedial action performance at the Tuba City site through March 2010.

Table 1. Tuba City Wells with Analyte Concentrations that Exceed EPA Standards

Analyte	Standard	Location	Concentration
Arsenic	0.05	1105	0.26
Arsenic	0.05	1106	0.3
Molybdenum	0.1	0262	1.5
Molybdenum	0.1	1105	0.5
Molybdenum	0.1	1106	0.18
Molybdenum	0.1	1129	0.73
Molybdenum	0.1	1132	1.5
Nitrate + Nitrite as Nitrogen	10	0262	170
Nitrate + Nitrite as Nitrogen	10	0263	170
Nitrate + Nitrite as Nitrogen	10	0264	11
Nitrate + Nitrite as Nitrogen	10	0265	180
Nitrate + Nitrite as Nitrogen	10	0267	280
Nitrate + Nitrite as Nitrogen	10	0268	19
Nitrate + Nitrite as Nitrogen	10	0273	66
Nitrate + Nitrite as Nitrogen	10	0275	210
Nitrate + Nitrite as Nitrogen	10	0279	12
Nitrate + Nitrite as Nitrogen	10	0281	44

Table 1 (continued). Tuba City Wells with Analyte Concentrations that Exceed EPA Standards

Analyte	Standard	Location	Concentration
Nitrate + Nitrite as Nitrogen	10	0286	61
Nitrate + Nitrite as Nitrogen	10	0287	230
Nitrate + Nitrite as Nitrogen	10	0288	64
Nitrate + Nitrite as Nitrogen	10	0289	51
Nitrate + Nitrite as Nitrogen	10	0691	51
Nitrate + Nitrite as Nitrogen	10	0691	52
Nitrate + Nitrite as Nitrogen	10	0906	380
Nitrate + Nitrite as Nitrogen	10	0908	190
Nitrate + Nitrite as Nitrogen	10	0909	150
Nitrate + Nitrite as Nitrogen	10	0912	62
Nitrate + Nitrite as Nitrogen	10	0929	12
Nitrate + Nitrite as Nitrogen	10	0930	14
Nitrate + Nitrite as Nitrogen	10	0934	370
Nitrate + Nitrite as Nitrogen	10	0935	190
Nitrate + Nitrite as Nitrogen	10	0938	220
Nitrate + Nitrite as Nitrogen	10	0941	230
Nitrate + Nitrite as Nitrogen	10	0942	180
Nitrate + Nitrite as Nitrogen	10	1003	52
Nitrate + Nitrite as Nitrogen	10	1004	12
Nitrate + Nitrite as Nitrogen	10	1101	72
Nitrate + Nitrite as Nitrogen	10	1101	75
Nitrate + Nitrite as Nitrogen	10	1102	110
Nitrate + Nitrite as Nitrogen	10	1103	170
Nitrate + Nitrite as Nitrogen	10	1104	120
Nitrate + Nitrite as Nitrogen	10	1105	110
Nitrate + Nitrite as Nitrogen	10	1106	98
Nitrate + Nitrite as Nitrogen	10	1107	61
Nitrate + Nitrite as Nitrogen	10	1108	150
Nitrate + Nitrite as Nitrogen	10	1109	93
Nitrate + Nitrite as Nitrogen	10	1110	96
Nitrate + Nitrite as Nitrogen	10	1111	130
Nitrate + Nitrite as Nitrogen	10	1112	39
Nitrate + Nitrite as Nitrogen	10	1113	26
Nitrate + Nitrite as Nitrogen	10	1114	74
Nitrate + Nitrite as Nitrogen	10	1115	86
Nitrate + Nitrite as Nitrogen	10	1116	54
Nitrate + Nitrite as Nitrogen	10	1117	100
Nitrate + Nitrite as Nitrogen	10	1118	150
Nitrate + Nitrite as Nitrogen	10	1119	170
Nitrate + Nitrite as Nitrogen	10	1120	47
Nitrate + Nitrite as Nitrogen	10	1121	14
Nitrate + Nitrite as Nitrogen	10	1123	31
Nitrate + Nitrite as Nitrogen	10	1125	11
Nitrate + Nitrite as Nitrogen	10	1129	100
Nitrate + Nitrite as Nitrogen	10	1130	180
Nitrate + Nitrite as Nitrogen	10	1132	170
Nitrate + Nitrite as Nitrogen	10	1133	38
Selenium	0.01	0262	0.11

Table 1 (continued). Tuba City Wells with Analyte Concentrations that Exceed EPA Standards

Analyte	Standard	Location	Concentration
Selenium	0.01	0263	0.032
Selenium	0.01	0267	0.043
Selenium	0.01	0273	0.018
Selenium	0.01	0275	0.02
Selenium	0.01	0287	0.096
Selenium	0.01	0904	0.018
Selenium	0.01	0906	0.016
Selenium	0.01	0908	0.023
Selenium	0.01	0909	0.052
Selenium	0.01	0934	0.011
Selenium	0.01	0935	0.018
Selenium	0.01	0938	0.037
Selenium	0.01	0941	0.082
Selenium	0.01	0942	0.051
Selenium	0.01	1101	0.017
Selenium	0.01	1101	0.017
Selenium	0.01	1102	0.018
Selenium	0.01	1103	0.029
Selenium	0.01	1104	0.027
Selenium	0.01	1105	0.034
Selenium	0.01	1106	0.03
Selenium	0.01	1107	0.015
Selenium	0.01	1108	0.033
Selenium	0.01	1109	0.015
Selenium	0.01	1110	0.013
Selenium	0.01	1111	0.013
Selenium	0.01	1115	0.011
Selenium	0.01	1117	0.011
Selenium	0.01	1118	0.017
Selenium	0.01	1119	0.031
Selenium	0.01	1120	0.019
Selenium	0.01	1123	0.014
Selenium	0.01	1129	0.057
Selenium	0.01	1130	0.026
Selenium	0.01	1132	0.11
Selenium	0.01	1133	0.013
Uranium	0.044	0262	1.3
Uranium	0.044	0263	0.17
Uranium	0.044	0265	0.071
Uranium	0.044	0267	0.07
Uranium	0.044	0273	0.068
Uranium	0.044	0275	0.48
Uranium	0.044	0286	0.093
Uranium	0.044	0287	0.19
Uranium	0.044	0906	0.91
Uranium	0.044	0908	0.096
Uranium	0.044	0909	0.057
Uranium	0.044	0934	0.19

Table 1 (continued). Tuba City Wells with Analyte Concentrations that Exceed EPA Standards

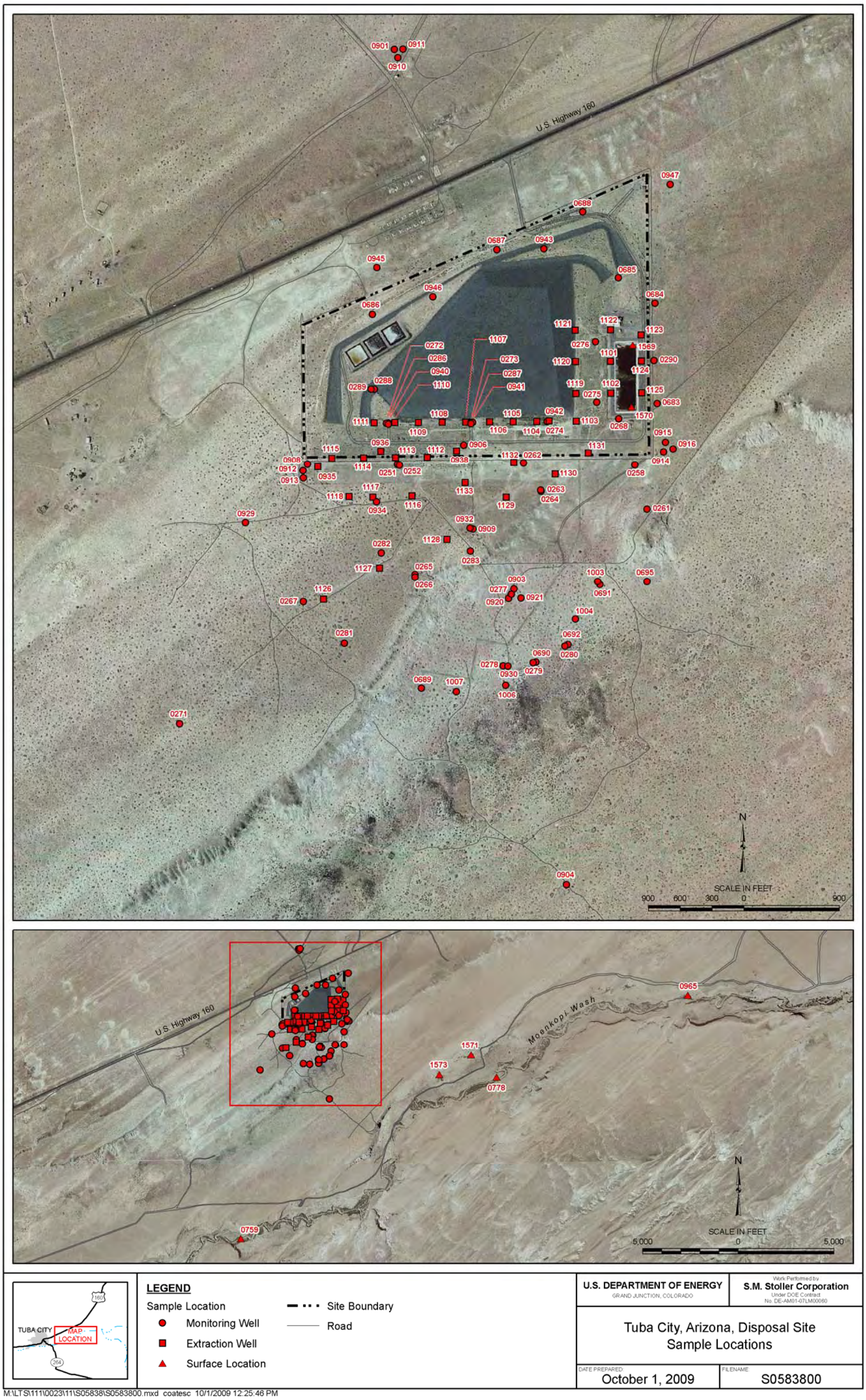
Analyte	Standard	Location	Concentration
Uranium	0.044	0935	0.11
Uranium	0.044	0938	0.51
Uranium	0.044	0941	0.19
Uranium	0.044	0942	0.51
Uranium	0.044	1101	0.25
Uranium	0.044	1101	0.25
Uranium	0.044	1102	0.32
Uranium	0.044	1103	0.41
Uranium	0.044	1104	0.68
Uranium	0.044	1105	0.95
Uranium	0.044	1106	0.73
Uranium	0.044	1107	0.062
Uranium	0.044	1108	0.44
Uranium	0.044	1109	0.29
Uranium	0.044	1110	0.2
Uranium	0.044	1111	0.2
Uranium	0.044	1112	0.049
Uranium	0.044	1114	0.082
Uranium	0.044	1115	0.099
Uranium	0.044	1118	0.08
Uranium	0.044	1119	0.4
Uranium	0.044	1120	0.17
Uranium	0.044	1121	0.052
Uranium	0.044	1123	0.21
Uranium	0.044	1129	0.71
Uranium	0.044	1130	0.22
Uranium	0.044	1132	1.6
Uranium	0.044	1133	0.078

T B Bartlett

Tim Bartlett
Site Hydrologist, S.M. Stoller

12/18/09

Date



Tuba City, Arizona, Disposal Site, Sample Location Map

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Data Assessment Summary

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Water Sampling Field Activities Verification Checklist

Project	Tuba City, Arizona	**Date(s) of Water Sampling**	August 10-13, 2009
Date(s) of Verification	October 2, 2009	**Name of Verifier**	Gretchen Baer

	Response (Yes, No, NA)	Comments
1. Is the SAP the primary document directing field procedures?	Yes	
List other documents, SOPs, instructions.		Work Order Letter dated July 2, 2009.
2. Were the sampling locations specified in the planning documents sampled?	No	Wells 0283, 0936, 0940, 1122, 1124 did not have enough water to sample. Extraction wells 1126, 1127, 1128, 1131 were not operational. Surface locations 0759, 0778, 0965 were dry.
3. Was a pre-trip calibration conducted as specified in the above-named documents?	Yes	Pre-trip calibrations were performed on August 6, 2009.
4. Was an operational check of the field equipment conducted daily?	Yes	Documentation for some op checks is missing due to a data error on one of the field computers.
Did the operational checks meet criteria?	No	One turbidity check result for the highest range was not recorded on 8/13/09. This does not affect sample data because sample turbidities were measured at the low range.
5. Were the number and types (alkalinity, temperature, specific conductance, pH, turbidity, DO, ORP) of field measurements taken as specified?	Yes	
6. Was the category of the well documented?	Yes	
7. Were the following conditions met when purging a Category I well:		
Was one pump/tubing volume purged prior to sampling?	Yes	
Did the water level stabilize prior to sampling?	Yes	
Did pH, specific conductance, and turbidity measurements stabilize prior to sampling?	No	Turbidity was >10 NTU at 0909. Samples were filtered & data are qualified as "Q."
Was the flow rate less than 500 mL/min?	Yes	
If a portable pump was used, was there a 4-hour delay between pump installation and sampling?	NA	

Water Sampling Field Activities Verification Checklist (continued)

	Response (Yes, No, NA)	Comments
8. Were the following conditions met when purging a Category II well:		
Was the flow rate less than 500 mL/min?	Yes	
Was one pump/tubing volume removed prior to sampling?	Yes	
9. Were duplicates taken at a frequency of one per 20 samples?	Yes	
10. Were equipment blanks taken at a frequency of one per 20 samples that were collected with nondedicated equipment?	Yes	Collected from locations 0252, 0276, 0687, 0691, 0943, & 1101.
11. Were trip blanks prepared and included with each shipment of VOC samples?	NA	
12. Were QC samples assigned a fictitious site identification number?	Yes	
Was the true identity of the samples recorded on the Quality Assurance Sample Log or in the Field Data Collection System (FDCS) report?	Yes	QC samples are also listed in trip report.
13. Were samples collected in the containers specified?	Yes	
14. Were samples filtered and preserved as specified?	Yes	
15. Were the number and types of samples collected as specified?	Yes	
16. Were chain of custody records completed and was sample custody maintained?	Yes	
17. Are field data sheets signed and dated by both team members (hardcopies) or are dates present for the “Date Signed” fields (FDCS)?	Yes	
18. Was all other pertinent information documented on the field data sheets?	Yes	
19. Was the presence or absence of ice in the cooler documented at every sample location?	Yes	
20. Were water levels measured at the locations specified in the planning documents?	Yes	The levels at locations at 0284, 0285, 0904 were inadvertently measured twice; all readings were consistent.

Laboratory Performance Assessment

General Information

Requisition No.:	09072474
Sample Event:	August 10-13, 2009
Site(s):	Tuba City, Arizona
Laboratory:	ALS Laboratory Group, Fort Collins, Colorado
Work Order No.:	0908109
Analysis:	Metals and Inorganics
Validator:	Gretchen Baer
Review Date:	October 2, 2009

This validation was performed according to the *Environmental Procedures Catalog* (LMS/PRO/S04325, continually updated) "Standard Practice for Validation of Laboratory Samples." The procedure was applied at Level 3, Data Validation. See attached Data Validation Worksheets for supporting documentation on the data review and validation. All analyses were successfully completed. The samples were prepared and analyzed using accepted procedures based on methods specified by line item code, which are listed in Table 2.

Table 2. Analytes and Methods

Analyte	Line Item Code	Prep Method	Analytical Method
Ammonia as N	WCH-A-005	MCAWW 350.1	MCAWW 350.1
Arsenic, Molybdenum, Selenium, Uranium	LMM-02	SW-846 3005A	SW-846 6020A
Calcium, Iron, Magnesium, Manganese, Potassium, Silica, Sodium	LMM-01	SW-846 3005A	SW-846 6010B
Chloride	MIS-A-039	SW-846 9056	SW-846 9056
Nitrite + Nitrate as N	WCH-A-022	MCAWW 353.2	MCAWW 353.2
Sulfate	MIS-A-044	SW-846 9056	SW-846 9056
Total Dissolved Solids	WCH-A-033	MCAWW 160.1	MCAWW 160.1

Data Qualifier Summary

Analytical results were qualified as listed in Table 3. Refer to the attached validation worksheets and the sections below for an explanation of the data qualifiers applied.

Table 3. Data Qualifiers

Sample Number	Location	Analyte	Flag	Reason
0908109-1	0251	Molybdenum	U	Less than 5 times the method blank
0908109-2	0252	Iron	U	Less than 5 times the method blank
0908109-2	0252	Iron	J	Negative calibration blank
0908109-2	0252	Molybdenum	U	Less than 5 times the method blank
0908109-3	0258	Iron	U	Less than 5 times the method blank

Table 3 (continued). Data Qualifiers

Sample Number	Location	Analyte	Flag	Reason
0908109-3	0258	Manganese	J	Negative calibration blank
0908109-7	0264	Iron	U	Less than 5 times the method blank
0908109-7	0264	Iron	J	Negative calibration blank
0908109-7	0264	Manganese	J	Negative calibration blank
0908109-8	0268	Iron	U	Less than 5 times the method blank
0908109-8	0268	Iron	J	Negative calibration blank
0908109-8	0268	Manganese	J	Negative calibration blank
0908109-8	0268	Molybdenum	U	Less than 5 times the method blank
0908109-9	0272	Iron	U	Less than 5 times the method blank
0908109-9	0272	Iron	J	Negative calibration blank
0908109-9	0272	Manganese	J	Negative calibration blank
0908109-9	0272	Molybdenum	U	Less than 5 times the method blank
0908109-10	0273	Iron	J	Negative calibration blank
0908109-10	0273	Manganese	J	Negative calibration blank
0908109-11	0274	Iron	J	Negative calibration blank
0908109-11	0274	Manganese	J	Negative calibration blank
0908109-12	0275	Iron	J	Negative calibration blank
0908109-12	0275	Molybdenum	U	Less than 5 times the method blank
0908109-13	0286	Iron	J	Negative calibration blank
0908109-14	0287	Iron	U	Less than 5 times the method blank
0908109-15	0288	Molybdenum	U	Less than 5 times the method blank
0908109-16	0289	Iron	J	Negative calibration blank
0908109-16	0289	Molybdenum	U	Less than 5 times the method blank
0908109-17	0290	Iron	U	Less than 5 times the method blank
0908109-17	0290	Iron	J	Negative calibration blank
0908109-17	0290	Manganese	J	Negative calibration blank
0908109-18	0683	Manganese	J	Negative calibration blank
0908109-19	0684	Iron	J	Negative calibration blank
0908109-19	0684	Manganese	J	Negative calibration blank
0908109-20	0685	Iron	U	Less than 5 times the method blank
0908109-20	0685	Iron	J	Negative calibration blank
0908109-20	0685	Manganese	J	Negative calibration blank
0908109-20	0685	Molybdenum	U	Less than 5 times the method blank
0908109-21	0686	Potassium	J	Major cation less than 5 times blank
0908109-21	0686	Selenium	J	Reporting limit verification failure
0908109-22	0687	Iron	J	Negative calibration blank
0908109-22	0687	Manganese	J	Negative calibration blank
0908109-22	0687	Potassium	J	Major cation less than 5 times blank
0908109-24	0914	Manganese	J	Negative calibration blank
0908109-24	0914	Uranium	U	Less than 5 times the calibration blank
0908109-25	0915	Arsenic	U	Less than 5 times the method blank
0908109-25	0915	Manganese	J	Negative calibration blank
0908109-25	0915	Uranium	U	Less than 5 times the calibration blank
0908109-26	0916	Arsenic	U	Less than 5 times the method blank
0908109-26	0916	Magnesium	J	Negative calibration blank
0908109-26	0916	Manganese	J	Negative calibration blank
0908109-26	0916	Uranium	U	Less than 5 times the calibration blank

Table 3 (continued). Data Qualifiers

Sample Number	Location	Analyte	Flag	Reason
0908109-27	0935	Molybdenum	U	Less than 5 times the calibration blank
0908109-29	0943	Iron	J	Negative calibration blank
0908109-29	0943	Potassium	J	Major cation less than 5 times blank
0908109-30	0945	Iron	J	Negative calibration blank
0908109-30	0945	Manganese	J	Negative calibration blank
0908109-31	0947	Iron	J	Negative calibration blank
0908109-31	0947	Manganese	J	Negative calibration blank
0908109-31	0947	Potassium	J	Major cation less than 5 times blank
0908109-32	1112	Molybdenum	U	Less than 5 times the calibration blank
0908109-33	1113	Iron	J	Negative calibration blank
0908109-33	1113	Manganese	J	Negative calibration blank
0908109-33	1113	Molybdenum	U	Less than 5 times the calibration blank
0908109-35	1115	Molybdenum	U	Less than 5 times the calibration blank
0908109-36	1116	Iron	J	Negative calibration blank
0908109-36	1116	Manganese	J	Negative calibration blank
0908109-36	1116	Molybdenum	U	Less than 5 times the calibration blank
0908109-37	1129	Iron	J	Negative calibration blank
0908109-37	1129	Manganese	J	Negative calibration blank
0908109-38	1130	Iron	J	Negative calibration blank
0908109-38	1130	Sulfate	J	Matrix spike failure
0908109-39	1132	Iron	J	Negative calibration blank
0908109-39	1132	Manganese	J	Negative calibration blank
0908109-40	1133	Manganese	J	Negative calibration blank
0908109-42	0943 dup, 2990	Iron	J	Negative calibration blank
0908109-42	0943 dup, 2990	Potassium	J	Major cation less than 5 times blank
0908109-43	0687 dup, 2991	Iron	J	Negative calibration blank
0908109-43	0687 dup, 2991	Manganese	J	Negative calibration blank
0908109-43	0687 dup, 2991	Potassium	J	Major cation less than 5 times blank
0908109-45	0266	Iron	J	Negative calibration blank
0908109-45	0266	Manganese	J	Negative calibration blank
0908109-46	0267	Iron	J	Negative calibration blank
0908109-47	0271	Iron	J	Negative calibration blank
0908109-47	0271	Manganese	J	Negative calibration blank
0908109-48	0276	Iron	J	Negative calibration blank
0908109-48	0276	Manganese	J	Negative calibration blank
0908109-48	0276	Potassium	J	Major cation less than 5 times blank
0908109-49	0277	Specific conductance	R	Sampling technique
0908109-52	0280	Iron	J	Negative calibration blank
0908109-52	0280	Manganese	J	Negative calibration blank
0908109-55	0689	Iron	J	Negative calibration blank
0908109-55	0689	Manganese	J	Negative calibration blank
0908109-55	0689	Potassium	J	Major cation less than 5 times blank
0908109-56	0690	Iron	J	Negative calibration blank
0908109-59	0695	Manganese	J	Negative calibration blank
0908109-60	0901	Potassium	J	Major cation less than 5 times blank
0908109-61	0903	Iron	J	Negative calibration blank
0908109-61	0903	Molybdenum	U	Less than 5 times the method blank

Table 3 (continued). Data Qualifiers

Sample Number	Location	Analyte	Flag	Reason
0908109-61	0903	Nitrite + Nitrate as N	J	Matrix spike failure
0908109-62	0904	Molybdenum	U	Less than 5 times the method blank
0908109-62	0904	Potassium	J	Major cation less than 5 times blank
0908109-65	0909	Iron	J	Negative calibration blank
0908109-65	0909	Manganese	J	Negative calibration blank
0908109-65	0909	Molybdenum	U	Less than 5 times the method blank
0908109-66	0910	Iron	J	Negative calibration blank
0908109-66	0910	Manganese	J	Negative calibration blank
0908109-66	0910	Molybdenum	U	Less than 5 times the method blank
0908109-66	0910	Potassium	J	Major cation less than 5 times blank
0908109-67	0911	Iron	J	Negative calibration blank
0908109-67	0911	Molybdenum	U	Less than 5 times the method blank
0908109-68	0912	Molybdenum	U	Less than 5 times the method blank
0908109-69	0913	Iron	J	Negative calibration blank
0908109-69	0913	Manganese	J	Negative calibration blank
0908109-69	0913	Molybdenum	U	Less than 5 times the method blank
0908109-70	0920	Manganese	J	Negative calibration blank
0908109-70	0920	Molybdenum	U	Less than 5 times the method blank
0908109-71	0921	Iron	J	Negative calibration blank
0908109-71	0921	Manganese	J	Negative calibration blank
0908109-71	0921	Molybdenum	U	Less than 5 times the method blank
0908109-72	0929	Iron	J	Negative calibration blank
0908109-72	0929	Manganese	J	Negative calibration blank
0908109-72	0929	Molybdenum	U	Less than 5 times the method blank
0908109-73	0930	Molybdenum	U	Less than 5 times the method blank
0908109-74	0932	Iron	J	Negative calibration blank
0908109-74	0932	Manganese	J	Negative calibration blank
0908109-74	0932	Molybdenum	U	Less than 5 times the method blank
0908109-75	0934	Iron	J	Negative calibration blank
0908109-75	0934	Molybdenum	U	Less than 5 times the method blank
0908109-76	0938	Iron	J	Negative calibration blank
0908109-77	0942	Iron	J	Negative calibration blank
0908109-78	0946	Potassium	J	Major cation less than 5 times blank
0908109-79	1003	Manganese	J	Negative calibration blank
0908109-79	1003	Molybdenum	U	Less than 5 times the method blank
0908109-80	1004	Iron	J	Negative calibration blank
0908109-80	1004	Manganese	J	Negative calibration blank
0908109-80	1004	Molybdenum	U	Less than 5 times the method blank
0908109-80	1004	Potassium	J	Major cation less than 5 times blank
0908109-82	1007	Iron	J	Negative calibration blank
0908109-82	1007	Manganese	J	Negative calibration blank
0908109-83	1101	Iron	J	Negative calibration blank
0908109-85	1103	Iron	J	Negative calibration blank
0908109-86	1104	Iron	J	Negative calibration blank
0908109-87	1105	Iron	J	Negative calibration blank
0908109-89	1107	Iron	J	Negative calibration blank
0908109-90	1108	Iron	J	Negative calibration blank

Table 3 (continued). Data Qualifiers

Sample Number	Location	Analyte	Flag	Reason
0908109-92	1110	Iron	J	Negative calibration blank
0908109-93	1111	Iron	J	Negative calibration blank
0908109-95	1118	Iron	J	Negative calibration blank
0908109-96	1119	Iron	U	Less than 5 times the method blank
0908109-97	1120	Iron	J	Negative calibration blank
0908109-98	1121	Iron	U	Less than 5 times the method blank
0908109-98	1121	Iron	J	Negative calibration blank
0908109-99	1123	Molybdenum	U	Less than 5 times the calibration blank
0908109-100	1125	Iron	U	Less than 5 times the method blank
0908109-100	1125	Manganese	J	Negative calibration blank
0908109-100	1125	Molybdenum	U	Less than 5 times the calibration blank
0908109-100	1125	Sodium	J	Serial dilution failure
0908109-103	1571	Iron	U	Less than 5 times the method blank
0908109-103	1571	Iron	J	Negative calibration blank
0908109-104	1573	Iron	U	Less than 5 times the method blank
0908109-104	1573	Iron	J	Negative calibration blank
0908109-104	1573	Manganese	J	Negative calibration blank
0908109-105	1101 dup, 2532	Iron	J	Negative calibration blank
0908109-106	0691 dup, 2987	Iron	U	Less than 5 times the method blank
0908109-107	0276 dup, 2989	Iron	U	Less than 5 times the method blank
0908109-107	0276 dup, 2989	Iron	J	Negative calibration blank
0908109-107	0276 dup, 2989	Manganese	J	Negative calibration blank

Sample Shipping/Receiving

ALS Laboratory Group in Fort Collins, Colorado, received 107 samples on August 13 and 15, 2009, accompanied by Chain of Custody (COC) forms. Copies of both air bills and four additional shipping labels were included in the receiving documentation. The COC forms were checked to confirm that all of the samples were listed with sample collection dates and times, and that signatures and dates were present indicating sample relinquishment and receipt. The COC forms had no errors or omissions, with one exception. The sample time for location 0921 differed from the time written on the bottle labels by one hour; the laboratory used the time on the COC for log in.

Preservation and Holding Times

The sample shipments were received intact with temperatures inside the iced coolers at 1.6, 2.6, and 1.0 °C, which complies with requirements. All samples were received in the correct container types and had been preserved correctly for the requested analyses. The laboratory noted that the unpreserved aliquots for locations 0916, 1569, and 1570 were received with pH values that were either above or below the expected range of 4-9. This is typical for samples from these locations; these pH values do not indicate field preservation errors. All samples were analyzed within the applicable holding times.

Laboratory Instrument Calibration

Compliance requirements for satisfactory instrument calibration are established to ensure that the instrument is capable of producing acceptable qualitative and quantitative data for all analytes. Initial calibration demonstrates that the instrument is capable of acceptable performance in the beginning of the analytical run and of producing a linear curve. Compliance requirements for continuing calibration checks are established to ensure that the instrument continues to be capable of producing acceptable qualitative and quantitative data. All laboratory instrument calibrations were performed correctly in accordance with the cited methods.

Method MCAWW 160.1

There is no initial or continuing calibration requirement associated with the determination of total dissolved solids.

Method MCAWW 350.1

The initial calibrations for ammonia as N were performed on August 18, 2009, using six calibration standards. The calibration curve correlation coefficient values were greater than 0.995 and the absolute values of the intercepts were less than 3 times the method detection limit (MDL). Calibration and laboratory spike standards were prepared from independent sources. Initial and continuing calibration verification checks were made at the required frequency resulting in 17 verification checks. All calibration verification checks met the acceptance criteria.

Method MCAWW 353.2

The initial calibrations for nitrate + nitrite as N were performed on August 20 and October 14, 2009, using seven calibration standards. The calibration curve correlation coefficient values were greater than 0.995 and the absolute values of the intercepts were less than 3 times the MDL. Calibration and laboratory spike standards were prepared from independent sources. Initial and continuing calibration verification checks were made at the required frequency resulting in 17 verification checks. All calibration verification checks met the acceptance criteria.

Method SW-846 6010B

Calibrations for calcium, iron, magnesium, manganese, potassium, silica, and sodium were performed on August 21 and 24, 2009, using three calibration standards. The correlation coefficient values were greater than 0.995. The absolute values of the intercepts were greater than 3 times the MDL; however, the intercepts were less than 3 times the reporting limits. Calibration and laboratory spike standards were prepared from independent sources. Initial and continuing calibration verification checks were made at the required frequency resulting in 31 verification checks. All calibration checks met the acceptance criteria. Reporting limit verification checks were made at the required frequency to verify the linearity of the calibration curve near the practical quantitation limit and all results were within the acceptance range.

Method SW-846 6020A

Calibrations for molybdenum and uranium were performed on August 20 and 24, 2009, and for arsenic and selenium on August 21 and 25, 2009, using at least seven calibration standards. The calibration curve correlation coefficient values were greater than 0.995. The absolute values of the calibration curve intercepts were slightly greater than 3 times the MDL for some calibrations, but are acceptable for this project. Calibration and laboratory spike standards were prepared from independent sources. Initial and continuing calibration verification checks were made at the required frequency resulting in 36 verification checks. All calibration checks met the acceptance criteria. Reporting limit verification checks were made at the required frequency to verify the linearity of the calibration curve near the practical quantitation limit and all results were within the acceptance range, with the following exception. A selenium check result was above the acceptance range. The affected results that were less than 5 times the practical quantitation limit and above the detection limit are qualified with a "J" flag (estimated). Mass calibration and resolution verifications were performed at the beginning of each analytical run in accordance with the analytical procedure. Internal standard recoveries associated with requested analytes were stable and within acceptable ranges.

Method SW-846 9056

Calibrations for chloride and sulfate were performed on August 14 and 18, 2009, using five calibration standards. The calibration curve correlation coefficient values were greater than 0.995 and the absolute values of the intercepts were less than 3 times the MDL. Calibration and laboratory spike standards were prepared from independent sources. Initial and continuing calibration verification checks were made at the required frequency resulting in 20 verification checks. All calibration checks met the acceptance criteria.

Method and Calibration Blanks

Method blanks are analyzed to assess any contamination that may have occurred during sample preparation. Calibration blanks are analyzed to assess instrument contamination prior to and during sample analysis. All method blank and initial and continuing calibration blank results associated with the samples were below the practical quantitation limits (PQLs) for all analytes with the following exceptions. Some nitrate + nitrite as N, chloride, and sulfate calibration blanks were slightly above the PQLs. All samples associated with these blanks had chloride and sulfate concentrations greater than 10 times the blank. In cases where a blank concentration exceeds the MDL, the associated sample results are qualified with a "U" flag (not detected) when the sample result is greater than the MDL but less than 5 times the blank concentration. Some results for major cations were only slightly below 5 times an associated blank; these results are flagged with a "J" as estimated values.

For calcium, iron, magnesium, and manganese, the values of some blank results were negative and the absolute values were greater than the MDLs. All calcium results were greater than 5 times the MDLs, so no results were qualified. The associated iron, magnesium, and manganese samples with results less than 5 times the MDL are flagged with a "J" as estimated values.

Inductively Coupled Plasma (ICP) Interference Check Sample (ICS) Analysis

ICP interference check samples ICSA and ICSAB were analyzed at the required frequency to verify the instrumental interelement and background correction factors. All check sample results met the acceptance criteria.

Matrix Spike Analysis

Matrix spike and matrix spike duplicate (MS/MSD) samples are used to measure method performance in the sample matrix. The MS/MSD data are not evaluated when the concentration of the unspiked sample is greater than 4 times the spike concentration. The spike recoveries met the recovery and precision criteria for all analytes evaluated with the following exceptions. The spike recoveries were below the acceptance range for some nitrate + nitrite as N and sulfate samples. The sample results associated with the failed spike results are qualified with a "J" flag as estimated values. Some spike recoveries of chloride and sulfate exceeded the laboratory's acceptance criteria, but were within the ±25 percent requirement for methods for which no digestion is employed.

Laboratory Replicate Analysis

Laboratory replicate sample results demonstrate acceptable laboratory precision. The relative percent difference (RPD) values for the sample replicates and matrix spike replicates were less than 20 percent for results that are greater than 5 times the PQL.

Laboratory Control Sample

Laboratory control samples were analyzed at the correct frequency to provide information on the accuracy of the analytical method and the overall laboratory performance, including sample preparation. The results were acceptable for all analytes.

Metals Serial Dilution

Serial dilutions were prepared and analyzed for the metals analyses to monitor chemical or physical interferences in the sample matrix. Serial dilution data are evaluated when the concentration of the undiluted sample is greater than 100 times the PQL for ICP-MS or greater than 50 times the PQL for ICP. A serial dilution percent difference for a selenium and a sodium were above the acceptance criteria. The sample results associated with the failed serial dilutions are qualified with a "J" flag as estimated values.

Detection Limits/Dilutions

Samples were diluted in a consistent and acceptable manner when required. The samples were diluted prior to analysis of molybdenum and uranium to reduce interferences. The required detection limits were achieved for all analytes.

Completeness

Results were reported in the correct units for all analytes requested using contract-required laboratory qualifiers.

Chromatography Peak Integration

The integration of analyte peaks was reviewed for all ion chromatography data. There were no manual integrations performed and all peak integrations were satisfactory.

Electronic Data Deliverable (EDD) File

The EDD file arrived on August 26, 2009, and the data were loaded into SEEPro on September 29, 2009. An EDD file arrived on November 20, 2009, that included replacement values for the nitrate + nitrite as N results for location 1571, in response to Request for Information #09-2385. The Sample Management System EDD validation module was used to verify that the EDD file was complete and in compliance with requirements. The module compares the contents of the file to the requested analyses to ensure all and only the requested data are delivered. The contents of the EDD were manually examined to verify that the sample results accurately reflect the data contained in the sample data package.

Anion/Cation Balance

The anion/cation balance is used to determine if major ion concentrations have been quantified correctly. The total anions should balance with (be equal to) the total cations when expressed in milliequivalents per liter (meq/L). Table 4 shows the total anion and cation results from this event and the charge balance, which is a RPD calculation. Typically, a charge balance difference of 10 percent is considered acceptable.

Table 4. Comparison of Major Anions and Cations

Location	Cations (meq/L)	Anions (meq/L)	Charge Balance (%)
0251	2.29	2.38	2.0
0252	1.81	2.08	6.8
0258	2.77	2.86	1.6
0261	2.71	3.07	6.1
0262	56.41	55.77	0.6
0263	60.98	62.68	1.4
0264	4.27	5.11	8.9
0265	46.39	51.25	5.0
0266	2.31	2.65	6.8
0267	108.55	106.44	1.0
0268	6.99	6.65	2.6
0271	2.71	2.99	4.9
0272	2.42	2.44	0.4
0273	13.32	14.44	4.0
0274	2.63	2.44	3.7

Table 4 (continued). Comparison of Major Anions and Cations

Location	Cations (meq/L)	Anions (meq/L)	Charge Balance (%)
0275	71.55	67.96	2.6
0276	2.85	2.72	2.4
0277	2.59	2.72	2.5
0278	2.48	2.11	8.1
0279	4.54	4.75	2.3
0280	3.12	3.05	1.1
0281	8.70	9.43	4.0
0282	7.23	5.39	14.6
0286	20.58	20.02	1.4
0287	55.16	55.20	0.0
0288	17.40	16.55	2.5
0289	14.54	14.41	0.5
0290	2.84	2.90	1.1
0684	2.79	2.94	2.6
0685	3.24	2.98	4.3
0686	1.71	1.08	22.5
0687	1.69	1.01	25.3
0688	8.80	7.72	6.6
0689	2.74	2.64	2.0
0690	2.44	2.45	0.3
0691	17.44	15.78	5.0
0692	2.73	2.07	13.6
0695	3.64	3.97	4.3
0901	3.93	4.23	3.7
0903	5.04	4.52	5.4
0904	10.85	14.29	13.7
0906	92.23	93.95	0.9
0908	83.33	86.46	1.8
0909	37.52	36.92	0.8
0910	2.78	2.80	0.5
0911	2.20	2.37	3.8
0912	20.72	20.13	1.4
0913	1.96	2.21	5.9
0914	1.44	1.55	3.6
0915	1.59	1.70	3.2
0916	5.45	5.15	2.9
0920	2.54	2.40	2.7
0921	2.06	5.16	43.0
0929	3.59	4.37	9.8
0930	4.47	4.48	0.2
0932	3.28	3.64	5.2
0934	120.81	108.99	5.1
0935	76.87	70.00	4.7
0938	54.51	62.08	6.5
0941	58.34	55.40	2.6
0942	97.00	97.71	0.4
0943	2.14	2.07	1.6

Table 4 (continued). Comparison of Major Anions and Cations

Location	Cations (meq/L)	Anions (meq/L)	Charge Balance (%)
0945	3.24	3.35	1.8
0946	2.20	2.02	4.3
0947	2.77	2.65	2.1
1003	20.23	19.48	1.9
1004	4.80	4.66	1.5
1006	2.42	2.29	2.7
1007	2.66	3.22	9.5
1101	38.71	37.42	1.7
1102	40.56	38.94	2.1
1103	60.97	61.50	0.4
1104	43.55	43.31	0.3
1105	35.80	36.36	0.8
1106	33.60	34.37	1.1
1107	18.21	17.77	1.2
1108	58.26	59.82	1.3
1109	44.53	44.45	0.1
1110	40.57	39.00	2.0
1111	47.83	51.35	3.5
1112	11.57	10.85	3.2
1113	6.37	6.60	1.7
1114	27.99	26.09	3.5
1115	31.94	29.46	4.0
1116	14.26	14.67	1.4
1117	35.39	32.96	3.6
1118	56.39	60.63	3.6
1119	62.92	66.88	3.1
1120	42.32	47.32	5.6
1121	20.79	22.36	3.6
1123	41.13	44.61	4.1
1125	4.56	4.75	2.1
1129	33.63	29.44	6.7
1130	57.22	66.18	7.3
1132	51.38	48.88	2.5
1133	10.16	10.22	0.3
1569	5341.16	6548.59	10.2
1570	5930.59	6753.85	6.5
1571	5.32	6.84	12.5
1573	3.78	5.04	14.3

The charge balance value for most locations was less than 10 percent.

At nine locations, the charge balances were above 10 percent; there were no analytical errors identified during the review of the data. At location 0921, the recorded alkalinity (an anion) value was approximately twice the historical average.

SAMPLE MANAGEMENT SYSTEM
General Data Validation Report

RIN: 09072474 **Lab Code:** PAR **Validator:** Gretchen Baer **Validation Date:** 11/20/2009

Project: Tuba City **Analysis Type:** ☑ Metals ☑ General Chem ☐ Rad ☐ Organics

# of Samples: 107 **Matrix:** WATER **Requested Analysis Completed:** Yes

Chain of Custody

Present: OK **Signed:** OK **Dated:** OK

Sample

Integrity: OK **Preservation:** OK **Temperature:** OK

Select Quality Parameters

☑ Holding Times	All analyses were completed within the applicable holding times.
☑ Detection Limits	The reported detection limits are equal to or below contract requirements.
☐ Field/Trip Blanks	
☑ Field Duplicates	There were 6 duplicates evaluated.

SAMPLE MANAGEMENT SYSTEM

Metals Data Validation Worksheet

RIN: 09072474 **Lab Code:** PAR **Date Due:** 9/10/2009

Matrix: Water **Site Code:** TUB **Date Completed:** 8/28/2009

Analyte	Date Analyzed	CALIBRATION						Method Blank	LCS %R	MS %R	MSD %R	Dup. RPD	ICSAB %R	Serial Dil. %R	CRI %R
		Int.	R^2	ICV	CCV	ICB	CCB								
1ARSENIC	08/21/2009	-0.0410	1.0000	OK	OK	OK	OK	OK	98.0	89.0	91.0	1.0		4.0	107.0
1ARSENIC	08/21/2009	-0.0390	1.0000	OK	OK	OK	OK	OK	99.0	89.0	88.0	0.0		5.0	105.0
1ARSENIC	08/21/2009							OK	100.0	97.0	96.0	0.0		3.0	102.0
1ARSENIC	08/21/2009							OK	100.0	92.0	93.0	0.0			99.0
1ARSENIC	08/25/2009							OK	100.0	95.0	97.0	1.0			98.0
1ARSENIC	08/25/2009							OK	101.0	88.0	89.0	0.0		6.0	
1SELENIUM	08/21/2009	-0.1300	0.9999	OK	OK	OK	OK	OK	95.0	80.0	82.0	2.0			149.0
1SELENIUM	08/21/2009	-0.1250	1.0000	OK	OK	OK	OK	OK	95.0	84.0	84.0	1.0			116.0
1SELENIUM	08/21/2009							OK	97.0	89.0	85.0	1.0			121.0
1SELENIUM	08/21/2009							OK	96.0	85.0	83.0	1.0		5.0	97.0
1SELENIUM	08/25/2009							OK	96.0	87.0	88.0	1.0			95.0
1SELENIUM	08/25/2009							OK	97.0	83.0	82.0	0.0		18.0	
2Molybdenum	08/20/2009	-0.0020	1.0000	OK	OK	OK	OK	OK	103.0	102.0	103.0	1.0			107.0
2Molybdenum	08/24/2009	-0.0020	1.0000	OK	OK	OK	OK	OK	100.0	101.0	101.0	0.0			103.0
2Molybdenum	08/24/2009							OK	101.0	102.0	103.0	1.0			124.0
2Molybdenum	08/24/2009							OK	99.0	101.0	100.0	1.0			114.0
2Molybdenum	08/24/2009							OK	99.0	102.0	102.0	1.0			

SAMPLE MANAGEMENT SYSTEM

Metals Data Validation Worksheet

RIN: 09072474 **Lab Code:** PAR **Date Due:** 9/10/2009

Matrix: Water **Site Code:** TUB **Date Completed:** 8/28/2009

Analyte	Date Analyzed	CALIBRATION						Method Blank	LCS %R	MS %R	MSD %R	Dup. RPD	ICSAB %R	Serial Dil. %R	CRI %R
		Int.	R^2	ICV	CCV	ICB	CCB								
2Molybdenum	08/24/2009							OK	98.0	103.0	101.0	2.0			
2URANIUM	08/20/2009	0.0000	1.0000	OK	OK	OK	OK	OK	104.0	105.0	105.0	0.0			107.0
2URANIUM	08/24/2009	0.0000	1.0000	OK	OK	OK	OK	OK	103.0	105.0	104.0	1.0			111.0
2URANIUM	08/24/2009							OK	104.0	102.0	105.0	2.0		1.0	105.0
2URANIUM	08/24/2009							OK	100.0	101.0	99.0	2.0		4.0	110.0
2URANIUM	08/24/2009							OK	100.0	106.0	102.0	3.0		6.0	
2URANIUM	08/24/2009							OK	99.0	105.0	105.0	0.0		5.0	
CALCIUM	08/21/2009	43.0000	0.9998	OK	OK	OK	OK	OK	103.0	96.0	95.0	1.0	105.0	7.0	103.0
CALCIUM	08/21/2009											1.0			
CALCIUM	08/24/2009	38.0000	0.9999	OK	OK	OK	OK	OK	103.0	101.0	99.0	1.0	99.0	2.0	98.0
CALCIUM	08/24/2009							OK	95.0	102.0	101.0	0.0	103.0	3.0	107.0
CALCIUM	08/24/2009							OK	101.0	102.0	107.0	3.0	107.0	4.0	106.0
CALCIUM	08/24/2009							OK	98.0	99.0	95.0	1.0	96.0	1.0	101.0
CALCIUM	08/24/2009							OK	100.0	95.0	95.0	0.0	104.0	3.0	107.0
CALCIUM	08/24/2009											4.0			
CALCIUM	08/24/2009											1.0			
CALCIUM	08/24/2009											0.0			

SAMPLE MANAGEMENT SYSTEM

Metals Data Validation Worksheet

RIN: 09072474 **Lab Code:** PAR **Date Due:** 9/10/2009

Matrix: Water **Site Code:** TUB **Date Completed:** 8/28/2009

Analyte	Date Analyzed	CALIBRATION						Method Blank	LCS %R	MS %R	MSD %R	Dup. RPD	ICSAB %R	Serial Dil. %R	CRI %R
		Int.	R^2	ICV	CCV	ICB	CCB								
CALCIUM	08/24/2009											2.0			
CALCIUM	08/24/2009											1.0			
IRON	08/21/2009	-9.0000	1.0000	OK	OK	OK	OK	OK	100.0	90.0	89.0	1.0	102.0		95.0
IRON	08/24/2009	-8.0000	0.9999	OK	OK	OK	OK	OK	95.0	88.0	87.0	1.0	96.0		91.0
IRON	08/24/2009							OK	90.0	91.0	91.0	0.0	101.0		99.0
IRON	08/24/2009							OK	91.0	95.0	96.0	2.0	103.0		98.0
IRON	08/24/2009							OK	91.0	91.0	90.0	1.0	95.0		94.0
IRON	08/24/2009							OK	96.0	88.0	88.0	1.0	100.0		98.0
MAGNESIUM	08/21/2009	21.0000	0.9998	OK	OK	OK	OK	OK	103.0	99.0	98.0	1.0	104.0	7.0	101.0
MAGNESIUM	08/21/2009											1.0			
MAGNESIUM	08/24/2009	16.0000	0.9999	OK	OK	OK	OK	OK	102.0	101.0	100.0	1.0	99.0	6.0	97.0
MAGNESIUM	08/24/2009							OK	97.0	101.0	100.0	0.0	103.0		105.0
MAGNESIUM	08/24/2009							OK	100.0	101.0	104.0	2.0	104.0	4.0	103.0
MAGNESIUM	08/24/2009							OK	99.0	99.0	97.0	1.0	96.0	2.0	99.0
MAGNESIUM	08/24/2009							OK	100.0	97.0	97.0	0.0	103.0	0.0	105.0
MAGNESIUM	08/24/2009											0.0			
MAGNESIUM	08/24/2009											2.0			

SAMPLE MANAGEMENT SYSTEM

Metals Data Validation Worksheet

RIN: 09072474 **Lab Code:** PAR **Date Due:** 9/10/2009

Matrix: Water **Site Code:** TUB **Date Completed:** 8/28/2009

Analyte	Date Analyzed	CALIBRATION						Method Blank	LCS %R	MS %R	MSD %R	Dup. RPD	ICSAB %R	Serial Dil. %R	CRI %R
		Int.	R^2	ICV	CCV	ICB	CCB								
MAGNESIUM	08/24/2009											1.0			
MANGANESE	08/21/2009	-0.6000	1.0000	OK	OK	OK	OK	OK	96.0	93.0	92.0	1.0	93.0	4.0	99.0
MANGANESE	08/24/2009	-0.7000	1.0000	OK	OK	OK	OK	OK	97.0	93.0	92.0	1.0	88.0		93.0
MANGANESE	08/24/2009							OK	90.0	92.0	91.0	0.0	92.0		100.0
MANGANESE	08/24/2009							OK	92.0	96.0	98.0	2.0	93.0		99.0
MANGANESE	08/24/2009							OK	91.0	92.0	91.0	1.0	87.0		95.0
MANGANESE	08/24/2009							OK	92.0	90.0	89.0	1.0	91.0		98.0
POTASSIUM	08/21/2009	99.9900	1.0000	OK	OK	OK	OK	OK	99.0	100.0	99.0	1.0			88.0
POTASSIUM	08/24/2009	99.9900	1.0000	OK	OK	OK	OK	OK	101.0	100.0	100.0	0.0			84.0
POTASSIUM	08/24/2009							OK	109.0	100.0	99.0	1.0			87.0
POTASSIUM	08/24/2009							OK	97.0	102.0	103.0	1.0			86.0
POTASSIUM	08/24/2009							OK	97.0	113.0	112.0	1.0			89.0
POTASSIUM	08/24/2009							OK	96.0	98.0	97.0	1.0			90.0
SILICON	08/21/2009	95.0000	1.0000	OK	OK	OK	OK	OK	97.0	84.0	82.0	1.0	92.0	4.0	102.0
SILICON	08/21/2009											1.0			
SILICON	08/24/2009	96.0000	1.0000	OK	OK	OK	OK	OK	100.0	95.0	93.0	1.0	88.0	1.0	95.0
SILICON	08/24/2009							OK	97.0	92.0	91.0	0.0	92.0	2.0	101.0

SAMPLE MANAGEMENT SYSTEM

Metals Data Validation Worksheet

RIN: 09072474 **Lab Code:** PAR **Date Due:** 9/10/2009

Matrix: Water **Site Code:** TUB **Date Completed:** 8/28/2009

Analyte	Date Analyzed	CALIBRATION						Method Blank	LCS %R	MS %R	MSD %R	Dup. RPD	ICSAB %R	Serial Dil. %R	CRI %R
		Int.	R^2	ICV	CCV	ICB	CCB								
SILICON	08/24/2009							OK	99.0	92.0	99.0	2.0	89.0	1.0	90.0
SILICON	08/24/2009							OK	99.0	96.0	93.0	1.0	91.0	1.0	101.0
SILICON	08/24/2009							OK	99.0	87.0	84.0	1.0	93.0	5.0	111.0
SILICON	08/24/2009											3.0			
SILICON	08/24/2009											1.0			
SILICON	08/24/2009											0.0			
SILICON	08/24/2009											1.0			
SILICON	08/24/2009											1.0			
SODIUM	08/21/2009	19.0000	1.0000	OK	OK	OK	OK	OK	101.0	100.0	99.0	1.0		5.0	96.0
SODIUM	08/21/2009											1.0			
SODIUM	08/24/2009	22.0000	1.0000	OK	OK	OK	OK	OK	98.0	99.0	99.0	0.0		2.0	96.0
SODIUM	08/24/2009							OK	98.0	99.0	98.0	1.0		4.0	93.0
SODIUM	08/24/2009							OK	100.0	97.0	98.0	1.0		7.0	88.0
SODIUM	08/24/2009							OK	99.0	97.0	96.0	1.0		2.0	94.0
SODIUM	08/24/2009							OK	99.0	98.0	97.0	1.0		11.0	98.0
SODIUM	08/24/2009											1.0			
SODIUM	08/24/2009											1.0			

SAMPLE MANAGEMENT SYSTEM

Metals Data Validation Worksheet

RIN: 09072474 **Lab Code:** PAR **Date Due:** 9/10/2009

Matrix: Water **Site Code:** TUB **Date Completed:** 8/28/2009

Analyte	Date Analyzed	CALIBRATION						Method Blank	LCS %R	MS %R	MSD %R	Dup. RPD	ICSAB %R	Serial Dil. %R	CRI %R
		Int.	R^2	ICV	CCV	ICB	CCB								
SODIUM	08/24/2009											0.0			
SODIUM	08/24/2009											0.0			
SODIUM	08/24/2009											0.0			

SAMPLE MANAGEMENT SYSTEM

Wet Chemistry Data Validation Worksheet

RIN: 09072474 **Lab Code:** PAR **Date Due:** 9/10/2009

Matrix: Water **Site Code:** TUB **Date Completed:** 8/28/2009

Analyte	Date Analyzed	CALIBRATION						Method Blank	LCS %R	MS %R	MSD %R	DUP RPD	Serial Dil. %R
		Int.	R^2	ICV	CCV	ICB	CCB						
AMMONIA AS N	08/18/2009	-0.021	1.0000	OK	OK	OK	OK	OK	100	96	97	0	
AMMONIA AS N	08/18/2009							OK	100	102	97	5	
AMMONIA AS N	08/18/2009							OK	100	94	98	4	
AMMONIA AS N	08/18/2009							OK	101	99	101	2	
AMMONIA AS N	08/18/2009							OK	100	95	95	0	
AMMONIA AS N	08/18/2009							OK	102				
CHLORIDE	08/14/2009	0.036	0.9999	OK	OK	OK	OK	OK	100	96	97	1	
CHLORIDE	08/14/2009							OK	95	108			
CHLORIDE	08/14/2009									98			
CHLORIDE	08/15/2009							OK	97	79	104	3	
CHLORIDE	08/15/2009									94	94	0	
CHLORIDE	08/18/2009	0.021	1.0000	OK	OK	OK	OK	OK	97	107	103	2	
CHLORIDE	08/18/2009							OK	96	101	100	0	
CHLORIDE	08/18/2009							OK	99	103	98	2	
CHLORIDE	08/18/2009							OK	96	99			

SAMPLE MANAGEMENT SYSTEM

Wet Chemistry Data Validation Worksheet

RIN: 09072474 **Lab Code:** PAR **Date Due:** 9/10/2009

Matrix: Water **Site Code:** TUB **Date Completed:** 8/28/2009

Analyte	Date Analyzed	CALIBRATION						Method Blank	LCS %R	MS %R	MSD %R	DUP RPD	Serial Dil. %R
		Int.	R^2	ICV	CCV	ICB	CCB						
CHLORIDE	08/19/2009									99	97	1	
CHLORIDE	08/19/2009									99			
CHLORIDE	08/19/2009									103			
NITRATE/NITRITE AS N	08/20/2009							OK	94	95	69	6	
NITRATE/NITRITE AS N	08/20/2009							OK	91	87	80	1	
NITRATE/NITRITE AS N	08/20/2009							OK	91	93	88	1	
NITRATE/NITRITE AS N	08/20/2009	0.000	0.9992	OK	OK	OK	OK	OK	97	86	89	1	
NITRATE/NITRITE AS N	08/20/2009							OK	103				
NITRATE/NITRITE AS N	08/20/2009	0.000	0.9997	OK	OK	OK	OK	OK	95	83	85	0	
NITRATE/NITRITE AS N	10/14/2009	0.000	0.9989	OK	OK	OK	OK	OK					
SULFATE	08/14/2009	0.558	0.9999	OK	OK	OK	OK	OK	100	101	101	0	
SULFATE	08/14/2009							OK	92	125			
SULFATE	08/14/2009									101			
SULFATE	08/15/2009							OK	97	37	118	2	
SULFATE	08/15/2009									93	97	2	

SAMPLE MANAGEMENT SYSTEM

Wet Chemistry Data Validation Worksheet

RIN: 09072474 **Lab Code:** PAR **Date Due:** 9/10/2009

Matrix: Water **Site Code:** TUB **Date Completed:** 8/28/2009

Analyte	Date Analyzed	CALIBRATION						Method Blank	LCS %R	MS %R	MSD %R	DUP RPD	Serial Dil. %R
		Int.	R^2	ICV	CCV	ICB	CCB						
SULFATE	08/18/2009	0.228	1.0000	OK	OK	OK	OK	OK	98	106	101	1	
SULFATE	08/18/2009							OK	97	109	111	0	
SULFATE	08/18/2009							OK	99	115	106	2	
SULFATE	08/18/2009							OK	97	106			
SULFATE	08/19/2009									101	104	1	
SULFATE	08/19/2009									103			
SULFATE	08/19/2009									106			
TOTAL DISSOLVED SOLIDS	08/17/2009							OK	103			2	
TOTAL DISSOLVED SOLIDS	08/17/2009							OK	98			3	
TOTAL DISSOLVED SOLIDS	08/18/2009							OK	100			2	
TOTAL DISSOLVED SOLIDS	08/19/2009							OK	101			2	
TOTAL DISSOLVED SOLIDS	08/19/2009							OK	101			1	
TOTAL DISSOLVED SOLIDS	08/20/2009							OK	101			6	

Sampling Quality Control Assessment

The following information summarizes and assesses quality control for this sampling event.

Sampling Protocol

Sample results for monitoring wells that met the Category I, II, or III low-flow sampling criteria were qualified with an "F" flag in the database, indicating the wells were purged and sampled using the low-flow sampling method. All monitoring wells are equipped with either dedicated downhole and pumphead tubing or a bladder pump. Extraction wells (0935, 0938, 0942, 1101, 1102, 1103, 1104, 1105, 1106, 1107, 1108, 1109, 1110, 1111, 1112, 1113, 1114, 1115, 1116, 1117, 1118, 1119, 1120, 1121, 1123, 1125, 1129, 1130, 1132, and 1133) are spigot samples and are designated as Category IV.

All monitoring wells met the Category I criteria and were sampled with dedicated tubing using the low-flow purge procedure with the following exceptions.

- Turbidity requirements could not be met at well 0909.
- The following 34 wells were classified as Category II or III: 0251, 0258, 0262, 0263, 0264, 0266, 0273, 0274, 0277, 0278, 0280, 0281, 0286, 0287, 0288, 0289, 0290, 0683, 0684, 0690, 0692, 0906, 0908, 0911, 0912, 0913, 0914, 0915, 0916, 0929, 0934, 0941, 0945, and 0947.

The sample results for these 35 wells were qualified with a "Q" flag, indicating the data are qualitative because of the sampling technique.

Equipment Blank Assessment

No equipment blanks were taken. All groundwater and surface water samples were collected using dedicated equipment that did not require equipment blanks.

Field Duplicate Analysis

Field duplicate samples are collected and analyzed as an indication of overall precision of the measurement process. The precision observed includes both field and laboratory precision and has more variability than laboratory duplicates, which measure only laboratory performance. Duplicate samples were collected from locations 0252, 0276, 0687, 0691, 0943, and 1101. The EPA recommended laboratory duplicate criterion is less than 20 percent relative difference for results that are greater than 5 times the PQL. The duplicate results were acceptable with the exception of chloride at location 0691, with an RPD of 22 percent. There were no analytical errors identified during the review of the data.

SAMPLE MANAGEMENT SYSTEM

Validation Report: Field Duplicates

RIN: 09072474 **Lab Code:** PAR **Project:** Tuba City **Validation Date:** 10/1/2009

Duplicate: 2532 **Sample:** 1101

Analyte	Sample Result	Flag	Error	Duplicate Result	Flag	Error	RPD	RER	Units
ARSENIC	1.2			1.2			0		UG/L
CALCIUM	430000			370000			15.00		UG/L
CHLORIDE	97			110			12.56		MG/L
IRON	2.7	B		1.6	U				UG/L
MAGNESIUM	100000			94000			6.19		UG/L
MANGANESE	470			420			11.24		UG/L
MOLYBDENUM	0.54	B		0.54	B		0		UG/L
NITRATE/NITRITE AS N	72			75			4.08		MG/L
POTASSIUM	9200			9900			7.33		UG/L
SELENIUM	17			17			0		UG/L
SODIUM	200000			190000			5.13		UG/L
SULFATE	1100			1100			0		MG/L
TOTAL DISSOLVED SOLIDS	2500			2600			3.92		MG/L
URANIUM	250			250			0		UG/L

Duplicate: 2987 **Sample:** 0691

Analyte	Sample Result	Flag	Error	Duplicate Result	Flag	Error	RPD	RER	Units
AMMONIA AS N	0.1	U		0.1	U				MG/L
ARSENIC	1.2			1.2			0		UG/L
CALCIUM	250000			240000			4.08		UG/L
CHLORIDE	40			50			22.22		MG/L
IRON	51			29	B		55.00		UG/L
MAGNESIUM	40000			39000			2.53		UG/L
MANGANESE	200			200			0		UG/L
MOLYBDENUM	0.28	B		0.23	B				UG/L
NITRATE/NITRITE AS N	51			52			1.94		MG/L
POTASSIUM	4200			4800			13.33		UG/L
SELENIUM	2.8			3			6.90		UG/L
Silica	15000			14000			6.90		UG/L
SILICON	6800			6600			2.99		UG/L
SODIUM	36000			36000			0		UG/L
SULFATE	360			410			12.99		MG/L
TOTAL DISSOLVED SOLIDS	1300			1200			8.00		MG/L
URANIUM	38			39			2.60		UG/L

SAMPLE MANAGEMENT SYSTEM

Validation Report: Field Duplicates

RIN: 09072474 **Lab Code:** PAR **Project:** Tuba City **Validation Date:** 10/1/2009

Duplicate: 2988 **Sample:** 0252

Analyte	Sample Result	Flag	Error	Duplicate Result	Flag	Error	RPD	RER	Units
AMMONIA AS N	0.1	U		0.1	U				MG/L
ARSENIC	2.5			2.4			4.08		UG/L
CALCIUM	20000			21000			4.88		UG/L
CHLORIDE	4.6			4.8			4.26		MG/L
IRON	3.5	B		17	B				UG/L
MAGNESIUM	3900			4000			2.53		UG/L
MANGANESE	2.7	B		3.3	B		20.00		UG/L
MOLYBDENUM	0.29	B		0.34	B				UG/L
NITRATE/NITRITE AS N	2.2			2.2			0		MG/L
POTASSIUM	2200			2300			4.44		UG/L
SELENIUM	0.66			0.67			1.50		UG/L
Silica	9300			9900			6.25		UG/L
SILICON	4300			4600			6.74		UG/L
SODIUM	9900			10000			1.01		UG/L
SULFATE	6.2			5.9			4.96		MG/L
TOTAL DISSOLVED SOLIDS	140			130			7.41		MG/L
URANIUM	2.1			1.9			10.00		UG/L

Duplicate: 2989 **Sample:** 0276

Analyte	Sample Result	Flag	Error	Duplicate Result	Flag	Error	RPD	RER	Units
AMMONIA AS N	0.1	U		0.1	U				MG/L
ARSENIC	2.6			2.6			0		UG/L
CALCIUM	34000			32000			6.06		UG/L
CHLORIDE	11			12			8.70		MG/L
IRON	1.6	U		2.5	B				UG/L
MAGNESIUM	6600			6300			4.65		UG/L
MANGANESE	0.1	U		0.1	U				UG/L
MOLYBDENUM	0.52	B		0.51	B		1.94		UG/L
NITRATE/NITRITE AS N	3			3.2			6.45		MG/L
POTASSIUM	1600			1700			6.06		UG/L
SELENIUM	1.4			1.5			6.90		UG/L
Silica	12000			11000			8.70		UG/L
SILICON	5400			5300			1.87		UG/L
SODIUM	13000			13000			0		UG/L
SULFATE	17			17			0		MG/L
TOTAL DISSOLVED SOLIDS	180			180			0		MG/L

SAMPLE MANAGEMENT SYSTEM

Validation Report: Field Duplicates

RIN: 09072474 **Lab Code:** PAR **Project:** Tuba City **Validation Date:** 10/1/2009

Duplicate: 2989 **Sample:** 0276

Analyte	Sample Result	Flag	Error	Duplicate Result	Flag	Error	RPD	RER	Units
URANIUM	1.5			1.5			0		UG/L

Duplicate: 2990 **Sample:** 0943

Analyte	Sample Result	Flag	Error	Duplicate Result	Flag	Error	RPD	RER	Units
AMMONIA AS N	0.1	U		0.1	U				MG/L
ARSENIC	2.9			2.8			3.51		UG/L
CALCIUM	19000			19000			0		UG/L
CHLORIDE	3.9			3.7			5.26		MG/L
IRON	1.6	U		1.6	U				UG/L
MAGNESIUM	3800			3900			2.60		UG/L
MANGANESE	16			18			11.76		UG/L
MOLYBDENUM	0.83	B		0.85	B		2.38		UG/L
NITRATE/NITRITE AS N	3.6			3.6			0		MG/L
POTASSIUM	1700			1700			0		UG/L
SELENIUM	0.79			0.76			3.87		UG/L
Silica	15000			15000			0		UG/L
SILICON	6900			7000			1.44		UG/L
SODIUM	19000			19000			0		UG/L
SULFATE	53			51			3.85		MG/L
TOTAL DISSOLVED SOLIDS	160			160			0		MG/L
URANIUM	8.4			8.6			2.35		UG/L

Duplicate: 2991 **Sample:** 0687

Analyte	Sample Result	Flag	Error	Duplicate Result	Flag	Error	RPD	RER	Units
AMMONIA AS N	0.1	U		0.1	U				MG/L
ARSENIC	7.9			7.8			1.27		UG/L
CALCIUM	13000			13000			0		UG/L
CHLORIDE	1.7			1.7			0		MG/L
IRON	6.3	B		3.7	B				UG/L
MAGNESIUM	1600			1600			0		UG/L
MANGANESE	0.1	U		0.1	U				UG/L
MOLYBDENUM	4.4			4.4			0		UG/L
NITRATE/NITRITE AS N	2			2			0		MG/L
POTASSIUM	1400			1400			0		UG/L
SELENIUM	0.52			0.54			3.77		UG/L

SAMPLE MANAGEMENT SYSTEM

Validation Report: Field Duplicates

RIN: 09072474 **Lab Code:** PAR **Project:** Tuba City **Validation Date:** 10/1/2009

Duplicate: 2991 **Sample:** 0687

Analyte	Sample Result	Sample Flag	Sample Error	Duplicate Result	Duplicate Flag	Duplicate Error	RPD	RER	Units
Silica	12000			12000			0		UG/L
SILICON	5400			5400			0		UG/L
SODIUM	20000			20000			0		UG/L
SULFATE	24			25			4.08		MG/L
TOTAL DISSOLVED SOLIDS	120			130			8.00		MG/L
URANIUM	0.24			0.23			4.26		UG/L

Certification

All laboratory analytical quality control criteria were met except as qualified in this report. The data qualifiers listed on the SEEPro database reports are defined on the last page of each report. All data in this package are considered validated and available for use.

Laboratory Coordinator: Steve Donivan — Steve Donivan — 12-18-2009 — Date

Data Validation Lead: Gretchen R Baer — Gretchen Baer — 12/18/09 — Date

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Attachment 1
Assessment of Anomalous Data

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Potential Outliers Report

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Potential Outliers Report

Potential outliers are measurements that are extremely large or small relative to the rest of the data and, therefore, are suspected of misrepresenting the population from which they were collected. Potential outliers may result from transcription errors, data-coding errors, or measurement system problems. However, outliers may also represent true extreme values of a distribution and indicate more variability in the population than was expected.

Statistical outlier tests give probabilistic evidence that an extreme value does not "fit" with the distribution of the remainder of the data and is therefore a statistical outlier. These tests should only be used to identify data points that require further investigation. The tests alone cannot determine whether a statistical outlier should be discarded or corrected within a data set.

There are three steps involved in identifying extreme values or outliers:

1. Identify extreme values that may be potential outliers by generating the Outliers Report using the Sample Management System from data in the SEEPro database. The application compares the new data set with historical data and lists all new data that fall outside the historical data range. Data listed in the report are highlighted if the concentration detected is not within 50 percent of historical minimum or maximum values. A determination is also made if the data are normally distributed using the Studentized Range Test.
2. Apply the appropriate statistical test. Dixon's Extreme Value test is used to test for statistical outliers when the sample size is less than or equal to 25. This test considers both extreme values that are much smaller than the rest of the data (case 1) and extreme values that are much larger than the rest of the data (case 2). This test is valid only if the data without the suspected outlier are normally distributed. Rosner's Test is a parametric test that is used to detect outliers for sample sizes of 25 or more. This test also assumes that the data without the suspected outliers are normally distributed.
3. Scientifically review statistical outliers and decide on their disposition.

The field measurement for specific conductance at location 0277 was recorded as 9 micromhos per centimeter (µmhos/cm). This value is much lower than both the historical minimum at this location and a typical specific conductance reading for a groundwater sample. All other specific conductance measurements by the field equipment for this sampling event are acceptable, which indicates that the flow cell was not filled sufficiently high to cover the specific conductance probe at this location only. The specific conductance result for 0277 is qualified with an “R” flag as rejected.

Twenty-four laboratory results were identified as potentially anomalous. All other sample results meet these criteria and are acceptable for use as qualified. At this time, all data from this sampling event may be treated as validated results.

Of the 24 results, 23 were identified as potentially anomalous because of the low variability of the historical data or because of downward or upward trending in the data. One result (ammonia as N at location 0938) is listed on the Anomalous Data Review Checksheet for further review.

Table 5 summarizes the anomalies identified in a previous report (August 2008). The right-hand column describes the result for this sampling event (August 2009).

Table 5. Comparison of August 2008 Anomalies with August 2009 Results

Loc. No.	Analyte	Type of Anomaly in August 2008	August 2009 Measurement
0692	Arsenic	High	Measurement is lower but still elevated; possible upward trend
0778	Iron	High	Not sampled
0778	Manganese	High	Not sampled
0911	Iron	High	Measurement is lower & within historical range
0965	Iron	High	Not sampled
1103	Calcium	Low	Measurement is higher & within historical range
1120	Manganese	High	Measurement is lower but still elevated; possible upward trend
1123	Iron	High	Measurement is higher; apparent upward trend
1125	Iron	High	Measurement is lower & within historical range
1571	Iron	High	Measurement is lower & within historical range

Data Validation Outliers Report - Field Parameters Only
Laboratory: Field Measurements
RIN: 09072474
Comparison: All Historical Data
Report Date: 11/24/2009

Site Code	Location Code	Sample Date	Analyte	Current Result	Current Qualifiers Lab	Current Qualifiers Data	Historical Maximum Result	Historical Maximum Qualifiers Lab	Historical Maximum Qualifiers Data	Historical Minimum Result	Historical Minimum Qualifiers Lab	Historical Minimum Qualifiers Data	Number of Data Points N	Number of Data Points N Below Detect	Normally Distributed	Statistical Outlier
TUB01	0277	08/13/2009	Specific Conductance	9		RFQ	294		F	275		FQ	5	0	Yes	Yes

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number.

LAB QUALIFIERS:

*	Replicate analysis not within control limits.
>	Result above upper detection limit.
A	TIC is a suspected aldol-condensation product.
B	Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
C	Pesticide result confirmed by GC-MS.
D	Analyte determined in diluted sample.
E	Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
H	Holding time expired, value suspect.
I	Increased detection limit due to required dilution.
J	Estimated
N	Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
P	> 25% difference in detected pesticide or Aroclor concentrations between 2 columns.
U	Analytical result below detection limit.
W	Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
X,Y,Z	Laboratory defined qualifier, see case narrative.

DATA QUALIFIERS:

F	Low flow sampling method used.	G	Possible grout contamination, pH > 9.	J	Estimated value.
L	Less than 3 bore volumes purged prior to sampling.	Q	Qualitative result due to sampling technique.	R	Unusable result.
U	Parameter analyzed for but was not detected.	X	Location is undefined.		

STATISTICAL TESTS:
The distribution of the data is tested for normality or lognormality using the Shapiro-Wilk Test
Outliers are identified using Dixon's Test when there are 25 or fewer data points.
Outliers are identified using Rosner's Test when there are 26 or more data points.
See Data Quality Assessment: Statistical Methods for Practitioners, EPA QC/G-9S, February 2006.

Data Validation Outliers Report - No Field Parameters
Laboratory: PARAGON (Fort Collins, CO)
RIN: 09072474
Comparison: All Historical Data
Report Date: 11/24/2009

				Current			Historical Maximum			Historical Minimum			Number of Data Points		Normally Distributed	Statistical Outlier
					Qualifiers			Qualifiers			Qualifiers						
Site Code	Location Code	Sample Date	Analyte	Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect		
TUB01	0252	08/11/2009	Arsenic	0.0025		F	0.0024	E	F	0.0012		F	15	0	Yes	No
TUB01	0252	08/11/2009	Nitrate + Nitrite as Nitrogen	2.2		F	2.8		FQ	2.3		F	10	0	No	No
TUB01	0252	08/11/2009	Sulfate	6.2		F	39.1			6.4		F	20	0	No	No
TUB01	0252	08/11/2009	Sulfate	5.9		F	39.1			6.4		F	20	0	No	No
TUB01	0261	08/11/2009	Iron	0.038	B	F	0.036	B	UF	0.0033	B	UF	7	7	Yes (log)	No
TUB01	0261	08/11/2009	Manganese	0.0044	B	F	0.0028	B		0.000095	U	F	7	5	Yes (log)	No
TUB01	0261	08/11/2009	Silica	12		F	26		JF	12.5		F	7	0	No	No
TUB01	0261	08/11/2009	Silicon	5.4		F	12		F	5.9		F	5	0	No	No
TUB01	0262	08/11/2009	Iron	0.076		FQ	0.038	B	UFQ	0.0055	B	UF	12	11	Yes (log)	Yes
TUB01	0262	08/11/2009	Magnesium	140		FQ	130		FQ	71		FQ	12	0	Yes	No
TUB01	0262	08/11/2009	Manganese	0.018		FQ	0.012		FQ	0.000054	U	FQ	12	6	Yes (log)	No
TUB01	0262	08/11/2009	Selenium	0.11		FQ	0.099		FQ	0.058		FQ	12	0	No	No
TUB01	0262	08/11/2009	Sodium	210		FQ	200		FQ	73.7			12	0	Yes	No
TUB01	0262	08/11/2009	Total Dissolved Solids	4300		FQ	3800		FQ	2000		FQ	12	0	Yes	No
TUB01	0263	08/11/2009	Iron	0.13		FQ	0.029	U	FQ	0.0057	U	FQ	12	10	Yes	Yes
TUB01	0265	08/12/2009	Iron	0.078		F	0.057		F	0.0028	B	UFJ	13	10	Yes (log)	No
TUB01	0265	08/12/2009	Manganese	0.0034	B	F	0.0033	B	F	0.000054	U	F	13	8	Yes (log)	No
TUB01	0266	08/12/2009	Nitrate + Nitrite as Nitrogen	2.9		FQ	4.6		FJ	3.1		F	10	0	No	No
TUB01	0267	08/13/2009	Chloride	100		F	132		F	110		F	14	0	Yes	No
TUB01	0267	08/13/2009	Magnesium	750		F	932		F	770		F	15	0	Yes	No
TUB01	0267	08/13/2009	Manganese	0.022		F	0.153			0.032		F	18	0	No	No
TUB01	0267	08/13/2009	Nitrate + Nitrite as Nitrogen	280		F	480		FJ	300		F	11	0	No	No
TUB01	0271	08/13/2009	Nitrate + Nitrite as Nitrogen	3.3		F	5.3		FJ	3.4		F	5	0	No	No

Data Validation Outliers Report - No Field Parameters
Laboratory: PARAGON (Fort Collins, CO)
RIN: 09072474
Comparison: All Historical Data
Report Date: 11/24/2009

				Current			Historical Maximum			Historical Minimum			Number of Data Points		Normally Distributed	Statistical Outlier
					Qualifiers			Qualifiers			Qualifiers					
Site Code	Location Code	Sample Date	Analyte	Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect		
TUB01	0272	08/11/2009	Chloride	7.7		F	13		F	7.8		F	11	0	No	No
TUB01	0273	08/11/2009	Manganese	0.0002	B	JFQ	0.0066		FQ	0.00032	B	QFJ	9	2	Yes	No
TUB01	0273	08/11/2009	Nitrate + Nitrite as Nitrogen	66		FQ	55		FQ	28		QFJ	9	0	Yes	No
TUB01	0273	08/11/2009	Uranium	0.068		FQ	0.064		FQ	0.028		QF	9	0	Yes	No
TUB01	0274	08/11/2009	Magnesium	6.2		FQ	7.6		FQ	6.4		FQ	9	0	Yes	No
TUB01	0274	08/11/2009	Nitrate + Nitrite as Nitrogen	3.2		FQ	4.3		FQ	3.3		FQ	9	0	No	Yes
TUB01	0274	08/11/2009	Sulfate	14		FQ	18		FQ	15		FQ	9	0	No	Yes
TUB01	0275	08/11/2009	Chloride	96		F	130		F	110		F	9	0	No	Yes
TUB01	0275	08/11/2009	Nitrate + Nitrite as Nitrogen	210		F	370		FJ	220		F	9	0	No	No
TUB01	0275	08/11/2009	Sulfate	1900		F	2400		FJ	2000		F	9	0	Yes	No
TUB01	0277	08/13/2009	Arsenic	0.0005		FQ	0.00048		FQ	0.0001		F	5	2	Yes	No
TUB01	0277	08/13/2009	Iron	0.031	B	FQ	0.014	U		0.0034	U	QF	5	5	Yes	Yes
TUB01	0277	08/13/2009	Potassium	2.4		FQ	3.1			2.5		FQ	5	0	Yes	No
TUB01	0277	08/13/2009	Sulfate	16		FQ	23		F	18			5	0	Yes	No
TUB01	0278	08/13/2009	Molybdenum	0.00073	B	FQ	0.0007	B	UFQ	0.00036	B	UQF	5	5	Yes	No
TUB01	0278	08/13/2009	Nitrate + Nitrite as Nitrogen	2.8		FQ	4.4		FQJ	2.9		QF	5	0	No	No
TUB01	0279	08/13/2009	Arsenic	0.00098		F	0.00086		F	0.00016		F	5	1	Yes	No
TUB01	0279	08/13/2009	Potassium	2.1		F	2.7		F	2.2		F	5	0	Yes	No
TUB01	0280	08/13/2009	Calcium	33		FQ	36		FQ	34		FQ	6	0	No	No
TUB01	0280	08/13/2009	Magnesium	6.7		FQ	7.2		QF	6.9		FQ	6	0	Yes	No
TUB01	0281	08/13/2009	Total Dissolved Solids	660		FQ	650		QFJ	410		FQ	9	0	Yes	No
TUB01	0282	08/12/2009	Nitrate + Nitrite as Nitrogen	3.9		F	110		F	34		FQ	9	0	No	Yes
TUB01	0282	08/12/2009	Selenium	0.0013		F	0.0035		F	0.0015		FQ	9	0	Yes (log)	No

Data Validation Outliers Report - No Field Parameters
Laboratory: PARAGON (Fort Collins, CO)
RIN: 09072474
Comparison: All Historical Data
Report Date: 11/24/2009

				Current			Historical Maximum			Historical Minimum			Number of Data Points		Normally Distributed	Statistical Outlier
					Qualifiers			Qualifiers			Qualifiers					
Site Code	Location Code	Sample Date	Analyte	Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect		
TUB01	0282	08/12/2009	Sulfate	65		F	790		F	76		FQ	9	0	Yes (log)	No
TUB01	0282	08/12/2009	Uranium	0.0044		F	0.054		F	0.0046		FQ	9	0	Yes (log)	No
TUB01	0683	08/11/2009	Silicon	5.4		FQ	12		F	5.7		FQ	5	0	No	No
TUB01	0684	08/11/2009	Silicon	5.1		FQ	12		FQ	5.3		FQ	5	0	No	No
TUB01	0685	08/11/2009	Chloride	25		F	22		F	9.9		F	10	1	No	Yes
TUB01	0685	08/11/2009	Selenium	0.0022		F	0.0021		F	0.0013		F	13	0	Yes	No
TUB01	0685	08/11/2009	Sulfate	28		F	26.2		F	14.6			13	0	No	No
TUB01	0686	08/10/2009	Iron	0.2	E	F	0.044	B	UFQ	0.003	B	U	20	14	Yes (log)	Yes
TUB01	0686	08/10/2009	Nitrate + Nitrite as Nitrogen	1.7		F	5.6		FQJ	1.8			7	0	Yes	No
TUB01	0686	08/10/2009	Silica	9		F	12.3		L	9.2		F	20	0	Yes	No
TUB01	0686	08/10/2009	Silicon	4.2		F	5.4		F	4.3		F	8	0	Yes	No
TUB01	0688	08/11/2009	Iron	0.073		F	0.06		UF	0.0015	U	F	17	15	Yes (log)	Yes
TUB01	0688	08/11/2009	Nitrate + Nitrite as Nitrogen	7.3		F	12		FJ	8.2		FJ	6	0	Yes	No
TUB01	0689	08/13/2009	Nitrate + Nitrite as Nitrogen	2.3		F	4.1		FJ	2.7		QF	6	0	Yes	No
TUB01	0690	08/13/2009	Molybdenum	0.0004	B	FQ	0.0043	B	UL	0.00043	B	UQF	18	11	Yes (log)	No
TUB01	0691	08/13/2009	Molybdenum	0.00023	B	F	0.003	U		0.0003	U		22	18	No	No
TUB01	0691	08/13/2009	Molybdenum	0.00028	B	F	0.003	U		0.0003	U		22	18	No	No
TUB01	0691	08/13/2009	Nitrate + Nitrite as Nitrogen	51		F	46		F	12		F	11	0	No	No
TUB01	0691	08/13/2009	Nitrate + Nitrite as Nitrogen	52		F	46		F	12		F	11	0	No	No
TUB01	0692	08/13/2009	Molybdenum	0.00043	B	FQ	0.003	U		0.00055	B	UF	17	10	Yes (log)	No
TUB01	0695	08/13/2009	Iron	0.063		F	0.0161	B	U	0.0014	B	U	14	11	Yes	Yes
TUB01	0901	08/13/2009	Chloride	23		F	21		F	10			32	0	No	Yes
TUB01	0903	08/13/2009	Nitrate + Nitrite as Nitrogen	3	N	JF	20		FJ	6.7			9	0	Yes	No

Data Validation Outliers Report - No Field Parameters
Laboratory: PARAGON (Fort Collins, CO)
RIN: 09072474
Comparison: All Historical Data
Report Date: 11/24/2009

				Current			Historical Maximum			Historical Minimum			Number of Data Points		Normally Distributed	Statistical Outlier
					Qualifiers			Qualifiers			Qualifiers					
Site Code	Location Code	Sample Date	Analyte	Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect		
TUB01	0904	08/13/2009	Molybdenum	0.00058	B	UF	0.01	U		0.00059	B	F	26	22	No	No
TUB01	0904	08/13/2009	Silicon	8.3		F	9.3		F	8.4		F	5	0	Yes	No
TUB01	0906	08/12/2009	Molybdenum	0.0015		FQ	0.8			0.003	U	J	55	5	No	No
TUB01	0911	08/13/2009	Iron	0.0017	B	JFQ	0.19		FQ	0.005	U	F	12	9	Yes (log)	No
TUB01	0912	08/12/2009	Chloride	24		FQ	42.5			28		QFJ	34	0	Yes	Yes
TUB01	0914	08/11/2009	Arsenic	0.00074		FQ	0.01	U	F	0.00081		QF	19	10	No	No
TUB01	0914	08/11/2009	Magnesium	0.2	B	FQ	7.98		F	0.21	B	QF	30	0	No	No
TUB01	0915	08/11/2009	Silicon	2.4		FQ	3.2		FQG	2.9		FQ	5	0	Yes	Yes
TUB01	0916	08/11/2009	Chloride	5.7		FQ	11		GF	6		GF	15	0	Yes	No
TUB01	0916	08/11/2009	Nitrate + Nitrite as Nitrogen	1.9		FQ	3		FQJ	2		GF	7	0	Yes (log)	No
TUB01	0916	08/11/2009	Sulfate	6.3		FQ	16	H	GF	9.5		QFJ	15	0	Yes	No
TUB01	0929	08/13/2009	Selenium	0.0018		FQ	0.005	UW	FJ	0.0019	B	FQ	21	1	No	No
TUB01	0934	08/12/2009	Nitrate + Nitrite as Nitrogen	370		FQ	520		FQJ	400		F	13	0	Yes	No
TUB01	0935	08/11/2009	Magnesium	310			593			340		F	23	0	Yes	No
TUB01	0935	08/11/2009	Sulfate	2100	N		3360			2400		F	27	0	Yes	No
TUB01	0938	08/12/2009	Ammonia Total as N	1.3			0.1	U	F	0.1	U	F	8	8	Yes	Yes
TUB01	0938	08/12/2009	Iron	0.0016	U	J	0.42			0.0038	B		16	13	No	No
TUB01	0941	08/11/2009	Iron	0.048	B	FQ	0.035	B	UFQ	0.0012	B	UL	32	27	No	Yes
TUB01	0941	08/11/2009	Magnesium	130		FQ	120		FQ	28.3		F	25	0	Yes (log)	Yes
TUB01	0941	08/11/2009	Total Dissolved Solids	4400		FQ	3700		FQ	755			24	0	Yes (log)	No
TUB01	0942	08/12/2009	Arsenic	0.0031			0.0028			0.0013		F	15	0	Yes	Yes
TUB01	0942	08/12/2009	Molybdenum	0.0065			0.0794		F	0.0083	B	F	31	0	Yes (log)	No
TUB01	0942	08/12/2009	Nitrate + Nitrite as Nitrogen	180			380		F	210		F	11	0	Yes	No

Data Validation Outliers Report - No Field Parameters
Laboratory: PARAGON (Fort Collins, CO)
RIN: 09072474
Comparison: All Historical Data
Report Date: 11/24/2009

				Current			Historical Maximum			Historical Minimum			Number of Data Points		Normally Distributed	Statistical Outlier
					Qualifiers			Qualifiers			Qualifiers					
Site Code	Location Code	Sample Date	Analyte	Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect		
TUB01	0943	08/11/2009	Chloride	3.7		F	100		F	5		F	16	1	No	No
TUB01	0943	08/11/2009	Chloride	3.9		F	100		F	5		F	16	1	No	No
TUB01	0943	08/11/2009	Selenium	0.00079		F	0.01		F	0.00093		F	20	3	Yes (log)	No
TUB01	0943	08/11/2009	Selenium	0.00076		F	0.01		F	0.00093		F	20	3	Yes (log)	No
TUB01	0945	08/10/2009	Silicon	5.5		FQ	6.1		FQ	5.6		F	6	0	Yes	No
TUB01	0946	08/12/2009	Calcium	18		F	165		F	19		F	11	0	Yes (log)	No
TUB01	0946	08/12/2009	Chloride	5.3		F	173		F	10		F	11	0	Yes (log)	No
TUB01	0946	08/12/2009	Magnesium	3.2		F	27.6		F	3.5		F	11	0	Yes (log)	No
TUB01	0946	08/12/2009	Selenium	0.00083		F	0.0175		F	0.0014		F	11	0	Yes (log)	No
TUB01	1003	08/13/2009	Calcium	300		F	292		F	58		F	9	0	Yes	No
TUB01	1003	08/13/2009	Silicon	6.4		F	6.1		F	5.4		F	5	0	No	No
TUB01	1003	08/13/2009	Sodium	35		F	34.7		F	15		F	9	0	Yes	No
TUB01	1003	08/13/2009	Sulfate	490		F	473		F	46		F	9	0	No	No
TUB01	1003	08/13/2009	Total Dissolved Solids	1500		F	1320		F	290		F	9	0	Yes	No
TUB01	1003	08/13/2009	Uranium	0.037		F	0.0355		F	0.0021		F	9	0	Yes	No
TUB01	1006	08/13/2009	Iron	0.047	B	F	0.032	B	UF	0.0015	U	F	9	8	Yes (log)	No
TUB01	1006	08/13/2009	Silicon	6.1		F	6		F	5.2		F	5	0	Yes	No
TUB01	1101	08/12/2009	Iron	0.0027	B	J	0.0976			0.0031	U	J	15	12	Yes (log)	No
TUB01	1101	08/12/2009	Magnesium	94			160			95			11	0	Yes	No
TUB01	1101	08/12/2009	Nitrate + Nitrite as Nitrogen	75			160		J	93			5	0	Yes	No
TUB01	1101	08/12/2009	Nitrate + Nitrite as Nitrogen	72			160		J	93			5	0	Yes	No
TUB01	1102	08/12/2009	Ammonia Total as N	0.87			2.8		F	1.1		J	5	0	Yes	No
TUB01	1102	08/12/2009	Arsenic	0.0014			0.0013	B	F	0.00088			10	0	Yes	Yes

Data Validation Outliers Report - No Field Parameters
Laboratory: PARAGON (Fort Collins, CO)
RIN: 09072474
Comparison: All Historical Data
Report Date: 11/24/2009

				Current			Historical Maximum			Historical Minimum			Number of Data Points		Normally Distributed	Statistical Outlier
					Qualifiers			Qualifiers			Qualifiers					
Site Code	Location Code	Sample Date	Analyte	Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect		
TUB01	1102	08/12/2009	Magnesium	120			220			122			13	0	Yes	No
TUB01	1102	08/12/2009	Silica	14			18.6			15			17	0	Yes	No
TUB01	1102	08/12/2009	Silicon	6.8			8.4			7.2			6	0	Yes	No
TUB01	1102	08/12/2009	Uranium	0.32			0.689			0.33			18	0	Yes	No
TUB01	1103	08/12/2009	Arsenic	0.0014			0.0013		F	0.00071		J	9	0	Yes	No
TUB01	1103	08/12/2009	Molybdenum	0.0049			0.0036	B	U	0.0004	U		16	11	Yes	No
TUB01	1104	08/12/2009	Iron	0.0019	B	J	1.02			0.0033	B		15	7	No	No
TUB01	1104	08/12/2009	Magnesium	140			310			150			11	0	No	No
TUB01	1104	08/12/2009	Uranium	0.68			0.48			0.0945			16	0	No	Yes
TUB01	1105	08/12/2009	Iron	0.0016	U	J	0.051			0.0026	B		18	13	Yes (log)	No
TUB01	1106	08/12/2009	Ammonia Total as N	20			6.2		J	1.5		F	6	0	Yes (log)	No
TUB01	1106	08/12/2009	Nitrate + Nitrite as Nitrogen	98			93		J	46			6	0	Yes	No
TUB01	1106	08/12/2009	Potassium	11			6.4		J	2.53			13	0	Yes	Yes
TUB01	1106	08/12/2009	Silica	15			14.8			12	E	F	17	0	Yes	No
TUB01	1106	08/12/2009	Silicon	6.9			6.6			5.6		F	7	0	Yes	No
TUB01	1107	08/12/2009	Iron	0.0016	U	J	0.24			0.0035	B		18	10	Yes (log)	No
TUB01	1108	08/12/2009	Magnesium	220			669			240			13	0	Yes	No
TUB01	1108	08/12/2009	Manganese	3.3			25.1			3.8			18	0	Yes	No
TUB01	1109	08/12/2009	Ammonia Total as N	14			11		J	3.9			6	0	Yes	No
TUB01	1110	08/12/2009	Ammonia Total as N	4.7			4			0.1	U	J	7	4	No	No
TUB01	1111	08/12/2009	Ammonia Total as N	10			4.1		F	2.7			5	0	Yes	Yes
TUB01	1111	08/12/2009	Calcium	500			498			248			12	0	Yes	No
TUB01	1113	08/11/2009	Silicon	5.3			5.8			5.4			6	0	Yes	No

Data Validation Outliers Report - No Field Parameters
Laboratory: PARAGON (Fort Collins, CO)
RIN: 09072474
Comparison: All Historical Data
Report Date: 11/24/2009

				Current			Historical Maximum			Historical Minimum			Number of Data Points		Normally Distributed	Statistical Outlier
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Site Code	Location Code	Sample Date	Analyte	Result	Lab	Data	Result	Lab	Data	Result	Lab	Data	N	N Below Detect		
TUB01	1114	08/11/2009	Calcium	380			370			106			11	0	Yes (log)	No
TUB01	1114	08/11/2009	Iron	0.16			0.078			0.0025	B	U	15	12	Yes (log)	Yes
TUB01	1114	08/11/2009	Selenium	0.0087			0.0083			0.0023	B		15	0	Yes (log)	No
TUB01	1114	08/11/2009	Uranium	0.082			0.075			0.011			16	0	Yes (log)	No
TUB01	1117	08/12/2009	Manganese	0.019			0.014			0.0001	U		16	7	Yes (log)	No
TUB01	1118	08/12/2009	Potassium	16			15	EN	J	2.49			10	0	Yes	No
TUB01	1118	08/12/2009	Silicon	7.1			8.2		J	7.3		F	5	0	Yes	No
TUB01	1119	08/12/2009	Ammonia Total as N	21			18		J	4.3			6	0	Yes	No
TUB01	1119	08/12/2009	Potassium	20			17			6.33			14	0	Yes (log)	No
TUB01	1119	08/12/2009	Total Dissolved Solids	4700			4600		J	2400			14	0	Yes	No
TUB01	1120	08/12/2009	Nitrate + Nitrite as Nitrogen	47			110		F	60			7	0	No	No
TUB01	1120	08/12/2009	Selenium	0.019			0.0697			0.02			18	0	Yes	No
TUB01	1120	08/12/2009	Sodium	210			669			230			14	0	Yes	No
TUB01	1120	08/12/2009	Uranium	0.17			1.64			0.24			19	0	No	No
TUB01	1121	08/12/2009	Calcium	210			570			220			14	0	Yes	No
TUB01	1121	08/12/2009	Chloride	25			152			57			15	0	Yes (log)	Yes
TUB01	1121	08/12/2009	Magnesium	61			349			137			14	0	Yes	No
TUB01	1121	08/12/2009	Molybdenum	0.012			0.148			0.027		F	19	0	Yes	No
TUB01	1121	08/12/2009	Nitrate + Nitrite as Nitrogen	14			88			30		J	5	0	Yes	No
TUB01	1121	08/12/2009	Selenium	0.005			0.0527			0.013			19	0	Yes	No
TUB01	1121	08/12/2009	Sodium	94			710			130			14	0	Yes	No
TUB01	1121	08/12/2009	Sulfate	850			3240			940			20	0	Yes	No
TUB01	1121	08/12/2009	Total Dissolved Solids	1500			6440			2400			14	0	Yes	No

Data Validation Outliers Report - No Field Parameters
Laboratory: PARAGON (Fort Collins, CO)
RIN: 09072474
Comparison: All Historical Data
Report Date: 11/24/2009

Site Code	Location Code	Sample Date	Analyte	Current			Historical Maximum			Historical Minimum			Number of Data Points		Normally Distributed	Statistical Outlier
				Result	Qualifiers		Result	Qualifiers		Result	Qualifiers		N	N Below Detect		
					Lab	Data		Lab	Data		Lab	Data				
TUB01	1121	08/12/2009	Uranium	0.052			1.09			0.14			20	0	Yes	No
TUB01	1123	08/12/2009	Arsenic	0.0026			0.0024			0.00098	B		8	0	Yes	No
TUB01	1123	08/12/2009	Iron	0.38			0.098			0.0024	B	U	15	13	Yes (log)	Yes
TUB01	1123	08/12/2009	Potassium	16			7.21			2.1			12	0	Yes	Yes
TUB01	1123	08/12/2009	Silicon	7.3			6.6			5.8			5	0	Yes	No
TUB01	1125	08/12/2009	Calcium	58			133			60.5			12	0	Yes (log)	No
TUB01	1129	08/11/2009	Chloride	49			74			62			5	0	Yes	No
TUB01	1129	08/11/2009	Sulfate	800			1308			970			5	0	No	No
TUB01	1569	08/12/2009	Arsenic	3.4			2.7			0.16			14	0	Yes (log)	No
TUB01	1569	08/12/2009	Calcium	160			1700			230			16	0	Yes	No
TUB01	1569	08/12/2009	Iron	9.2			5			0.0008	U		18	11	Yes (log)	No
TUB01	1569	08/12/2009	Magnesium	24000			16000			472			16	0	Yes	Yes
TUB01	1569	08/12/2009	Manganese	450			340			0.543			18	0	No	Yes
TUB01	1569	08/12/2009	Selenium	3.1			2.2			0.0477			18	0	Yes	Yes
TUB01	1569	08/12/2009	Sulfate	53000			52000			2440			18	0	Yes (log)	No
TUB01	1570	08/12/2009	Arsenic	3.6			2.7			0.18			18	0	Yes (log)	No
TUB01	1570	08/12/2009	Calcium	150			1600			230			21	0	No	No
TUB01	1570	08/12/2009	Iron	9.5			4.4			0.0008	U		22	17	Yes (log)	No
TUB01	1570	08/12/2009	Magnesium	28000			13000			544			21	0	Yes	Yes
TUB01	1570	08/12/2009	Manganese	520			500			0.54			22	0	No	Yes
TUB01	1570	08/12/2009	Nitrate + Nitrite as Nitrogen	19000			13000			3000			12	0	Yes	Yes
TUB01	1570	08/12/2009	Selenium	3.4			2.2			0.0507			22	0	Yes	Yes
TUB01	1570	08/12/2009	Sulfate	56000			51000			2490			22	0	Yes	No

Data Validation Outliers Report - No Field Parameters
Laboratory: PARAGON (Fort Collins, CO)
RIN: 09072474
Comparison: All Historical Data
Report Date: 11/24/2009

Site Code	Location Code	Sample Date	Analyte	Current Result	Current Qualifiers Lab	Current Qualifiers Data	Historical Maximum Result	Historical Maximum Qualifiers Lab	Historical Maximum Qualifiers Data	Historical Minimum Result	Historical Minimum Qualifiers Lab	Historical Minimum Qualifiers Data	Number of Data Points N	Number of Data Points N Below Detect	Normally Distributed	Statistical Outlier
TUB01	1571	08/12/2009	Calcium	33			44			33.8			9	0	Yes	No
TUB01	1571	08/12/2009	Selenium	0.0039	E		0.0064		J	0.004			13	0	Yes	No
TUB01	1571	08/12/2009	Sodium	64			109			71			9	0	No	No
TUB01	1573	08/12/2009	Chloride	28			27			23			10	0	Yes	No
TUB01	1573	08/12/2009	Nitrate + Nitrite as Nitrogen	0.61			1.2			1		J	5	0	Yes	Yes

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number.

LAB QUALIFIERS:
- * Replicate analysis not within control limits.
- > Result above upper detection limit.
- A TIC is a suspected aldol-condensation product.
- B Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
- C Pesticide result confirmed by GC-MS.
- D Analyte determined in diluted sample.
- E Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
- H Holding time expired, value suspect.
- I Increased detection limit due to required dilution.
- J Estimated
- N Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
- P > 25% difference in detected pesticide or Aroclor concentrations between 2 columns.
- U Analytical result below detection limit.
- W Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
- X,Y,Z Laboratory defined qualifier, see case narrative.

DATA QUALIFIERS:
- F Low flow sampling method used.
- L Less than 3 bore volumes purged prior to sampling.
- U Parameter analyzed for but was not detected.
- G Possible grout contamination, pH > 9.
- Q Qualitative result due to sampling technique.
- X Location is undefined.
- J Estimated value.
- R Unusable result.

STATISTICAL TESTS:
The distribution of the data is tested for normality or lognormality using the Shapiro-Wilk Test
Outliers are identified using Dixon's Test when there are 25 or fewer data points.
Outliers are identified using Rosner's Test when there are 26 or more data points.
See Data Quality Assessment: Statistical Methods for Practitioners, EPA QC/G-9S, February 2006.

Anomalous Data Review Checksheet

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Anomalous Data Review Checksheet

Site: Tuba City, Arizona, Disposal Site **Sampling Data:** Water Sampling

Reviewer: Gretchen Baer Signature 12/18/09 Date

Site Hydrologist: Tim Bartlett Signature 12/18/09 Date

Date of Review: October 2, 2009

Loc. No.	Analyte	Type of Anomaly	Disposition
0938	Ammonia as N	High	Compare to future results.

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Attachment 2
Data Presentation

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Groundwater Quality Data

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Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0251 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	200	-	300	83		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	200	-	300	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	200	-	300	0.002		FQ	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	200	-	300	29		FQ	#	0.0021	
Chloride	mg/L	08/11/2009	N001	200	-	300	6.8		FQ	#	0.2	
Iron	mg/L	08/11/2009	N001	200	-	300	0.021	B	FQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	200	-	300	6		FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	200	-	300	0.0029	B	FQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	200	-	300	0.00041	B	UFQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	200	-	300	3.6		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/11/2009	N001	200	-	300	154.3		FQ	#		
pH	s.u.	08/11/2009	N001	200	-	300	8.02		FQ	#		
Potassium	mg/L	08/11/2009	N001	200	-	300	2.4		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	200	-	300	0.00082		FQ	#	0.000032	
Silica	mg/L	08/11/2009	N001	200	-	300	10		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	200	-	300	4.7		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	200	-	300	6.4		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	200	-	300	239		FQ	#		
Sulfate	mg/L	08/11/2009	N001	200	-	300	13		FQ	#	0.5	
Temperature	C	08/11/2009	N001	200	-	300	18.74		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	200	-	300	140		FQ	#	20	
Turbidity	NTU	08/11/2009	N001	200	-	300	2.17		FQ	#		
Uranium	mg/L	08/11/2009	N001	200	-	300	0.0018	E	FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0252 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	400	-	500	83		F	#		
Ammonia Total as N	mg/L	08/11/2009	N001	400	-	500	0.1	U	F	#	0.1	
Ammonia Total as N	mg/L	08/11/2009	N002	400	-	500	0.1	U	F	#	0.1	
Arsenic	mg/L	08/11/2009	N001	400	-	500	0.0025		F	#	0.0000084	
Arsenic	mg/L	08/11/2009	N002	400	-	500	0.0024		F	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	400	-	500	20		F	#	0.0021	
Calcium	mg/L	08/11/2009	N002	400	-	500	21		F	#	0.0021	
Chloride	mg/L	08/11/2009	N001	400	-	500	4.6		F	#	0.2	
Chloride	mg/L	08/11/2009	N002	400	-	500	4.8		F	#	0.2	
Iron	mg/L	08/11/2009	N001	400	-	500	0.0035	B	UJF	#	0.0016	
Iron	mg/L	08/11/2009	N002	400	-	500	0.017	B	F	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	400	-	500	3.9		F	#	0.0066	
Magnesium	mg/L	08/11/2009	N002	400	-	500	4		F	#	0.0066	
Manganese	mg/L	08/11/2009	N001	400	-	500	0.0027	B	F	#	0.0001	
Manganese	mg/L	08/11/2009	N002	400	-	500	0.0033	B	F	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	400	-	500	0.00029	B	UF	#	0.000067	
Molybdenum	mg/L	08/11/2009	N002	400	-	500	0.00034	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	400	-	500	2.2		F	#	0.02	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N002	400	-	500	2.2		F	#	0.02	
Oxidation Reduction Potential	mV	08/11/2009	N001	400	-	500	155		F	#		
pH	s.u.	08/11/2009	N001	400	-	500	8		F	#		
Potassium	mg/L	08/11/2009	N001	400	-	500	2.2		F	#	0.092	
Potassium	mg/L	08/11/2009	N002	400	-	500	2.3		F	#	0.092	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0252 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Selenium	mg/L	08/11/2009	N001	400	-	500	0.00066		F	#	0.000032	
Selenium	mg/L	08/11/2009	N002	400	-	500	0.00067		F	#	0.000032	
Silica	mg/L	08/11/2009	N001	400	-	500	9.3		F	#	0.0071	
Silica	mg/L	08/11/2009	N002	400	-	500	9.9		F	#	0.0071	
Silicon	mg/L	08/11/2009	N001	400	-	500	4.3		F	#	0.0033	
Silicon	mg/L	08/11/2009	N002	400	-	500	4.6		F	#	0.0033	
Sodium	mg/L	08/11/2009	N001	400	-	500	9.9		F	#	0.0044	
Sodium	mg/L	08/11/2009	N002	400	-	500	10		F	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	400	-	500	196		F	#		
Sulfate	mg/L	08/11/2009	N001	400	-	500	6.2		F	#	0.5	
Sulfate	mg/L	08/11/2009	N002	400	-	500	5.9		F	#	0.5	
Temperature	C	08/11/2009	N001	400	-	500	17.87		F	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	400	-	500	140		F	#	20	
Total Dissolved Solids	mg/L	08/11/2009	N002	400	-	500	130		F	#	20	
Turbidity	NTU	08/11/2009	N001	400	-	500	2.35		F	#		
Uranium	mg/L	08/11/2009	N001	400	-	500	0.0021		F	#	0.0000017	
Uranium	mg/L	08/11/2009	N002	400	-	500	0.0019		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0258 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	159	-	199	97		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	159	-	199	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	159	-	199	0.0023		FQ	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	159	-	199	33		FQ	#	0.0021	
Chloride	mg/L	08/11/2009	N001	159	-	199	12		FQ	#	0.2	
Iron	mg/L	08/11/2009	N001	159	-	199	0.009	B	UFQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	159	-	199	6.7		FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	159	-	199	0.0001	U	JFQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	159	-	199	0.00055	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	159	-	199	3.2		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/11/2009	N001	159	-	199	159.2		FQ	#		
pH	s.u.	08/11/2009	N001	159	-	199	7.78		FQ	#		
Potassium	mg/L	08/11/2009	N001	159	-	199	1.7		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	159	-	199	0.0014		FQ	#	0.000032	
Silica	mg/L	08/11/2009	N001	159	-	199	11		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	159	-	199	5.3		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	159	-	199	12		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	159	-	199	262		FQ	#		
Sulfate	mg/L	08/11/2009	N001	159	-	199	17		FQ	#	0.5	
Temperature	C	08/11/2009	N001	159	-	199	18.84		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	159	-	199	180		FQ	#	20	
Turbidity	NTU	08/11/2009	N001	159	-	199	4.16		FQ	#		
Uranium	mg/L	08/11/2009	N001	159	-	199	0.0013		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0261 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	160	-	200	102		F	#		
Ammonia Total as N	mg/L	08/11/2009	N001	160	-	200	0.1	U	F	#	0.1	
Arsenic	mg/L	08/11/2009	N001	160	-	200	0.002		F	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	160	-	200	31		F	#	0.0021	
Chloride	mg/L	08/11/2009	N001	160	-	200	13		F	#	0.2	
Iron	mg/L	08/11/2009	N001	160	-	200	0.038	B	F	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	160	-	200	7.2		F	#	0.0066	
Manganese	mg/L	08/11/2009	N001	160	-	200	0.0044	B	F	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	160	-	200	0.0006	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	160	-	200	3.1		F	#	0.02	
Oxidation Reduction Potential	mV	08/11/2009	N001	160	-	200	133.3		F	#		
pH	s.u.	08/11/2009	N001	160	-	200	7.81		F	#		
Potassium	mg/L	08/11/2009	N001	160	-	200	1.7		F	#	0.092	
Selenium	mg/L	08/11/2009	N001	160	-	200	0.0015		F	#	0.000032	
Silica	mg/L	08/11/2009	N001	160	-	200	12		F	#	0.0071	
Silicon	mg/L	08/11/2009	N001	160	-	200	5.4		F	#	0.0033	
Sodium	mg/L	08/11/2009	N001	160	-	200	12		F	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	160	-	200	273		F	#		
Sulfate	mg/L	08/11/2009	N001	160	-	200	21		F	#	0.5	
Temperature	C	08/11/2009	N001	160	-	200	24.84		F	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	160	-	200	180		F	#	20	
Turbidity	NTU	08/11/2009	N001	160	-	200	2.67		F	#		
Uranium	mg/L	08/11/2009	N001	160	-	200	0.0013		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0262 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	60	-	100	375		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	60	-	100	1.1		FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	60	-	100	0.0016		FQ	#	0.000084	
Calcium	mg/L	08/11/2009	N001	60	-	100	710		FQ	#	0.021	
Chloride	mg/L	08/11/2009	N001	60	-	100	100		FQ	#	10	
Iron	mg/L	08/11/2009	N001	60	-	100	0.076		FQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	60	-	100	140		FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	60	-	100	0.018		FQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	60	-	100	1.5		FQ	#	0.0034	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	60	-	100	170		FQ	#	1	
Oxidation Reduction Potential	mV	08/11/2009	N001	60	-	100	186.1		FQ	#		
pH	s.u.	08/11/2009	N001	60	-	100	6.73		FQ	#		
Potassium	mg/L	08/11/2009	N001	60	-	100	10		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	60	-	100	0.11		FQ	#	0.00032	
Silica	mg/L	08/11/2009	N001	60	-	100	17		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	60	-	100	7.9		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	60	-	100	210		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	60	-	100	3768		FQ	#		
Sulfate	mg/L	08/11/2009	N001	60	-	100	1600		FQ	#	25	
Temperature	C	08/11/2009	N001	60	-	100	19.18		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	60	-	100	4300		FQ	#	80	
Turbidity	NTU	08/11/2009	N001	60	-	100	2.2		FQ	#		
Uranium	mg/L	08/11/2009	N001	60	-	100	1.3		FQ	#	0.000087	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0263 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	60	-	100	290		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	60	-	100	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	60	-	100	0.0012		FQ	#	0.000017	
Calcium	mg/L	08/11/2009	N001	60	-	100	690		FQ	#	0.021	
Chloride	mg/L	08/11/2009	N001	60	-	100	110		FQ	#	10	
Iron	mg/L	08/11/2009	N001	60	-	100	0.13		FQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	60	-	100	230		FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	60	-	100	0.0028	B	FQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	60	-	100	0.03		FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	60	-	100	170		FQ	#	1	
Oxidation Reduction Potential	mV	08/11/2009	N001	60	-	100	192.8		FQ	#		
pH	s.u.	08/11/2009	N001	60	-	100	6.88		FQ	#		
Potassium	mg/L	08/11/2009	N001	60	-	100	9.1		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	60	-	100	0.032		FQ	#	0.000064	
Silica	mg/L	08/11/2009	N001	60	-	100	14		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	60	-	100	6.4		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	60	-	100	170		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	60	-	100	4040		FQ	#		
Sulfate	mg/L	08/11/2009	N001	60	-	100	2000		FQ	#	25	
Temperature	C	08/11/2009	N001	60	-	100	18.67		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	60	-	100	4800		FQ	#	80	
Turbidity	NTU	08/11/2009	N001	60	-	100	2.75		FQ	#		
Uranium	mg/L	08/11/2009	N001	60	-	100	0.17		FQ	#	0.000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0264 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	160	-	200	135		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	160	-	200	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	160	-	200	0.002		FQ	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	160	-	200	54		FQ	#	0.0021	
Chloride	mg/L	08/11/2009	N001	160	-	200	14		FQ	#	0.2	
Iron	mg/L	08/11/2009	N001	160	-	200	0.0076	B	UJFQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	160	-	200	11		FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	160	-	200	0.0001	U	JFQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	160	-	200	0.0005	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	160	-	200	11		FQ	#	0.1	
Oxidation Reduction Potential	mV	08/11/2009	N001	160	-	200	168.7		FQ	#		
pH	s.u.	08/11/2009	N001	160	-	200	7.64		FQ	#		
Potassium	mg/L	08/11/2009	N001	160	-	200	2.1		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	160	-	200	0.0015		FQ	#	0.000032	
Silica	mg/L	08/11/2009	N001	160	-	200	12		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	160	-	200	5.5		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	160	-	200	14		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	160	-	200	397		FQ	#		
Sulfate	mg/L	08/11/2009	N001	160	-	200	59		FQ	#	0.5	
Temperature	C	08/11/2009	N001	160	-	200	18.56		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	160	-	200	290		FQ	#	20	
Turbidity	NTU	08/11/2009	N001	160	-	200	2.6		FQ	#		
Uranium	mg/L	08/11/2009	N001	160	-	200	0.0032		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0265 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	60	-	100	383		F	#		
Ammonia Total as N	mg/L	08/12/2009	N001	60	-	100	0.1	U	F	#	0.1	
Arsenic	mg/L	08/12/2009	N001	60	-	100	0.00099		F	#	0.0000084	
Calcium	mg/L	08/12/2009	N001	60	-	100	550		F	#	0.11	
Chloride	mg/L	08/12/2009	N001	60	-	100	130		F	#	4	
Iron	mg/L	08/12/2009	N001	60	-	100	0.078		F	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	60	-	100	170		F	#	0.0066	
Manganese	mg/L	08/12/2009	N001	60	-	100	0.0034	B	F	#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	60	-	100	0.0002	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	60	-	100	180		F	#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	60	-	100	205		F	#		
pH	s.u.	08/12/2009	N001	60	-	100	6.76		F	#		
Potassium	mg/L	08/12/2009	N001	60	-	100	6.9		F	#	0.092	
Selenium	mg/L	08/12/2009	N001	60	-	100	0.0057		F	#	0.000032	
Silica	mg/L	08/12/2009	N001	60	-	100	16		F	#	0.0071	
Silicon	mg/L	08/12/2009	N001	60	-	100	7.4		F	#	0.0033	
Sodium	mg/L	08/12/2009	N001	60	-	100	110		F	#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	60	-	100	3320		F	#		
Sulfate	mg/L	08/12/2009	N001	60	-	100	1300		F	#	10	
Temperature	C	08/12/2009	N001	60	-	100	21.8		F	#		
Total Dissolved Solids	mg/L	08/12/2009	N001	60	-	100	3700		F	#	80	
Turbidity	NTU	08/12/2009	N001	60	-	100	1.37		F	#		
Uranium	mg/L	08/12/2009	N001	60	-	100	0.071		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0266 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	160	-	200	100		FQ	#		
Ammonia Total as N	mg/L	08/12/2009	N001	160	-	200	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/12/2009	N001	160	-	200	0.0015		FQ	#	0.0000084	
Calcium	mg/L	08/12/2009	N001	160	-	200	28		FQ	#	0.0021	
Chloride	mg/L	08/12/2009	N001	160	-	200	7.6		FQ	#	0.2	
Iron	mg/L	08/12/2009	N001	160	-	200	0.0016	U	JFQ	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	160	-	200	7		FQ	#	0.0066	
Manganese	mg/L	08/12/2009	N001	160	-	200	0.0001	U	JFQ	#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	160	-	200	0.00061	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	160	-	200	2.9		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/12/2009	N001	160	-	200	132.4		FQ	#		
pH	s.u.	08/12/2009	N001	160	-	200	7.87		FQ	#		
Potassium	mg/L	08/12/2009	N001	160	-	200	2.4		FQ	#	0.092	
Selenium	mg/L	08/12/2009	N001	160	-	200	0.00096		FQ	#	0.000032	
Silica	mg/L	08/12/2009	N001	160	-	200	12		FQ	#	0.0071	
Silicon	mg/L	08/12/2009	N001	160	-	200	5.6		FQ	#	0.0033	
Sodium	mg/L	08/12/2009	N001	160	-	200	6.2		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	160	-	200	299		FQ	#		
Sulfate	mg/L	08/12/2009	N001	160	-	200	11		FQ	#	0.5	
Temperature	C	08/12/2009	N001	160	-	200	20.82		FQ	#		
Total Dissolved Solids	mg/L	08/12/2009	N001	160	-	200	160		FQ	#	20	
Turbidity	NTU	08/12/2009	N001	160	-	200	3.58		FQ	#		
Uranium	mg/L	08/12/2009	N001	160	-	200	0.002		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0267 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	60	-	100	850		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	60	-	100	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	60	-	100	0.0028		F	#	0.000042	
Calcium	mg/L	08/13/2009	N001	60	-	100	610		F	#	0.21	
Chloride	mg/L	08/13/2009	N001	60	-	100	100		F	#	10	
Iron	mg/L	08/13/2009	N001	60	-	100	0.0027	B	JF	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	60	-	100	750		F	#	0.66	
Manganese	mg/L	08/13/2009	N001	60	-	100	0.022		F	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	60	-	100	0.00026	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	60	-	100	280		F	#	2	
Oxidation Reduction Potential	mV	08/13/2009	N001	60	-	100	231		F	#		
pH	s.u.	08/13/2009	N001	60	-	100	6.49		F	#		
Potassium	mg/L	08/13/2009	N001	60	-	100	13		F	#	0.092	
Selenium	mg/L	08/13/2009	N001	60	-	100	0.043		F	#	0.00016	
Silica	mg/L	08/13/2009	N001	60	-	100	22		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	60	-	100	10		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	60	-	100	370		F	#	0.44	
Specific Conductance	umhos /cm	08/13/2009	N001	60	-	100	6320		F	#		
Sulfate	mg/L	08/13/2009	N001	60	-	100	3200		F	#	25	
Temperature	C	08/13/2009	N001	60	-	100	17.8		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	60	-	100	7600		F	#	80	
Turbidity	NTU	08/13/2009	N001	60	-	100	1.82		F	#		
Uranium	mg/L	08/13/2009	N001	60	-	100	0.07		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0268 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	200	-	300	117		F	#		
Ammonia Total as N	mg/L	08/11/2009	N001	200	-	300	0.1	U	F	#	0.1	
Arsenic	mg/L	08/11/2009	N001	200	-	300	0.00052		F	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	200	-	300	94		F	#	0.0021	
Chloride	mg/L	08/11/2009	N001	200	-	300	16		F	#	1	
Iron	mg/L	08/11/2009	N001	200	-	300	0.0047	B	UJF	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	200	-	300	17		F	#	0.0066	
Manganese	mg/L	08/11/2009	N001	200	-	300	0.0001	U	JF	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	200	-	300	0.00032	B	UF	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	200	-	300	19		F	#	0.2	
Oxidation Reduction Potential	mV	08/11/2009	N001	200	-	300	199.9		F	#		
pH	s.u.	08/11/2009	N001	200	-	300	7.49		F	#		
Potassium	mg/L	08/11/2009	N001	200	-	300	4.5		F	#	0.092	
Selenium	mg/L	08/11/2009	N001	200	-	300	0.0016		F	#	0.000032	
Silica	mg/L	08/11/2009	N001	200	-	300	10		F	#	0.0071	
Silicon	mg/L	08/11/2009	N001	200	-	300	4.7		F	#	0.0033	
Sodium	mg/L	08/11/2009	N001	200	-	300	18		F	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	200	-	300	671		F	#		
Sulfate	mg/L	08/11/2009	N001	200	-	300	120		F	#	2.5	
Temperature	C	08/11/2009	N001	200	-	300	19.05		F	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	200	-	300	480		F	#	20	
Turbidity	NTU	08/11/2009	N001	200	-	300	1.54		F	#		
Uranium	mg/L	08/11/2009	N001	200	-	300	0.019		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0271 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	60	-	100	105		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	60	-	100	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	60	-	100	0.002		F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	60	-	100	35		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	60	-	100	12		F	#	0.2	
Iron	mg/L	08/13/2009	N001	60	-	100	0.0016	U	JF	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	60	-	100	6		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	60	-	100	0.0001	U	JF	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	60	-	100	0.00034	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	60	-	100	3.3		F	#	0.02	
Oxidation Reduction Potential	mV	08/13/2009	N001	60	-	100	208		F	#		
pH	s.u.	08/13/2009	N001	60	-	100	7.81		F	#		
Potassium	mg/L	08/13/2009	N001	60	-	100	1.8		F	#	0.092	
Selenium	mg/L	08/13/2009	N001	60	-	100	0.0013		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	60	-	100	11		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	60	-	100	5.2		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	60	-	100	9.5		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	60	-	100	274		F	#		
Sulfate	mg/L	08/13/2009	N001	60	-	100	15		F	#	0.5	
Temperature	C	08/13/2009	N001	60	-	100	17.7		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	60	-	100	180		F	#	20	
Turbidity	NTU	08/13/2009	N001	60	-	100	2.54		F	#		
Uranium	mg/L	08/13/2009	N001	60	-	100	0.0015		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0272 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	159.1	-	179.1	88		F	#		
Ammonia Total as N	mg/L	08/11/2009	N001	159.1	-	179.1	0.1	U	F	#	0.1	
Arsenic	mg/L	08/11/2009	N001	159.1	-	179.1	0.0017		F	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	159.1	-	179.1	31		F	#	0.0021	
Chloride	mg/L	08/11/2009	N001	159.1	-	179.1	7.7		F	#	0.2	
Iron	mg/L	08/11/2009	N001	159.1	-	179.1	0.0052	B	UJF	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	159.1	-	179.1	6.6		F	#	0.0066	
Manganese	mg/L	08/11/2009	N001	159.1	-	179.1	0.0001	U	JF	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	159.1	-	179.1	0.00031	B	UF	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	159.1	-	179.1	3.3		F	#	0.02	
Oxidation Reduction Potential	mV	08/11/2009	N001	159.1	-	179.1	197.6		F	#		
pH	s.u.	08/11/2009	N001	159.1	-	179.1	7.59		F	#		
Potassium	mg/L	08/11/2009	N001	159.1	-	179.1	1.6		F	#	0.092	
Selenium	mg/L	08/11/2009	N001	159.1	-	179.1	0.001		F	#	0.000032	
Silica	mg/L	08/11/2009	N001	159.1	-	179.1	11		F	#	0.0071	
Silicon	mg/L	08/11/2009	N001	159.1	-	179.1	5		F	#	0.0033	
Sodium	mg/L	08/11/2009	N001	159.1	-	179.1	6.6		F	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	159.1	-	179.1	244		F	#		
Sulfate	mg/L	08/11/2009	N001	159.1	-	179.1	11		F	#	0.5	
Temperature	C	08/11/2009	N001	159.1	-	179.1	21.6		F	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	159.1	-	179.1	160		F	#	20	
Turbidity	NTU	08/11/2009	N001	159.1	-	179.1	2.26		F	#		
Uranium	mg/L	08/11/2009	N001	159.1	-	179.1	0.0014		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0273 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	153	-	173	166		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	153	-	173	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	153	-	173	0.0012		FQ	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	153	-	173	180		FQ	#	0.0021	
Chloride	mg/L	08/11/2009	N001	153	-	173	50		FQ	#	2	
Iron	mg/L	08/11/2009	N001	153	-	173	0.0016	U	JFQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	153	-	173	32		FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	153	-	173	0.0002	B	JFQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	153	-	173	0.028		FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	153	-	173	66		FQ	#	0.5	
Oxidation Reduction Potential	mV	08/11/2009	N001	153	-	173	205.9		FQ	#		
pH	s.u.	08/11/2009	N001	153	-	173	7.14		FQ	#		
Potassium	mg/L	08/11/2009	N001	153	-	173	3.4		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	153	-	173	0.018		FQ	#	0.000032	
Silica	mg/L	08/11/2009	N001	153	-	173	12		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	153	-	173	5.7		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	153	-	173	37		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	153	-	173	1250		FQ	#		
Sulfate	mg/L	08/11/2009	N001	153	-	173	240		FQ	#	5	
Temperature	C	08/11/2009	N001	153	-	173	20.3		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	153	-	173	1000		FQ	#	20	
Turbidity	NTU	08/11/2009	N001	153	-	173	3.36		FQ	#		
Uranium	mg/L	08/11/2009	N001	153	-	173	0.068		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0274 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	149	-	169	82		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	149	-	169	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	149	-	169	0.0023		FQ	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	149	-	169	32		FQ	#	0.0021	
Chloride	mg/L	08/11/2009	N001	149	-	169	10		FQ	#	0.2	
Iron	mg/L	08/11/2009	N001	149	-	169	0.0016	U	JFQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	149	-	169	6.2		FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	149	-	169	0.0001	U	JFQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	149	-	169	0.00052	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	149	-	169	3.2		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/11/2009	N001	149	-	169	179.8		FQ	#		
pH	s.u.	08/11/2009	N001	149	-	169	7.83		FQ	#		
Potassium	mg/L	08/11/2009	N001	149	-	169	1.4		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	149	-	169	0.0013		FQ	#	0.000032	
Silica	mg/L	08/11/2009	N001	149	-	169	10		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	149	-	169	4.9		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	149	-	169	11		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	149	-	169	272		FQ	#		
Sulfate	mg/L	08/11/2009	N001	149	-	169	14		FQ	#	0.5	
Temperature	C	08/11/2009	N001	149	-	169	21.64		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	149	-	169	170		FQ	#	20	
Turbidity	NTU	08/11/2009	N001	149	-	169	3.08		FQ	#		
Uranium	mg/L	08/11/2009	N001	149	-	169	0.0016		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0275 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	158.2	-	178.2	535		F	#		
Ammonia Total as N	mg/L	08/11/2009	N001	158.2	-	178.2	24		F	#	2	
Arsenic	mg/L	08/11/2009	N001	158.2	-	178.2	0.00083		F	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	158.2	-	178.2	660		F	#	0.021	
Chloride	mg/L	08/11/2009	N001	158.2	-	178.2	96		F	#	10	
Iron	mg/L	08/11/2009	N001	158.2	-	178.2	0.0016	U	JF	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	158.2	-	178.2	310		F	#	0.0066	
Manganese	mg/L	08/11/2009	N001	158.2	-	178.2	8		F	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	158.2	-	178.2	0.0003	B	UF	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	158.2	-	178.2	210		F	#	2	
Oxidation Reduction Potential	mV	08/11/2009	N001	158.2	-	178.2	238.7		F	#		
pH	s.u.	08/11/2009	N001	158.2	-	178.2	6.35		F	#		
Potassium	mg/L	08/11/2009	N001	158.2	-	178.2	21		F	#	0.092	
Selenium	mg/L	08/11/2009	N001	158.2	-	178.2	0.02		F	#	0.000032	
Silica	mg/L	08/11/2009	N001	158.2	-	178.2	15		F	#	0.0071	
Silicon	mg/L	08/11/2009	N001	158.2	-	178.2	7		F	#	0.0033	
Sodium	mg/L	08/11/2009	N001	158.2	-	178.2	250		F	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	158.2	-	178.2	5217		F	#		
Sulfate	mg/L	08/11/2009	N001	158.2	-	178.2	1900		F	#	25	
Temperature	C	08/11/2009	N001	158.2	-	178.2	18.67		F	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	158.2	-	178.2	4900		F	#	80	
Turbidity	NTU	08/11/2009	N001	158.2	-	178.2	1.4		F	#		
Uranium	mg/L	08/11/2009	N001	158.2	-	178.2	0.48		F	#	0.000035	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0276 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	154.5	-	174.5	92		F	#		
Ammonia Total as N	mg/L	08/12/2009	N001	154.5	-	174.5	0.1	U	F	#	0.1	
Ammonia Total as N	mg/L	08/12/2009	N002	154.5	-	174.5	0.1	U	F	#	0.1	
Arsenic	mg/L	08/12/2009	N001	154.5	-	174.5	0.0026		F	#	0.0000084	
Arsenic	mg/L	08/12/2009	N002	154.5	-	174.5	0.0026		F	#	0.0000084	
Calcium	mg/L	08/12/2009	N001	154.5	-	174.5	34		F	#	0.0021	
Calcium	mg/L	08/12/2009	N002	154.5	-	174.5	32		F	#	0.0021	
Chloride	mg/L	08/12/2009	N001	154.5	-	174.5	11		F	#	0.2	
Chloride	mg/L	08/12/2009	N002	154.5	-	174.5	12		F	#	0.2	
Iron	mg/L	08/12/2009	N001	154.5	-	174.5	0.0016	U	JF	#	0.0016	
Iron	mg/L	08/12/2009	N002	154.5	-	174.5	0.0025	B	UJF	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	154.5	-	174.5	6.6		F	#	0.0066	
Magnesium	mg/L	08/12/2009	N002	154.5	-	174.5	6.3		F	#	0.0066	
Manganese	mg/L	08/12/2009	N001	154.5	-	174.5	0.0001	U	JF	#	0.0001	
Manganese	mg/L	08/12/2009	N002	154.5	-	174.5	0.0001	U	JF	#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	154.5	-	174.5	0.00052	B	F	#	0.000067	
Molybdenum	mg/L	08/12/2009	N002	154.5	-	174.5	0.00051	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	154.5	-	174.5	3		F	#	0.02	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N002	154.5	-	174.5	3.2		F	#	0.02	
Oxidation Reduction Potential	mV	08/12/2009	N001	154.5	-	174.5	194.9		F	#		
pH	s.u.	08/12/2009	N001	154.5	-	174.5	7.84		F	#		
Potassium	mg/L	08/12/2009	N001	154.5	-	174.5	1.6		JF	#	0.092	
Potassium	mg/L	08/12/2009	N002	154.5	-	174.5	1.7		F	#	0.092	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0276 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Selenium	mg/L	08/12/2009	N001	154.5	-	174.5	0.0014		F	#	0.000032	
Selenium	mg/L	08/12/2009	N002	154.5	-	174.5	0.0015		F	#	0.000032	
Silica	mg/L	08/12/2009	N001	154.5	-	174.5	12		F	#	0.0071	
Silica	mg/L	08/12/2009	N002	154.5	-	174.5	11		F	#	0.0071	
Silicon	mg/L	08/12/2009	N001	154.5	-	174.5	5.4		F	#	0.0033	
Silicon	mg/L	08/12/2009	N002	154.5	-	174.5	5.3		F	#	0.0033	
Sodium	mg/L	08/12/2009	N001	154.5	-	174.5	13		F	#	0.0044	
Sodium	mg/L	08/12/2009	N002	154.5	-	174.5	13		F	#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	154.5	-	174.5	274		F	#		
Sulfate	mg/L	08/12/2009	N001	154.5	-	174.5	17		F	#	0.5	
Sulfate	mg/L	08/12/2009	N002	154.5	-	174.5	17		F	#	0.5	
Temperature	C	08/12/2009	N001	154.5	-	174.5	19.81		F	#		
Total Dissolved Solids	mg/L	08/12/2009	N001	154.5	-	174.5	180		F	#	20	
Total Dissolved Solids	mg/L	08/12/2009	N002	154.5	-	174.5	180		F	#	20	
Turbidity	NTU	08/12/2009	N001	154.5	-	174.5	2.04		F	#		
Uranium	mg/L	08/12/2009	N001	154.5	-	174.5	0.0015		F	#	0.0000017	
Uranium	mg/L	08/12/2009	N002	154.5	-	174.5	0.0015		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0277 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	95.7	-	105.7	95		FQ	#		
Ammonia Total as N	mg/L	08/13/2009	N001	95.7	-	105.7	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/13/2009	N001	95.7	-	105.7	0.0005		FQ	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	95.7	-	105.7	27		FQ	#	0.0021	
Chloride	mg/L	08/13/2009	N001	95.7	-	105.7	10		FQ	#	0.2	
Iron	mg/L	08/13/2009	N001	95.7	-	105.7	0.031	B	FQ	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	95.7	-	105.7	8.5		FQ	#	0.0066	
Manganese	mg/L	08/13/2009	N001	95.7	-	105.7	0.035		FQ	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	95.7	-	105.7	0.00046	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	95.7	-	105.7	2.9		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/13/2009	N001	95.7	-	105.7	127.8		FQ	#		
pH	s.u.	08/13/2009	N001	95.7	-	105.7	7.86		FQ	#		
Potassium	mg/L	08/13/2009	N001	95.7	-	105.7	2.4		FQ	#	0.092	
Selenium	mg/L	08/13/2009	N001	95.7	-	105.7	0.0012		FQ	#	0.000032	
Silica	mg/L	08/13/2009	N001	95.7	-	105.7	14		FQ	#	0.0071	
Silicon	mg/L	08/13/2009	N001	95.7	-	105.7	6.6		FQ	#	0.0033	
Sodium	mg/L	08/13/2009	N001	95.7	-	105.7	11		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	95.7	-	105.7	9		RFQ	#		
Sulfate	mg/L	08/13/2009	N001	95.7	-	105.7	16		FQ	#	0.5	
Temperature	C	08/13/2009	N001	95.7	-	105.7	22.26		FQ	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	95.7	-	105.7	170		FQ	#	20	
Turbidity	NTU	08/13/2009	N001	95.7	-	105.7	5.43		FQ	#		
Uranium	mg/L	08/13/2009	N001	95.7	-	105.7	0.0026		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0278 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	90.5	-	100.5	70		FQ	#		
Ammonia Total as N	mg/L	08/13/2009	N001	90.5	-	100.5	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/13/2009	N001	90.5	-	100.5	0.0017		FQ	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	90.5	-	100.5	29		FQ	#	0.0021	
Chloride	mg/L	08/13/2009	N001	90.5	-	100.5	9.3		FQ	#	0.2	
Iron	mg/L	08/13/2009	N001	90.5	-	100.5	0.0099	B	FQ	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	90.5	-	100.5	6.9		FQ	#	0.0066	
Manganese	mg/L	08/13/2009	N001	90.5	-	100.5	0.0025	B	FQ	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	90.5	-	100.5	0.00073	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	90.5	-	100.5	2.8		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/13/2009	N001	90.5	-	100.5	250.3		FQ	#		
pH	s.u.	08/13/2009	N001	90.5	-	100.5	7.91		FQ	#		
Potassium	mg/L	08/13/2009	N001	90.5	-	100.5	2.4		FQ	#	0.092	
Selenium	mg/L	08/13/2009	N001	90.5	-	100.5	0.0011		FQ	#	0.000032	
Silica	mg/L	08/13/2009	N001	90.5	-	100.5	12		FQ	#	0.0071	
Silicon	mg/L	08/13/2009	N001	90.5	-	100.5	5.5		FQ	#	0.0033	
Sodium	mg/L	08/13/2009	N001	90.5	-	100.5	9.2		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	90.5	-	100.5	238		FQ	#		
Sulfate	mg/L	08/13/2009	N001	90.5	-	100.5	12		FQ	#	0.5	
Temperature	C	08/13/2009	N001	90.5	-	100.5	18.5		FQ	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	90.5	-	100.5	160		FQ	#	20	
Turbidity	NTU	08/13/2009	N001	90.5	-	100.5	1.43		FQ	#		
Uranium	mg/L	08/13/2009	N001	90.5	-	100.5	0.0013		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0279 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	26.5	-	36.5	82		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	26.5	-	36.5	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	26.5	-	36.5	0.00098		F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	26.5	-	36.5	57		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	26.5	-	36.5	32		F	#	1	
Iron	mg/L	08/13/2009	N001	26.5	-	36.5	0.029	B	F	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	26.5	-	36.5	12		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	26.5	-	36.5	0.0048	B	F	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	26.5	-	36.5	0.00053	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	26.5	-	36.5	12		F	#	0.1	
Oxidation Reduction Potential	mV	08/13/2009	N001	26.5	-	36.5	256		F	#		
pH	s.u.	08/13/2009	N001	26.5	-	36.5	7.66		F	#		
Potassium	mg/L	08/13/2009	N001	26.5	-	36.5	2.1		F	#	0.092	
Selenium	mg/L	08/13/2009	N001	26.5	-	36.5	0.0021		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	26.5	-	36.5	12		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	26.5	-	36.5	5.7		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	26.5	-	36.5	15		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	26.5	-	36.5	466		F	#		
Sulfate	mg/L	08/13/2009	N001	26.5	-	36.5	65		F	#	0.5	
Temperature	C	08/13/2009	N001	26.5	-	36.5	18.92		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	26.5	-	36.5	310		F	#	20	
Turbidity	NTU	08/13/2009	N001	26.5	-	36.5	2.47		F	#		
Uranium	mg/L	08/13/2009	N001	26.5	-	36.5	0.0018		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0280 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	26.5	-	36.5	90		FQ	#		
Ammonia Total as N	mg/L	08/13/2009	N001	26.5	-	36.5	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/13/2009	N001	26.5	-	36.5	0.0021		FQ	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	26.5	-	36.5	33		FQ	#	0.0021	
Chloride	mg/L	08/13/2009	N001	26.5	-	36.5	22		FQ	#	0.4	
Iron	mg/L	08/13/2009	N001	26.5	-	36.5	0.0016	U	JFQ	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	26.5	-	36.5	6.7		FQ	#	0.0066	
Manganese	mg/L	08/13/2009	N001	26.5	-	36.5	0.0001	U	JFQ	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	26.5	-	36.5	0.00055	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	26.5	-	36.5	2.7		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/13/2009	N001	26.5	-	36.5	247.7		FQ	#		
pH	s.u.	08/13/2009	N001	26.5	-	36.5	7.91		FQ	#		
Potassium	mg/L	08/13/2009	N001	26.5	-	36.5	1.8		FQ	#	0.092	
Selenium	mg/L	08/13/2009	N001	26.5	-	36.5	0.0018		FQ	#	0.000032	
Silica	mg/L	08/13/2009	N001	26.5	-	36.5	12		FQ	#	0.0071	
Silicon	mg/L	08/13/2009	N001	26.5	-	36.5	5.6		FQ	#	0.0033	
Sodium	mg/L	08/13/2009	N001	26.5	-	36.5	20		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	26.5	-	36.5	315		FQ	#		
Sulfate	mg/L	08/13/2009	N001	26.5	-	36.5	21		FQ	#	0.5	
Temperature	C	08/13/2009	N001	26.5	-	36.5	18.72		FQ	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	26.5	-	36.5	200		FQ	#	20	
Turbidity	NTU	08/13/2009	N001	26.5	-	36.5	3.47		FQ	#		
Uranium	mg/L	08/13/2009	N001	26.5	-	36.5	0.0015		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0281 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	0001	70.5	-	80.5	129		FQ	#		
Ammonia Total as N	mg/L	08/13/2009	0001	70.5	-	80.5	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/13/2009	0001	70.5	-	80.5	0.0002		FQ	#	0.0000084	
Calcium	mg/L	08/13/2009	0001	70.5	-	80.5	120		FQ	#	0.0021	
Chloride	mg/L	08/13/2009	0001	70.5	-	80.5	28		FQ	#	1	
Iron	mg/L	08/13/2009	0001	70.5	-	80.5	0.19		FQ	#	0.0016	
Magnesium	mg/L	08/13/2009	0001	70.5	-	80.5	21		FQ	#	0.0066	
Manganese	mg/L	08/13/2009	0001	70.5	-	80.5	0.017		FQ	#	0.0001	
Molybdenum	mg/L	08/13/2009	0001	70.5	-	80.5	0.00088	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	0001	70.5	-	80.5	44		FQ	#	0.5	
Oxidation Reduction Potential	mV	08/13/2009	N001	70.5	-	80.5	112.1		FQ	#		
pH	s.u.	08/13/2009	N001	70.5	-	80.5	7.3		FQ	#		
Potassium	mg/L	08/13/2009	0001	70.5	-	80.5	2.4		FQ	#	0.092	
Selenium	mg/L	08/13/2009	0001	70.5	-	80.5	0.0018		FQ	#	0.000032	
Silica	mg/L	08/13/2009	0001	70.5	-	80.5	14		FQ	#	0.0071	
Silicon	mg/L	08/13/2009	0001	70.5	-	80.5	6.8		FQ	#	0.0033	
Sodium	mg/L	08/13/2009	0001	70.5	-	80.5	21		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	70.5	-	80.5	815		FQ	#		
Sulfate	mg/L	08/13/2009	0001	70.5	-	80.5	140		FQ	#	2.5	
Temperature	C	08/13/2009	N001	70.5	-	80.5	17.49		FQ	#		
Total Dissolved Solids	mg/L	08/13/2009	0001	70.5	-	80.5	660		FQ	#	20	
Turbidity	NTU	08/13/2009	N001	70.5	-	80.5	21.4		FQ	#		
Uranium	mg/L	08/13/2009	0001	70.5	-	80.5	0.007		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0282 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	74.1	-	84.1	133		F	#		
Ammonia Total as N	mg/L	08/12/2009	N001	74.1	-	84.1	0.1	U	F	#	0.1	
Arsenic	mg/L	08/12/2009	N001	74.1	-	84.1	0.00015		F	#	0.0000084	
Calcium	mg/L	08/12/2009	N001	74.1	-	84.1	99		F	#	0.0021	
Chloride	mg/L	08/12/2009	N001	74.1	-	84.1	39		F	#	1	
Iron	mg/L	08/12/2009	N001	74.1	-	84.1	0.06		F	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	74.1	-	84.1	19		F	#	0.0066	
Manganese	mg/L	08/12/2009	N001	74.1	-	84.1	0.0026	B	F	#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	74.1	-	84.1	0.00067	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	74.1	-	84.1	3.9		F	#	0.02	
Oxidation Reduction Potential	mV	08/12/2009	N001	74.1	-	84.1	147		F	#		
pH	s.u.	08/12/2009	N001	74.1	-	84.1	7.72		F	#		
Potassium	mg/L	08/12/2009	N001	74.1	-	84.1	2.6		F	#	0.092	
Selenium	mg/L	08/12/2009	N001	74.1	-	84.1	0.0013		F	#	0.000032	
Silica	mg/L	08/12/2009	N001	74.1	-	84.1	14		F	#	0.0071	
Silicon	mg/L	08/12/2009	N001	74.1	-	84.1	6.8		F	#	0.0033	
Sodium	mg/L	08/12/2009	N001	74.1	-	84.1	15		F	#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	74.1	-	84.1	703		F	#		
Sulfate	mg/L	08/12/2009	N001	74.1	-	84.1	65		F	#	2.5	
Temperature	C	08/12/2009	N001	74.1	-	84.1	24.4		F	#		
Total Dissolved Solids	mg/L	08/12/2009	N001	74.1	-	84.1	540		F	#	20	
Turbidity	NTU	08/12/2009	N001	74.1	-	84.1	9.85		F	#		
Uranium	mg/L	08/12/2009	N001	74.1	-	84.1	0.0044		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0286 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	93.2	-	103.2	231		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	93.2	-	103.2	2		FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	93.2	-	103.2	0.00049		FQ	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	93.2	-	103.2	240		FQ	#	0.0021	
Chloride	mg/L	08/11/2009	N001	93.2	-	103.2	30		FQ	#	4	
Iron	mg/L	08/11/2009	N001	93.2	-	103.2	0.0016	U	JFQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	93.2	-	103.2	64		FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	93.2	-	103.2	0.33		FQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	93.2	-	103.2	0.00044	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	93.2	-	103.2	61		FQ	#	0.5	
Oxidation Reduction Potential	mV	08/11/2009	N001	93.2	-	103.2	213.9		FQ	#		
pH	s.u.	08/11/2009	N001	93.2	-	103.2	6.59		FQ	#		
Potassium	mg/L	08/11/2009	N001	93.2	-	103.2	6		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	93.2	-	103.2	0.006		FQ	#	0.000032	
Silica	mg/L	08/11/2009	N001	93.2	-	103.2	15		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	93.2	-	103.2	7		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	93.2	-	103.2	70		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	93.2	-	103.2	1729		FQ	#		
Sulfate	mg/L	08/11/2009	N001	93.2	-	103.2	490		FQ	#	10	
Temperature	C	08/11/2009	N001	93.2	-	103.2	20.4		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	93.2	-	103.2	1400		FQ	#	40	
Turbidity	NTU	08/11/2009	N001	93.2	-	103.2	2.08		FQ	#		
Uranium	mg/L	08/11/2009	N001	93.2	-	103.2	0.093		FQ	#	0.0000087	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0287 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	100.7	-	110.7	450		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	100.7	-	110.7	0.57		FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	100.7	-	110.7	0.0012		FQ	#	0.000084	
Calcium	mg/L	08/11/2009	N001	100.7	-	110.7	720		FQ	#	0.021	
Chloride	mg/L	08/11/2009	N001	100.7	-	110.7	170		FQ	#	10	
Iron	mg/L	08/11/2009	N001	100.7	-	110.7	0.013	B	UFQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	100.7	-	110.7	130		FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	100.7	-	110.7	0.0093		FQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	100.7	-	110.7	0.048		FQ	#	0.00067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	100.7	-	110.7	230		FQ	#	2	
Oxidation Reduction Potential	mV	08/11/2009	N001	100.7	-	110.7	210.3		FQ	#		
pH	s.u.	08/11/2009	N001	100.7	-	110.7	6.53		FQ	#		
Potassium	mg/L	08/11/2009	N001	100.7	-	110.7	9.2		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	100.7	-	110.7	0.096		FQ	#	0.00032	
Silica	mg/L	08/11/2009	N001	100.7	-	110.7	15		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	100.7	-	110.7	7.2		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	100.7	-	110.7	190		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	100.7	-	110.7	4450		FQ	#		
Sulfate	mg/L	08/11/2009	N001	100.7	-	110.7	1200		FQ	#	25	
Temperature	C	08/11/2009	N001	100.7	-	110.7	19.91		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	100.7	-	110.7	4400		FQ	#	80	
Turbidity	NTU	08/11/2009	N001	100.7	-	110.7	3		FQ	#		
Uranium	mg/L	08/11/2009	N001	100.7	-	110.7	0.19		FQ	#	0.000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0288 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	104	-	114	263		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	104	-	114	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	104	-	114	0.00048		FQ	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	104	-	114	230		FQ	#	0.0021	
Chloride	mg/L	08/11/2009	N001	104	-	114	24		FQ	#	2	
Iron	mg/L	08/11/2009	N001	104	-	114	0.018	B	FQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	104	-	114	42		FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	104	-	114	0.0037	B	FQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	104	-	114	0.0002	B	UFQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	104	-	114	64		FQ	#	0.5	
Oxidation Reduction Potential	mV	08/11/2009	N001	104	-	114	223.2		FQ	#		
pH	s.u.	08/11/2009	N001	104	-	114	6.78		FQ	#		
Potassium	mg/L	08/11/2009	N001	104	-	114	4.4		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	104	-	114	0.0025		FQ	#	0.000032	
Silica	mg/L	08/11/2009	N001	104	-	114	15		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	104	-	114	7.2		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	104	-	114	54		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	104	-	114	1697		FQ	#		
Sulfate	mg/L	08/11/2009	N001	104	-	114	290		FQ	#	5	
Temperature	C	08/11/2009	N001	104	-	114	18.64		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	104	-	114	1200		FQ	#	20	
Turbidity	NTU	08/11/2009	N001	104	-	114	3.94		FQ	#		
Uranium	mg/L	08/11/2009	N001	104	-	114	0.014		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0289 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	148.3	-	158.3	231		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	148.3	-	158.3	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	148.3	-	158.3	0.00091		FQ	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	148.3	-	158.3	200		FQ	#	0.0021	
Chloride	mg/L	08/11/2009	N001	148.3	-	158.3	26		FQ	#	2	
Iron	mg/L	08/11/2009	N001	148.3	-	158.3	0.0016	U	JFQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	148.3	-	158.3	35		FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	148.3	-	158.3	0.017		FQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	148.3	-	158.3	0.00043	B	UFQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	148.3	-	158.3	51		FQ	#	0.5	
Oxidation Reduction Potential	mV	08/11/2009	N001	148.3	-	158.3	222		FQ	#		
pH	s.u.	08/11/2009	N001	148.3	-	158.3	6.94		FQ	#		
Potassium	mg/L	08/11/2009	N001	148.3	-	158.3	4.1		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	148.3	-	158.3	0.0028		FQ	#	0.000032	
Silica	mg/L	08/11/2009	N001	148.3	-	158.3	14		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	148.3	-	158.3	6.6		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	148.3	-	158.3	36		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	148.3	-	158.3	1383		FQ	#		
Sulfate	mg/L	08/11/2009	N001	148.3	-	158.3	260		FQ	#	5	
Temperature	C	08/11/2009	N001	148.3	-	158.3	18.45		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	148.3	-	158.3	1000		FQ	#	20	
Turbidity	NTU	08/11/2009	N001	148.3	-	158.3	3.49		FQ	#		
Uranium	mg/L	08/11/2009	N001	148.3	-	158.3	0.022		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0290 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	0001	102.7	-	112.7	94		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	0001	102.7	-	112.7	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/11/2009	0001	102.7	-	112.7	0.0019		FQ	#	0.0000084	
Calcium	mg/L	08/11/2009	0001	102.7	-	112.7	35		FQ	#	0.0021	
Chloride	mg/L	08/11/2009	0001	102.7	-	112.7	13		FQ	#	0.2	
Iron	mg/L	08/11/2009	0001	102.7	-	112.7	0.0055	B	UJFQ	#	0.0016	
Magnesium	mg/L	08/11/2009	0001	102.7	-	112.7	5.8		FQ	#	0.0066	
Manganese	mg/L	08/11/2009	0001	102.7	-	112.7	0.00025	B	JFQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	0001	102.7	-	112.7	0.00057	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	0001	102.7	-	112.7	3.6		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/11/2009	N001	102.7	-	112.7	159.3		FQ	#		
pH	s.u.	08/11/2009	N001	102.7	-	112.7	7.67		FQ	#		
Potassium	mg/L	08/11/2009	0001	102.7	-	112.7	1.6		FQ	#	0.092	
Selenium	mg/L	08/11/2009	0001	102.7	-	112.7	0.0015		FQ	#	0.000032	
Silica	mg/L	08/11/2009	0001	102.7	-	112.7	11		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	0001	102.7	-	112.7	5.4		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	0001	102.7	-	112.7	13		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	102.7	-	112.7	308		FQ	#		
Sulfate	mg/L	08/11/2009	0001	102.7	-	112.7	19		FQ	#	0.5	
Temperature	C	08/11/2009	N001	102.7	-	112.7	17.12		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	0001	102.7	-	112.7	190		FQ	#	20	
Turbidity	NTU	08/11/2009	N001	102.7	-	112.7	24.2		FQ	#		
Uranium	mg/L	08/11/2009	0001	102.7	-	112.7	0.0014		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0683 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	95	-	145	94		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	95	-	145	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	95	-	145	0.002		FQ	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	95	-	145	34		FQ	#	0.0021	
Chloride	mg/L	08/11/2009	N001	95	-	145	13		FQ	#	0.2	
Iron	mg/L	08/11/2009	N001	95	-	145	0.024	B	FQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	95	-	145	5.7		FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	95	-	145	0.0001	U	JFQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	95	-	145	0.00059	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	95	-	145	3.1		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/11/2009	N001	95	-	145	161.9		FQ	#		
pH	s.u.	08/11/2009	N001	95	-	145	7.73		FQ	#		
Potassium	mg/L	08/11/2009	N001	95	-	145	1.7		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	95	-	145	0.0015		FQ	#	0.000032	
Silica	mg/L	08/11/2009	N001	95	-	145	12		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	95	-	145	5.4		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	95	-	145	13		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	95	-	145	287		FQ	#		
Sulfate	mg/L	08/11/2009	N001	95	-	145	18		FQ	#	0.5	
Temperature	C	08/11/2009	N001	95	-	145	16.86		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	95	-	145	190		FQ	#	20	
Turbidity	NTU	08/11/2009	N001	95	-	145	2.37		FQ	#		
Uranium	mg/L	08/11/2009	N001	95	-	145	0.0013		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0684 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	124.2	-	175.5	102		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	124.2	-	175.5	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	124.2	-	175.5	0.0028		FQ	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	124.2	-	175.5	33		FQ	#	0.0021	
Chloride	mg/L	08/11/2009	N001	124.2	-	175.5	11		FQ	#	0.2	
Iron	mg/L	08/11/2009	N001	124.2	-	175.5	0.0016	U	JFQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	124.2	-	175.5	6.5		FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	124.2	-	175.5	0.0001	U	JFQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	124.2	-	175.5	0.00053	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	124.2	-	175.5	3.3		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/11/2009	N001	124.2	-	175.5	154.2		FQ	#		
pH	s.u.	08/11/2009	N001	124.2	-	175.5	7.51		FQ	#		
Potassium	mg/L	08/11/2009	N001	124.2	-	175.5	1.5		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	124.2	-	175.5	0.0014		FQ	#	0.000032	
Silica	mg/L	08/11/2009	N001	124.2	-	175.5	11		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	124.2	-	175.5	5.1		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	124.2	-	175.5	13		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	124.2	-	175.5	308		FQ	#		
Sulfate	mg/L	08/11/2009	N001	124.2	-	175.5	17		FQ	#	0.5	
Temperature	C	08/11/2009	N001	124.2	-	175.5	17.21		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	124.2	-	175.5	170		FQ	#	20	
Turbidity	NTU	08/11/2009	N001	124.2	-	175.5	3.81		FQ	#		
Uranium	mg/L	08/11/2009	N001	124.2	-	175.5	0.0017		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0685 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	93.66	-	145.5	73		F	#		
Ammonia Total as N	mg/L	08/11/2009	N001	93.66	-	145.5	0.1	U	F	#	0.1	
Arsenic	mg/L	08/11/2009	N001	93.66	-	145.5	0.0025		F	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	93.66	-	145.5	40		F	#	0.0021	
Chloride	mg/L	08/11/2009	N001	93.66	-	145.5	25		F	#	1	
Iron	mg/L	08/11/2009	N001	93.66	-	145.5	0.0056	B	UJF	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	93.66	-	145.5	7.7		F	#	0.0066	
Manganese	mg/L	08/11/2009	N001	93.66	-	145.5	0.0001	U	JF	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	93.66	-	145.5	0.00043	B	UF	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	93.66	-	145.5	3.2		F	#	0.02	
Oxidation Reduction Potential	mV	08/11/2009	N001	93.66	-	145.5	188.7		F	#		
pH	s.u.	08/11/2009	N001	93.66	-	145.5	7.91		F	#		
Potassium	mg/L	08/11/2009	N001	93.66	-	145.5	1.6		F	#	0.092	
Selenium	mg/L	08/11/2009	N001	93.66	-	145.5	0.0022		F	#	0.000032	
Silica	mg/L	08/11/2009	N001	93.66	-	145.5	11		F	#	0.0071	
Silicon	mg/L	08/11/2009	N001	93.66	-	145.5	5		F	#	0.0033	
Sodium	mg/L	08/11/2009	N001	93.66	-	145.5	13		F	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	93.66	-	145.5	337		F	#		
Sulfate	mg/L	08/11/2009	N001	93.66	-	145.5	28		F	#	0.5	
Temperature	C	08/11/2009	N001	93.66	-	145.5	17.33		F	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	93.66	-	145.5	210		F	#	20	
Turbidity	NTU	08/11/2009	N001	93.66	-	145.5	2.44		F	#		
Uranium	mg/L	08/11/2009	N001	93.66	-	145.5	0.0015		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0686 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/10/2009	N001	60	-	100	20		F	#		
Ammonia Total as N	mg/L	08/10/2009	N001	60	-	100	0.1	U	F	#	0.1	
Arsenic	mg/L	08/10/2009	N001	60	-	100	0.006		F	#	0.0000084	
Calcium	mg/L	08/10/2009	N001	60	-	100	14		F	#	0.0021	
Chloride	mg/L	08/10/2009	N001	60	-	100	2.2		F	#	0.2	
Iron	mg/L	08/10/2009	N001	60	-	100	0.2	E	F	#	0.0016	
Magnesium	mg/L	08/10/2009	N001	60	-	100	1.7		F	#	0.0066	
Manganese	mg/L	08/10/2009	N001	60	-	100	0.0026	B	F	#	0.0001	
Molybdenum	mg/L	08/10/2009	N001	60	-	100	0.00096	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/10/2009	N001	60	-	100	1.7		F	#	0.01	
Oxidation Reduction Potential	mV	08/10/2009	N001	60	-	100	191		F	#		
pH	s.u.	08/10/2009	N001	60	-	100	8.29		F	#		
Potassium	mg/L	08/10/2009	N001	60	-	100	1.5		JF	#	0.092	
Selenium	mg/L	08/10/2009	N001	60	-	100	0.00046		JF	#	0.000032	
Silica	mg/L	08/10/2009	N001	60	-	100	9		F	#	0.0071	
Silicon	mg/L	08/10/2009	N001	60	-	100	4.2		F	#	0.0033	
Sodium	mg/L	08/10/2009	N001	60	-	100	19		F	#	0.0044	
Specific Conductance	umhos /cm	08/10/2009	N001	60	-	100	159		F	#		
Sulfate	mg/L	08/10/2009	N001	60	-	100	24		F	#	0.5	
Temperature	C	08/10/2009	N001	60	-	100	19.07		F	#		
Total Dissolved Solids	mg/L	08/10/2009	N001	60	-	100	120		F	#	20	
Turbidity	NTU	08/10/2009	N001	60	-	100	7.21		F	#		
Uranium	mg/L	08/10/2009	N001	60	-	100	0.00018	E	F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0687 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	60	-	100	16		F	#		
Ammonia Total as N	mg/L	08/11/2009	N001	60	-	100	0.1	U	F	#	0.1	
Ammonia Total as N	mg/L	08/11/2009	N002	60	-	100	0.1	U	F	#	0.1	
Arsenic	mg/L	08/11/2009	N001	60	-	100	0.0079		F	#	0.0000084	
Arsenic	mg/L	08/11/2009	N002	60	-	100	0.0078		F	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	60	-	100	13		F	#	0.0021	
Calcium	mg/L	08/11/2009	N002	60	-	100	13		F	#	0.0021	
Chloride	mg/L	08/11/2009	N001	60	-	100	1.7		F	#	0.2	
Chloride	mg/L	08/11/2009	N002	60	-	100	1.7		F	#	0.2	
Iron	mg/L	08/11/2009	N001	60	-	100	0.0063	B	JF	#	0.0016	
Iron	mg/L	08/11/2009	N002	60	-	100	0.0037	B	JF	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	60	-	100	1.6		F	#	0.0066	
Magnesium	mg/L	08/11/2009	N002	60	-	100	1.6		F	#	0.0066	
Manganese	mg/L	08/11/2009	N001	60	-	100	0.0001	U	JF	#	0.0001	
Manganese	mg/L	08/11/2009	N002	60	-	100	0.0001	U	JF	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	60	-	100	0.0044		F	#	0.000067	
Molybdenum	mg/L	08/11/2009	N002	60	-	100	0.0044		F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	60	-	100	2		F	#	0.02	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N002	60	-	100	2		F	#	0.02	
Oxidation Reduction Potential	mV	08/11/2009	N001	60	-	100	180		F	#		
pH	s.u.	08/11/2009	N001	60	-	100	8.57		F	#		
Potassium	mg/L	08/11/2009	N001	60	-	100	1.4		JF	#	0.092	
Potassium	mg/L	08/11/2009	N002	60	-	100	1.4		JF	#	0.092	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0687 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Selenium	mg/L	08/11/2009	N001	60	-	100	0.00052		F	#	0.000032	
Selenium	mg/L	08/11/2009	N002	60	-	100	0.00054		F	#	0.000032	
Silica	mg/L	08/11/2009	N001	60	-	100	12		F	#	0.0071	
Silica	mg/L	08/11/2009	N002	60	-	100	12		F	#	0.0071	
Silicon	mg/L	08/11/2009	N001	60	-	100	5.4		F	#	0.0033	
Silicon	mg/L	08/11/2009	N002	60	-	100	5.4		F	#	0.0033	
Sodium	mg/L	08/11/2009	N001	60	-	100	20		F	#	0.0044	
Sodium	mg/L	08/11/2009	N002	60	-	100	20		F	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	60	-	100	178		F	#		
Sulfate	mg/L	08/11/2009	N001	60	-	100	24		F	#	0.5	
Sulfate	mg/L	08/11/2009	N002	60	-	100	25		F	#	0.5	
Temperature	C	08/11/2009	N001	60	-	100	20.79		F	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	60	-	100	120		F	#	20	
Total Dissolved Solids	mg/L	08/11/2009	N002	60	-	100	130		F	#	20	
Turbidity	NTU	08/11/2009	N001	60	-	100	3.67		F	#		
Uranium	mg/L	08/11/2009	N001	60	-	100	0.00024		F	#	0.0000017	
Uranium	mg/L	08/11/2009	N002	60	-	100	0.00023		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0688 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	60	-	100	65		F	#		
Ammonia Total as N	mg/L	08/11/2009	N001	60	-	100	0.1	U	F	#	0.1	
Arsenic	mg/L	08/11/2009	N001	60	-	100	0.001		F	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	60	-	100	120		F	#	0.0021	
Chloride	mg/L	08/11/2009	N001	60	-	100	91		F	#	1	
Iron	mg/L	08/11/2009	N001	60	-	100	0.073		F	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	60	-	100	12		F	#	0.0066	
Manganese	mg/L	08/11/2009	N001	60	-	100	0.0019	B	F	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	60	-	100	0.0033		F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	60	-	100	7.3		F	#	0.05	
Oxidation Reduction Potential	mV	08/11/2009	N001	60	-	100	184.6		F	#		
pH	s.u.	08/11/2009	N001	60	-	100	7.7		F	#		
Potassium	mg/L	08/11/2009	N001	60	-	100	3.2		F	#	0.092	
Selenium	mg/L	08/11/2009	N001	60	-	100	0.0089		F	#	0.000032	
Silica	mg/L	08/11/2009	N001	60	-	100	13		F	#	0.0071	
Silicon	mg/L	08/11/2009	N001	60	-	100	6.3		F	#	0.0033	
Sodium	mg/L	08/11/2009	N001	60	-	100	40		F	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	60	-	100	844		F	#		
Sulfate	mg/L	08/11/2009	N001	60	-	100	160		F	#	2.5	
Temperature	C	08/11/2009	N001	60	-	100	18.89		F	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	60	-	100	600		F	#	20	
Turbidity	NTU	08/11/2009	N001	60	-	100	4.59		F	#		
Uranium	mg/L	08/11/2009	N001	60	-	100	0.0043		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0689 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	55	-	95	90		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	55	-	95	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	55	-	95	0.0019		F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	55	-	95	35		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	55	-	95	12		F	#	0.2	
Iron	mg/L	08/13/2009	N001	55	-	95	0.0051	B	JF	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	55	-	95	6.7		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	55	-	95	0.0001	U	JF	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	55	-	95	0.00045	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	55	-	95	2.3		F	#	0.02	
Oxidation Reduction Potential	mV	08/13/2009	N001	55	-	95	182.8		F	#		
pH	s.u.	08/13/2009	N001	55	-	95	7.77		F	#		
Potassium	mg/L	08/13/2009	N001	55	-	95	1.7		JF	#	0.092	
Selenium	mg/L	08/13/2009	N001	55	-	95	0.0012		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	55	-	95	12		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	55	-	95	5.8		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	55	-	95	9.1		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	55	-	95	271		F	#		
Sulfate	mg/L	08/13/2009	N001	55	-	95	16		F	#	0.5	
Temperature	C	08/13/2009	N001	55	-	95	17.43		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	55	-	95	170		F	#	20	
Turbidity	NTU	08/13/2009	N001	55	-	95	0.68		F	#		
Uranium	mg/L	08/13/2009	N001	55	-	95	0.0013		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0690 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	55	-	95	88		FQ	#		
Ammonia Total as N	mg/L	08/13/2009	N001	55	-	95	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/13/2009	N001	55	-	95	0.0012		FQ	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	55	-	95	27		FQ	#	0.0021	
Chloride	mg/L	08/13/2009	N001	55	-	95	8.6		FQ	#	0.2	
Iron	mg/L	08/13/2009	N001	55	-	95	0.0016	U	JFQ	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	55	-	95	7.5		FQ	#	0.0066	
Manganese	mg/L	08/13/2009	N001	55	-	95	0.00081	B	FQ	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	55	-	95	0.0004	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	55	-	95	2.8		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/13/2009	N001	55	-	95	242.2		FQ	#		
pH	s.u.	08/13/2009	N001	55	-	95	7.97		FQ	#		
Potassium	mg/L	08/13/2009	N001	55	-	95	2.5		FQ	#	0.092	
Selenium	mg/L	08/13/2009	N001	55	-	95	0.0012		FQ	#	0.000032	
Silica	mg/L	08/13/2009	N001	55	-	95	11		FQ	#	0.0071	
Silicon	mg/L	08/13/2009	N001	55	-	95	5.3		FQ	#	0.0033	
Sodium	mg/L	08/13/2009	N001	55	-	95	9.3		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	55	-	95	245		FQ	#		
Sulfate	mg/L	08/13/2009	N001	55	-	95	12		FQ	#	0.5	
Temperature	C	08/13/2009	N001	55	-	95	18.55		FQ	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	55	-	95	160		FQ	#	20	
Turbidity	NTU	08/13/2009	N001	55	-	95	2.9		FQ	#		
Uranium	mg/L	08/13/2009	N001	55	-	95	0.0017		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0691 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	55	-	95	176		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	55	-	95	0.1	U	F	#	0.1	
Ammonia Total as N	mg/L	08/13/2009	N002	55	-	95	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	55	-	95	0.0012		F	#	0.0000084	
Arsenic	mg/L	08/13/2009	N002	55	-	95	0.0012		F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	55	-	95	250		F	#	0.0021	
Calcium	mg/L	08/13/2009	N002	55	-	95	240		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	55	-	95	40		F	#	2	
Chloride	mg/L	08/13/2009	N002	55	-	95	50		F	#	1	
Iron	mg/L	08/13/2009	N001	55	-	95	0.051		F	#	0.0016	
Iron	mg/L	08/13/2009	N002	55	-	95	0.029	B	UF	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	55	-	95	40		F	#	0.0066	
Magnesium	mg/L	08/13/2009	N002	55	-	95	39		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	55	-	95	0.2		F	#	0.0001	
Manganese	mg/L	08/13/2009	N002	55	-	95	0.2		F	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	55	-	95	0.00028	B	F	#	0.000067	
Molybdenum	mg/L	08/13/2009	N002	55	-	95	0.00023	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	55	-	95	51		F	#	0.5	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N002	55	-	95	52		F	#	0.5	
Oxidation Reduction Potential	mV	08/13/2009	N001	55	-	95	254.6		F	#		
pH	s.u.	08/13/2009	N001	55	-	95	7.2		F	#		
Potassium	mg/L	08/13/2009	N001	55	-	95	4.2		F	#	0.092	
Potassium	mg/L	08/13/2009	N002	55	-	95	4.8		F	#	0.092	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0691 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Selenium	mg/L	08/13/2009	N001	55	-	95	0.0028		F	#	0.000032	
Selenium	mg/L	08/13/2009	N002	55	-	95	0.003		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	55	-	95	15		F	#	0.0071	
Silica	mg/L	08/13/2009	N002	55	-	95	14		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	55	-	95	6.8		F	#	0.0033	
Silicon	mg/L	08/13/2009	N002	55	-	95	6.6		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	55	-	95	36		F	#	0.0044	
Sodium	mg/L	08/13/2009	N002	55	-	95	36		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	55	-	95	1560		F	#		
Sulfate	mg/L	08/13/2009	N001	55	-	95	360		F	#	5	
Sulfate	mg/L	08/13/2009	N002	55	-	95	410		F	#	5	
Temperature	C	08/13/2009	N001	55	-	95	17.37		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	55	-	95	1300		F	#	20	
Total Dissolved Solids	mg/L	08/13/2009	N002	55	-	95	1200		F	#	40	
Turbidity	NTU	08/13/2009	N001	55	-	95	7.37		F	#		
Uranium	mg/L	08/13/2009	N001	55	-	95	0.038		F	#	0.0000017	
Uranium	mg/L	08/13/2009	N002	55	-	95	0.039		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0692 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	55	-	95	60		FQ	#		
Ammonia Total as N	mg/L	08/13/2009	N001	55	-	95	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/13/2009	N001	55	-	95	0.0064		FQ	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	55	-	95	30		FQ	#	0.0021	
Chloride	mg/L	08/13/2009	N001	55	-	95	13		FQ	#	0.2	
Iron	mg/L	08/13/2009	N001	55	-	95	0.35		FQ	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	55	-	95	6.8		FQ	#	0.0066	
Manganese	mg/L	08/13/2009	N001	55	-	95	0.084		FQ	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	55	-	95	0.00043	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	55	-	95	2.7		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/13/2009	N001	55	-	95	235.2		FQ	#		
pH	s.u.	08/13/2009	N001	55	-	95	7.93		FQ	#		
Potassium	mg/L	08/13/2009	N001	55	-	95	3.8		FQ	#	0.092	
Selenium	mg/L	08/13/2009	N001	55	-	95	0.0015		FQ	#	0.000032	
Silica	mg/L	08/13/2009	N001	55	-	95	13		FQ	#	0.0071	
Silicon	mg/L	08/13/2009	N001	55	-	95	6.1		FQ	#	0.0033	
Sodium	mg/L	08/13/2009	N001	55	-	95	13		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	55	-	95	267		FQ	#		
Sulfate	mg/L	08/13/2009	N001	55	-	95	15		FQ	#	0.5	
Temperature	C	08/13/2009	N001	55	-	95	19.05		FQ	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	55	-	95	180		FQ	#	20	
Turbidity	NTU	08/13/2009	N001	55	-	95	7.22		FQ	#		
Uranium	mg/L	08/13/2009	N001	55	-	95	0.0018		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0695 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	55	-	95	114		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	55	-	95	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	55	-	95	0.0016		F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	55	-	95	49		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	55	-	95	14		F	#	0.2	
Iron	mg/L	08/13/2009	N001	55	-	95	0.063		F	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	55	-	95	7.5		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	55	-	95	0.0001	U	JF	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	55	-	95	0.00071	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	55	-	95	5		F	#	0.05	
Oxidation Reduction Potential	mV	08/13/2009	N001	55	-	95	262.8		F	#		
pH	s.u.	08/13/2009	N001	55	-	95	7.97		F	#		
Potassium	mg/L	08/13/2009	N001	55	-	95	2.1		F	#	0.092	
Selenium	mg/L	08/13/2009	N001	55	-	95	0.0017		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	55	-	95	12		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	55	-	95	5.6		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	55	-	95	12		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	55	-	95	363		F	#		
Sulfate	mg/L	08/13/2009	N001	55	-	95	45		F	#	0.5	
Temperature	C	08/13/2009	N001	55	-	95	17.88		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	55	-	95	260		F	#	20	
Turbidity	NTU	08/13/2009	N001	55	-	95	1.83		F	#		
Uranium	mg/L	08/13/2009	N001	55	-	95	0.0022		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0901 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	58	-	78	131		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	58	-	78	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	58	-	78	0.0023		F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	58	-	78	47		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	58	-	78	23		F	#	0.4	
Iron	mg/L	08/13/2009	N001	58	-	78	0.18		F	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	58	-	78	8		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	58	-	78	0.0095		F	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	58	-	78	0.00061	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	58	-	78	2.9		F	#	0.02	
Oxidation Reduction Potential	mV	08/13/2009	N001	58	-	78	174		F	#		
pH	s.u.	08/13/2009	N001	58	-	78	7.98		F	#		
Potassium	mg/L	08/13/2009	N001	58	-	78	1.8		JF	#	0.092	
Selenium	mg/L	08/13/2009	N001	58	-	78	0.0025		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	58	-	78	13		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	58	-	78	6		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	58	-	78	20		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	58	-	78	341		F	#		
Sulfate	mg/L	08/13/2009	N001	58	-	78	36		F	#	0.5	
Temperature	C	08/13/2009	N001	58	-	78	17		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	58	-	78	260		F	#	20	
Turbidity	NTU	08/13/2009	N001	58	-	78	9.76		F	#		
Uranium	mg/L	08/13/2009	N001	58	-	78	0.0034		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0903 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	28	-	48	105		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	28	-	48	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	28	-	48	0.0017		F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	28	-	48	66		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	28	-	48	25		F	#	0.4	
Iron	mg/L	08/13/2009	N001	28	-	48	0.0074	B	JF	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	28	-	48	13		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	28	-	48	0.0014	B	F	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	28	-	48	0.00039	B	UF	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	28	-	48	3	N	JF	#	0.02	
Oxidation Reduction Potential	mV	08/13/2009	N001	28	-	48	154.3		F	#		
pH	s.u.	08/13/2009	N001	28	-	48	7.77		F	#		
Potassium	mg/L	08/13/2009	N001	28	-	48	2.3		F	#	0.092	
Selenium	mg/L	08/13/2009	N001	28	-	48	0.0017		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	28	-	48	12		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	28	-	48	5.6		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	28	-	48	14		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	28	-	48	436		F	#		
Sulfate	mg/L	08/13/2009	N001	28	-	48	72		F	#	0.5	
Temperature	C	08/13/2009	N001	28	-	48	19.24		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	28	-	48	320		F	#	20	
Turbidity	NTU	08/13/2009	N001	28	-	48	0.8		F	#		
Uranium	mg/L	08/13/2009	N001	28	-	48	0.0022		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0904 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	28	-	38	297		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	28	-	38	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	28	-	38	0.00044	E	F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	28	-	38	93		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	28	-	38	190		F	#	2	
Iron	mg/L	08/13/2009	N001	28	-	38	0.029	B	F	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	28	-	38	22		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	28	-	38	0.002	B	F	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	28	-	38	0.00058	B	UF	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	28	-	38	1.1		F	#	0.01	
Oxidation Reduction Potential	mV	08/13/2009	N001	28	-	38	184.5		F	#		
pH	s.u.	08/13/2009	N001	28	-	38	7.49		F	#		
Potassium	mg/L	08/13/2009	N001	28	-	38	1.7		JF	#	0.092	
Selenium	mg/L	08/13/2009	N001	28	-	38	0.018		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	28	-	38	18		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	28	-	38	8.3		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	28	-	38	100		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	28	-	38	1037		F	#		
Sulfate	mg/L	08/13/2009	N001	28	-	38	140		F	#	5	
Temperature	C	08/13/2009	N001	28	-	38	18.95		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	28	-	38	730		F	#	20	
Turbidity	NTU	08/13/2009	N001	28	-	38	3.68		F	#		
Uranium	mg/L	08/13/2009	N001	28	-	38	0.0061		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0906 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	0001	44	-	64	1388		FQ	#		
Ammonia Total as N	mg/L	08/12/2009	0001	44	-	64	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/12/2009	0001	44	-	64	0.0012		FQ	#	0.0000084	
Calcium	mg/L	08/12/2009	0001	44	-	64	930		FQ	#	0.21	
Chloride	mg/L	08/12/2009	0001	44	-	64	130		FQ	#	10	
Iron	mg/L	08/12/2009	0001	44	-	64	0.014	B	FQ	#	0.0016	
Magnesium	mg/L	08/12/2009	0001	44	-	64	400		FQ	#	0.0066	
Manganese	mg/L	08/12/2009	0001	44	-	64	0.094		FQ	#	0.0001	
Molybdenum	mg/L	08/12/2009	0001	44	-	64	0.0015		FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	0001	44	-	64	380		FQ	#	5	
Oxidation Reduction Potential	mV	08/12/2009	N001	44	-	64	237		FQ	#		
pH	s.u.	08/12/2009	N001	44	-	64	6.48		FQ	#		
Potassium	mg/L	08/12/2009	0001	44	-	64	12		FQ	#	0.092	
Selenium	mg/L	08/12/2009	0001	44	-	64	0.016		FQ	#	0.000032	
Silica	mg/L	08/12/2009	0001	44	-	64	15		FQ	#	0.0071	
Silicon	mg/L	08/12/2009	0001	44	-	64	6.8		FQ	#	0.0033	
Sodium	mg/L	08/12/2009	0001	44	-	64	290		FQ	#	0.44	
Specific Conductance	umhos /cm	08/12/2009	N001	44	-	64	6158		FQ	#		
Sulfate	mg/L	08/12/2009	0001	44	-	64	1700		FQ	#	25	
Temperature	C	08/12/2009	N001	44	-	64	26.4		FQ	#		
Total Dissolved Solids	mg/L	08/12/2009	0001	44	-	64	6700		FQ	#	80	
Turbidity	NTU	08/12/2009	N001	44	-	64	11.5		FQ	#		
Uranium	mg/L	08/12/2009	0001	44	-	64	0.91		FQ	#	0.000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0908 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	52	-	67	620		FQ	#		
Ammonia Total as N	mg/L	08/12/2009	N001	52	-	67	61		FQ	#	2	
Arsenic	mg/L	08/12/2009	N001	52	-	67	0.00082		FQ	#	0.000017	
Calcium	mg/L	08/12/2009	N001	52	-	67	550		FQ	#	0.21	
Chloride	mg/L	08/12/2009	N001	52	-	67	78		FQ	#	10	
Iron	mg/L	08/12/2009	N001	52	-	67	0.037	B	FQ	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	52	-	67	480		FQ	#	0.0066	
Manganese	mg/L	08/12/2009	N001	52	-	67	0.14		FQ	#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	52	-	67	0.00099	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	52	-	67	190		FQ	#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	52	-	67	456		FQ	#		
pH	s.u.	08/12/2009	N001	52	-	67	6.57		FQ	#		
Potassium	mg/L	08/12/2009	N001	52	-	67	29		FQ	#	0.092	
Selenium	mg/L	08/12/2009	N001	52	-	67	0.023		FQ	#	0.000064	
Silica	mg/L	08/12/2009	N001	52	-	67	19		FQ	#	0.0071	
Silicon	mg/L	08/12/2009	N001	52	-	67	9.1		FQ	#	0.0033	
Sodium	mg/L	08/12/2009	N001	52	-	67	260		FQ	#	0.44	
Specific Conductance	umhos /cm	08/12/2009	N001	52	-	67	6590		FQ	#		
Sulfate	mg/L	08/12/2009	N001	52	-	67	2800		FQ	#	25	
Temperature	C	08/12/2009	N001	52	-	67	19.6		FQ	#		
Total Dissolved Solids	mg/L	08/12/2009	N001	52	-	67	5800		FQ	#	80	
Turbidity	NTU	08/12/2009	N001	52	-	67	6.95		FQ	#		
Uranium	mg/L	08/12/2009	N001	52	-	67	0.096		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0909 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	0001	65	-	80	208		FQ	#		
Ammonia Total as N	mg/L	08/12/2009	0001	65	-	80	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/12/2009	0001	65	-	80	0.0011		FQ	#	0.000042	
Calcium	mg/L	08/12/2009	0001	65	-	80	520		FQ	#	0.11	
Chloride	mg/L	08/12/2009	0001	65	-	80	110		FQ	#	4	
Iron	mg/L	08/12/2009	0001	65	-	80	0.0046	B	JFQ	#	0.0016	
Magnesium	mg/L	08/12/2009	0001	65	-	80	89		FQ	#	0.0066	
Manganese	mg/L	08/12/2009	0001	65	-	80	0.00024	B	JFQ	#	0.0001	
Molybdenum	mg/L	08/12/2009	0001	65	-	80	0.00025	B	UFQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	0001	65	-	80	150		FQ	#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	65	-	80	268		FQ	#		
pH	s.u.	08/12/2009	N001	65	-	80	6.98		FQ	#		
Potassium	mg/L	08/12/2009	0001	65	-	80	6		FQ	#	0.092	
Selenium	mg/L	08/12/2009	0001	65	-	80	0.052		FQ	#	0.00016	
Silica	mg/L	08/12/2009	0001	65	-	80	14		FQ	#	0.0071	
Silicon	mg/L	08/12/2009	0001	65	-	80	6.5		FQ	#	0.0033	
Sodium	mg/L	08/12/2009	0001	65	-	80	94		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	65	-	80	3420		FQ	#		
Sulfate	mg/L	08/12/2009	0001	65	-	80	910		FQ	#	10	
Temperature	C	08/12/2009	N001	65	-	80	23.4		FQ	#		
Total Dissolved Solids	mg/L	08/12/2009	0001	65	-	80	3000		FQ	#	40	
Turbidity	NTU	08/12/2009	N001	65	-	80	51.9		FQ	#		
Uranium	mg/L	08/12/2009	0001	65	-	80	0.057		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0910 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	97	-	197	98		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	97	-	197	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	97	-	197	0.0019		F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	97	-	197	34		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	97	-	197	11		F	#	0.2	
Iron	mg/L	08/13/2009	N001	97	-	197	0.0016	U	JF	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	97	-	197	5.7		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	97	-	197	0.0001	U	JF	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	97	-	197	0.00054	B	UF	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	97	-	197	2.8		F	#	0.02	
Oxidation Reduction Potential	mV	08/13/2009	N001	97	-	197	250.2		F	#		
pH	s.u.	08/13/2009	N001	97	-	197	7.97		F	#		
Potassium	mg/L	08/13/2009	N001	97	-	197	1.5		JF	#	0.092	
Selenium	mg/L	08/13/2009	N001	97	-	197	0.0013		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	97	-	197	11		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	97	-	197	5.3		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	97	-	197	13		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	97	-	197	264		F	#		
Sulfate	mg/L	08/13/2009	N001	97	-	197	16		F	#	0.5	
Temperature	C	08/13/2009	N001	97	-	197	17.72		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	97	-	197	180		F	#	20	
Turbidity	NTU	08/13/2009	N001	97	-	197	1.87		F	#		
Uranium	mg/L	08/13/2009	N001	97	-	197	0.0012		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0911 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	309.4	-	349.4	89		FQ	#		
Ammonia Total as N	mg/L	08/13/2009	N001	309.4	-	349.4	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/13/2009	N001	309.4	-	349.4	0.0018		FQ	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	309.4	-	349.4	27		FQ	#	0.0021	
Chloride	mg/L	08/13/2009	N001	309.4	-	349.4	7.5		FQ	#	0.2	
Iron	mg/L	08/13/2009	N001	309.4	-	349.4	0.0017	B	JFQ	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	309.4	-	349.4	5.5		FQ	#	0.0066	
Manganese	mg/L	08/13/2009	N001	309.4	-	349.4	0.0011	B	FQ	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	309.4	-	349.4	0.00025	B	UFQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	309.4	-	349.4	2.7		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/13/2009	N001	309.4	-	349.4	175.5		FQ	#		
pH	s.u.	08/13/2009	N001	309.4	-	349.4	8.07		FQ	#		
Potassium	mg/L	08/13/2009	N001	309.4	-	349.4	1.9		FQ	#	0.092	
Selenium	mg/L	08/13/2009	N001	309.4	-	349.4	0.00095		FQ	#	0.000032	
Silica	mg/L	08/13/2009	N001	309.4	-	349.4	13		FQ	#	0.0071	
Silicon	mg/L	08/13/2009	N001	309.4	-	349.4	5.9		FQ	#	0.0033	
Sodium	mg/L	08/13/2009	N001	309.4	-	349.4	7.9		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	309.4	-	349.4	193		FQ	#		
Sulfate	mg/L	08/13/2009	N001	309.4	-	349.4	9.1		FQ	#	0.5	
Temperature	C	08/13/2009	N001	309.4	-	349.4	18.21		FQ	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	309.4	-	349.4	140		FQ	#	20	
Turbidity	NTU	08/13/2009	N001	309.4	-	349.4	2.92		FQ	#		
Uranium	mg/L	08/13/2009	N001	309.4	-	349.4	0.0012		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0912 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	123	-	163	283		FQ	#		
Ammonia Total as N	mg/L	08/12/2009	N001	123	-	163	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/12/2009	N001	123	-	163	0.001		FQ	#	0.0000084	
Calcium	mg/L	08/12/2009	N001	123	-	163	280		FQ	#	0.0021	
Chloride	mg/L	08/12/2009	N001	123	-	163	24		FQ	#	2	
Iron	mg/L	08/12/2009	N001	123	-	163	0.017	B	FQ	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	123	-	163	54		FQ	#	0.0066	
Manganese	mg/L	08/12/2009	N001	123	-	163	0.0011	B	FQ	#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	123	-	163	0.00025	B	UFQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	123	-	163	62		FQ	#	0.5	
Oxidation Reduction Potential	mV	08/12/2009	N001	123	-	163	189		FQ	#		
pH	s.u.	08/12/2009	N001	123	-	163	6.85		FQ	#		
Potassium	mg/L	08/12/2009	N001	123	-	163	4.7		FQ	#	0.092	
Selenium	mg/L	08/12/2009	N001	123	-	163	0.0061		FQ	#	0.000032	
Silica	mg/L	08/12/2009	N001	123	-	163	13		FQ	#	0.0071	
Silicon	mg/L	08/12/2009	N001	123	-	163	6.2		FQ	#	0.0033	
Sodium	mg/L	08/12/2009	N001	123	-	163	50		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	123	-	163	1540		FQ	#		
Sulfate	mg/L	08/12/2009	N001	123	-	163	450		FQ	#	5	
Temperature	C	08/12/2009	N001	123	-	163	21		FQ	#		
Total Dissolved Solids	mg/L	08/12/2009	N001	123	-	163	1400		FQ	#	20	
Turbidity	NTU	08/12/2009	N001	123	-	163	3.24		FQ	#		
Uranium	mg/L	08/12/2009	N001	123	-	163	0.023		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0913 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	328.7	-	368.7	85		FQ	#		
Ammonia Total as N	mg/L	08/12/2009	N001	328.7	-	368.7	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/12/2009	N001	328.7	-	368.7	0.0025		FQ	#	0.0000084	
Calcium	mg/L	08/12/2009	N001	328.7	-	368.7	24		FQ	#	0.0021	
Chloride	mg/L	08/12/2009	N001	328.7	-	368.7	5.9		FQ	#	0.2	
Iron	mg/L	08/12/2009	N001	328.7	-	368.7	0.0037	B	JFQ	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	328.7	-	368.7	4.8		FQ	#	0.0066	
Manganese	mg/L	08/12/2009	N001	328.7	-	368.7	0.00018	B	JFQ	#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	328.7	-	368.7	0.00016	B	UFQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	328.7	-	368.7	2.6		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/12/2009	N001	328.7	-	368.7	190		FQ	#		
pH	s.u.	08/12/2009	N001	328.7	-	368.7	7.93		FQ	#		
Potassium	mg/L	08/12/2009	N001	328.7	-	368.7	1.8		FQ	#	0.092	
Selenium	mg/L	08/12/2009	N001	328.7	-	368.7	0.00082		FQ	#	0.000032	
Silica	mg/L	08/12/2009	N001	328.7	-	368.7	10		FQ	#	0.0071	
Silicon	mg/L	08/12/2009	N001	328.7	-	368.7	4.7		FQ	#	0.0033	
Sodium	mg/L	08/12/2009	N001	328.7	-	368.7	7.3		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	328.7	-	368.7	210		FQ	#		
Sulfate	mg/L	08/12/2009	N001	328.7	-	368.7	7.6		FQ	#	0.5	
Temperature	C	08/12/2009	N001	328.7	-	368.7	18.2		FQ	#		
Total Dissolved Solids	mg/L	08/12/2009	N001	328.7	-	368.7	130		FQ	#	20	
Turbidity	NTU	08/12/2009	N001	328.7	-	368.7	2.91		FQ	#		
Uranium	mg/L	08/12/2009	N001	328.7	-	368.7	0.0013		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0914 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	137.2	-	154.2	41		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	137.2	-	154.2	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	137.2	-	154.2	0.00074		FQ	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	137.2	-	154.2	8.1		FQ	#	0.0021	
Chloride	mg/L	08/11/2009	N001	137.2	-	154.2	11		FQ	#	0.2	
Iron	mg/L	08/11/2009	N001	137.2	-	154.2	0.01	B	FQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	137.2	-	154.2	0.2	B	FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	137.2	-	154.2	0.0001	U	JFQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	137.2	-	154.2	0.00095	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	137.2	-	154.2	2.4		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/11/2009	N001	137.2	-	154.2	112.8		FQ	#		
pH	s.u.	08/11/2009	N001	137.2	-	154.2	9.94		FQ	#		
Potassium	mg/L	08/11/2009	N001	137.2	-	154.2	5.7		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	137.2	-	154.2	0.00098		FQ	#	0.000032	
Silica	mg/L	08/11/2009	N001	137.2	-	154.2	34		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	137.2	-	154.2	16		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	137.2	-	154.2	20		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	137.2	-	154.2	187		FQ	#		
Sulfate	mg/L	08/11/2009	N001	137.2	-	154.2	12		FQ	#	0.5	
Temperature	C	08/11/2009	N001	137.2	-	154.2	17.15		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	137.2	-	154.2	130		FQ	#	20	
Turbidity	NTU	08/11/2009	N001	137.2	-	154.2	2.38		FQ	#		
Uranium	mg/L	08/11/2009	N001	137.2	-	154.2	0.000014	B	UFQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0915 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	170	-	180	40		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	170	-	180	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	170	-	180	0.000071	B	UFQ	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	170	-	180	18		FQ	#	0.0021	
Chloride	mg/L	08/11/2009	N001	170	-	180	12		FQ	#	0.2	
Iron	mg/L	08/11/2009	N001	170	-	180	0.05	B	FQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	170	-	180	0.71	B	FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	170	-	180	0.0001	U	JFQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	170	-	180	0.00069	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	170	-	180	2.9		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/11/2009	N001	170	-	180	65.3		FQ	#		
pH	s.u.	08/11/2009	N001	170	-	180	10.51		FQ	#		
Potassium	mg/L	08/11/2009	N001	170	-	180	2.6		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	170	-	180	0.0013		FQ	#	0.000032	
Silica	mg/L	08/11/2009	N001	170	-	180	5.2		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	170	-	180	2.4		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	170	-	180	13		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	170	-	180	261		FQ	#		
Sulfate	mg/L	08/11/2009	N001	170	-	180	17		FQ	#	0.5	
Temperature	C	08/11/2009	N001	170	-	180	18.04		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	170	-	180	100		FQ	#	20	
Turbidity	NTU	08/11/2009	N001	170	-	180	4		FQ	#		
Uranium	mg/L	08/11/2009	N001	170	-	180	0.0000099	B	UFQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0916 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	345.7	-	355.7	236		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	345.7	-	355.7	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	345.7	-	355.7	0.00012		UFQ	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	345.7	-	355.7	91		FQ	#	0.0021	
Chloride	mg/L	08/11/2009	N001	345.7	-	355.7	5.7		FQ	#	0.2	
Iron	mg/L	08/11/2009	N001	345.7	-	355.7	0.029	B	FQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	345.7	-	355.7	0.0066	U	JFQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	345.7	-	355.7	0.0001	U	JFQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	345.7	-	355.7	0.001		FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	345.7	-	355.7	1.9		FQ	#	0.01	
Oxidation Reduction Potential	mV	08/11/2009	N001	345.7	-	355.7	8.9		FQ	#		
pH	s.u.	08/11/2009	N001	345.7	-	355.7	11.38		FQ	#		
Potassium	mg/L	08/11/2009	N001	345.7	-	355.7	6.4		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	345.7	-	355.7	0.00075		FQ	#	0.000032	
Silica	mg/L	08/11/2009	N001	345.7	-	355.7	16		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	345.7	-	355.7	7.6		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	345.7	-	355.7	17		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	345.7	-	355.7	1005		FQ	#		
Sulfate	mg/L	08/11/2009	N001	345.7	-	355.7	6.3		FQ	#	0.5	
Temperature	C	08/11/2009	N001	345.7	-	355.7	17.31		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	345.7	-	355.7	310		FQ	#	20	
Turbidity	NTU	08/11/2009	N001	345.7	-	355.7	2.28		FQ	#		
Uranium	mg/L	08/11/2009	N001	345.7	-	355.7	0.000015	B	UFQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0920 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	114.4	-	154.4	84		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	114.4	-	154.4	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	114.4	-	154.4	0.0021		F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	114.4	-	154.4	31		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	114.4	-	154.4	9.5		F	#	0.2	
Iron	mg/L	08/13/2009	N001	114.4	-	154.4	0.0081	B	F	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	114.4	-	154.4	6.9		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	114.4	-	154.4	0.0001	U	JF	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	114.4	-	154.4	0.00038	B	UF	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	114.4	-	154.4	2.9		F	#	0.02	
Oxidation Reduction Potential	mV	08/13/2009	N001	114.4	-	154.4	112.5		F	#		
pH	s.u.	08/13/2009	N001	114.4	-	154.4	7.91		F	#		
Potassium	mg/L	08/13/2009	N001	114.4	-	154.4	1.9		F	#	0.092	
Selenium	mg/L	08/13/2009	N001	114.4	-	154.4	0.0012		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	114.4	-	154.4	11		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	114.4	-	154.4	5.3		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	114.4	-	154.4	8.5		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	114.4	-	154.4	233		F	#		
Sulfate	mg/L	08/13/2009	N001	114.4	-	154.4	12		F	#	0.5	
Temperature	C	08/13/2009	N001	114.4	-	154.4	18.69		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	114.4	-	154.4	160		F	#	20	
Turbidity	NTU	08/13/2009	N001	114.4	-	154.4	1.02		F	#		
Uranium	mg/L	08/13/2009	N001	114.4	-	154.4	0.0013		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0921 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	313.2	-	353.2	232		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	313.2	-	353.2	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	313.2	-	353.2	0.00025		F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	313.2	-	353.2	24		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	313.2	-	353.2	6.5		F	#	0.2	
Iron	mg/L	08/13/2009	N001	313.2	-	353.2	0.0016	U	JF	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	313.2	-	353.2	3.4		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	313.2	-	353.2	0.0001	U	JF	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	313.2	-	353.2	0.00022	B	UF	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	313.2	-	353.2	2.3		F	#	0.02	
Oxidation Reduction Potential	mV	08/13/2009	N001	313.2	-	353.2	149.2		F	#		
pH	s.u.	08/13/2009	N001	313.2	-	353.2	8.14		F	#		
Potassium	mg/L	08/13/2009	N001	313.2	-	353.2	5.5		F	#	0.092	
Selenium	mg/L	08/13/2009	N001	313.2	-	353.2	0.00087		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	313.2	-	353.2	9.4		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	313.2	-	353.2	4.4		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	313.2	-	353.2	9.9		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	313.2	-	353.2	184		F	#		
Sulfate	mg/L	08/13/2009	N001	313.2	-	353.2	8.2		F	#	0.5	
Temperature	C	08/13/2009	N001	313.2	-	353.2	18.87		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	313.2	-	353.2	140		F	#	20	
Turbidity	NTU	08/13/2009	N001	313.2	-	353.2	0.51		F	#		
Uranium	mg/L	08/13/2009	N001	313.2	-	353.2	0.0046		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0929 WELL No Log Information.

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	48.2	-	88.2	129		FQ	#		
Ammonia Total as N	mg/L	08/13/2009	N001	48.2	-	88.2	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/13/2009	N001	48.2	-	88.2	0.0014		FQ	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	48.2	-	88.2	48		FQ	#	0.0021	
Chloride	mg/L	08/13/2009	N001	48.2	-	88.2	16		FQ	#	0.2	
Iron	mg/L	08/13/2009	N001	48.2	-	88.2	0.0045	B	JFQ	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	48.2	-	88.2	8		FQ	#	0.0066	
Manganese	mg/L	08/13/2009	N001	48.2	-	88.2	0.0001	U	JFQ	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	48.2	-	88.2	0.00036	B	UFQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	48.2	-	88.2	12		FQ	#	0.1	
Oxidation Reduction Potential	mV	08/13/2009	N001	48.2	-	88.2	191		FQ	#		
pH	s.u.	08/13/2009	N001	48.2	-	88.2	7.47		FQ	#		
Potassium	mg/L	08/13/2009	N001	48.2	-	88.2	2		FQ	#	0.092	
Selenium	mg/L	08/13/2009	N001	48.2	-	88.2	0.0018		FQ	#	0.000032	
Silica	mg/L	08/13/2009	N001	48.2	-	88.2	12		FQ	#	0.0071	
Silicon	mg/L	08/13/2009	N001	48.2	-	88.2	5.6		FQ	#	0.0033	
Sodium	mg/L	08/13/2009	N001	48.2	-	88.2	11		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	48.2	-	88.2	375		FQ	#		
Sulfate	mg/L	08/13/2009	N001	48.2	-	88.2	23		FQ	#	0.5	
Temperature	C	08/13/2009	N001	48.2	-	88.2	17.4		FQ	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	48.2	-	88.2	240		FQ	#	20	
Turbidity	NTU	08/13/2009	N001	48.2	-	88.2	2.44		FQ	#		
Uranium	mg/L	08/13/2009	N001	48.2	-	88.2	0.0016		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0930 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	20	-	50	88		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	20	-	50	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	20	-	50	0.0015		F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	20	-	50	58		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	20	-	50	19		F	#	0.2	
Iron	mg/L	08/13/2009	N001	20	-	50	0.018	B	F	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	20	-	50	12		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	20	-	50	0.00068	B	F	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	20	-	50	0.00028	B	UF	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	20	-	50	14		F	#	0.1	
Oxidation Reduction Potential	mV	08/13/2009	N001	20	-	50	257.6		F	#		
pH	s.u.	08/13/2009	N001	20	-	50	7.79		F	#		
Potassium	mg/L	08/13/2009	N001	20	-	50	2.3		F	#	0.092	
Selenium	mg/L	08/13/2009	N001	20	-	50	0.0016		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	20	-	50	13		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	20	-	50	6		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	20	-	50	12		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	20	-	50	437		F	#		
Sulfate	mg/L	08/13/2009	N001	20	-	50	57		F	#	0.5	
Temperature	C	08/13/2009	N001	20	-	50	18.16		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	20	-	50	300		F	#	20	
Turbidity	NTU	08/13/2009	N001	20	-	50	1.8		F	#		
Uranium	mg/L	08/13/2009	N001	20	-	50	0.0029		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0932 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	112.5	-	132.5	113		F	#		
Ammonia Total as N	mg/L	08/12/2009	N001	112.5	-	132.5	0.1	U	F	#	0.1	
Arsenic	mg/L	08/12/2009	N001	112.5	-	132.5	0.0013		F	#	0.0000084	
Calcium	mg/L	08/12/2009	N001	112.5	-	132.5	40		F	#	0.0021	
Chloride	mg/L	08/12/2009	N001	112.5	-	132.5	13		F	#	0.2	
Iron	mg/L	08/12/2009	N001	112.5	-	132.5	0.0067	B	JF	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	112.5	-	132.5	8		F	#	0.0066	
Manganese	mg/L	08/12/2009	N001	112.5	-	132.5	0.00015	B	JF	#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	112.5	-	132.5	0.00047	B	UF	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	112.5	-	132.5	6		F	#	0.05	
Oxidation Reduction Potential	mV	08/12/2009	N001	112.5	-	132.5	230.5		F	#		
pH	s.u.	08/12/2009	N001	112.5	-	132.5	7.77		F	#		
Potassium	mg/L	08/12/2009	N001	112.5	-	132.5	2		F	#	0.092	
Selenium	mg/L	08/12/2009	N001	112.5	-	132.5	0.0013		F	#	0.000032	
Silica	mg/L	08/12/2009	N001	112.5	-	132.5	11		F	#	0.0071	
Silicon	mg/L	08/12/2009	N001	112.5	-	132.5	5.2		F	#	0.0033	
Sodium	mg/L	08/12/2009	N001	112.5	-	132.5	13		F	#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	112.5	-	132.5	547		F	#		
Sulfate	mg/L	08/12/2009	N001	112.5	-	132.5	28		F	#	0.5	
Temperature	C	08/12/2009	N001	112.5	-	132.5	18.14		F	#		
Total Dissolved Solids	mg/L	08/12/2009	N001	112.5	-	132.5	220		F	#	20	
Turbidity	NTU	08/12/2009	N001	112.5	-	132.5	1.58		F	#		
Uranium	mg/L	08/12/2009	N001	112.5	-	132.5	0.0016		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0934 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	45	-	90	771		FQ	#		
Ammonia Total as N	mg/L	08/12/2009	N001	45	-	90	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/12/2009	N001	45	-	90	0.00063		FQ	#	0.0000084	
Calcium	mg/L	08/12/2009	N001	45	-	90	810		FQ	#	0.11	
Chloride	mg/L	08/12/2009	N001	45	-	90	240		FQ	#	10	
Iron	mg/L	08/12/2009	N001	45	-	90	0.0059	B	JFQ	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	45	-	90	900		FQ	#	0.33	
Manganese	mg/L	08/12/2009	N001	45	-	90	0.0061		FQ	#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	45	-	90	0.00026	B	UFQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	45	-	90	370		FQ	#	5	
Oxidation Reduction Potential	mV	08/12/2009	N001	45	-	90	184		FQ	#		
pH	s.u.	08/12/2009	N001	45	-	90	6.69		FQ	#		
Potassium	mg/L	08/12/2009	N001	45	-	90	11		FQ	#	0.092	
Selenium	mg/L	08/12/2009	N001	45	-	90	0.011		FQ	#	0.000032	
Silica	mg/L	08/12/2009	N001	45	-	90	17		FQ	#	0.0071	
Silicon	mg/L	08/12/2009	N001	45	-	90	7.8		FQ	#	0.0033	
Sodium	mg/L	08/12/2009	N001	45	-	90	140		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	45	-	90	6365		FQ	#		
Sulfate	mg/L	08/12/2009	N001	45	-	90	2900		FQ	#	25	
Temperature	C	08/12/2009	N001	45	-	90	17.8		FQ	#		
Total Dissolved Solids	mg/L	08/12/2009	N001	45	-	90	7900		FQ	#	80	
Turbidity	NTU	08/12/2009	N001	45	-	90	5.43		FQ	#		
Uranium	mg/L	08/12/2009	N001	45	-	90	0.19		FQ	#	0.0000035	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0935 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	50	-	90	538			#		
Ammonia Total as N	mg/L	08/11/2009	N001	50	-	90	80			#	10	
Arsenic	mg/L	08/11/2009	N001	50	-	90	0.00066			#	0.0000084	
Calcium	mg/L	08/11/2009	N001	50	-	90	640			#	0.11	
Chloride	mg/L	08/11/2009	N001	50	-	90	69			#	10	
Iron	mg/L	08/11/2009	N001	50	-	90	0.015	B		#	0.0016	
Magnesium	mg/L	08/11/2009	N001	50	-	90	310			#	0.0066	
Manganese	mg/L	08/11/2009	N001	50	-	90	0.42			#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	50	-	90	0.00031	B	U	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	50	-	90	190			#	1	
Oxidation Reduction Potential	mV	08/11/2009	N001	50	-	90	196.8			#		
pH	s.u.	08/11/2009	N001	50	-	90	6.57			#		
Potassium	mg/L	08/11/2009	N001	50	-	90	26			#	0.092	
Selenium	mg/L	08/11/2009	N001	50	-	90	0.018			#	0.000032	
Silica	mg/L	08/11/2009	N001	50	-	90	20			#	0.0071	
Silicon	mg/L	08/11/2009	N001	50	-	90	9.2			#	0.0033	
Sodium	mg/L	08/11/2009	N001	50	-	90	300			#	0.22	
Specific Conductance	umhos /cm	08/11/2009	N001	50	-	90	4935			#		
Sulfate	mg/L	08/11/2009	N001	50	-	90	2100	N		#	25	
Temperature	C	08/11/2009	N001	50	-	90	27.18			#		
Total Dissolved Solids	mg/L	08/11/2009	N001	50	-	90	5100			#	80	
Turbidity	NTU	08/11/2009	N001	50	-	90	1.92			#		
Uranium	mg/L	08/11/2009	N001	50	-	90	0.11			#	0.0000087	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0938 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	40	-	95	720			#		
Ammonia Total as N	mg/L	08/12/2009	N001	40	-	95	1.3			#	0.1	
Arsenic	mg/L	08/12/2009	N001	40	-	95	0.0014			#	0.000017	
Calcium	mg/L	08/12/2009	N001	40	-	95	650			#	0.11	
Chloride	mg/L	08/12/2009	N001	40	-	95	100			#	10	
Iron	mg/L	08/12/2009	N001	40	-	95	0.0016	U	J	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	40	-	95	180			#	0.0066	
Manganese	mg/L	08/12/2009	N001	40	-	95	0.017			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	40	-	95	0.08			#	0.00067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	40	-	95	220			#	2	
Oxidation Reduction Potential	mV	08/12/2009	N001	40	-	95	289			#		
pH	s.u.	08/12/2009	N001	40	-	95	6.69			#		
Potassium	mg/L	08/12/2009	N001	40	-	95	8.6			#	0.092	
Selenium	mg/L	08/12/2009	N001	40	-	95	0.037			#	0.000064	
Silica	mg/L	08/12/2009	N001	40	-	95	16			#	0.0071	
Silicon	mg/L	08/12/2009	N001	40	-	95	7.4			#	0.0033	
Sodium	mg/L	08/12/2009	N001	40	-	95	160			#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	40	-	95	4073			#		
Sulfate	mg/L	08/12/2009	N001	40	-	95	1400			#	25	
Temperature	C	08/12/2009	N001	40	-	95	27.74			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	40	-	95	4800			#	80	
Turbidity	NTU	08/12/2009	N001	40	-	95	2.6			#		
Uranium	mg/L	08/12/2009	N001	40	-	95	0.51			#	0.000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0941 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	45	-	65	488		FQ	#		
Ammonia Total as N	mg/L	08/11/2009	N001	45	-	65	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/11/2009	N001	45	-	65	0.0013		FQ	#	0.000042	
Calcium	mg/L	08/11/2009	N001	45	-	65	820		FQ	#	0.11	
Chloride	mg/L	08/11/2009	N001	45	-	65	150		FQ	#	10	
Iron	mg/L	08/11/2009	N001	45	-	65	0.048	B	FQ	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	45	-	65	130		FQ	#	0.0066	
Manganese	mg/L	08/11/2009	N001	45	-	65	0.0028	B	FQ	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	45	-	65	0.0029		FQ	#	0.00013	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	45	-	65	230		FQ	#	2	
Oxidation Reduction Potential	mV	08/11/2009	N001	45	-	65	216.2		FQ	#		
pH	s.u.	08/11/2009	N001	45	-	65	6.71		FQ	#		
Potassium	mg/L	08/11/2009	N001	45	-	65	7.9		FQ	#	0.092	
Selenium	mg/L	08/11/2009	N001	45	-	65	0.082		FQ	#	0.00016	
Silica	mg/L	08/11/2009	N001	45	-	65	16		FQ	#	0.0071	
Silicon	mg/L	08/11/2009	N001	45	-	65	7.6		FQ	#	0.0033	
Sodium	mg/L	08/11/2009	N001	45	-	65	150		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	45	-	65	4160		FQ	#		
Sulfate	mg/L	08/11/2009	N001	45	-	65	1200		FQ	#	25	
Temperature	C	08/11/2009	N001	45	-	65	23.87		FQ	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	45	-	65	4400		FQ	#	80	
Turbidity	NTU	08/11/2009	N001	45	-	65	6.45		FQ	#		
Uranium	mg/L	08/11/2009	N001	45	-	65	0.19		FQ	#	0.0000035	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0942 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	54	-	74	672			#		
Ammonia Total as N	mg/L	08/12/2009	N001	54	-	74	110			#	10	
Arsenic	mg/L	08/12/2009	N001	54	-	74	0.0031			#	0.000042	
Calcium	mg/L	08/12/2009	N001	54	-	74	600			#	0.21	
Chloride	mg/L	08/12/2009	N001	54	-	74	170			#	10	
Iron	mg/L	08/12/2009	N001	54	-	74	0.0016	U	J	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	54	-	74	460			#	0.0066	
Manganese	mg/L	08/12/2009	N001	54	-	74	3.5			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	54	-	74	0.0065			#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	54	-	74	180			#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	54	-	74	272			#		
pH	s.u.	08/12/2009	N001	54	-	74	6.49			#		
Potassium	mg/L	08/12/2009	N001	54	-	74	36			#	0.092	
Selenium	mg/L	08/12/2009	N001	54	-	74	0.051			#	0.00016	
Silica	mg/L	08/12/2009	N001	54	-	74	17			#	0.0071	
Silicon	mg/L	08/12/2009	N001	54	-	74	7.8			#	0.0033	
Sodium	mg/L	08/12/2009	N001	54	-	74	470			#	0.44	
Specific Conductance	umhos /cm	08/12/2009	N001	54	-	74	6775			#		
Sulfate	mg/L	08/12/2009	N001	54	-	74	3200			#	25	
Temperature	C	08/12/2009	N001	54	-	74	17.95			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	54	-	74	6400			#	80	
Turbidity	NTU	08/12/2009	N001	54	-	74	1.98			#		
Uranium	mg/L	08/12/2009	N001	54	-	74	0.51			#	0.000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0943 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	101	-	121	30		F	#		
Ammonia Total as N	mg/L	08/11/2009	N001	101	-	121	0.1	U	F	#	0.1	
Ammonia Total as N	mg/L	08/11/2009	N002	101	-	121	0.1	U	F	#	0.1	
Arsenic	mg/L	08/11/2009	N001	101	-	121	0.0029		F	#	0.0000084	
Arsenic	mg/L	08/11/2009	N002	101	-	121	0.0028		F	#	0.0000084	
Calcium	mg/L	08/11/2009	N001	101	-	121	19		F	#	0.0021	
Calcium	mg/L	08/11/2009	N002	101	-	121	19		F	#	0.0021	
Chloride	mg/L	08/11/2009	N001	101	-	121	3.9		F	#	0.2	
Chloride	mg/L	08/11/2009	N002	101	-	121	3.7		F	#	0.2	
Iron	mg/L	08/11/2009	N001	101	-	121	0.0016	U	JF	#	0.0016	
Iron	mg/L	08/11/2009	N002	101	-	121	0.0016	U	JF	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	101	-	121	3.8		F	#	0.0066	
Magnesium	mg/L	08/11/2009	N002	101	-	121	3.9		F	#	0.0066	
Manganese	mg/L	08/11/2009	N001	101	-	121	0.016		F	#	0.0001	
Manganese	mg/L	08/11/2009	N002	101	-	121	0.018		F	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	101	-	121	0.00083	B	F	#	0.000067	
Molybdenum	mg/L	08/11/2009	N002	101	-	121	0.00085	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	101	-	121	3.6		F	#	0.02	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N002	101	-	121	3.6		F	#	0.02	
Oxidation Reduction Potential	mV	08/11/2009	N001	101	-	121	176.5		F	#		
pH	s.u.	08/11/2009	N001	101	-	121	7.01		F	#		
Potassium	mg/L	08/11/2009	N001	101	-	121	1.7		JF	#	0.092	
Potassium	mg/L	08/11/2009	N002	101	-	121	1.7		JF	#	0.092	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0943 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Selenium	mg/L	08/11/2009	N001	101	-	121	0.00079		F	#	0.000032	
Selenium	mg/L	08/11/2009	N002	101	-	121	0.00076		F	#	0.000032	
Silica	mg/L	08/11/2009	N001	101	-	121	15		F	#	0.0071	
Silica	mg/L	08/11/2009	N002	101	-	121	15		F	#	0.0071	
Silicon	mg/L	08/11/2009	N001	101	-	121	6.9		F	#	0.0033	
Silicon	mg/L	08/11/2009	N002	101	-	121	7		F	#	0.0033	
Sodium	mg/L	08/11/2009	N001	101	-	121	19		F	#	0.0044	
Sodium	mg/L	08/11/2009	N002	101	-	121	19		F	#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	101	-	121	232		F	#		
Sulfate	mg/L	08/11/2009	N001	101	-	121	53		F	#	0.5	
Sulfate	mg/L	08/11/2009	N002	101	-	121	51		F	#	0.5	
Temperature	C	08/11/2009	N001	101	-	121	19.95		F	#		
Total Dissolved Solids	mg/L	08/11/2009	N001	101	-	121	160		F	#	20	
Total Dissolved Solids	mg/L	08/11/2009	N002	101	-	121	160		F	#	20	
Turbidity	NTU	08/11/2009	N001	101	-	121	1.8		F	#		
Uranium	mg/L	08/11/2009	N001	101	-	121	0.0084		F	#	0.0000017	
Uranium	mg/L	08/11/2009	N002	101	-	121	0.0086		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0945 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)	Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/10/2009	N001	110 - 130	92		FQ	#		
Ammonia Total as N	mg/L	08/10/2009	N001	110 - 130	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/10/2009	N001	110 - 130	0.0021		FQ	#	0.0000084	
Calcium	mg/L	08/10/2009	N001	110 - 130	39		FQ	#	0.0021	
Chloride	mg/L	08/10/2009	N001	110 - 130	24		FQ	#	1	
Iron	mg/L	08/10/2009	N001	110 - 130	0.0064	B	JFQ	#	0.0016	
Magnesium	mg/L	08/10/2009	N001	110 - 130	7.6		FQ	#	0.0066	
Manganese	mg/L	08/10/2009	N001	110 - 130	0.0001	U	JFQ	#	0.0001	
Molybdenum	mg/L	08/10/2009	N001	110 - 130	0.00073	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/10/2009	N001	110 - 130	4.7		FQ	#	0.05	
Oxidation Reduction Potential	mV	08/10/2009	N001	110 - 130	189.9		FQ	#		
pH	s.u.	08/10/2009	N001	110 - 130	7.16		FQ	#		
Potassium	mg/L	08/10/2009	N001	110 - 130	1.9		FQ	#	0.092	
Selenium	mg/L	08/10/2009	N001	110 - 130	0.0023		FQ	#	0.000032	
Silica	mg/L	08/10/2009	N001	110 - 130	12		FQ	#	0.0071	
Silicon	mg/L	08/10/2009	N001	110 - 130	5.5		FQ	#	0.0033	
Sodium	mg/L	08/10/2009	N001	110 - 130	14		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/10/2009	N001	110 - 130	364		FQ	#		
Sulfate	mg/L	08/10/2009	N001	110 - 130	24		FQ	#	0.5	
Temperature	C	08/10/2009	N001	110 - 130	17.78		FQ	#		
Total Dissolved Solids	mg/L	08/10/2009	N001	110 - 130	200		FQ	#	20	
Turbidity	NTU	08/10/2009	N001	110 - 130	7.65		FQ	#		
Uranium	mg/L	08/10/2009	N001	110 - 130	0.0015		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0946 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	40	-	60	36		F	#		
Ammonia Total as N	mg/L	08/12/2009	N001	40	-	60	0.1	U	F	#	0.1	
Arsenic	mg/L	08/12/2009	N001	40	-	60	0.014		F	#	0.0000084	
Calcium	mg/L	08/12/2009	N001	40	-	60	18		F	#	0.0021	
Chloride	mg/L	08/12/2009	N001	40	-	60	5.3		F	#	0.2	
Iron	mg/L	08/12/2009	N001	40	-	60	0.01	B	F	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	40	-	60	3.2		F	#	0.0066	
Manganese	mg/L	08/12/2009	N001	40	-	60	0.0011	B	F	#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	40	-	60	0.0011		F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	40	-	60	3		F	#	0.02	
Oxidation Reduction Potential	mV	08/12/2009	N001	40	-	60	204.4		F	#		
pH	s.u.	08/12/2009	N001	40	-	60	8.3		F	#		
Potassium	mg/L	08/12/2009	N001	40	-	60	1.3		JF	#	0.092	
Selenium	mg/L	08/12/2009	N001	40	-	60	0.00083		F	#	0.000032	
Silica	mg/L	08/12/2009	N001	40	-	60	13		F	#	0.0071	
Silicon	mg/L	08/12/2009	N001	40	-	60	5.9		F	#	0.0033	
Sodium	mg/L	08/12/2009	N001	40	-	60	23		F	#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	40	-	60	229		F	#		
Sulfate	mg/L	08/12/2009	N001	40	-	60	45		F	#	0.5	
Temperature	C	08/12/2009	N001	40	-	60	19.83		F	#		
Total Dissolved Solids	mg/L	08/12/2009	N001	40	-	60	160		F	#	20	
Turbidity	NTU	08/12/2009	N001	40	-	60	2.61		F	#		
Uranium	mg/L	08/12/2009	N001	40	-	60	0.00014		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 0947 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)	Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/10/2009	N001	105 - 125	88		FQ	#		
Ammonia Total as N	mg/L	08/10/2009	N001	105 - 125	0.1	U	FQ	#	0.1	
Arsenic	mg/L	08/10/2009	N001	105 - 125	0.0027		FQ	#	0.0000084	
Calcium	mg/L	08/10/2009	N001	105 - 125	34		FQ	#	0.0021	
Chloride	mg/L	08/10/2009	N001	105 - 125	12		FQ	#	0.2	
Iron	mg/L	08/10/2009	N001	105 - 125	0.007	B	JFQ	#	0.0016	
Magnesium	mg/L	08/10/2009	N001	105 - 125	6.6		FQ	#	0.0066	
Manganese	mg/L	08/10/2009	N001	105 - 125	0.0001	U	JFQ	#	0.0001	
Molybdenum	mg/L	08/10/2009	N001	105 - 125	0.00056	B	FQ	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/10/2009	N001	105 - 125	2.8		FQ	#	0.02	
Oxidation Reduction Potential	mV	08/10/2009	N001	105 - 125	168		FQ	#		
pH	s.u.	08/10/2009	N001	105 - 125	7.4		FQ	#		
Potassium	mg/L	08/10/2009	N001	105 - 125	1.6		JFQ	#	0.092	
Selenium	mg/L	08/10/2009	N001	105 - 125	0.0014		FQ	#	0.000032	
Silica	mg/L	08/10/2009	N001	105 - 125	12		FQ	#	0.0071	
Silicon	mg/L	08/10/2009	N001	105 - 125	5.4		FQ	#	0.0033	
Sodium	mg/L	08/10/2009	N001	105 - 125	11		FQ	#	0.0044	
Specific Conductance	umhos /cm	08/10/2009	N001	105 - 125	290		FQ	#		
Sulfate	mg/L	08/10/2009	N001	105 - 125	17		FQ	#	0.5	
Temperature	C	08/10/2009	N001	105 - 125	17.24		FQ	#		
Total Dissolved Solids	mg/L	08/10/2009	N001	105 - 125	160		FQ	#	20	
Turbidity	NTU	08/10/2009	N001	105 - 125	4.14		FQ	#		
Uranium	mg/L	08/10/2009	N001	105 - 125	0.0012		FQ	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1003 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	55.5	-	105.5	202		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	55.5	-	105.5	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	55.5	-	105.5	0.0013		F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	55.5	-	105.5	300		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	55.5	-	105.5	54		F	#	4	
Iron	mg/L	08/13/2009	N001	55.5	-	105.5	0.016	B	F	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	55.5	-	105.5	44		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	55.5	-	105.5	0.0001	U	JF	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	55.5	-	105.5	0.00021	B	UF	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	55.5	-	105.5	52		F	#	0.5	
Oxidation Reduction Potential	mV	08/13/2009	N001	55.5	-	105.5	245.4		F	#		
pH	s.u.	08/13/2009	N001	55.5	-	105.5	7.24		F	#		
Potassium	mg/L	08/13/2009	N001	55.5	-	105.5	4.4		F	#	0.092	
Selenium	mg/L	08/13/2009	N001	55.5	-	105.5	0.0033		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	55.5	-	105.5	14		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	55.5	-	105.5	6.4		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	55.5	-	105.5	35		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	55.5	-	105.5	1684		F	#		
Sulfate	mg/L	08/13/2009	N001	55.5	-	105.5	490		F	#	10	
Temperature	C	08/13/2009	N001	55.5	-	105.5	17.67		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	55.5	-	105.5	1500		F	#	40	
Turbidity	NTU	08/13/2009	N001	55.5	-	105.5	1.31		F	#		
Uranium	mg/L	08/13/2009	N001	55.5	-	105.5	0.037		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1004 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	45.5	-	95.5	98		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	45.5	-	95.5	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	45.5	-	95.5	0.0024		F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	45.5	-	95.5	64		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	45.5	-	95.5	16		F	#	0.2	
Iron	mg/L	08/13/2009	N001	45.5	-	95.5	0.0039	B	JF	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	45.5	-	95.5	11		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	45.5	-	95.5	0.0001	U	JF	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	45.5	-	95.5	0.00043	B	UF	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	45.5	-	95.5	12		F	#	0.1	
Oxidation Reduction Potential	mV	08/13/2009	N001	45.5	-	95.5	261.7		F	#		
pH	s.u.	08/13/2009	N001	45.5	-	95.5	7.64		F	#		
Potassium	mg/L	08/13/2009	N001	45.5	-	95.5	1.8		JF	#	0.092	
Selenium	mg/L	08/13/2009	N001	45.5	-	95.5	0.0017		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	45.5	-	95.5	12		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	45.5	-	95.5	5.7		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	45.5	-	95.5	15		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	45.5	-	95.5	464		F	#		
Sulfate	mg/L	08/13/2009	N001	45.5	-	95.5	67		F	#	0.5	
Temperature	C	08/13/2009	N001	45.5	-	95.5	19.32		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	45.5	-	95.5	310		F	#	20	
Turbidity	NTU	08/13/2009	N001	45.5	-	95.5	2.09		F	#		
Uranium	mg/L	08/13/2009	N001	45.5	-	95.5	0.0072		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1006 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	45.74	-	95.74	78		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	45.74	-	95.74	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	45.74	-	95.74	0.0019		F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	45.74	-	95.74	27		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	45.74	-	95.74	9.3		F	#	0.2	
Iron	mg/L	08/13/2009	N001	45.74	-	95.74	0.047	B	F	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	45.74	-	95.74	7.4		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	45.74	-	95.74	0.0017	B	F	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	45.74	-	95.74	0.0004	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	45.74	-	95.74	3		F	#	0.02	
Oxidation Reduction Potential	mV	08/13/2009	N001	45.74	-	95.74	245.6		F	#		
pH	s.u.	08/13/2009	N001	45.74	-	95.74	8.11		F	#		
Potassium	mg/L	08/13/2009	N001	45.74	-	95.74	2.4		F	#	0.092	
Selenium	mg/L	08/13/2009	N001	45.74	-	95.74	0.0011		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	45.74	-	95.74	13		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	45.74	-	95.74	6.1		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	45.74	-	95.74	9		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	45.74	-	95.74	233		F	#		
Sulfate	mg/L	08/13/2009	N001	45.74	-	95.74	12		F	#	0.5	
Temperature	C	08/13/2009	N001	45.74	-	95.74	21.23		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	45.74	-	95.74	150		F	#	20	
Turbidity	NTU	08/13/2009	N001	45.74	-	95.74	1.64		F	#		
Uranium	mg/L	08/13/2009	N001	45.74	-	95.74	0.0012		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1007 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/13/2009	N001	45.79	-	95.99	123		F	#		
Ammonia Total as N	mg/L	08/13/2009	N001	45.79	-	95.99	0.1	U	F	#	0.1	
Arsenic	mg/L	08/13/2009	N001	45.79	-	95.99	0.0019		F	#	0.0000084	
Calcium	mg/L	08/13/2009	N001	45.79	-	95.99	33		F	#	0.0021	
Chloride	mg/L	08/13/2009	N001	45.79	-	95.99	9.6		F	#	0.2	
Iron	mg/L	08/13/2009	N001	45.79	-	95.99	0.0033	B	JF	#	0.0016	
Magnesium	mg/L	08/13/2009	N001	45.79	-	95.99	7.6		F	#	0.0066	
Manganese	mg/L	08/13/2009	N001	45.79	-	95.99	0.0001	U	JF	#	0.0001	
Molybdenum	mg/L	08/13/2009	N001	45.79	-	95.99	0.00036	B	F	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/13/2009	N001	45.79	-	95.99	3.3		F	#	0.02	
Oxidation Reduction Potential	mV	08/13/2009	N001	45.79	-	95.99	189.2		F	#		
pH	s.u.	08/13/2009	N001	45.79	-	95.99	7.83		F	#		
Potassium	mg/L	08/13/2009	N001	45.79	-	95.99	2		F	#	0.092	
Selenium	mg/L	08/13/2009	N001	45.79	-	95.99	0.0011		F	#	0.000032	
Silica	mg/L	08/13/2009	N001	45.79	-	95.99	13		F	#	0.0071	
Silicon	mg/L	08/13/2009	N001	45.79	-	95.99	6		F	#	0.0033	
Sodium	mg/L	08/13/2009	N001	45.79	-	95.99	7.6		F	#	0.0044	
Specific Conductance	umhos /cm	08/13/2009	N001	45.79	-	95.99	245		F	#		
Sulfate	mg/L	08/13/2009	N001	45.79	-	95.99	12		F	#	0.5	
Temperature	C	08/13/2009	N001	45.79	-	95.99	18.11		F	#		
Total Dissolved Solids	mg/L	08/13/2009	N001	45.79	-	95.99	160		F	#	20	
Turbidity	NTU	08/13/2009	N001	45.79	-	95.99	0.61		F	#		
Uranium	mg/L	08/13/2009	N001	45.79	-	95.99	0.0013		F	#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1101 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)	Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	96.15 - 251.5	332			#		
Ammonia Total as N	mg/L	08/12/2009	N001	96.15 - 251.5	1.3			#	0.1	
Arsenic	mg/L	08/12/2009	N001	96.15 - 251.5	0.0012			#	0.0000084	
Arsenic	mg/L	08/12/2009	N002	96.15 - 251.5	0.0012			#	0.0000084	
Calcium	mg/L	08/12/2009	N001	96.15 - 251.5	430			#	0.0021	
Calcium	mg/L	08/12/2009	N002	96.15 - 251.5	370			#	0.0021	
Chloride	mg/L	08/12/2009	N001	96.15 - 251.5	97			#	4	
Chloride	mg/L	08/12/2009	N002	96.15 - 251.5	110			#	2	
Iron	mg/L	08/12/2009	N001	96.15 - 251.5	0.0027	B	J	#	0.0016	
Iron	mg/L	08/12/2009	N002	96.15 - 251.5	0.0016	U	J	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	96.15 - 251.5	100			#	0.0066	
Magnesium	mg/L	08/12/2009	N002	96.15 - 251.5	94			#	0.0066	
Manganese	mg/L	08/12/2009	N001	96.15 - 251.5	0.47			#	0.0001	
Manganese	mg/L	08/12/2009	N002	96.15 - 251.5	0.42			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	96.15 - 251.5	0.00054	B		#	0.000067	
Molybdenum	mg/L	08/12/2009	N002	96.15 - 251.5	0.00054	B		#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	96.15 - 251.5	72			#	0.5	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N002	96.15 - 251.5	75			#	0.5	
Oxidation Reduction Potential	mV	08/12/2009	N001	96.15 - 251.5	260			#		

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1101 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
pH	s.u.	08/12/2009	N001	96.15	-	251.5	6.93			#		
Potassium	mg/L	08/12/2009	N001	96.15	-	251.5	9.2			#	0.092	
Potassium	mg/L	08/12/2009	N002	96.15	-	251.5	9.9			#	0.092	
Selenium	mg/L	08/12/2009	N001	96.15	-	251.5	0.017			#	0.000032	
Selenium	mg/L	08/12/2009	N002	96.15	-	251.5	0.017			#	0.000032	
Silica	mg/L	08/12/2009	N001	96.15	-	251.5	15			#	0.0071	
Silicon	mg/L	08/12/2009	N001	96.15	-	251.5	7.2			#	0.0033	
Sodium	mg/L	08/12/2009	N001	96.15	-	251.5	200			#	0.0044	
Sodium	mg/L	08/12/2009	N002	96.15	-	251.5	190			#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	96.15	-	251.5	2890			#		
Sulfate	mg/L	08/12/2009	N001	96.15	-	251.5	1100			#	10	
Sulfate	mg/L	08/12/2009	N002	96.15	-	251.5	1100			#	10	
Temperature	C	08/12/2009	N001	96.15	-	251.5	17.88			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	96.15	-	251.5	2500			#	40	
Total Dissolved Solids	mg/L	08/12/2009	N002	96.15	-	251.5	2600			#	80	
Turbidity	NTU	08/12/2009	N001	96.15	-	251.5	2.67			#		
Uranium	mg/L	08/12/2009	N001	96.15	-	251.5	0.25			#	0.0000087	
Uranium	mg/L	08/12/2009	N002	96.15	-	251.5	0.25			#	0.0000087	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1102 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	101.5	-	251.5	306			#		
Ammonia Total as N	mg/L	08/12/2009	N001	101.5	-	251.5	0.87			#	0.1	
Arsenic	mg/L	08/12/2009	N001	101.5	-	251.5	0.0014			#	0.0000084	
Calcium	mg/L	08/12/2009	N001	101.5	-	251.5	470			#	0.0021	
Chloride	mg/L	08/12/2009	N001	101.5	-	251.5	73			#	4	
Iron	mg/L	08/12/2009	N001	101.5	-	251.5	0.0081	B		#	0.0016	
Magnesium	mg/L	08/12/2009	N001	101.5	-	251.5	120			#	0.0066	
Manganese	mg/L	08/12/2009	N001	101.5	-	251.5	0.77			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	101.5	-	251.5	0.00033	B		#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	101.5	-	251.5	110			#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	101.5	-	251.5	245			#		
pH	s.u.	08/12/2009	N001	101.5	-	251.5	6.84			#		
Potassium	mg/L	08/12/2009	N001	101.5	-	251.5	8.6			#	0.092	
Selenium	mg/L	08/12/2009	N001	101.5	-	251.5	0.018			#	0.000032	
Silica	mg/L	08/12/2009	N001	101.5	-	251.5	14			#	0.0071	
Silicon	mg/L	08/12/2009	N001	101.5	-	251.5	6.8			#	0.0033	
Sodium	mg/L	08/12/2009	N001	101.5	-	251.5	160			#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	101.5	-	251.5	2971			#		
Sulfate	mg/L	08/12/2009	N001	101.5	-	251.5	1100			#	10	
Temperature	C	08/12/2009	N001	101.5	-	251.5	17.45			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	101.5	-	251.5	2700			#	40	
Turbidity	NTU	08/12/2009	N001	101.5	-	251.5	1.79			#		
Uranium	mg/L	08/12/2009	N001	101.5	-	251.5	0.32			#	0.0000087	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1103 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)	Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	100 - 250	425			#		
Ammonia Total as N	mg/L	08/12/2009	N001	100 - 250	16			#	0.5	
Arsenic	mg/L	08/12/2009	N001	100 - 250	0.0014			#	0.000017	
Calcium	mg/L	08/12/2009	N001	100 - 250	550			#	0.021	
Chloride	mg/L	08/12/2009	N001	100 - 250	120			#	10	
Iron	mg/L	08/12/2009	N001	100 - 250	0.0048	B	J	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	100 - 250	240			#	0.0066	
Manganese	mg/L	08/12/2009	N001	100 - 250	3.8			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	100 - 250	0.0049			#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	100 - 250	170			#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	100 - 250	251			#		
pH	s.u.	08/12/2009	N001	100 - 250	6.6			#		
Potassium	mg/L	08/12/2009	N001	100 - 250	18			#	0.092	
Selenium	mg/L	08/12/2009	N001	100 - 250	0.029			#	0.000064	
Silica	mg/L	08/12/2009	N001	100 - 250	17			#	0.0071	
Silicon	mg/L	08/12/2009	N001	100 - 250	8			#	0.0033	
Sodium	mg/L	08/12/2009	N001	100 - 250	280			#	0.044	
Specific Conductance	umhos /cm	08/12/2009	N001	100 - 250	4592			#		
Sulfate	mg/L	08/12/2009	N001	100 - 250	1800			#	25	
Temperature	C	08/12/2009	N001	100 - 250	17.75			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	100 - 250	4400			#	80	
Turbidity	NTU	08/12/2009	N001	100 - 250	2.66			#		
Uranium	mg/L	08/12/2009	N001	100 - 250	0.41			#	0.0000087	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1104 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	90	-	245	378			#		
Ammonia Total as N	mg/L	08/12/2009	N001	90	-	245	22			#	0.5	
Arsenic	mg/L	08/12/2009	N001	90	-	245	0.0016			#	0.000017	
Calcium	mg/L	08/12/2009	N001	90	-	245	430			#	0.0021	
Chloride	mg/L	08/12/2009	N001	90	-	245	78			#	4	
Iron	mg/L	08/12/2009	N001	90	-	245	0.0019	B	J	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	90	-	245	140			#	0.0066	
Manganese	mg/L	08/12/2009	N001	90	-	245	0.56			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	90	-	245	0.046			#	0.00067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	90	-	245	120			#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	90	-	245	284			#		
pH	s.u.	08/12/2009	N001	90	-	245	6.58			#		
Potassium	mg/L	08/12/2009	N001	90	-	245	12			#	0.092	
Selenium	mg/L	08/12/2009	N001	90	-	245	0.027			#	0.000064	
Silica	mg/L	08/12/2009	N001	90	-	245	15			#	0.0071	
Silicon	mg/L	08/12/2009	N001	90	-	245	7.2			#	0.0033	
Sodium	mg/L	08/12/2009	N001	90	-	245	200			#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	90	-	245	3437			#		
Sulfate	mg/L	08/12/2009	N001	90	-	245	1200			#	10	
Temperature	C	08/12/2009	N001	90	-	245	21.66			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	90	-	245	2700			#	40	
Turbidity	NTU	08/12/2009	N001	90	-	245	2.75			#		
Uranium	mg/L	08/12/2009	N001	90	-	245	0.68			#	0.000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1105 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	90	-	245	352			#		
Ammonia Total as N	mg/L	08/12/2009	N001	90	-	245	3.7			#	0.1	
Arsenic	mg/L	08/12/2009	N001	90	-	245	0.26			#	0.00017	
Calcium	mg/L	08/12/2009	N001	90	-	245	390			#	0.0021	
Chloride	mg/L	08/12/2009	N001	90	-	245	67			#	4	
Iron	mg/L	08/12/2009	N001	90	-	245	0.0016	U	J	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	90	-	245	98			#	0.0066	
Manganese	mg/L	08/12/2009	N001	90	-	245	0.088			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	90	-	245	0.5			#	0.0013	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	90	-	245	110			#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	90	-	245	265			#		
pH	s.u.	08/12/2009	N001	90	-	245	6.62			#		
Potassium	mg/L	08/12/2009	N001	90	-	245	7.4			#	0.092	
Selenium	mg/L	08/12/2009	N001	90	-	245	0.034			#	0.00064	
Silica	mg/L	08/12/2009	N001	90	-	245	13			#	0.0071	
Silicon	mg/L	08/12/2009	N001	90	-	245	6			#	0.0033	
Sodium	mg/L	08/12/2009	N001	90	-	245	180			#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	90	-	245	2794			#		
Sulfate	mg/L	08/12/2009	N001	90	-	245	940			#	10	
Temperature	C	08/12/2009	N001	90	-	245	26.05			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	90	-	245	2400			#	40	
Turbidity	NTU	08/12/2009	N001	90	-	245	2.8			#		
Uranium	mg/L	08/12/2009	N001	90	-	245	0.95			#	0.000035	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1106 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	96.5	-	251.1	370			#		
Ammonia Total as N	mg/L	08/12/2009	N001	96.5	-	251.1	20			#	0.5	
Arsenic	mg/L	08/12/2009	N001	96.5	-	251.1	0.3			#	0.00017	
Calcium	mg/L	08/12/2009	N001	96.5	-	251.1	340			#	0.0021	
Chloride	mg/L	08/12/2009	N001	96.5	-	251.1	66			#	4	
Iron	mg/L	08/12/2009	N001	96.5	-	251.1	0.021	B		#	0.0016	
Magnesium	mg/L	08/12/2009	N001	96.5	-	251.1	81			#	0.0066	
Manganese	mg/L	08/12/2009	N001	96.5	-	251.1	0.029			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	96.5	-	251.1	0.18			#	0.00067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	96.5	-	251.1	98			#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	96.5	-	251.1	272			#		
pH	s.u.	08/12/2009	N001	96.5	-	251.1	6.8			#		
Potassium	mg/L	08/12/2009	N001	96.5	-	251.1	11			#	0.092	
Selenium	mg/L	08/12/2009	N001	96.5	-	251.1	0.03			#	0.00064	
Silica	mg/L	08/12/2009	N001	96.5	-	251.1	15			#	0.0071	
Silicon	mg/L	08/12/2009	N001	96.5	-	251.1	6.9			#	0.0033	
Sodium	mg/L	08/12/2009	N001	96.5	-	251.1	190			#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	96.5	-	251.1	2780			#		
Sulfate	mg/L	08/12/2009	N001	96.5	-	251.1	870			#	10	
Temperature	C	08/12/2009	N001	96.5	-	251.1	29.79			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	96.5	-	251.1	2300			#	40	
Turbidity	NTU	08/12/2009	N001	96.5	-	251.1	2.11			#		
Uranium	mg/L	08/12/2009	N001	96.5	-	251.1	0.73			#	0.000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1107 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	91.1	-	245.5	238			#		
Ammonia Total as N	mg/L	08/12/2009	N001	91.1	-	245.5	0.1	U		#	0.1	
Arsenic	mg/L	08/12/2009	N001	91.1	-	245.5	0.0018			#	0.0000084	
Calcium	mg/L	08/12/2009	N001	91.1	-	245.5	230			#	0.0021	
Chloride	mg/L	08/12/2009	N001	91.1	-	245.5	41			#	2	
Iron	mg/L	08/12/2009	N001	91.1	-	245.5	0.0016	U	J	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	91.1	-	245.5	42			#	0.0066	
Manganese	mg/L	08/12/2009	N001	91.1	-	245.5	0.015			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	91.1	-	245.5	0.027			#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	91.1	-	245.5	61			#	0.5	
Oxidation Reduction Potential	mV	08/12/2009	N001	91.1	-	245.5	261			#		
pH	s.u.	08/12/2009	N001	91.1	-	245.5	6.79			#		
Potassium	mg/L	08/12/2009	N001	91.1	-	245.5	3.8			#	0.092	
Selenium	mg/L	08/12/2009	N001	91.1	-	245.5	0.015			#	0.000032	
Silica	mg/L	08/12/2009	N001	91.1	-	245.5	12			#	0.0071	
Silicon	mg/L	08/12/2009	N001	91.1	-	245.5	5.7			#	0.0033	
Sodium	mg/L	08/12/2009	N001	91.1	-	245.5	73			#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	91.1	-	245.5	1541			#		
Sulfate	mg/L	08/12/2009	N001	91.1	-	245.5	360			#	5	
Temperature	C	08/12/2009	N001	91.1	-	245.5	20.34			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	91.1	-	245.5	1200			#	20	
Turbidity	NTU	08/12/2009	N001	91.1	-	245.5	2.17			#		
Uranium	mg/L	08/12/2009	N001	91.1	-	245.5	0.062			#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1108 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	96.3	-	246.3	566			#		
Ammonia Total as N	mg/L	08/12/2009	N001	96.3	-	246.3	38			#	2	
Arsenic	mg/L	08/12/2009	N001	96.3	-	246.3	0.0011			#	0.000017	
Calcium	mg/L	08/12/2009	N001	96.3	-	246.3	550			#	0.021	
Chloride	mg/L	08/12/2009	N001	96.3	-	246.3	85			#	10	
Iron	mg/L	08/12/2009	N001	96.3	-	246.3	0.0023	B	J	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	96.3	-	246.3	220			#	0.0066	
Manganese	mg/L	08/12/2009	N001	96.3	-	246.3	3.3			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	96.3	-	246.3	0.0013			#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	96.3	-	246.3	150			#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	96.3	-	246.3	286			#		
pH	s.u.	08/12/2009	N001	96.3	-	246.3	6.55			#		
Potassium	mg/L	08/12/2009	N001	96.3	-	246.3	17			#	0.092	
Selenium	mg/L	08/12/2009	N001	96.3	-	246.3	0.033			#	0.000064	
Silica	mg/L	08/12/2009	N001	96.3	-	246.3	16			#	0.0071	
Silicon	mg/L	08/12/2009	N001	96.3	-	246.3	7.4			#	0.0033	
Sodium	mg/L	08/12/2009	N001	96.3	-	246.3	220			#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	96.3	-	246.3	4366			#		
Sulfate	mg/L	08/12/2009	N001	96.3	-	246.3	1700			#	25	
Temperature	C	08/12/2009	N001	96.3	-	246.3	17.9			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	96.3	-	246.3	4000			#	80	
Turbidity	NTU	08/12/2009	N001	96.3	-	246.3	2.58			#		
Uranium	mg/L	08/12/2009	N001	96.3	-	246.3	0.44			#	0.0000087	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1109 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	90.34	-	245.1	364			#		
Ammonia Total as N	mg/L	08/12/2009	N001	90.34	-	245.1	14			#	0.5	
Arsenic	mg/L	08/12/2009	N001	90.34	-	245.1	0.0014			#	0.0000084	
Calcium	mg/L	08/12/2009	N001	90.34	-	245.1	350			#	0.0021	
Chloride	mg/L	08/12/2009	N001	90.34	-	245.1	49			#	4	
Iron	mg/L	08/12/2009	N001	90.34	-	245.1	0.023	B		#	0.0016	
Magnesium	mg/L	08/12/2009	N001	90.34	-	245.1	250			#	0.0066	
Manganese	mg/L	08/12/2009	N001	90.34	-	245.1	4.8			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	90.34	-	245.1	0.00046	B		#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	90.34	-	245.1	93			#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	90.34	-	245.1	289			#		
pH	s.u.	08/12/2009	N001	90.34	-	245.1	6.5			#		
Potassium	mg/L	08/12/2009	N001	90.34	-	245.1	11			#	0.092	
Selenium	mg/L	08/12/2009	N001	90.34	-	245.1	0.015			#	0.000032	
Silica	mg/L	08/12/2009	N001	90.34	-	245.1	14			#	0.0071	
Silicon	mg/L	08/12/2009	N001	90.34	-	245.1	6.6			#	0.0033	
Sodium	mg/L	08/12/2009	N001	90.34	-	245.1	120			#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	90.34	-	245.1	3138			#		
Sulfate	mg/L	08/12/2009	N001	90.34	-	245.1	1400			#	10	
Temperature	C	08/12/2009	N001	90.34	-	245.1	18.23			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	90.34	-	245.1	2800			#	40	
Turbidity	NTU	08/12/2009	N001	90.34	-	245.1	2.24			#		
Uranium	mg/L	08/12/2009	N001	90.34	-	245.1	0.29			#	0.0000087	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1110 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	95.5	-	245.5	390			#		
Ammonia Total as N	mg/L	08/12/2009	N001	95.5	-	245.5	4.7			#	0.1	
Arsenic	mg/L	08/12/2009	N001	95.5	-	245.5	0.0012			#	0.0000084	
Calcium	mg/L	08/12/2009	N001	95.5	-	245.5	450			#	0.0021	
Chloride	mg/L	08/12/2009	N001	95.5	-	245.5	51			#	4	
Iron	mg/L	08/12/2009	N001	95.5	-	245.5	0.0077	B	J	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	95.5	-	245.5	150			#	0.0066	
Manganese	mg/L	08/12/2009	N001	95.5	-	245.5	1.4			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	95.5	-	245.5	0.00025	B		#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	95.5	-	245.5	96			#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	95.5	-	245.5	305			#		
pH	s.u.	08/12/2009	N001	95.5	-	245.5	6.58			#		
Potassium	mg/L	08/12/2009	N001	95.5	-	245.5	8.9			#	0.092	
Selenium	mg/L	08/12/2009	N001	95.5	-	245.5	0.013			#	0.000032	
Silica	mg/L	08/12/2009	N001	95.5	-	245.5	15			#	0.0071	
Silicon	mg/L	08/12/2009	N001	95.5	-	245.5	6.8			#	0.0033	
Sodium	mg/L	08/12/2009	N001	95.5	-	245.5	120			#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	95.5	-	245.5	2905			#		
Sulfate	mg/L	08/12/2009	N001	95.5	-	245.5	1100			#	10	
Temperature	C	08/12/2009	N001	95.5	-	245.5	20			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	95.5	-	245.5	2600			#	40	
Turbidity	NTU	08/12/2009	N001	95.5	-	245.5	1.54			#		
Uranium	mg/L	08/12/2009	N001	95.5	-	245.5	0.2			#	0.0000035	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1111 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	90.68	-	245.1	450			#		
Ammonia Total as N	mg/L	08/12/2009	N001	90.68	-	245.1	10			#	0.5	
Arsenic	mg/L	08/12/2009	N001	90.68	-	245.1	0.00084			#	0.0000084	
Calcium	mg/L	08/12/2009	N001	90.68	-	245.1	500			#	0.021	
Chloride	mg/L	08/12/2009	N001	90.68	-	245.1	65			#	4	
Iron	mg/L	08/12/2009	N001	90.68	-	245.1	0.0016	U	J	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	90.68	-	245.1	170			#	0.0066	
Manganese	mg/L	08/12/2009	N001	90.68	-	245.1	1.1			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	90.68	-	245.1	0.00033	B		#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	90.68	-	245.1	130			#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	90.68	-	245.1	306			#		
pH	s.u.	08/12/2009	N001	90.68	-	245.1	7.16			#		
Potassium	mg/L	08/12/2009	N001	90.68	-	245.1	14			#	0.092	
Selenium	mg/L	08/12/2009	N001	90.68	-	245.1	0.013			#	0.000032	
Silica	mg/L	08/12/2009	N001	90.68	-	245.1	16			#	0.0071	
Silicon	mg/L	08/12/2009	N001	90.68	-	245.1	7.4			#	0.0033	
Sodium	mg/L	08/12/2009	N001	90.68	-	245.1	180			#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	90.68	-	245.1	3671			#		
Sulfate	mg/L	08/12/2009	N001	90.68	-	245.1	1500			#	10	
Temperature	C	08/12/2009	N001	90.68	-	245.1	18.36			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	90.68	-	245.1	3500			#	80	
Turbidity	NTU	08/12/2009	N001	90.68	-	245.1	2.25			#		
Uranium	mg/L	08/12/2009	N001	90.68	-	245.1	0.2			#	0.000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1112 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	90.5	-	245.5	149			#		
Ammonia Total as N	mg/L	08/11/2009	N001	90.5	-	245.5	0.1	U		#	0.1	
Arsenic	mg/L	08/11/2009	N001	90.5	-	245.5	0.0015			#	0.0000084	
Calcium	mg/L	08/11/2009	N001	90.5	-	245.5	150			#	0.0021	
Chloride	mg/L	08/11/2009	N001	90.5	-	245.5	18			#	2	
Iron	mg/L	08/11/2009	N001	90.5	-	245.5	0.077			#	0.0016	
Magnesium	mg/L	08/11/2009	N001	90.5	-	245.5	36			#	0.0066	
Manganese	mg/L	08/11/2009	N001	90.5	-	245.5	0.0012	B		#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	90.5	-	245.5	0.00029	B	U	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	90.5	-	245.5	39			#	0.5	
Oxidation Reduction Potential	mV	08/11/2009	N001	90.5	-	245.5	177.1			#		
pH	s.u.	08/11/2009	N001	90.5	-	245.5	6.99			#		
Potassium	mg/L	08/11/2009	N001	90.5	-	245.5	2.9			#	0.092	
Selenium	mg/L	08/11/2009	N001	90.5	-	245.5	0.0038			#	0.000032	
Silica	mg/L	08/11/2009	N001	90.5	-	245.5	12			#	0.0071	
Silicon	mg/L	08/11/2009	N001	90.5	-	245.5	5.6			#	0.0033	
Sodium	mg/L	08/11/2009	N001	90.5	-	245.5	24			#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	90.5	-	245.5	952			#		
Sulfate	mg/L	08/11/2009	N001	90.5	-	245.5	220			#	5	
Temperature	C	08/11/2009	N001	90.5	-	245.5	18.55			#		
Total Dissolved Solids	mg/L	08/11/2009	N001	90.5	-	245.5	790			#	20	
Turbidity	NTU	08/11/2009	N001	90.5	-	245.5	1.45			#		
Uranium	mg/L	08/11/2009	N001	90.5	-	245.5	0.049			#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1113 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	90.5	-	245.5	127			#		
Ammonia Total as N	mg/L	08/11/2009	N001	90.5	-	245.5	0.1	U		#	0.1	
Arsenic	mg/L	08/11/2009	N001	90.5	-	245.5	0.0014			#	0.0000084	
Calcium	mg/L	08/11/2009	N001	90.5	-	245.5	87			#	0.0021	
Chloride	mg/L	08/11/2009	N001	90.5	-	245.5	16			#	1	
Iron	mg/L	08/11/2009	N001	90.5	-	245.5	0.0056	B	J	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	90.5	-	245.5	18			#	0.0066	
Manganese	mg/L	08/11/2009	N001	90.5	-	245.5	0.0001	U	J	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	90.5	-	245.5	0.00026	B	U	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	90.5	-	245.5	26			#	0.2	
Oxidation Reduction Potential	mV	08/11/2009	N001	90.5	-	245.5	145.2			#		
pH	s.u.	08/11/2009	N001	90.5	-	245.5	7.62			#		
Potassium	mg/L	08/11/2009	N001	90.5	-	245.5	2.7			#	0.092	
Selenium	mg/L	08/11/2009	N001	90.5	-	245.5	0.0019			#	0.000032	
Silica	mg/L	08/11/2009	N001	90.5	-	245.5	11			#	0.0071	
Silicon	mg/L	08/11/2009	N001	90.5	-	245.5	5.3			#	0.0033	
Sodium	mg/L	08/11/2009	N001	90.5	-	245.5	11			#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	90.5	-	245.5	621			#		
Sulfate	mg/L	08/11/2009	N001	90.5	-	245.5	84			#	2.5	
Temperature	C	08/11/2009	N001	90.5	-	245.5	19.17			#		
Total Dissolved Solids	mg/L	08/11/2009	N001	90.5	-	245.5	450			#	20	
Turbidity	NTU	08/11/2009	N001	90.5	-	245.5	2.06			#		
Uranium	mg/L	08/11/2009	N001	90.5	-	245.5	0.012			#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1114 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	90.59	-	245.5	295			#		
Ammonia Total as N	mg/L	08/11/2009	N001	90.59	-	245.5	0.1	U		#	0.1	
Arsenic	mg/L	08/11/2009	N001	90.59	-	245.5	0.0013			#	0.0000084	
Calcium	mg/L	08/11/2009	N001	90.59	-	245.5	380			#	0.0021	
Chloride	mg/L	08/11/2009	N001	90.59	-	245.5	34			#	4	
Iron	mg/L	08/11/2009	N001	90.59	-	245.5	0.16			#	0.0016	
Magnesium	mg/L	08/11/2009	N001	90.59	-	245.5	73			#	0.0066	
Manganese	mg/L	08/11/2009	N001	90.59	-	245.5	0.0051			#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	90.59	-	245.5	0.014			#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	90.59	-	245.5	74			#	0.5	
Oxidation Reduction Potential	mV	08/11/2009	N001	90.59	-	245.5	182.8			#		
pH	s.u.	08/11/2009	N001	90.59	-	245.5	6.85			#		
Potassium	mg/L	08/11/2009	N001	90.59	-	245.5	5.6			#	0.092	
Selenium	mg/L	08/11/2009	N001	90.59	-	245.5	0.0087			#	0.000032	
Silica	mg/L	08/11/2009	N001	90.59	-	245.5	14			#	0.0071	
Silicon	mg/L	08/11/2009	N001	90.59	-	245.5	6.7			#	0.0033	
Sodium	mg/L	08/11/2009	N001	90.59	-	245.5	66			#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	90.59	-	245.5	1975			#		
Sulfate	mg/L	08/11/2009	N001	90.59	-	245.5	670			#	10	
Temperature	C	08/11/2009	N001	90.59	-	245.5	18.2			#		
Total Dissolved Solids	mg/L	08/11/2009	N001	90.59	-	245.5	1900			#	40	
Turbidity	NTU	08/11/2009	N001	90.59	-	245.5	1.54			#		
Uranium	mg/L	08/11/2009	N001	90.59	-	245.5	0.082			#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1115 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	90.52	-	245.5	327			#		
Ammonia Total as N	mg/L	08/11/2009	N001	90.52	-	245.5	0.1	U		#	0.1	
Arsenic	mg/L	08/11/2009	N001	90.52	-	245.5	0.0012			#	0.0000084	
Calcium	mg/L	08/11/2009	N001	90.52	-	245.5	410			#	0.0021	
Chloride	mg/L	08/11/2009	N001	90.52	-	245.5	34			#	4	
Iron	mg/L	08/11/2009	N001	90.52	-	245.5	0.013	B		#	0.0016	
Magnesium	mg/L	08/11/2009	N001	90.52	-	245.5	89			#	0.0066	
Manganese	mg/L	08/11/2009	N001	90.52	-	245.5	0.059			#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	90.52	-	245.5	0.00029	B	U	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	90.52	-	245.5	86			#	0.5	
Oxidation Reduction Potential	mV	08/11/2009	N001	90.52	-	245.5	155.3			#		
pH	s.u.	08/11/2009	N001	90.52	-	245.5	6.7			#		
Potassium	mg/L	08/11/2009	N001	90.52	-	245.5	6			#	0.092	
Selenium	mg/L	08/11/2009	N001	90.52	-	245.5	0.011			#	0.000032	
Silica	mg/L	08/11/2009	N001	90.52	-	245.5	14			#	0.0071	
Silicon	mg/L	08/11/2009	N001	90.52	-	245.5	6.5			#	0.0033	
Sodium	mg/L	08/11/2009	N001	90.52	-	245.5	92			#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	90.52	-	245.5	2264			#		
Sulfate	mg/L	08/11/2009	N001	90.52	-	245.5	760			#	10	
Temperature	C	08/11/2009	N001	90.52	-	245.5	18.3			#		
Total Dissolved Solids	mg/L	08/11/2009	N001	90.52	-	245.5	2200			#	40	
Turbidity	NTU	08/11/2009	N001	90.52	-	245.5	1.55			#		
Uranium	mg/L	08/11/2009	N001	90.52	-	245.5	0.099			#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1116 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	92.37	-	195.5	207			#		
Ammonia Total as N	mg/L	08/11/2009	N001	92.37	-	195.5	0.1	U		#	0.1	
Arsenic	mg/L	08/11/2009	N001	92.37	-	195.5	0.0013			#	0.0000084	
Calcium	mg/L	08/11/2009	N001	92.37	-	195.5	190			#	0.0021	
Chloride	mg/L	08/11/2009	N001	92.37	-	195.5	30			#	2	
Iron	mg/L	08/11/2009	N001	92.37	-	195.5	0.005	B	J	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	92.37	-	195.5	41			#	0.0066	
Manganese	mg/L	08/11/2009	N001	92.37	-	195.5	0.0001	U	J	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	92.37	-	195.5	0.00023	B	U	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	92.37	-	195.5	54			#	0.5	
Oxidation Reduction Potential	mV	08/11/2009	N001	92.37	-	195.5	239.5			#		
pH	s.u.	08/11/2009	N001	92.37	-	195.5	7.2			#		
Potassium	mg/L	08/11/2009	N001	92.37	-	195.5	3.6			#	0.092	
Selenium	mg/L	08/11/2009	N001	92.37	-	195.5	0.0027			#	0.000032	
Silica	mg/L	08/11/2009	N001	92.37	-	195.5	14			#	0.0071	
Silicon	mg/L	08/11/2009	N001	92.37	-	195.5	6.4			#	0.0033	
Sodium	mg/L	08/11/2009	N001	92.37	-	195.5	30			#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	92.37	-	195.5	1232			#		
Sulfate	mg/L	08/11/2009	N001	92.37	-	195.5	280			#	5	
Temperature	C	08/11/2009	N001	92.37	-	195.5	19.23			#		
Total Dissolved Solids	mg/L	08/11/2009	N001	92.37	-	195.5	1000			#	20	
Turbidity	NTU	08/11/2009	N001	92.37	-	195.5	2.25			#		
Uranium	mg/L	08/11/2009	N001	92.37	-	195.5	0.017			#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1117 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	92.3	-	195.5	340			#		
Ammonia Total as N	mg/L	08/12/2009	N001	92.3	-	195.5	0.1	U		#	0.1	
Arsenic	mg/L	08/12/2009	N001	92.3	-	195.5	0.0011			#	0.0000084	
Calcium	mg/L	08/12/2009	N001	92.3	-	195.5	410			#	0.0021	
Chloride	mg/L	08/12/2009	N001	92.3	-	195.5	47			#	4	
Iron	mg/L	08/12/2009	N001	92.3	-	195.5	0.015	B		#	0.0016	
Magnesium	mg/L	08/12/2009	N001	92.3	-	195.5	130			#	0.0066	
Manganese	mg/L	08/12/2009	N001	92.3	-	195.5	0.019			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	92.3	-	195.5	0.00026	B		#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	92.3	-	195.5	100			#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	92.3	-	195.5	250.4			#		
pH	s.u.	08/12/2009	N001	92.3	-	195.5	6.72			#		
Potassium	mg/L	08/12/2009	N001	92.3	-	195.5	7.5			#	0.092	
Selenium	mg/L	08/12/2009	N001	92.3	-	195.5	0.011			#	0.000032	
Silica	mg/L	08/12/2009	N001	92.3	-	195.5	16			#	0.0071	
Silicon	mg/L	08/12/2009	N001	92.3	-	195.5	7.4			#	0.0033	
Sodium	mg/L	08/12/2009	N001	92.3	-	195.5	93			#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	92.3	-	195.5	2686			#		
Sulfate	mg/L	08/12/2009	N001	92.3	-	195.5	850			#	10	
Temperature	C	08/12/2009	N001	92.3	-	195.5	19.36			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	92.3	-	195.5	2300			#	40	
Turbidity	NTU	08/12/2009	N001	92.3	-	195.5	2.47			#		
Uranium	mg/L	08/12/2009	N001	92.3	-	195.5	0.033			#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1118 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	89.93	-	195.5	536			#		
Ammonia Total as N	mg/L	08/12/2009	N001	89.93	-	195.5	10			#	0.5	
Arsenic	mg/L	08/12/2009	N001	89.93	-	195.5	0.0016			#	0.0000084	
Calcium	mg/L	08/12/2009	N001	89.93	-	195.5	530			#	0.021	
Chloride	mg/L	08/12/2009	N001	89.93	-	195.5	61			#	10	
Iron	mg/L	08/12/2009	N001	89.93	-	195.5	0.0016	U	J	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	89.93	-	195.5	250			#	0.0066	
Manganese	mg/L	08/12/2009	N001	89.93	-	195.5	0.21			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	89.93	-	195.5	0.00049	B		#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	89.93	-	195.5	150			#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	89.93	-	195.5	256.2			#		
pH	s.u.	08/12/2009	N001	89.93	-	195.5	6.64			#		
Potassium	mg/L	08/12/2009	N001	89.93	-	195.5	16			#	0.092	
Selenium	mg/L	08/12/2009	N001	89.93	-	195.5	0.017			#	0.000032	
Silica	mg/L	08/12/2009	N001	89.93	-	195.5	15			#	0.0071	
Silicon	mg/L	08/12/2009	N001	89.93	-	195.5	7.1			#	0.0033	
Sodium	mg/L	08/12/2009	N001	89.93	-	195.5	190			#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	89.93	-	195.5	3890			#		
Sulfate	mg/L	08/12/2009	N001	89.93	-	195.5	1800			#	25	
Temperature	C	08/12/2009	N001	89.93	-	195.5	18.11			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	89.93	-	195.5	4100			#	80	
Turbidity	NTU	08/12/2009	N001	89.93	-	195.5	2.34			#		
Uranium	mg/L	08/12/2009	N001	89.93	-	195.5	0.08			#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1119 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)	Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	95.33 - 245.33	604			#		
Ammonia Total as N	mg/L	08/12/2009	N001	95.33 - 245.33	21			#	0.5	
Arsenic	mg/L	08/12/2009	N001	95.33 - 245.33	0.0014			#	0.000017	
Calcium	mg/L	08/12/2009	N001	95.33 - 245.33	580			#	0.021	
Chloride	mg/L	08/12/2009	N001	95.33 - 245.33	110			#	10	
Iron	mg/L	08/12/2009	N001	95.33 - 245.33	0.024	B	U	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	95.33 - 245.33	230			#	0.0066	
Manganese	mg/L	08/12/2009	N001	95.33 - 245.33	2.5			#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	95.33 - 245.33	0.0069			#	0.00034	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	95.33 - 245.33	170			#	1	
Oxidation Reduction Potential	mV	08/12/2009	N001	95.33 - 245.33	276			#		
pH	s.u.	08/12/2009	N001	95.33 - 245.33	6.62			#		
Potassium	mg/L	08/12/2009	N001	95.33 - 245.33	20			#	0.092	
Selenium	mg/L	08/12/2009	N001	95.33 - 245.33	0.031			#	0.000064	
Silica	mg/L	08/12/2009	N001	95.33 - 245.33	17			#	0.0071	
Silicon	mg/L	08/12/2009	N001	95.33 - 245.33	8			#	0.0033	
Sodium	mg/L	08/12/2009	N001	95.33 - 245.33	300			#	0.044	
Specific Conductance	umhos /cm	08/12/2009	N001	95.33 - 245.33	4810			#		
Sulfate	mg/L	08/12/2009	N001	95.33 - 245.33	1900			#	25	
Temperature	C	08/12/2009	N001	95.33 - 245.33	17.32			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	95.33 - 245.33	4700			#	80	
Turbidity	NTU	08/12/2009	N001	95.33 - 245.33	1.95			#		
Uranium	mg/L	08/12/2009	N001	95.33 - 245.33	0.4			#	0.0000087	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1120 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	95.5	-	245.5	220			#		
Ammonia Total as N	mg/L	08/12/2009	N001	95.5	-	245.5	21			#	0.5	
Arsenic	mg/L	08/12/2009	N001	95.5	-	245.5	0.0015			#	0.000017	
Calcium	mg/L	08/12/2009	N001	95.5	-	245.5	380			#	0.0021	
Chloride	mg/L	08/12/2009	N001	95.5	-	245.5	74			#	4	
Iron	mg/L	08/12/2009	N001	95.5	-	245.5	0.0016	U	J	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	95.5	-	245.5	150			#	0.0066	
Manganese	mg/L	08/12/2009	N001	95.5	-	245.5	30			#	0.00052	
Molybdenum	mg/L	08/12/2009	N001	95.5	-	245.5	0.031			#	0.00013	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	95.5	-	245.5	47			#	0.5	
Oxidation Reduction Potential	mV	08/12/2009	N001	95.5	-	245.5	277			#		
pH	s.u.	08/12/2009	N001	95.5	-	245.5	6.69			#		
Potassium	mg/L	08/12/2009	N001	95.5	-	245.5	15			#	0.092	
Selenium	mg/L	08/12/2009	N001	95.5	-	245.5	0.019			#	0.000064	
Silica	mg/L	08/12/2009	N001	95.5	-	245.5	19			#	0.0071	
Silicon	mg/L	08/12/2009	N001	95.5	-	245.5	8.8			#	0.0033	
Sodium	mg/L	08/12/2009	N001	95.5	-	245.5	210			#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	95.5	-	245.5	3390			#		
Sulfate	mg/L	08/12/2009	N001	95.5	-	245.5	1800			#	10	
Temperature	C	08/12/2009	N001	95.5	-	245.5	17.43			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	95.5	-	245.5	3200			#	80	
Turbidity	NTU	08/12/2009	N001	95.5	-	245.5	3.44			#		
Uranium	mg/L	08/12/2009	N001	95.5	-	245.5	0.17			#	0.0000035	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1121 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	97.5	-	247.5	148			#		
Ammonia Total as N	mg/L	08/12/2009	N001	97.5	-	247.5	14			#	0.5	
Arsenic	mg/L	08/12/2009	N001	97.5	-	247.5	0.0013			#	0.0000084	
Calcium	mg/L	08/12/2009	N001	97.5	-	247.5	210			#	0.0021	
Chloride	mg/L	08/12/2009	N001	97.5	-	247.5	25			#	4	
Iron	mg/L	08/12/2009	N001	97.5	-	247.5	0.0022	B	UJ	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	97.5	-	247.5	61			#	0.0066	
Manganese	mg/L	08/12/2009	N001	97.5	-	247.5	22			#	0.00052	
Molybdenum	mg/L	08/12/2009	N001	97.5	-	247.5	0.012			#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	97.5	-	247.5	14			#	0.1	
Oxidation Reduction Potential	mV	08/12/2009	N001	97.5	-	247.5	267			#		
pH	s.u.	08/12/2009	N001	97.5	-	247.5	6.87			#		
Potassium	mg/L	08/12/2009	N001	97.5	-	247.5	8.1			#	0.092	
Selenium	mg/L	08/12/2009	N001	97.5	-	247.5	0.005			#	0.000032	
Silica	mg/L	08/12/2009	N001	97.5	-	247.5	16			#	0.0071	
Silicon	mg/L	08/12/2009	N001	97.5	-	247.5	7.4			#	0.0033	
Sodium	mg/L	08/12/2009	N001	97.5	-	247.5	94			#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	97.5	-	247.5	1835			#		
Sulfate	mg/L	08/12/2009	N001	97.5	-	247.5	850			#	10	
Temperature	C	08/12/2009	N001	97.5	-	247.5	17.38			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	97.5	-	247.5	1500			#	40	
Turbidity	NTU	08/12/2009	N001	97.5	-	247.5	3.06			#		
Uranium	mg/L	08/12/2009	N001	97.5	-	247.5	0.052			#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1123 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	91	-	245	299			#		
Ammonia Total as N	mg/L	08/12/2009	N001	91	-	245	8.5			#	0.5	
Arsenic	mg/L	08/12/2009	N001	91	-	245	0.0026			#	0.0000084	
Calcium	mg/L	08/12/2009	N001	91	-	245	330			#	0.0021	
Chloride	mg/L	08/12/2009	N001	91	-	245	110			#	4	
Iron	mg/L	08/12/2009	N001	91	-	245	0.38			#	0.0016	
Magnesium	mg/L	08/12/2009	N001	91	-	245	150			#	0.0066	
Manganese	mg/L	08/12/2009	N001	91	-	245	0.005	B		#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	91	-	245	0.00024	B	U	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	91	-	245	31			#	0.2	
Oxidation Reduction Potential	mV	08/12/2009	N001	91	-	245	145			#		
pH	s.u.	08/12/2009	N001	91	-	245	6.78			#		
Potassium	mg/L	08/12/2009	N001	91	-	245	16			#	0.092	
Selenium	mg/L	08/12/2009	N001	91	-	245	0.014			#	0.000032	
Silica	mg/L	08/12/2009	N001	91	-	245	16			#	0.0071	
Silicon	mg/L	08/12/2009	N001	91	-	245	7.3			#	0.0033	
Sodium	mg/L	08/12/2009	N001	91	-	245	260			#	0.044	
Specific Conductance	umhos /cm	08/12/2009	N001	91	-	245	3255			#		
Sulfate	mg/L	08/12/2009	N001	91	-	245	1600			#	10	
Temperature	C	08/12/2009	N001	91	-	245	19.34			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	91	-	245	3100			#	80	
Turbidity	NTU	08/12/2009	N001	91	-	245	3.38			#		
Uranium	mg/L	08/12/2009	N001	91	-	245	0.21			#	0.0000087	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1125 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	95.5	-	245.5	102			#		
Ammonia Total as N	mg/L	08/12/2009	N001	95.5	-	245.5	0.1	U		#	0.1	
Arsenic	mg/L	08/12/2009	N001	95.5	-	245.5	0.0021			#	0.0000084	
Calcium	mg/L	08/12/2009	N001	95.5	-	245.5	58			#	0.0021	
Chloride	mg/L	08/12/2009	N001	95.5	-	245.5	16			#	0.2	
Iron	mg/L	08/12/2009	N001	95.5	-	245.5	0.014	B	U	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	95.5	-	245.5	11			#	0.0066	
Manganese	mg/L	08/12/2009	N001	95.5	-	245.5	0.0001	U	J	#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	95.5	-	245.5	0.00042	B	U	#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	95.5	-	245.5	11			#	0.1	
Oxidation Reduction Potential	mV	08/12/2009	N001	95.5	-	245.5	183			#		
pH	s.u.	08/12/2009	N001	95.5	-	245.5	7.82			#		
Potassium	mg/L	08/12/2009	N001	95.5	-	245.5	2.3			#	0.092	
Selenium	mg/L	08/12/2009	N001	95.5	-	245.5	0.0019			#	0.000032	
Silica	mg/L	08/12/2009	N001	95.5	-	245.5	12			#	0.0071	
Silicon	mg/L	08/12/2009	N001	95.5	-	245.5	5.5			#	0.0033	
Sodium	mg/L	08/12/2009	N001	95.5	-	245.5	16	E	J	#	0.0044	
Specific Conductance	umhos /cm	08/12/2009	N001	95.5	-	245.5	497			#		
Sulfate	mg/L	08/12/2009	N001	95.5	-	245.5	71			#	0.5	
Temperature	C	08/12/2009	N001	95.5	-	245.5	20.55			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	95.5	-	245.5	330			#	20	
Turbidity	NTU	08/12/2009	N001	95.5	-	245.5	1.73			#		
Uranium	mg/L	08/12/2009	N001	95.5	-	245.5	0.0075			#	0.0000017	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1129 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	68.2	-	98.2	213			#		
Ammonia Total as N	mg/L	08/11/2009	N001	68.2	-	98.2	0.1	U		#	0.1	
Arsenic	mg/L	08/11/2009	N001	68.2	-	98.2	0.0015			#	0.000042	
Calcium	mg/L	08/11/2009	N001	68.2	-	98.2	450			#	0.0021	
Chloride	mg/L	08/11/2009	N001	68.2	-	98.2	49			#	4	
Iron	mg/L	08/11/2009	N001	68.2	-	98.2	0.0044	B	J	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	68.2	-	98.2	87			#	0.0066	
Manganese	mg/L	08/11/2009	N001	68.2	-	98.2	0.00018	B	J	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	68.2	-	98.2	0.73			#	0.0013	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	68.2	-	98.2	100			#	1	
Oxidation Reduction Potential	mV	08/11/2009	N001	68.2	-	98.2	233.9			#		
pH	s.u.	08/11/2009	N001	68.2	-	98.2	7.06			#		
Potassium	mg/L	08/11/2009	N001	68.2	-	98.2	5.6			#	0.092	
Selenium	mg/L	08/11/2009	N001	68.2	-	98.2	0.057			#	0.00016	
Silica	mg/L	08/11/2009	N001	68.2	-	98.2	15			#	0.0071	
Silicon	mg/L	08/11/2009	N001	68.2	-	98.2	6.9			#	0.0033	
Sodium	mg/L	08/11/2009	N001	68.2	-	98.2	89			#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	68.2	-	98.2	2189			#		
Sulfate	mg/L	08/11/2009	N001	68.2	-	98.2	800			#	10	
Temperature	C	08/11/2009	N001	68.2	-	98.2	23.54			#		
Total Dissolved Solids	mg/L	08/11/2009	N001	68.2	-	98.2	2400			#	40	
Turbidity	NTU	08/11/2009	N001	68.2	-	98.2	2.28			#		
Uranium	mg/L	08/11/2009	N001	68.2	-	98.2	0.71			#	0.000035	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1130 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	71.7	-	121.7	373			#		
Ammonia Total as N	mg/L	08/11/2009	N001	71.7	-	121.7	19			#	2	
Arsenic	mg/L	08/11/2009	N001	71.7	-	121.7	0.0012			#	0.000017	
Calcium	mg/L	08/11/2009	N001	71.7	-	121.7	590			#	0.11	
Chloride	mg/L	08/11/2009	N001	71.7	-	121.7	150	N		#	10	
Iron	mg/L	08/11/2009	N001	71.7	-	121.7	0.0058	B	J	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	71.7	-	121.7	190			#	0.0066	
Manganese	mg/L	08/11/2009	N001	71.7	-	121.7	0.22			#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	71.7	-	121.7	0.066			#	0.00034	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	71.7	-	121.7	180			#	2	
Oxidation Reduction Potential	mV	08/11/2009	N001	71.7	-	121.7	256.3			#		
pH	s.u.	08/11/2009	N001	71.7	-	121.7	6.59			#		
Potassium	mg/L	08/11/2009	N001	71.7	-	121.7	14			#	0.092	
Selenium	mg/L	08/11/2009	N001	71.7	-	121.7	0.026			#	0.000064	
Silica	mg/L	08/11/2009	N001	71.7	-	121.7	16			#	0.0071	
Silicon	mg/L	08/11/2009	N001	71.7	-	121.7	7.3			#	0.0033	
Sodium	mg/L	08/11/2009	N001	71.7	-	121.7	240			#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	71.7	-	121.7	2081			#		
Sulfate	mg/L	08/11/2009	N001	71.7	-	121.7	2000	N	J	#	25	
Temperature	C	08/11/2009	N001	71.7	-	121.7	21.78			#		
Total Dissolved Solids	mg/L	08/11/2009	N001	71.7	-	121.7	4300			#	80	
Turbidity	NTU	08/11/2009	N001	71.7	-	121.7	1.9			#		
Uranium	mg/L	08/11/2009	N001	71.7	-	121.7	0.22			#	0.0000087	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1132 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	49.7	-	99.7	358			#		
Ammonia Total as N	mg/L	08/11/2009	N001	49.7	-	99.7	0.1	U		#	0.1	
Arsenic	mg/L	08/11/2009	N001	49.7	-	99.7	0.0019			#	0.000084	
Calcium	mg/L	08/11/2009	N001	49.7	-	99.7	620			#	0.11	
Chloride	mg/L	08/11/2009	N001	49.7	-	99.7	89			#	10	
Iron	mg/L	08/11/2009	N001	49.7	-	99.7	0.0063	B	J	#	0.0016	
Magnesium	mg/L	08/11/2009	N001	49.7	-	99.7	140			#	0.0066	
Manganese	mg/L	08/11/2009	N001	49.7	-	99.7	0.00037	B	J	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	49.7	-	99.7	1.5			#	0.0034	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	49.7	-	99.7	170			#	1	
Oxidation Reduction Potential	mV	08/11/2009	N001	49.7	-	99.7	237.7			#		
pH	s.u.	08/11/2009	N001	49.7	-	99.7	6.97			#		
Potassium	mg/L	08/11/2009	N001	49.7	-	99.7	8.7			#	0.092	
Selenium	mg/L	08/11/2009	N001	49.7	-	99.7	0.11			#	0.00032	
Silica	mg/L	08/11/2009	N001	49.7	-	99.7	15			#	0.0071	
Silicon	mg/L	08/11/2009	N001	49.7	-	99.7	7			#	0.0033	
Sodium	mg/L	08/11/2009	N001	49.7	-	99.7	200			#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	49.7	-	99.7	3449			#		
Sulfate	mg/L	08/11/2009	N001	49.7	-	99.7	1300			#	25	
Temperature	C	08/11/2009	N001	49.7	-	99.7	27.55			#		
Total Dissolved Solids	mg/L	08/11/2009	N001	49.7	-	99.7	4000			#	80	
Turbidity	NTU	08/11/2009	N001	49.7	-	99.7	1.96			#		
Uranium	mg/L	08/11/2009	N001	49.7	-	99.7	1.6			#	0.000087	

Groundwater Quality Data by Location (USEE100) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1133 WELL

Parameter	Units	Sample Date	Sample ID	Depth Range (Ft BLS)			Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/11/2009	N001	59.7	-	99.7	150			#		
Ammonia Total as N	mg/L	08/11/2009	N001	59.7	-	99.7	0.1	U		#	0.1	
Arsenic	mg/L	08/11/2009	N001	59.7	-	99.7	0.0017			#	0.0000084	
Calcium	mg/L	08/11/2009	N001	59.7	-	99.7	140			#	0.0021	
Chloride	mg/L	08/11/2009	N001	59.7	-	99.7	27			#	2	
Iron	mg/L	08/11/2009	N001	59.7	-	99.7	0.013	B		#	0.0016	
Magnesium	mg/L	08/11/2009	N001	59.7	-	99.7	25			#	0.0066	
Manganese	mg/L	08/11/2009	N001	59.7	-	99.7	0.0001	U	J	#	0.0001	
Molybdenum	mg/L	08/11/2009	N001	59.7	-	99.7	0.013			#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/11/2009	N001	59.7	-	99.7	38			#	0.5	
Oxidation Reduction Potential	mV	08/11/2009	N001	59.7	-	99.7	230.3			#		
pH	s.u.	08/11/2009	N001	59.7	-	99.7	7.58			#		
Potassium	mg/L	08/11/2009	N001	59.7	-	99.7	2.8			#	0.092	
Selenium	mg/L	08/11/2009	N001	59.7	-	99.7	0.013			#	0.000032	
Silica	mg/L	08/11/2009	N001	59.7	-	99.7	13			#	0.0071	
Silicon	mg/L	08/11/2009	N001	59.7	-	99.7	6.1			#	0.0033	
Sodium	mg/L	08/11/2009	N001	59.7	-	99.7	24			#	0.0044	
Specific Conductance	umhos /cm	08/11/2009	N001	59.7	-	99.7	871			#		
Sulfate	mg/L	08/11/2009	N001	59.7	-	99.7	180			#	5	
Temperature	C	08/11/2009	N001	59.7	-	99.7	19.81			#		
Total Dissolved Solids	mg/L	08/11/2009	N001	59.7	-	99.7	740			#	20	
Turbidity	NTU	08/11/2009	N001	59.7	-	99.7	2.25			#		
Uranium	mg/L	08/11/2009	N001	59.7	-	99.7	0.078			#	0.0000017	

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number.

LAB QUALIFIERS:

*	Replicate analysis not within control limits.
>	Result above upper detection limit.
A	TIC is a suspected aldol-condensation product.
B	Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
C	Pesticide result confirmed by GC-MS.
D	Analyte determined in diluted sample.
E	Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
H	Holding time expired, value suspect.
I	Increased detection limit due to required dilution.
J	Estimated
N	Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
P	> 25% difference in detected pesticide or Aroclor concentrations between 2 columns.
U	Analytical result below detection limit.
W	Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
X,Y,Z	Laboratory defined qualifier, see case narrative.

DATA QUALIFIERS:

F	Low flow sampling method used.	G	Possible grout contamination, pH > 9.	J	Estimated value.
L	Less than 3 bore volumes purged prior to sampling.	Q	Qualitative result due to sampling technique.	R	Unusable result.
U	Parameter analyzed for but was not detected.	X	Location is undefined.		

QA QUALIFIER:

#	Validated according to quality assurance guidelines.

Surface Water Quality Data

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Surface Water Quality Data by Location (USEE102) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1569 SURFACE LOCATION

Parameter	Units	Sample Date	Sample ID	Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	0			#		
Arsenic	mg/L	08/12/2009	N001	3.4			#	0.0042	
Calcium	mg/L	08/12/2009	N001	160			#	0.021	
Chloride	mg/L	08/12/2009	N001	150000			#	2000	
Iron	mg/L	08/12/2009	N001	9.2			#	0.016	
Magnesium	mg/L	08/12/2009	N001	24000			#	0.66	
Manganese	mg/L	08/12/2009	N001	450			#	0.01	
Molybdenum	mg/L	08/12/2009	N001	3.4			#	0.013	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	17000			#	100	
Oxidation Reduction Potential	mV	08/12/2009	N001	12.3			#		
pH	s.u.	08/12/2009	N001	1.01			#		
Potassium	mg/L	08/12/2009	N001	2100			#	0.92	
Selenium	mg/L	08/12/2009	N001	3.1			#	0.016	
Sodium	mg/L	08/12/2009	N001	76000			#	2.2	
Specific Conductance	umhos/cm	08/12/2009	N001	146109			#		
Sulfate	mg/L	08/12/2009	N001	53000			#	2500	
Temperature	C	08/12/2009	N001	25.24			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	500000			#	8000	
Turbidity	NTU	08/12/2009	N001	5.45			#		
Uranium	mg/L	08/12/2009	N001	15			#	0.00035	

Surface Water Quality Data by Location (USEE102) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1570 SURFACE LOCATION

Parameter	Units	Sample Date	Sample ID	Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	0			#		
Arsenic	mg/L	08/12/2009	N001	3.6			#	0.0042	
Calcium	mg/L	08/12/2009	N001	150			#	0.021	
Chloride	mg/L	08/12/2009	N001	150000			#	2000	
Iron	mg/L	08/12/2009	N001	9.5			#	0.016	
Magnesium	mg/L	08/12/2009	N001	28000			#	0.66	
Manganese	mg/L	08/12/2009	N001	520			#	0.01	
Molybdenum	mg/L	08/12/2009	N001	3.7			#	0.013	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	19000			#	100	
Oxidation Reduction Potential	mV	08/12/2009	N001	12.3			#		
pH	s.u.	08/12/2009	N001	1.02			#		
Potassium	mg/L	08/12/2009	N001	2100			#	0.92	
Selenium	mg/L	08/12/2009	N001	3.4			#	0.016	
Sodium	mg/L	08/12/2009	N001	82000			#	2.2	
Specific Conductance	umhos/cm	08/12/2009	N001	135852			#		
Sulfate	mg/L	08/12/2009	N001	56000			#	2500	
Temperature	C	08/12/2009	N001	23.53			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	500000			#	8000	
Turbidity	NTU	08/12/2009	N001	7.4			#		
Uranium	mg/L	08/12/2009	N001	16			#	0.00035	

Surface Water Quality Data by Location (USEE102) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1571 SURFACE LOCATION Jimmy Spring West

Parameter	Units	Sample Date	Sample ID	Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	0001	182			#		
Arsenic	mg/L	08/12/2009	0001	0.0018	E		#	0.0000084	
Calcium	mg/L	08/12/2009	0001	33			#	0.0021	
Chloride	mg/L	08/12/2009	0001	43			#	1	
Iron	mg/L	08/12/2009	0001	0.0041	B	UJ	#	0.0016	
Magnesium	mg/L	08/12/2009	0001	9.6			#	0.0066	
Manganese	mg/L	08/12/2009	0001	0.0049	B		#	0.0001	
Molybdenum	mg/L	08/12/2009	0001	0.0035			#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	0001	2.5			#	0.05	
Oxidation Reduction Potential	mV	08/12/2009	N001	26.3			#		
pH	s.u.	08/12/2009	N001	8.56			#		
Potassium	mg/L	08/12/2009	0001	3.9			#	0.092	
Selenium	mg/L	08/12/2009	0001	0.0039	E		#	0.000032	
Sodium	mg/L	08/12/2009	0001	64			#	0.0044	
Specific Conductance	umhos/cm	08/12/2009	N001	349			#		
Sulfate	mg/L	08/12/2009	0001	87			#	2.5	
Temperature	C	08/12/2009	N001	20.8			#		
Total Dissolved Solids	mg/L	08/12/2009	0001	390			#	20	
Turbidity	NTU	08/12/2009	N001	14.8			#		
Uranium	mg/L	08/12/2009	0001	0.004			#	0.0000017	

Surface Water Quality Data by Location (USEE102) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 11/24/2009
Location: 1573 SURFACE LOCATION Shonto Well West Pipe

Parameter	Units	Sample Date	Sample ID	Result	Qualifiers Lab	Qualifiers Data	Qualifiers QA	Detection Limit	Uncertainty
Alkalinity, Total (As CaCO3)	mg/L	08/12/2009	N001	180			#		
Arsenic	mg/L	08/12/2009	N001	0.0047			#	0.0000084	
Calcium	mg/L	08/12/2009	N001	14			#	0.0021	
Chloride	mg/L	08/12/2009	N001	28			#	0.4	
Iron	mg/L	08/12/2009	N001	0.0068	B	UJ	#	0.0016	
Magnesium	mg/L	08/12/2009	N001	3.5			#	0.0066	
Manganese	mg/L	08/12/2009	N001	0.0001	U	J	#	0.0001	
Molybdenum	mg/L	08/12/2009	N001	0.0014			#	0.000067	
Nitrate + Nitrite as Nitrogen	mg/L	08/12/2009	N001	0.61			#	0.01	
Oxidation Reduction Potential	mV	08/12/2009	N001	9.8			#		
pH	s.u.	08/12/2009	N001	8.29			#		
Potassium	mg/L	08/12/2009	N001	1.9			#	0.092	
Selenium	mg/L	08/12/2009	N001	0.0023			#	0.000032	
Sodium	mg/L	08/12/2009	N001	63			#	0.0044	
Specific Conductance	umhos/cm	08/12/2009	N001	770			#		
Sulfate	mg/L	08/12/2009	N001	29			#	0.5	
Temperature	C	08/12/2009	N001	24.84			#		
Total Dissolved Solids	mg/L	08/12/2009	N001	270			#	20	
Turbidity	NTU	08/12/2009	N001	0.97			#		
Uranium	mg/L	08/12/2009	N001	0.0025			#	0.0000017	

SAMPLE ID CODES: 000X = Filtered sample (0.45 µm). N00X = Unfiltered sample. X = replicate number.

LAB QUALIFIERS:

*	Replicate analysis not within control limits.
>	Result above upper detection limit.
A	TIC is a suspected aldol-condensation product.
B	Inorganic: Result is between the IDL and CRDL. Organic: Analyte also found in method blank.
C	Pesticide result confirmed by GC-MS.
D	Analyte determined in diluted sample.
E	Inorganic: Estimate value because of interference, see case narrative. Organic: Analyte exceeded calibration range of the GC-MS.
H	Holding time expired, value suspect.
I	Increased detection limit due to required dilution.
J	Estimated
N	Inorganic or radiochemical: Spike sample recovery not within control limits. Organic: Tentatively identified compound (TIC).
P	> 25% difference in detected pesticide or Aroclor concentrations between 2 columns.
U	Analytical result below detection limit.
W	Post-digestion spike outside control limits while sample absorbance < 50% of analytical spike absorbance.
X,Y,Z	Laboratory defined qualifier, see case narrative.

DATA QUALIFIERS:

F	Low flow sampling method used.	G	Possible grout contamination, pH > 9.	J	Estimated value.
L	Less than 3 bore volumes purged prior to sampling.	Q	Qualitative result due to sampling technique.	R	Unusable result.
U	Parameter analyzed for but was not detected.	X	Location is undefined.		

QA QUALIFIER:

#	Validated according to quality assurance guidelines.

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Static Water Level Data

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STATIC WATER LEVELS (USEE700) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 10/13/2009

Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement Date	Measurement Time	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
000I		5064.56	08/11/2009	14:17:00	62.65	5001.91	
000J		5063.46	08/11/2009	14:19:00	56.3	5007.16	
000M		5063.7	08/11/2009	10:21:00	62.26	5001.44	
0251		5061.25	08/11/2009	13:15:49	101.74	4959.51	
0252		5061.3	08/11/2009	13:40:17	76.1	4985.2	
0258		5055.56	08/11/2009	12:00:04	105.89	4949.67	
0261		5069.69	08/11/2009	11:30:12	130.8	4938.89	
0262		5061.99	08/11/2009	13:00:26	66.01	4995.98	
0263		5063.1	08/11/2009	12:35:59	72.87	4990.23	
0264		5062.19	08/11/2009	12:20:10	106.2	4955.99	
0265		5053.88	08/12/2009	15:35:11	79.4	4974.48	
0266		5053.32	08/12/2009	15:10:04	109.47	4943.85	
0267		5053.4	08/13/2009	10:00:50	61.61	4991.79	
0268		5067.24	08/11/2009	12:15:38	126.93	4940.31	
0271		5046.72	08/13/2009	09:40:56	54.77	4991.95	
0272		5064.24	08/11/2009	16:30:05	94.91	4969.33	
0273		5064.74	08/11/2009	15:40:48	110.92	4953.82	
0274		5064.42	08/11/2009	13:55:52	98.46	4965.96	
0275		5062.64	08/11/2009	18:45:54	111.85	4950.79	
0276		5067.55	08/12/2009	11:30:42	115.15	4952.4	
0277		4982.35	08/13/2009	15:00:04	43.26	4939.09	
0278		4956.09	08/13/2009	15:30:01	25.87	4930.22	
0279		4951.04	08/13/2009	12:20:14	25.8	4925.24	
0280		4951.52	08/13/2009	14:45:14	27.48	4924.04	
0281		5051	08/13/2009	10:30:57	70.22	4980.78	
0282		5060.04	08/12/2009	16:10:39	84.08	4975.96	
0284		5098.72	08/12/2009	10:35:00	29.36	5069.36	
0284		5098.72	08/13/2009	09:04:00	29.36	5069.36	

STATIC WATER LEVELS (USEE700) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 10/13/2009

Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement Date	Measurement Time	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
0285		5096.47	08/11/2009	10:20:00			D
0285		5096.47	08/13/2009	08:55:00			D
0286		5063.99	08/11/2009	17:00:42	81.57	4982.42	
0287		5065.65	08/11/2009	14:40:24	67.93	4997.72	
0288		5072.54	08/11/2009	17:35:42	59.48	5013.06	
0289		5070.82	08/11/2009	18:05:36	60.78	5010.04	
0290		5068.91	08/11/2009	09:25:49	106.8	4962.11	
0683		5070.64	08/11/2009	09:45:12	109.31	4961.33	
0684		5070.05	08/11/2009	09:15:31	85.12	4984.93	
0685		5072.44	08/11/2009	11:15:20	51.96	5020.48	
0686		5107.97	08/10/2009	18:45:14	55.24	5052.73	
0687		5109.82	08/11/2009	09:10:02	49.75	5060.07	
0688		5106.98	08/11/2009	09:50:31	58.11	5048.87	
0689		4981.63	08/13/2009	11:45:13	42.43	4939.2	
0690		4950.87	08/13/2009	11:50:04	26.75	4924.12	
0691		4979.41	08/13/2009	09:50:53	45.47	4933.94	
0692		4953.31	08/13/2009	14:25:06	28.86	4924.45	
0695		4976.83	08/13/2009	10:25:40	50.68	4926.15	
0901	U	5105.46	08/13/2009	17:10:33	48.6	5056.86	
0902	N	4737.42	08/12/2009	16:49:00	30.47	4706.95	
0903	D	4983.33	08/13/2009	15:30:05	35.8	4947.53	
0904	N	4904.11	08/13/2009	08:47:00	22.8	4881.31	
0904	N	4904.11	08/13/2009	11:15:04	22.77	4881.34	
0906	O	5062.1	08/12/2009	17:15:39	59.4	5002.7	
0908	D	5058.14	08/12/2009	11:00:08	63.29	4994.85	
0909	D	5057.17	08/12/2009	11:35:37			E
0910	U	5106.7	08/13/2009	17:00:31	51.5	5055.2	
0911	U	5106.96	08/13/2009	18:00:25	48.04	5058.92	

STATIC WATER LEVELS (USEE700) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 10/13/2009

Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement Date	Measurement Time	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
0912	D	5059.97	08/12/2009	17:10:34	71.52	4988.45	
0913	D	5060.16	08/12/2009	17:40:45	70.76	4989.4	
0914	D	5070.1	08/11/2009	10:10:55	115.88	4954.22	
0915	D	5070.84	08/11/2009	11:00:24	115.88	4954.96	
0916	D	5070	08/11/2009	10:30:22	124.58	4945.42	
0917	D	5048.02	08/12/2009	17:20:00	69.48	4978.54	
0918	D	5049.63	08/12/2009	17:35:00			D
0919	D	5048.56	08/12/2009	17:10:00	146.62	4901.94	
0920	D	4982.97	08/13/2009	14:30:42	43.28	4939.69	
0921	D	4979.08	08/13/2009	16:00:38	44.25	4934.83	
0929	D	5060.82	08/13/2009	09:10:11	63.61	4997.21	
0930	D	4954.96	08/13/2009	15:15:15	21.78	4933.18	
0932	D	5057.32	08/12/2009	12:10:54	109.75	4947.57	
0934	D	5059.73	08/12/2009	16:40:49	77.11	4982.62	
0940	D	5064.77	08/11/2009	16:38:00	69.08	4995.69	E
0941	D	5065.97	08/11/2009	15:00:44	65.54	5000.43	
0943	U	5098.05	08/11/2009	10:35:59	48.97	5049.08	
0945	U	5140.49	08/10/2009	18:30:19	85.61	5054.88	
0946	C	5100.5	08/12/2009	10:20:54	36.81	5063.69	
0947	U	5097.01	08/10/2009	19:00:37	70.77	5026.24	
0968	U	5107	08/13/2009	12:35:00	52.7	5054.3	
0970	U	5109.53	08/13/2009	17:13:00	51.56	5057.97	
1003		4976.58	08/13/2009	09:20:01	42.52	4934.06	
1004		4961.55	08/13/2009	11:00:28	27.45	4934.1	
1005		4947.83	08/13/2009	12:15:00	22.56	4925.27	
1006		4947.08	08/13/2009	15:55:41	19.3	4927.78	
1007		4958.56	08/13/2009	12:15:15	24.72	4933.84	
1008		4980.52	08/13/2009	09:15:00	39.8	4940.72	

STATIC WATER LEVELS (USEE700) FOR SITE TUB01, Tuba City Disposal Site
REPORT DATE: 10/13/2009

Location Code	Flow Code	Top of Casing Elevation (Ft)	Measurement Date	Measurement Time	Depth From Top of Casing (Ft)	Water Elevation (Ft)	Water Level Flag
1117		5054.95	08/12/2009	12:30:42			F
1118		5055.11	08/12/2009	12:45:41			F

FLOW CODES: B BACKGROUND C CROSS GRADIENT D DOWN GRADIENT F OFF SITE
N UNKNOWN O ON SITE U UPGRADIENT

WATER LEVEL FLAGS: D Dry F FLOWING

Time-Concentration Graphs
Monitor Wells

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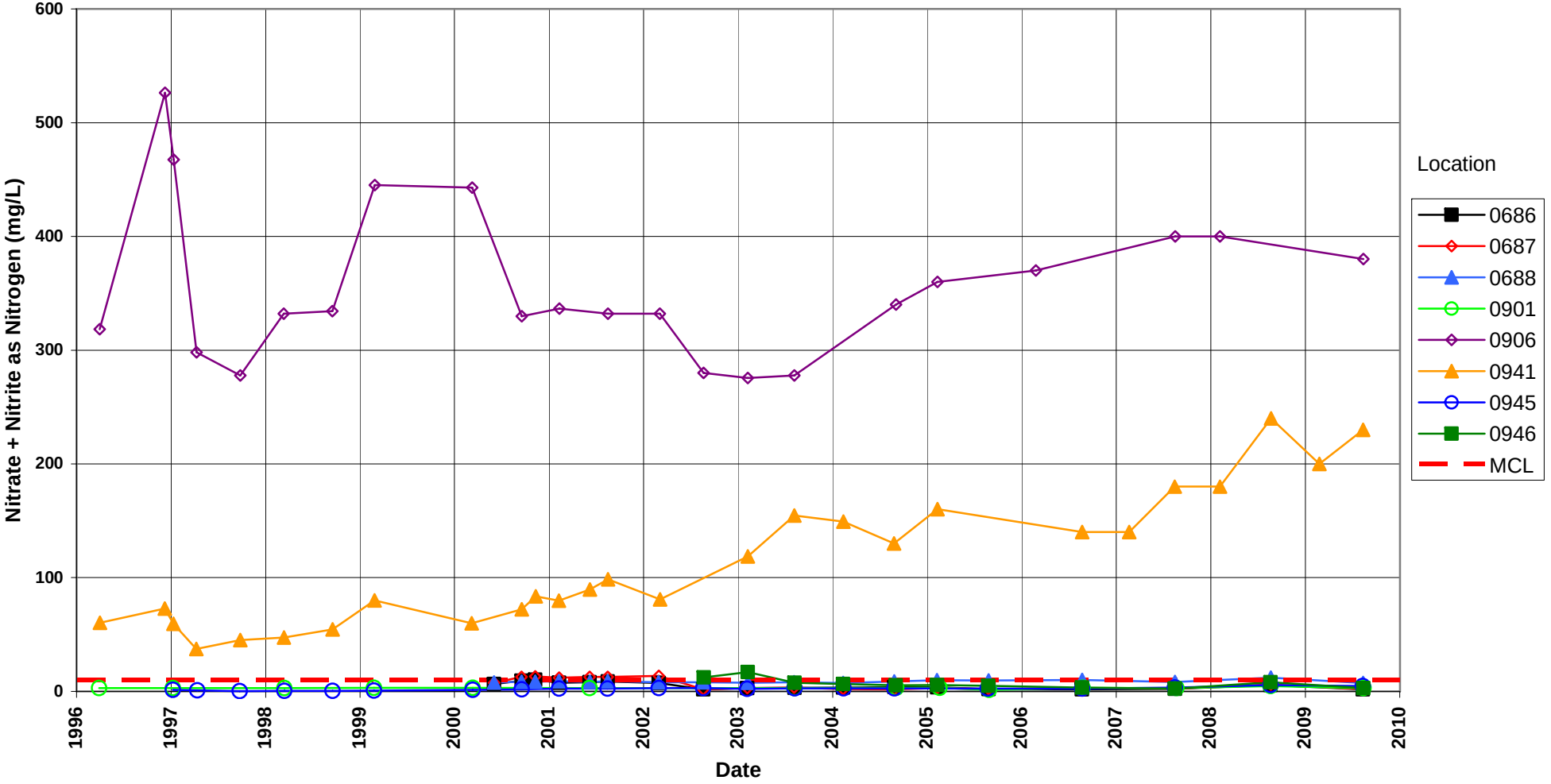
Tuba City Disposal Site
Horizon A Monitor Wells
Nitrate + Nitrite as Nitrogen Concentration
Maximum Concentration Limit = 10.0 mg/L



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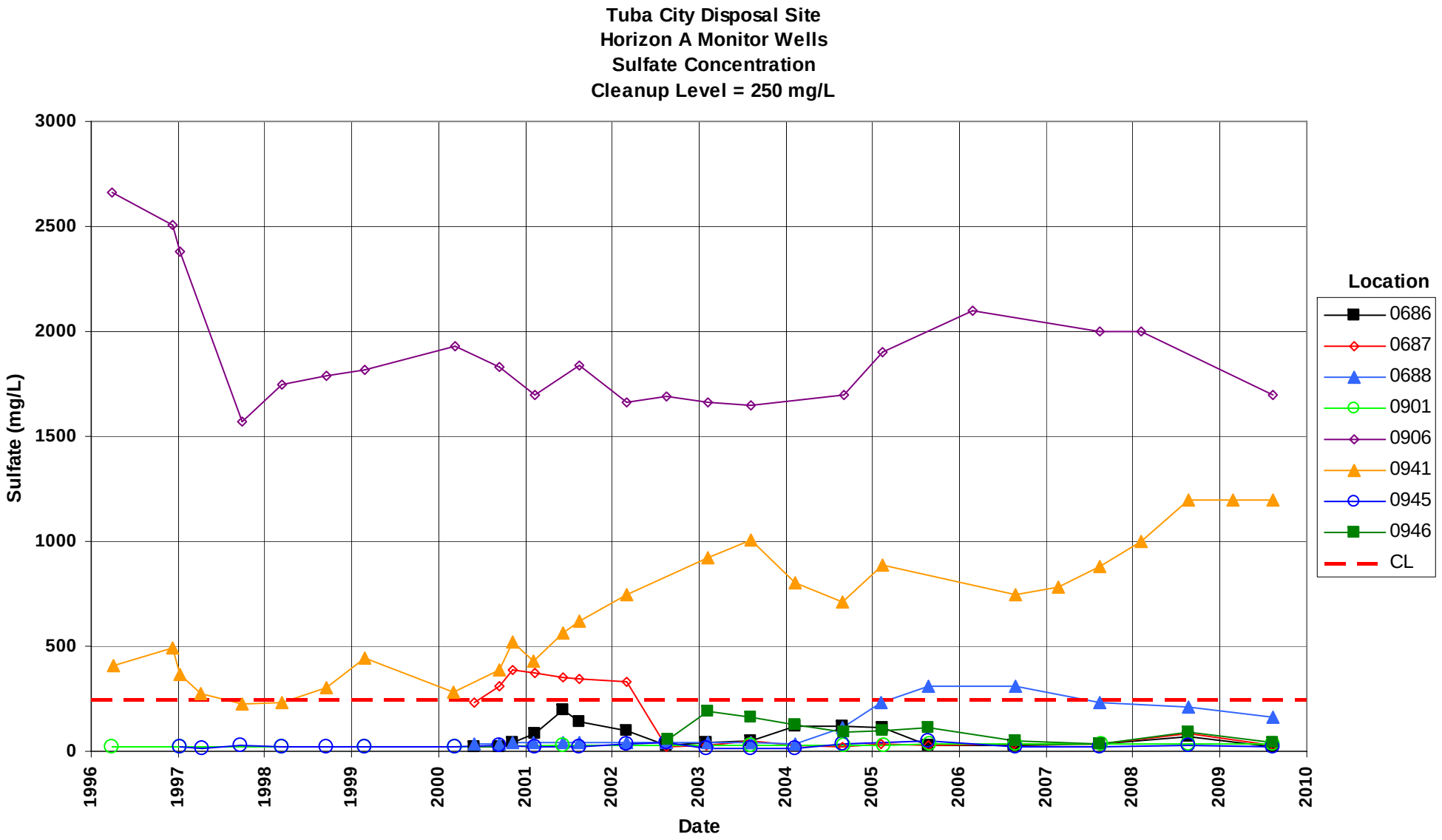
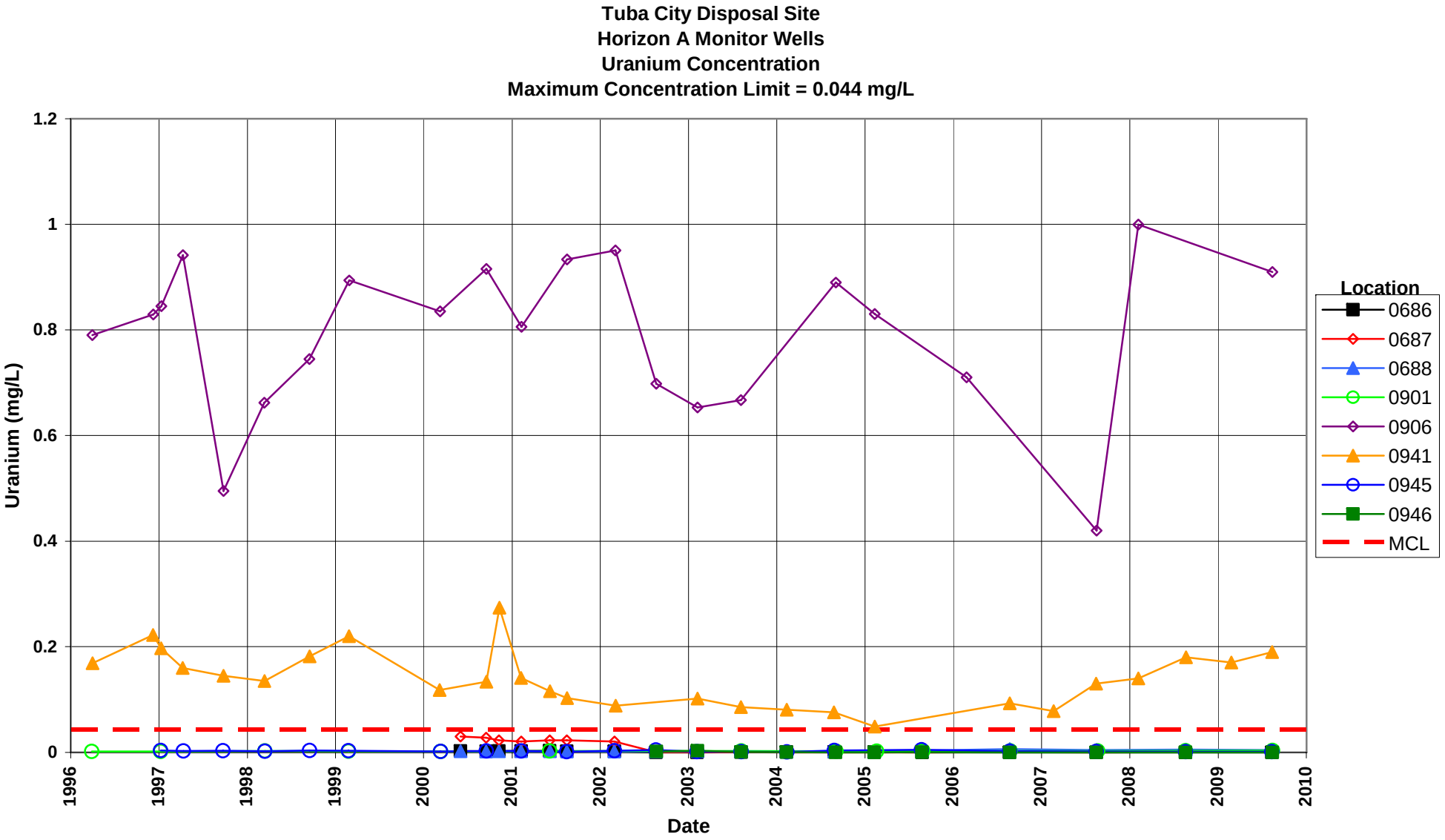
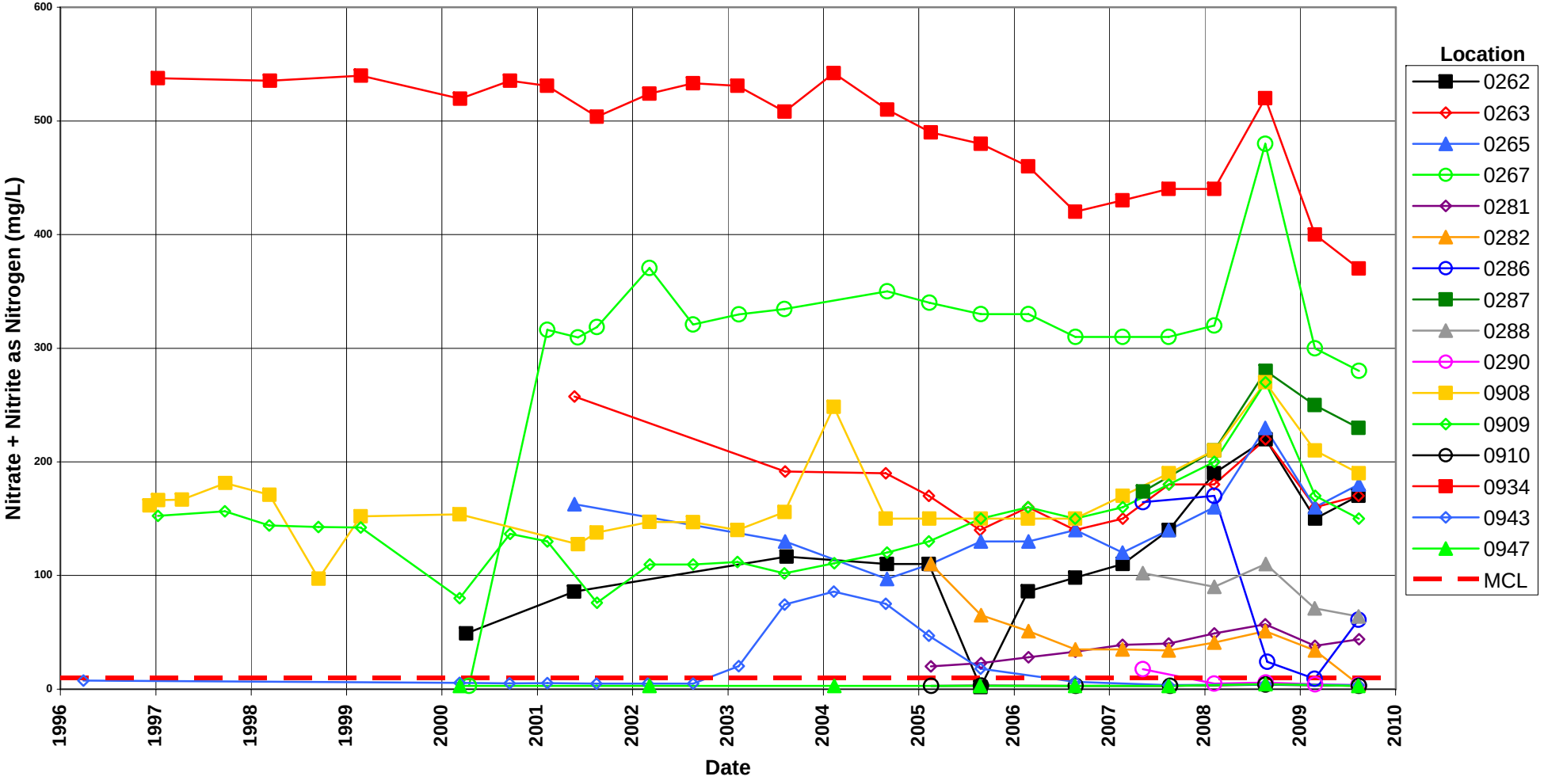

Tuba City Disposal Site
Horizon A Monitor Wells
Sulfate Concentration
Cleanup Level = 250 mg/L
Sulfate (mg/L)
3000
2500
2000
1500
1000
500
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
0686
0687
0688
0901
0906
0941
0945
0946
CL

-


Tuba City Disposal Site
Horizon A Monitor Wells
Uranium Concentration
Maximum Concentration Limit = 0.044 mg/L
Uranium (mg/L)
1.2
1
0.8
0.6
0.4
0.2
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
0686
0687
0688
0901
0906
0941
0945
0946
MCL

-

Tuba City Disposal Site
Horizon B Monitor Wells
Nitrate + Nitrite as Nitrogen Concentration
Maximum Concentration Limit = 10.0 mg/L



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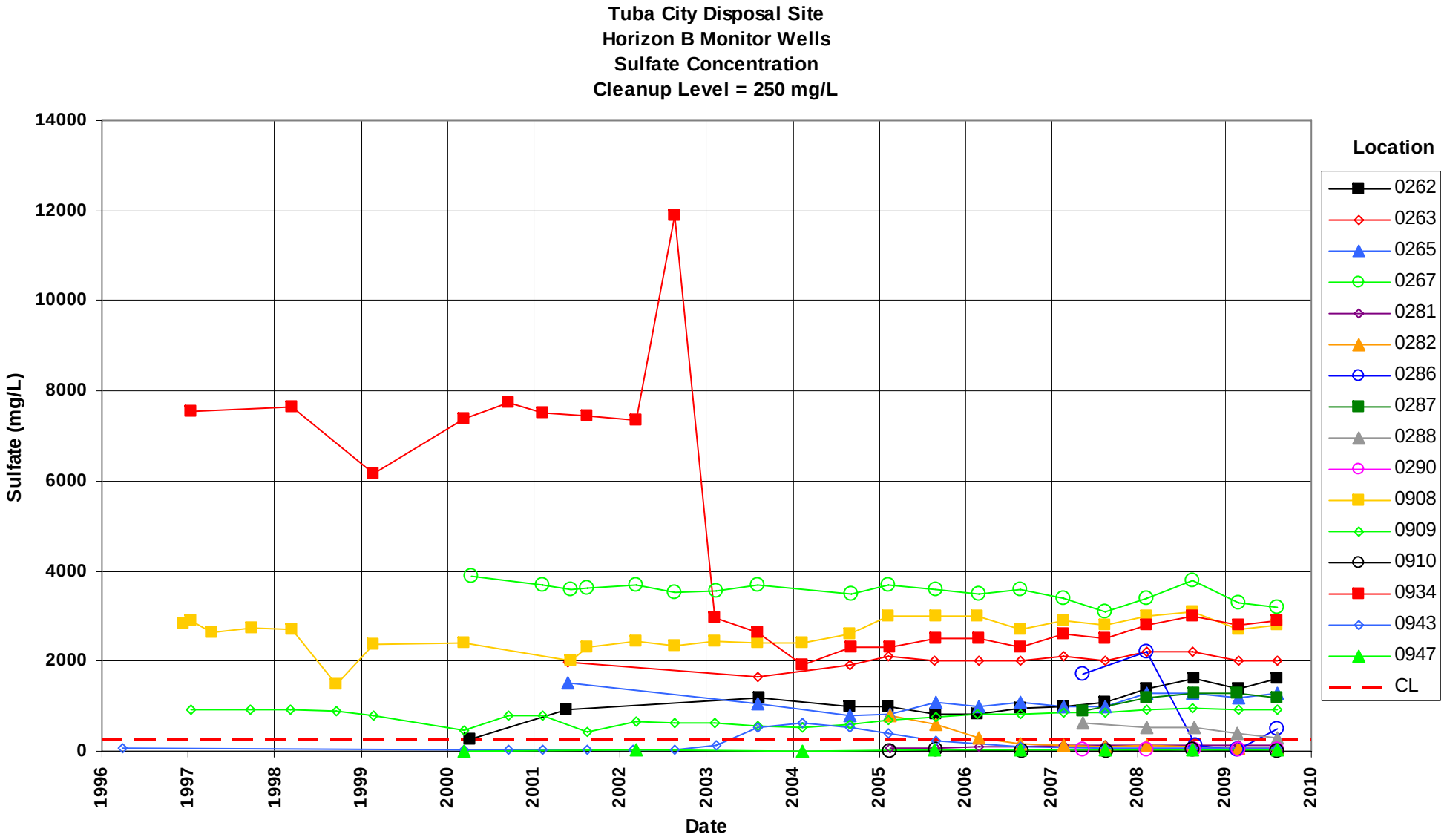
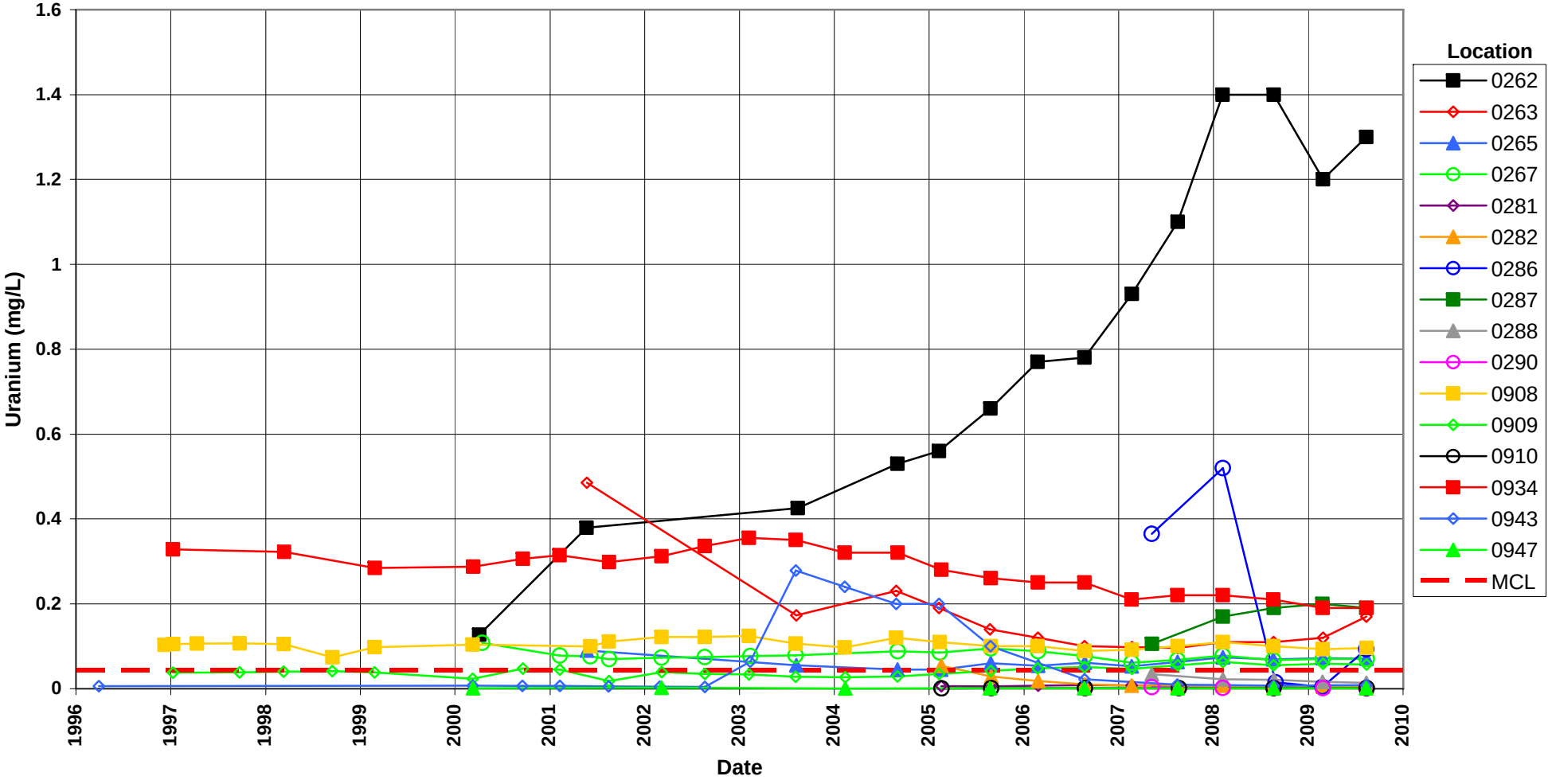

Tuba City Disposal Site
Horizon B Monitor Wells
Sulfate Concentration
Cleanup Level = 250 mg/L
Sulfate (mg/L)
14000
12000
10000
8000
6000
4000
2000
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
0262
0263
0265
0267
0281
0282
0286
0287
0288
0290
0908
0909
0910
0934
0943
0947
CL

-

Tuba City Disposal Site
Horizon B Monitor Wells
Uranium Concentration
Maximum Concentration Limit = 0.044 mg/L



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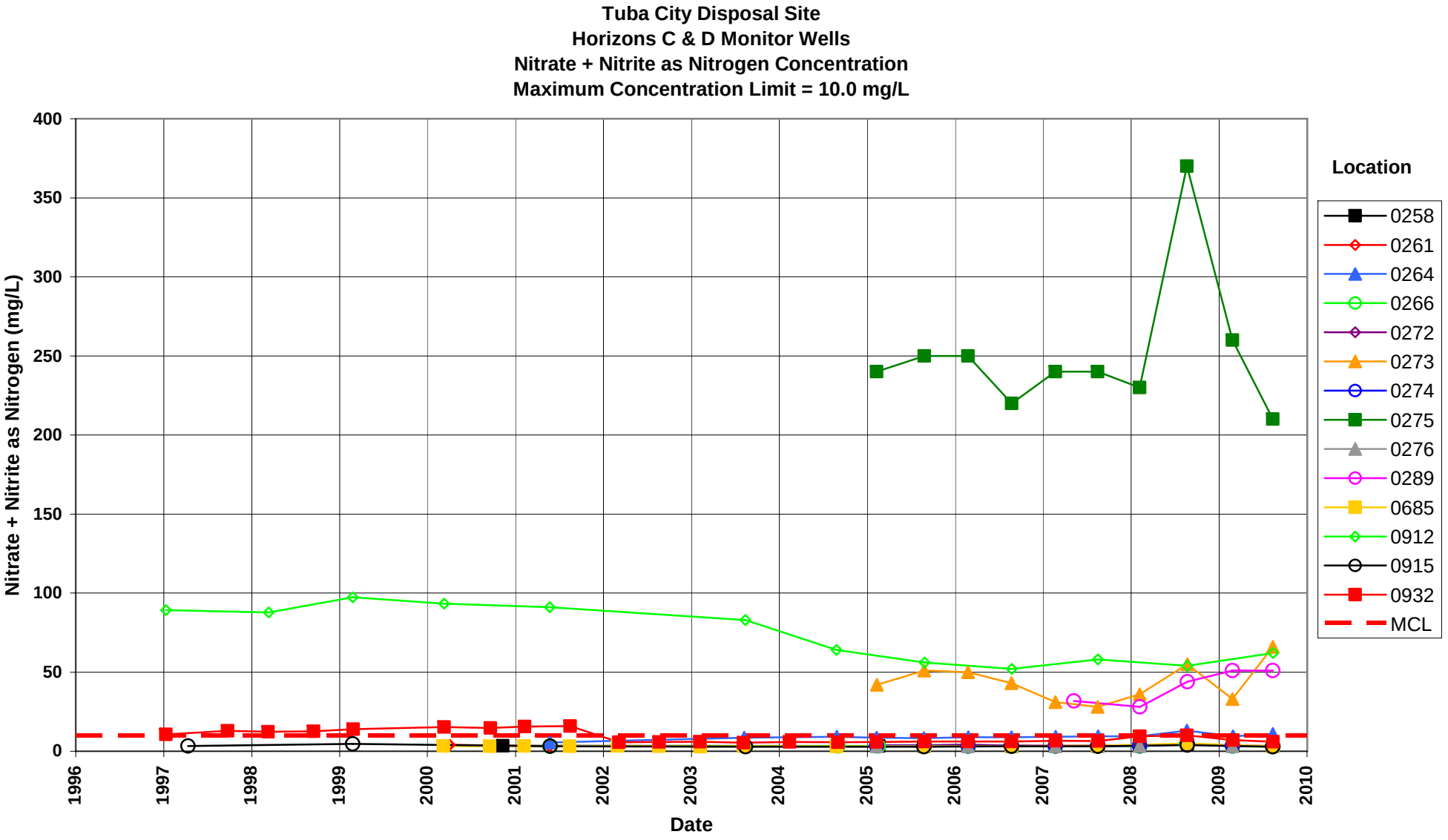
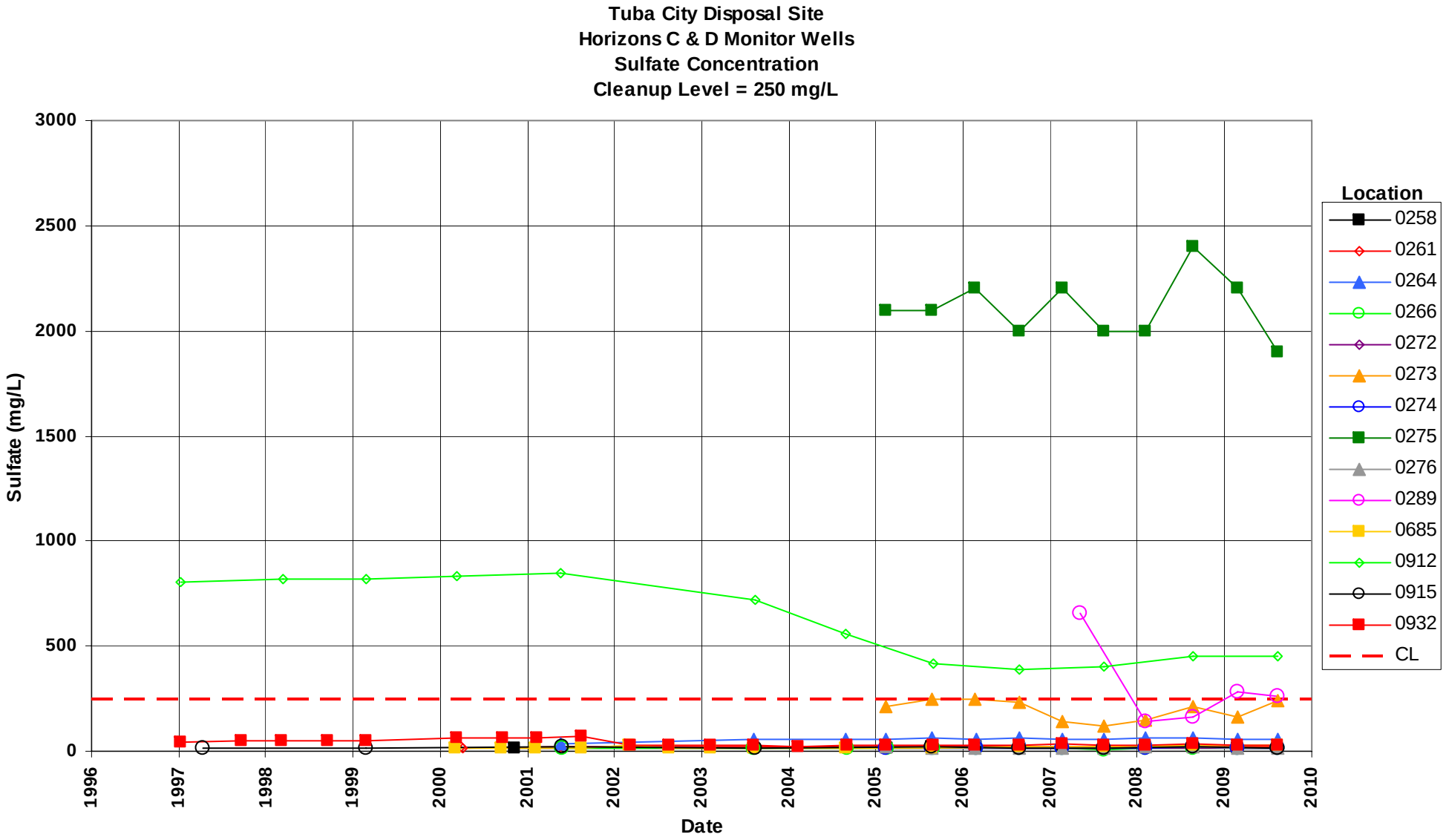
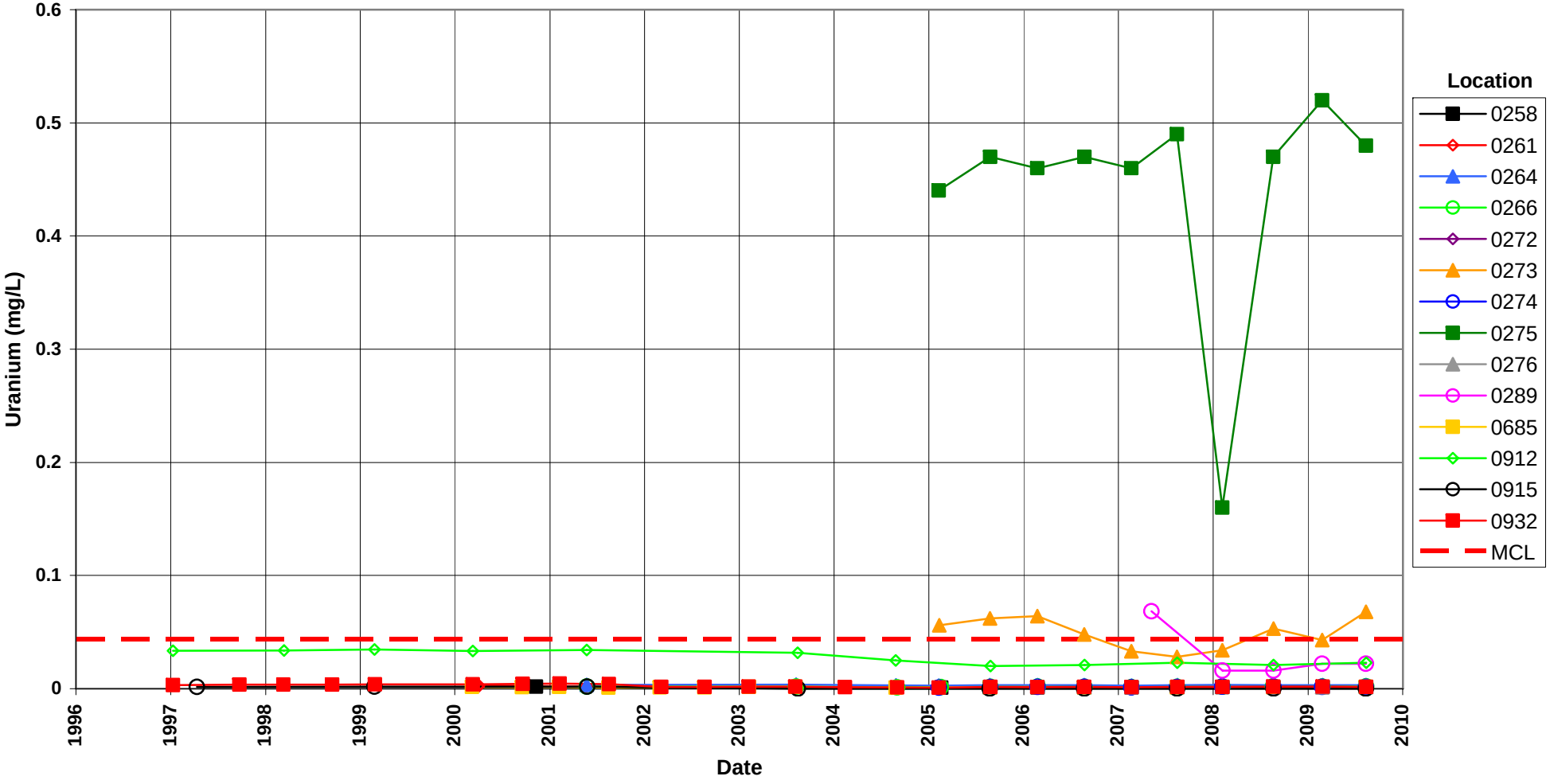

Tuba City Disposal Site
Horizons C & D Monitor Wells
Nitrate + Nitrite as Nitrogen Concentration
Maximum Concentration Limit = 10.0 mg/L
Nitrate + Nitrite as Nitrogen (mg/L)
400
350
300
250
200
150
100
50
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
0258
0261
0264
0266
0272
0273
0274
0275
0276
0289
0685
0912
0915
0932
MCL

-


Tuba City Disposal Site
Horizons C & D Monitor Wells
Sulfate Concentration
Cleanup Level = 250 mg/L
Sulfate (mg/L)
3000
2500
2000
1500
1000
500
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
0258
0261
0264
0266
0272
0273
0274
0275
0276
0289
0685
0912
0915
0932
CL

-

Tuba City Disposal Site
Horizons C & D Monitor Wells
Uranium Concentration
Maximum Concentration Limit = 0.044 mg/L



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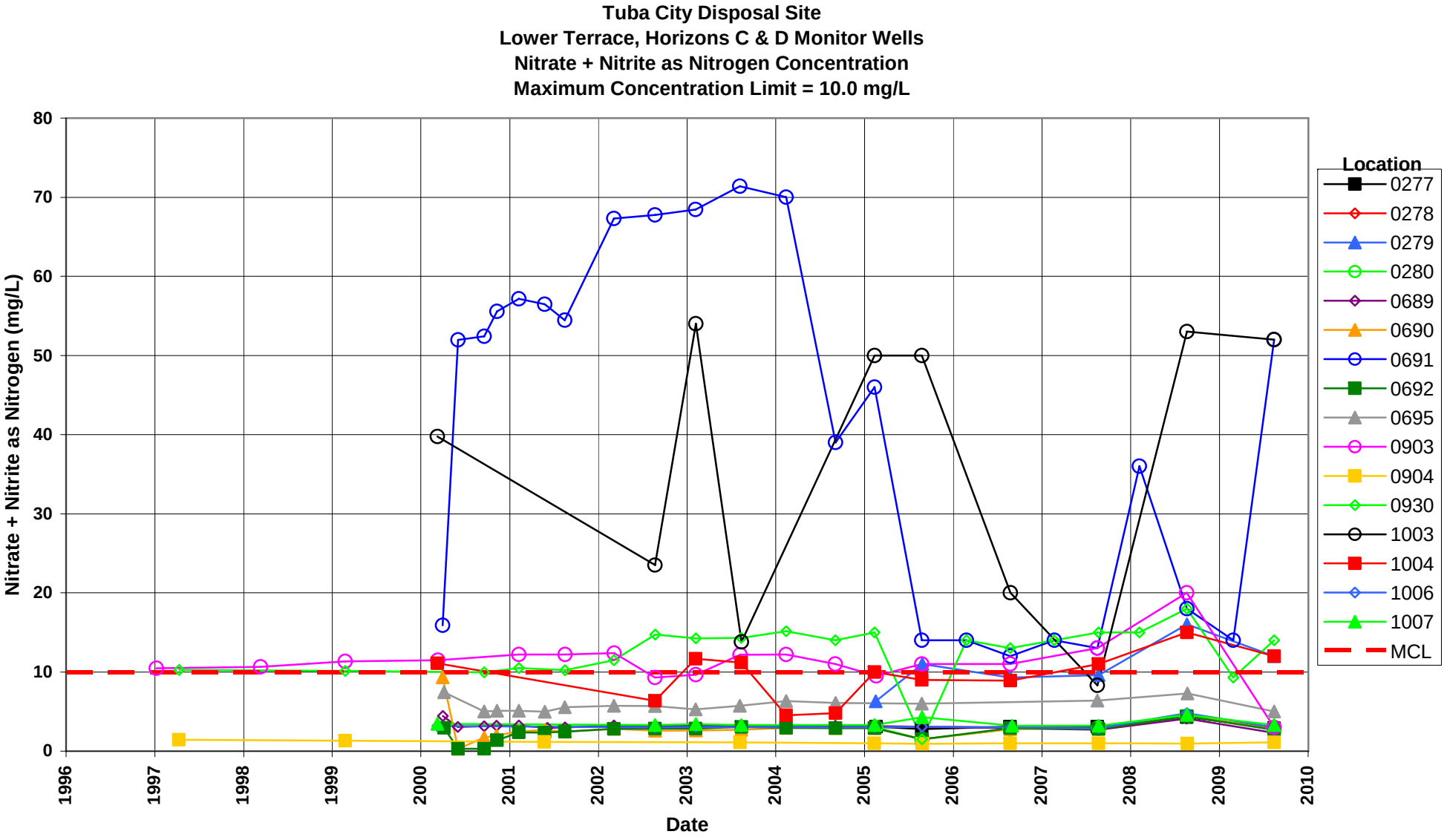
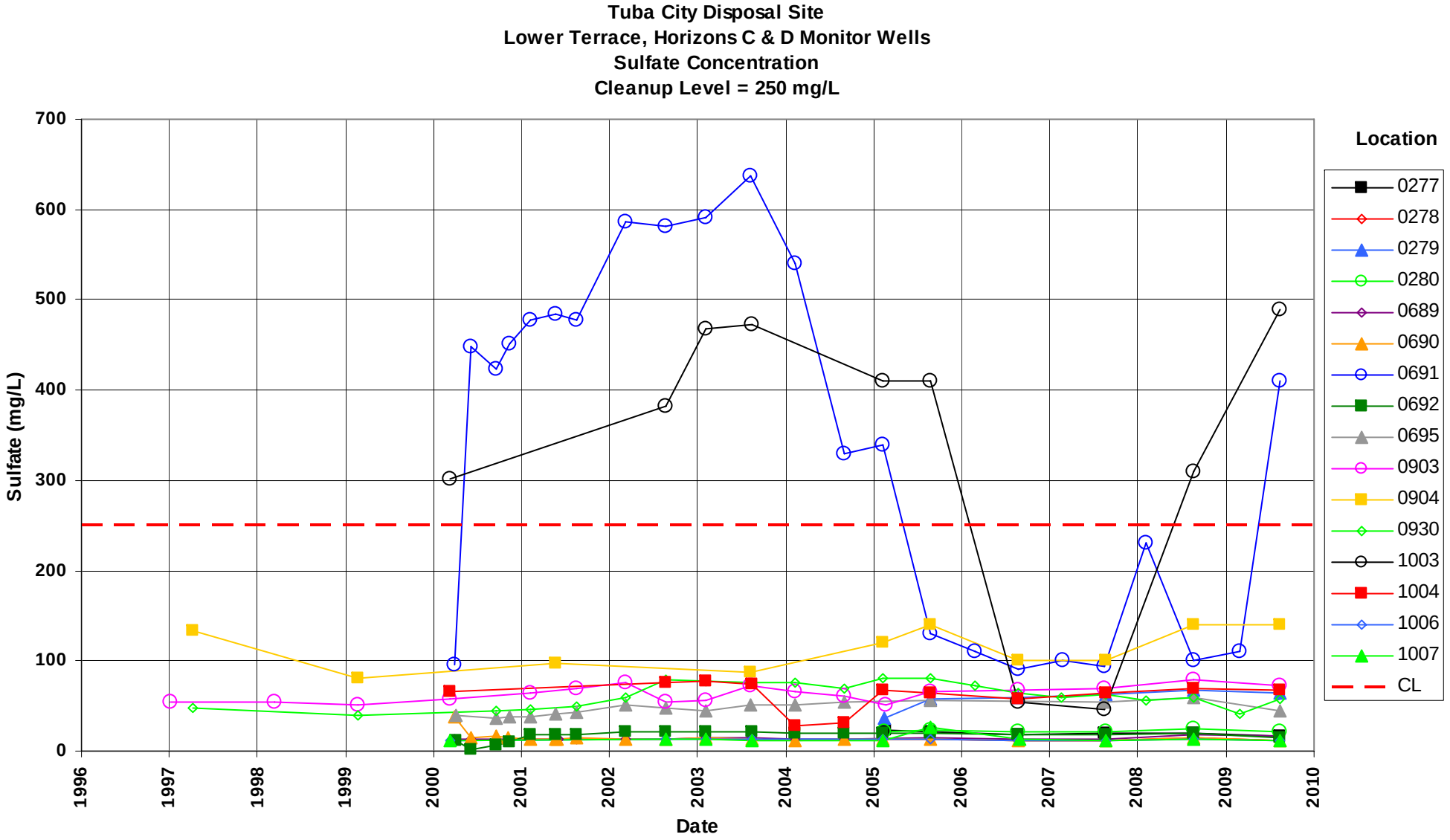
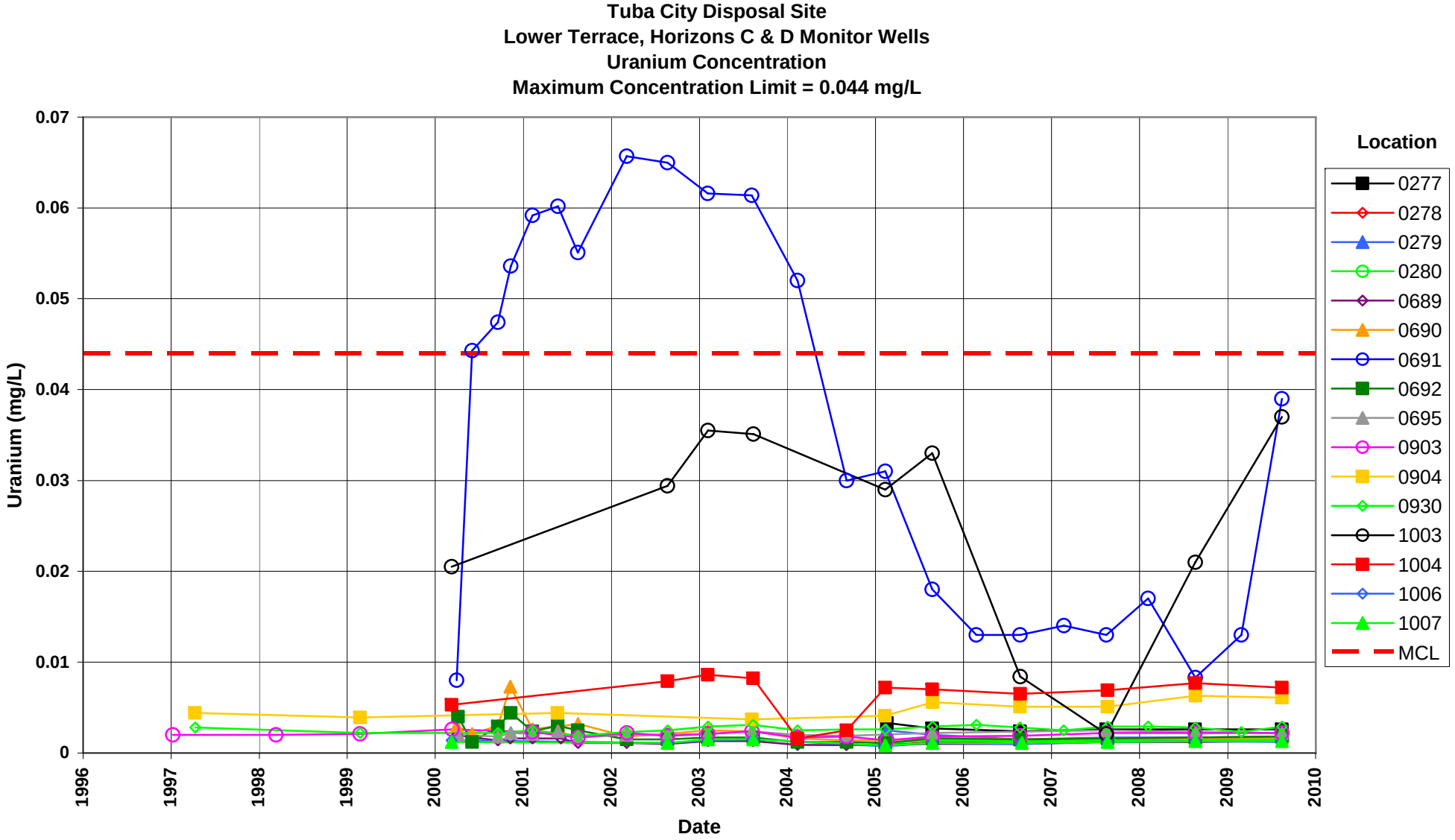

Tuba City Disposal Site
Lower Terrace, Horizons C & D Monitor Wells
Nitrate + Nitrite as Nitrogen Concentration
Maximum Concentration Limit = 10.0 mg/L
Nitrate + Nitrite as Nitrogen (mg/L)
Date
Location
0277
0278
0279
0280
0689
0690
0691
0692
0695
0903
0904
0930
1003
1004
1006
1007
MCL

-

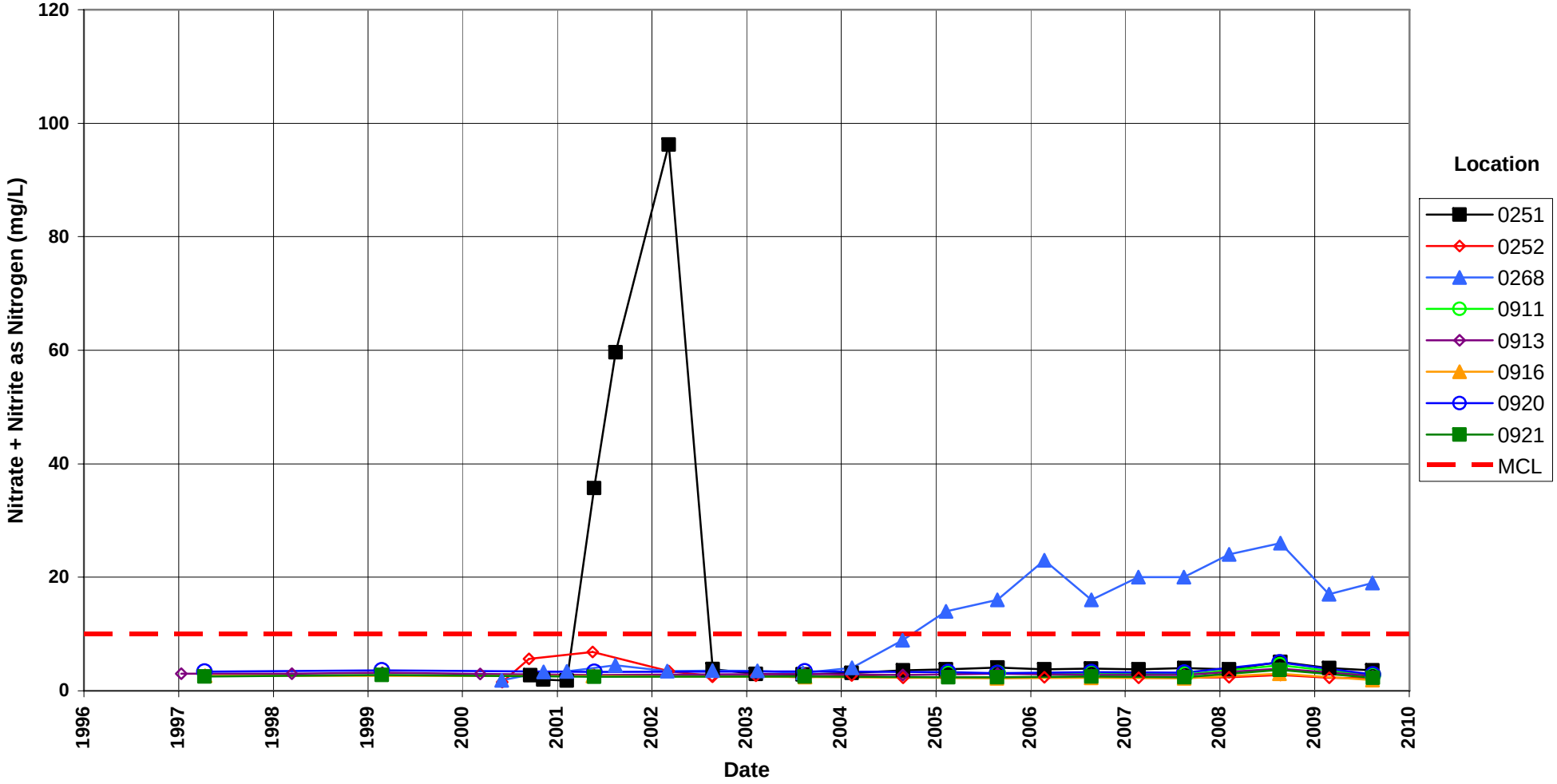

Tuba City Disposal Site
Lower Terrace, Horizons C & D Monitor Wells
Sulfate Concentration
Cleanup Level = 250 mg/L
Sulfate (mg/L)
700
600
500
400
300
200
100
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
0277
0278
0279
0280
0689
0690
0691
0692
0695
0903
0904
0930
1003
1004
1006
1007
CL

-


Tuba City Disposal Site
Lower Terrace, Horizons C & D Monitor Wells
Uranium Concentration
Maximum Concentration Limit = 0.044 mg/L
Uranium (mg/L)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
0277
0278
0279
0280
0689
0690
0691
0692
0695
0903
0904
0930
1003
1004
1006
1007
MCL

-

Tuba City Disposal Site
Deep Monitor Wells
Nitrate + Nitrite as Nitrogen Concentration
Maximum Concentration Limit = 10.0 mg/L



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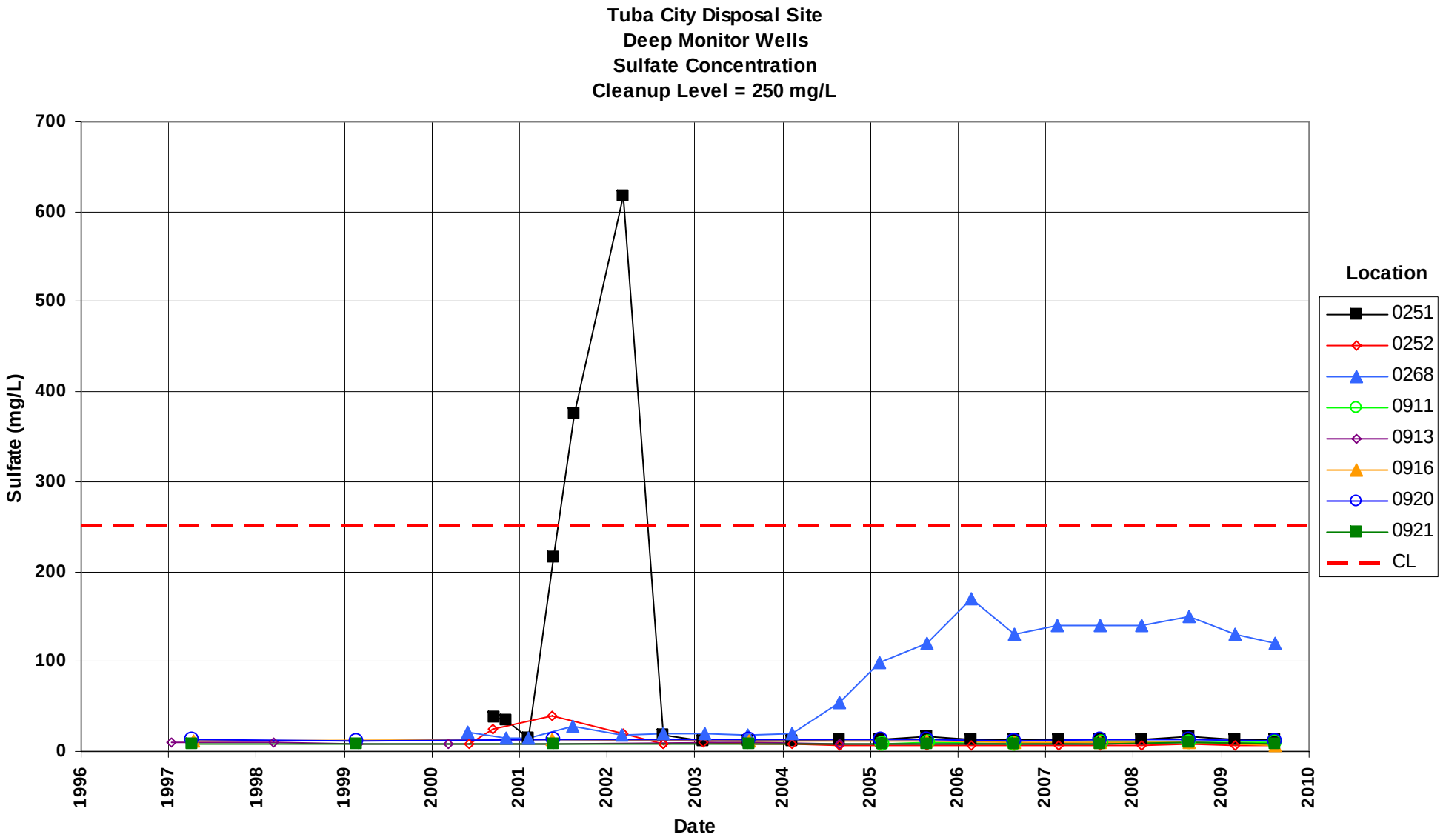
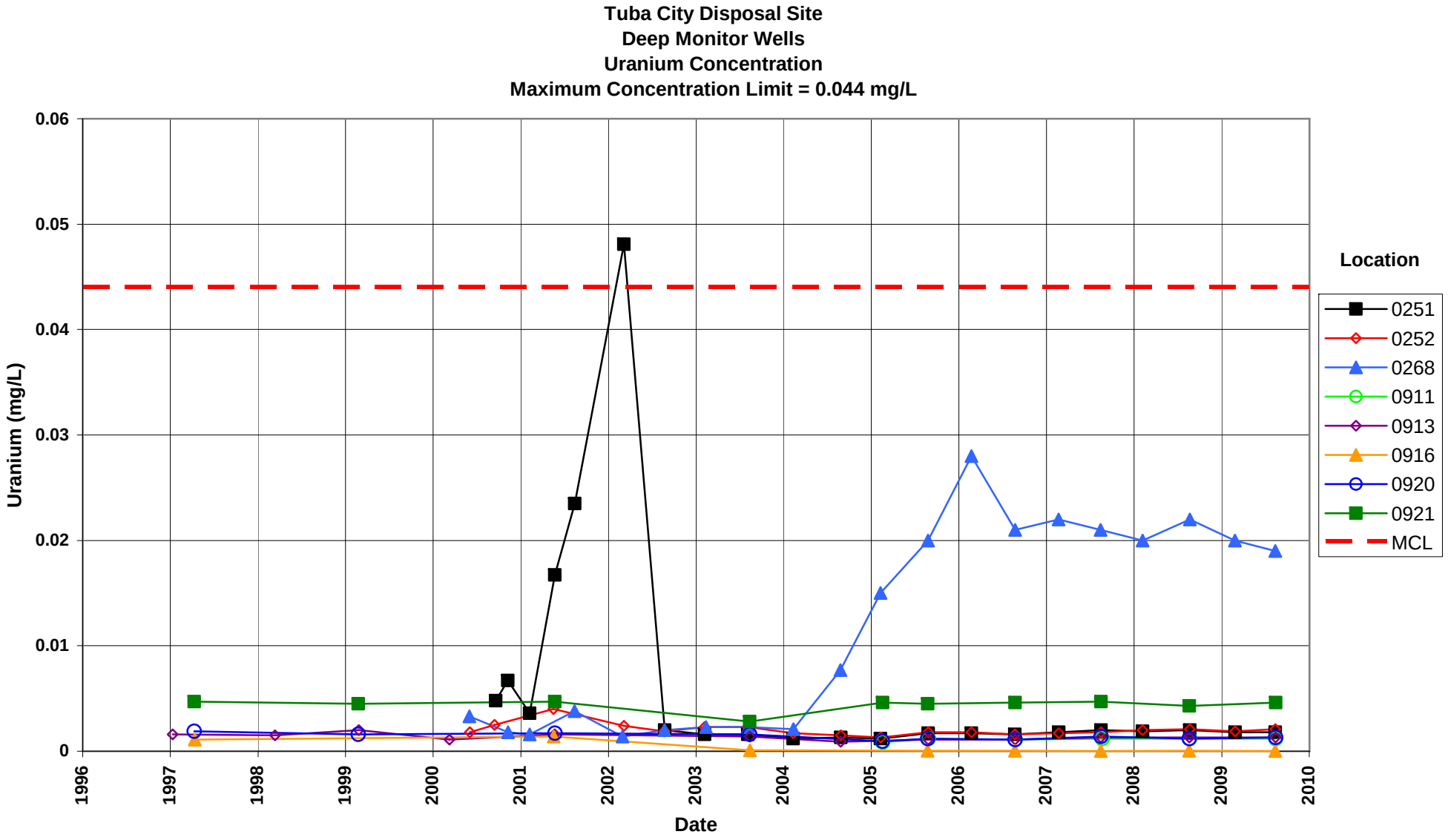
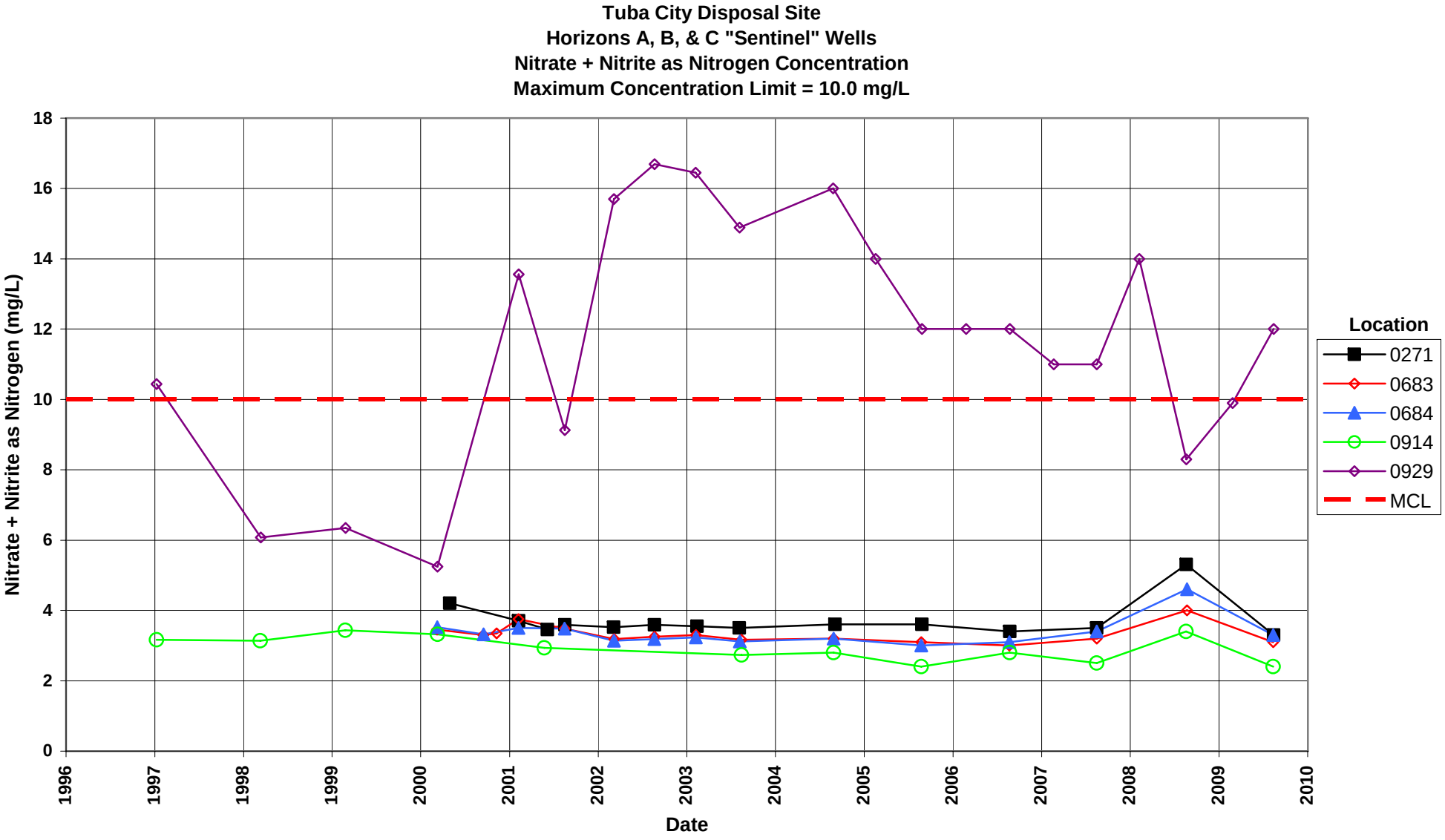

Tuba City Disposal Site
Deep Monitor Wells
Sulfate Concentration
Cleanup Level = 250 mg/L
Sulfate (mg/L)
700
600
500
400
300
200
100
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
0251
0252
0268
0911
0913
0916
0920
0921
CL

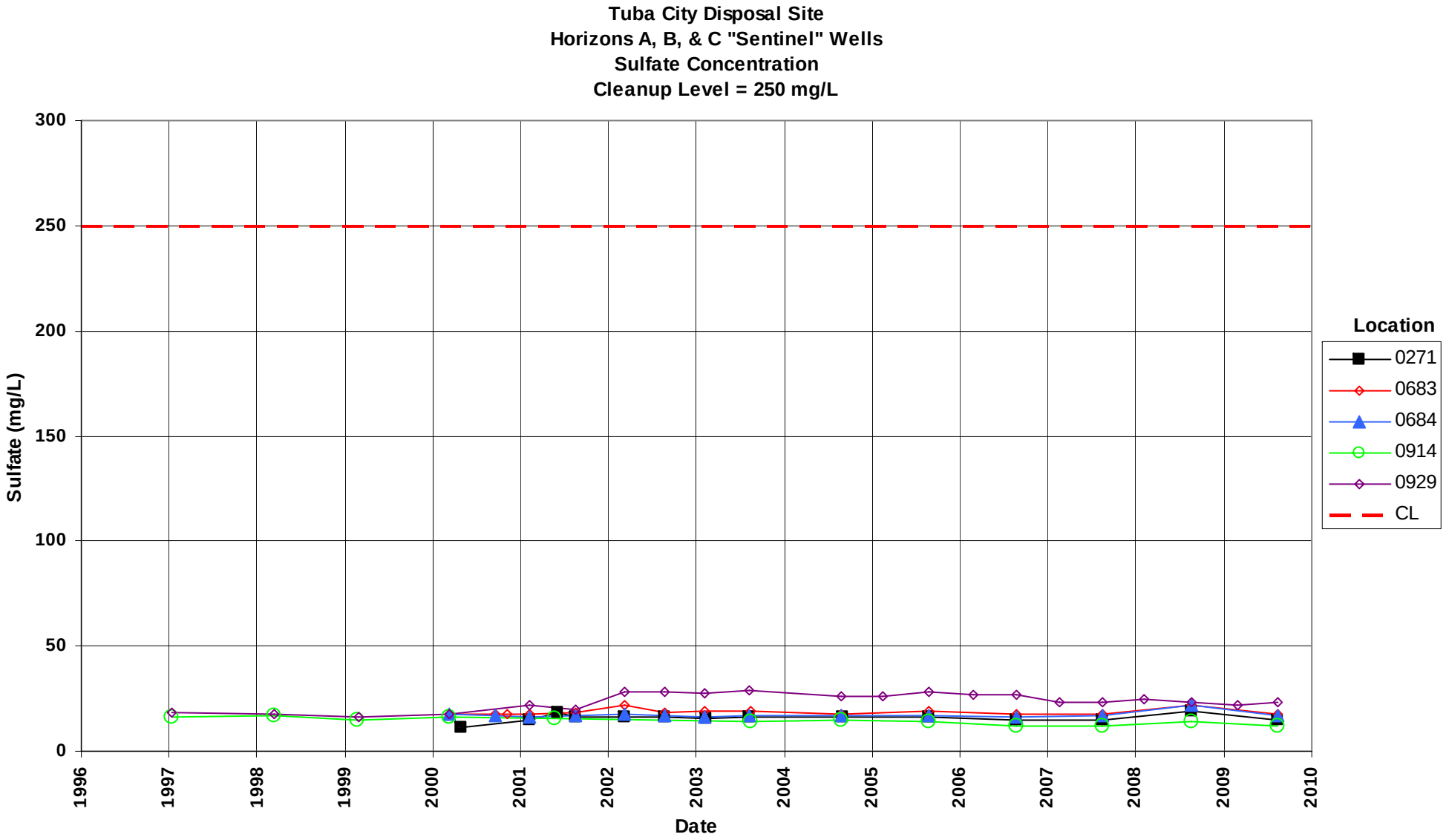
-


Tuba City Disposal Site
Deep Monitor Wells
Uranium Concentration
Maximum Concentration Limit = 0.044 mg/L
Uranium (mg/L)
0.06
0.05
0.04
0.03
0.02
0.01
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
0251
0252
0268
0911
0913
0916
0920
0921
MCL

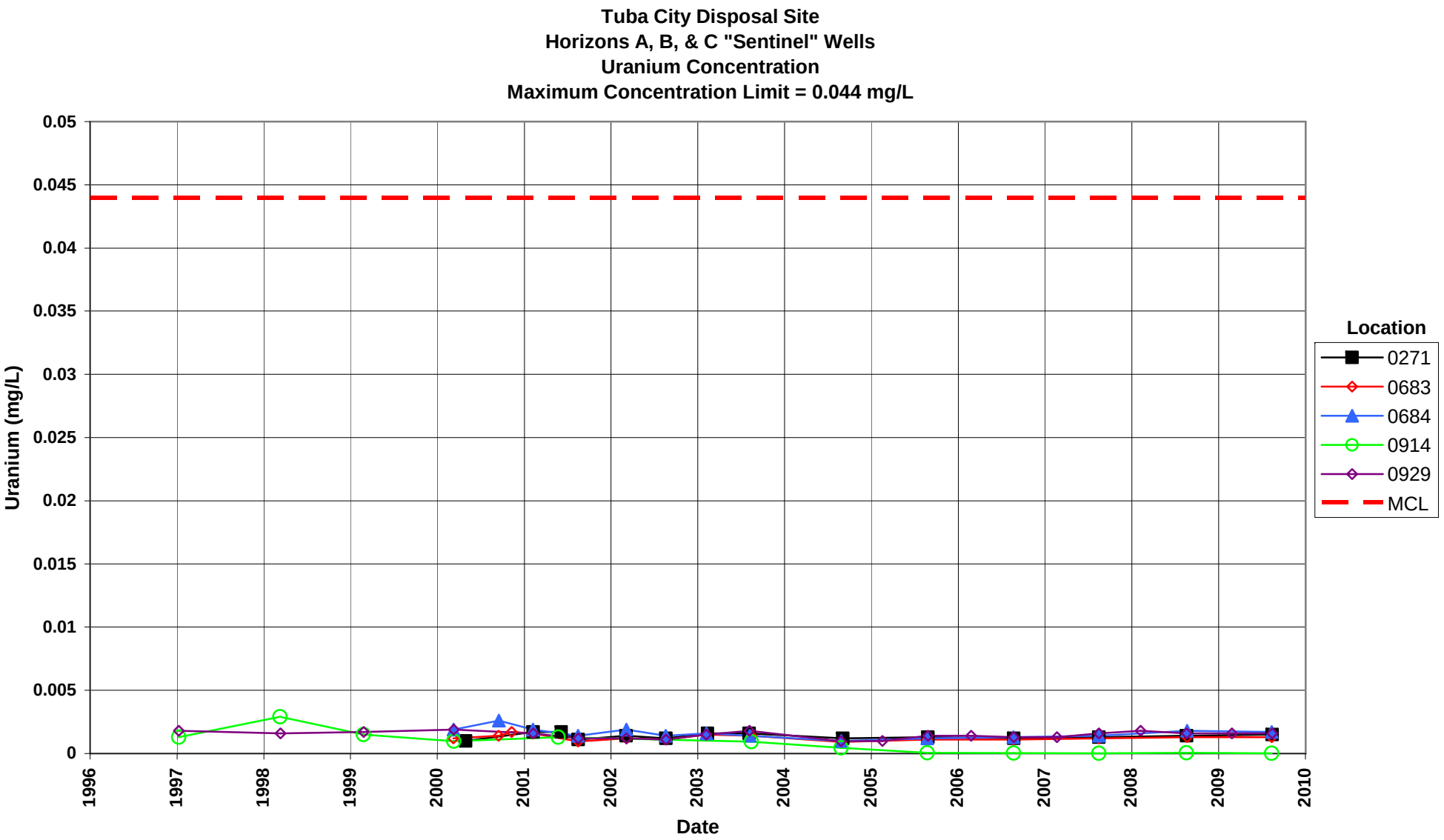
-


Tuba City Disposal Site
Horizons A, B, & C "Sentinel" Wells
Nitrate + Nitrite as Nitrogen Concentration
Maximum Concentration Limit = 10.0 mg/L
Nitrate + Nitrite as Nitrogen (mg/L)
0
2
4
6
8
10
12
14
16
18
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
0271
0683
0684
0914
0929
MCL

-


Tuba City Disposal Site
Horizons A, B, & C "Sentinel" Wells
Sulfate Concentration
Cleanup Level = 250 mg/L
Sulfate (mg/L)
300
250
200
150
100
50
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
0271
0683
0684
0914
0929
CL

-


Tuba City Disposal Site
Horizons A, B, & C "Sentinel" Wells
Uranium Concentration
Maximum Concentration Limit = 0.044 mg/L
Uranium (mg/L)
0.05
0.045
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
0271
0683
0684
0914
0929
MCL

-

Time-Concentration Graphs
Extraction Wells

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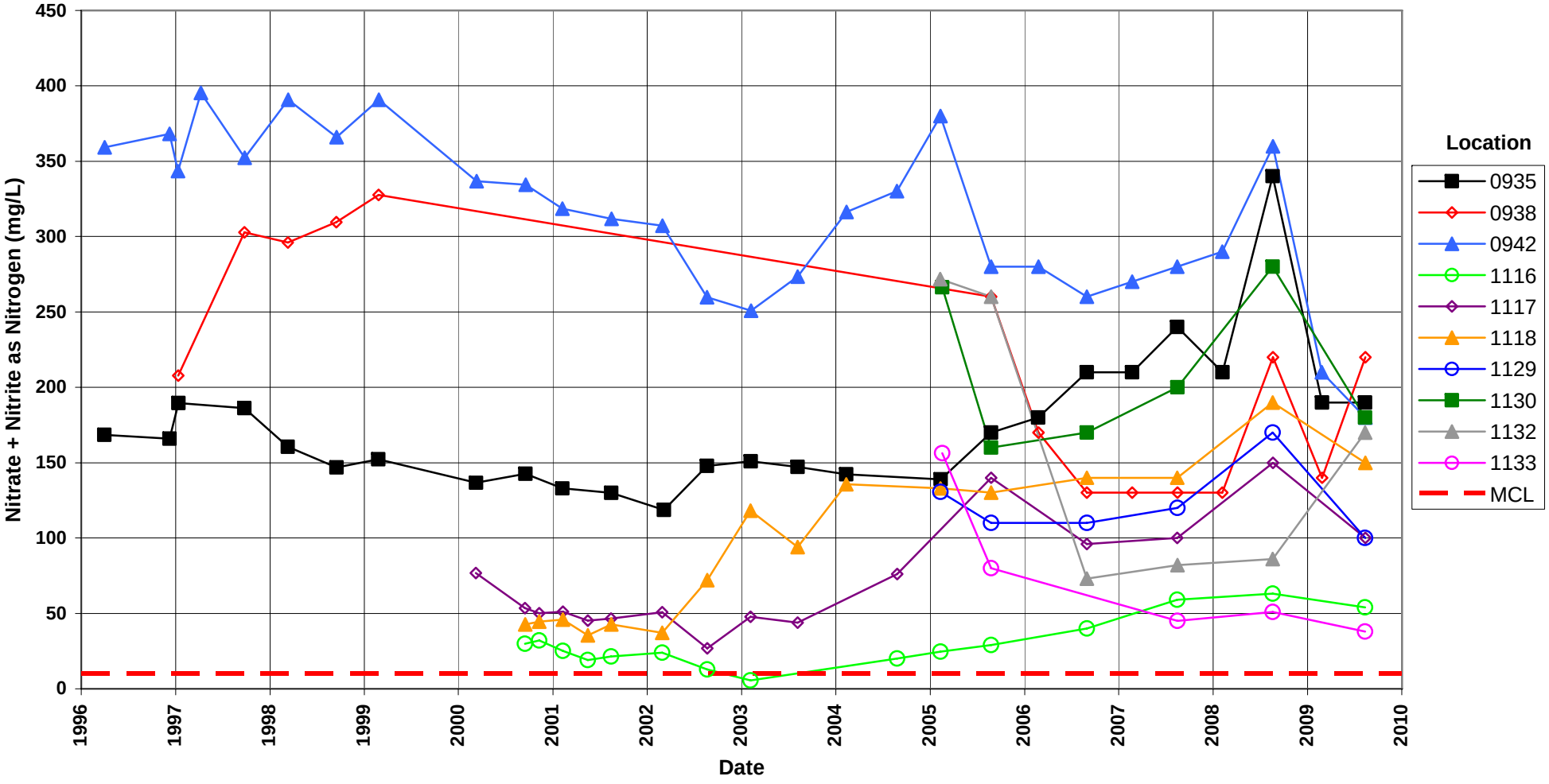
Tuba City Disposal Site
Horizons B & C Extraction Wells
Nitrate + Nitrite as Nitrogen Concentration
Maximum Concentration Limit= 10.0 mg/L



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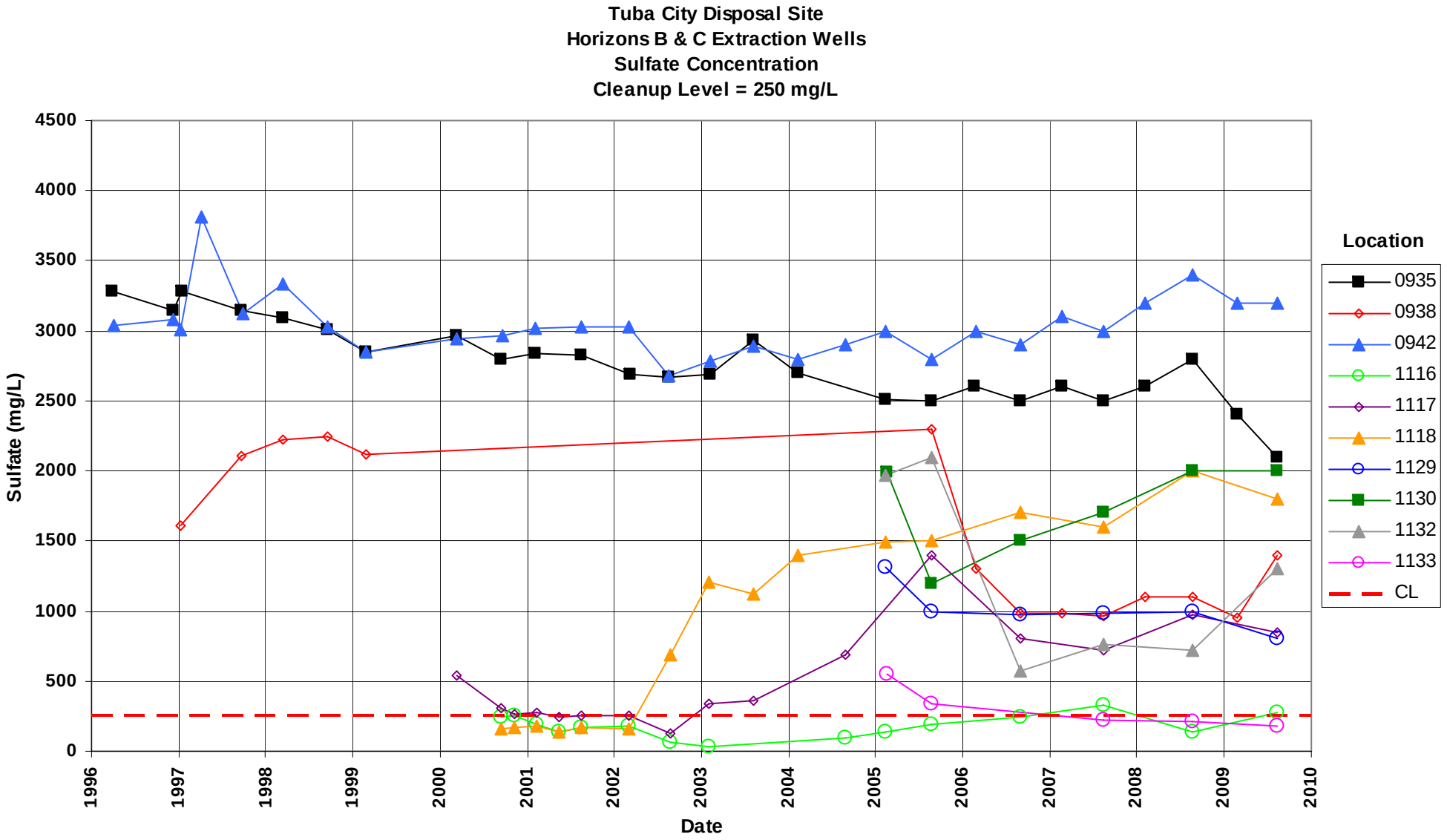
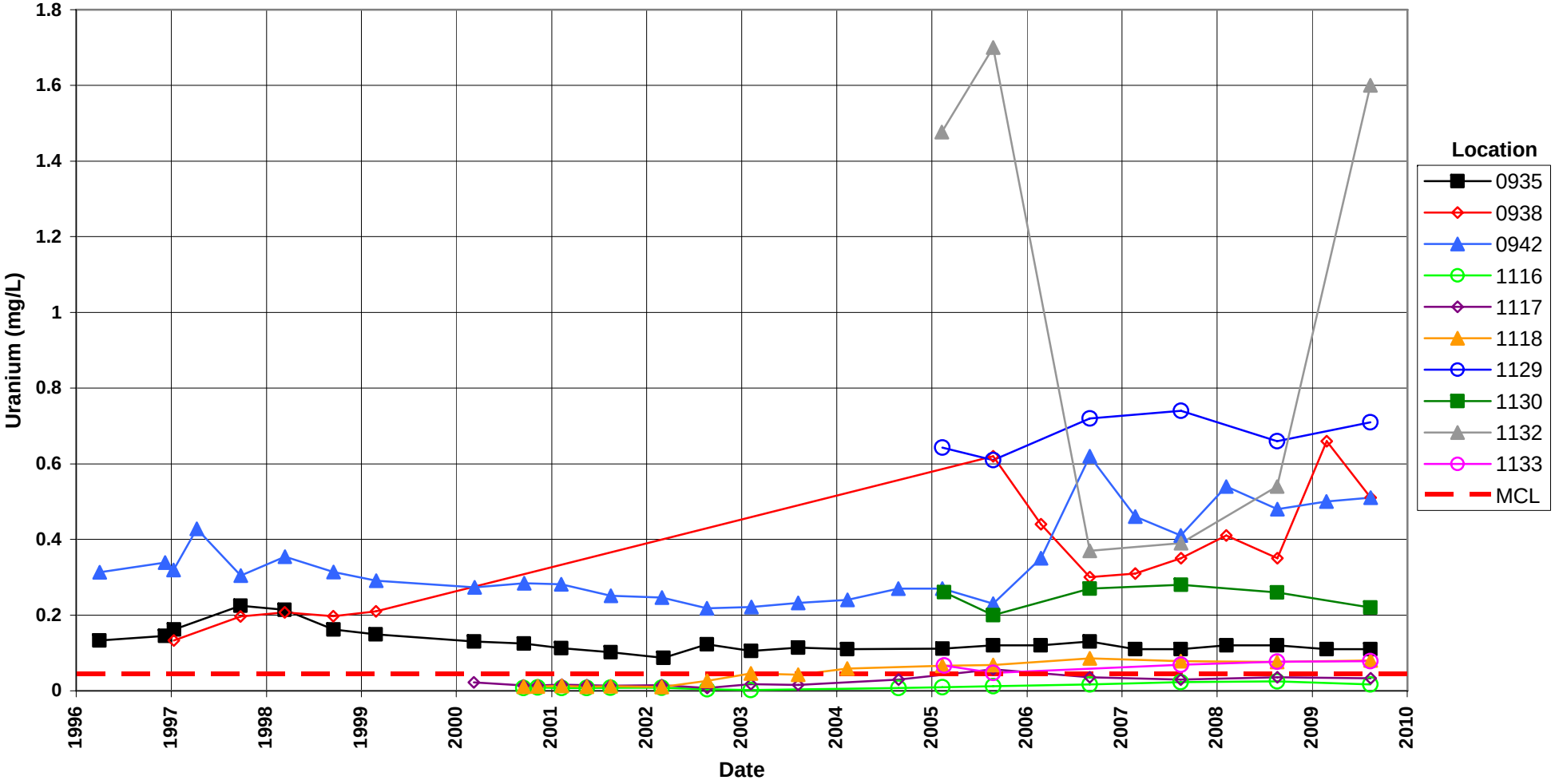

Tuba City Disposal Site
Horizons B & C Extraction Wells
Sulfate Concentration
Cleanup Level = 250 mg/L
Sulfate (mg/L)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
0935
0938
0942
1116
1117
1118
1129
1130
1132
1133
CL

-

Tuba City Disposal Site
Horizons B & C Extraction Wells
Uranium Concentration
Maximum Concentration Limit = 0.044 mg/L



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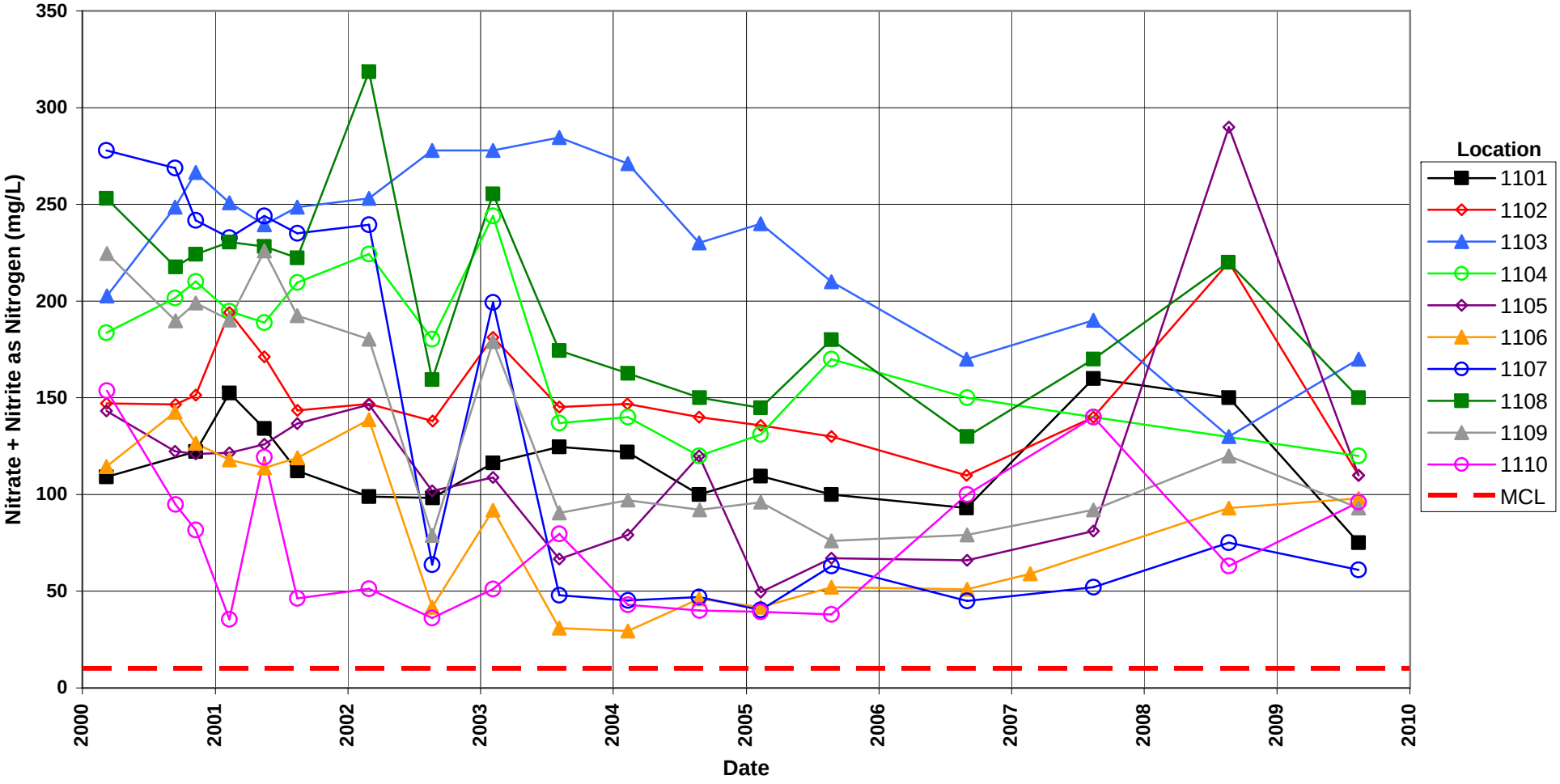
Tuba City Disposal Site
Horizon D Extraction Wells
Nitrate + Nitrite as Nitrogen Concentration
Maximum Concentration Limit = 10.0 mg/L



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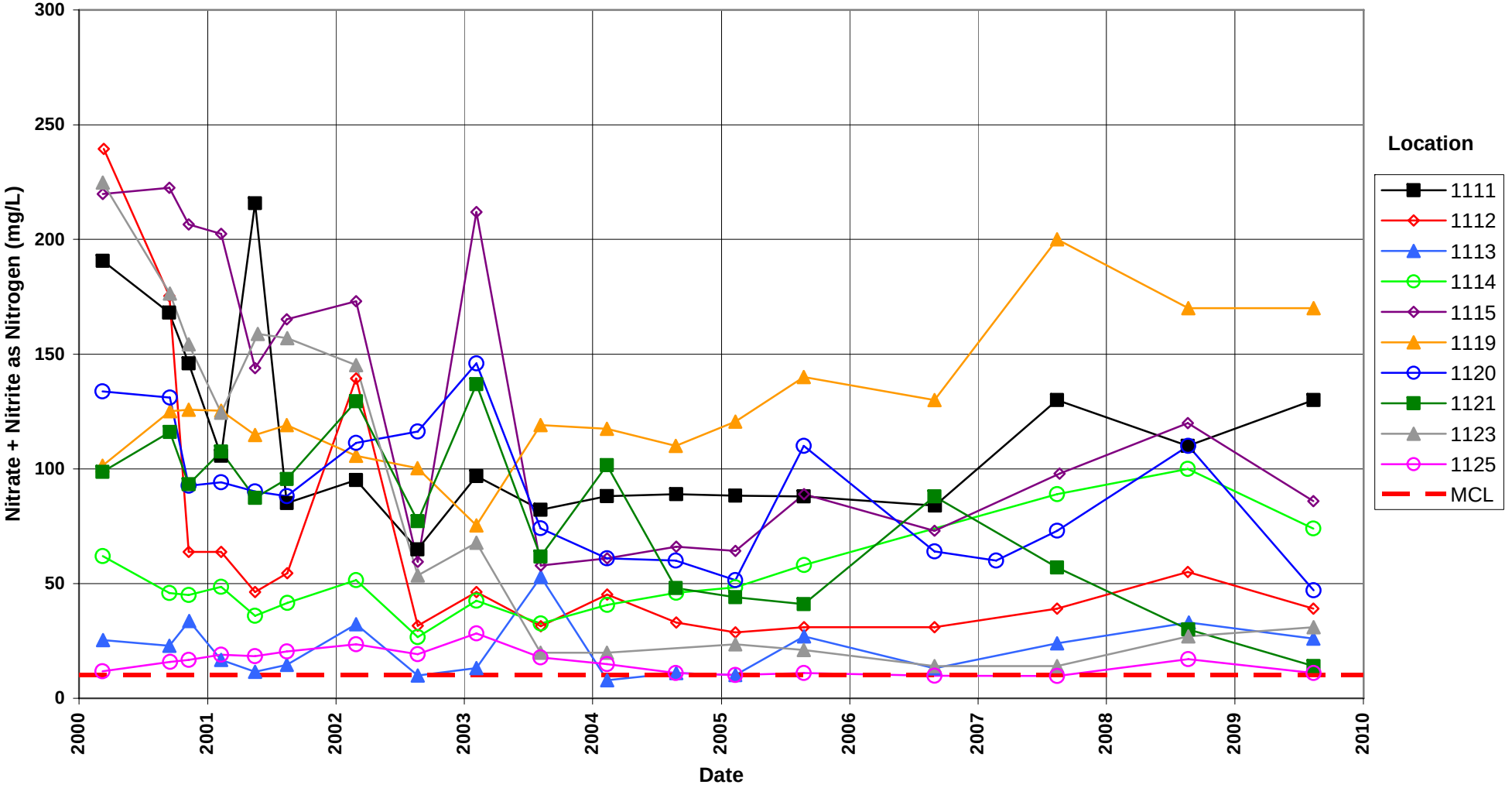
Tuba City Disposal Site
Horizon D Extraction Wells
Nitrate + Nitrite as Nitrogen Concentration
Maximum Concentration Limit = 10.0 mg/L



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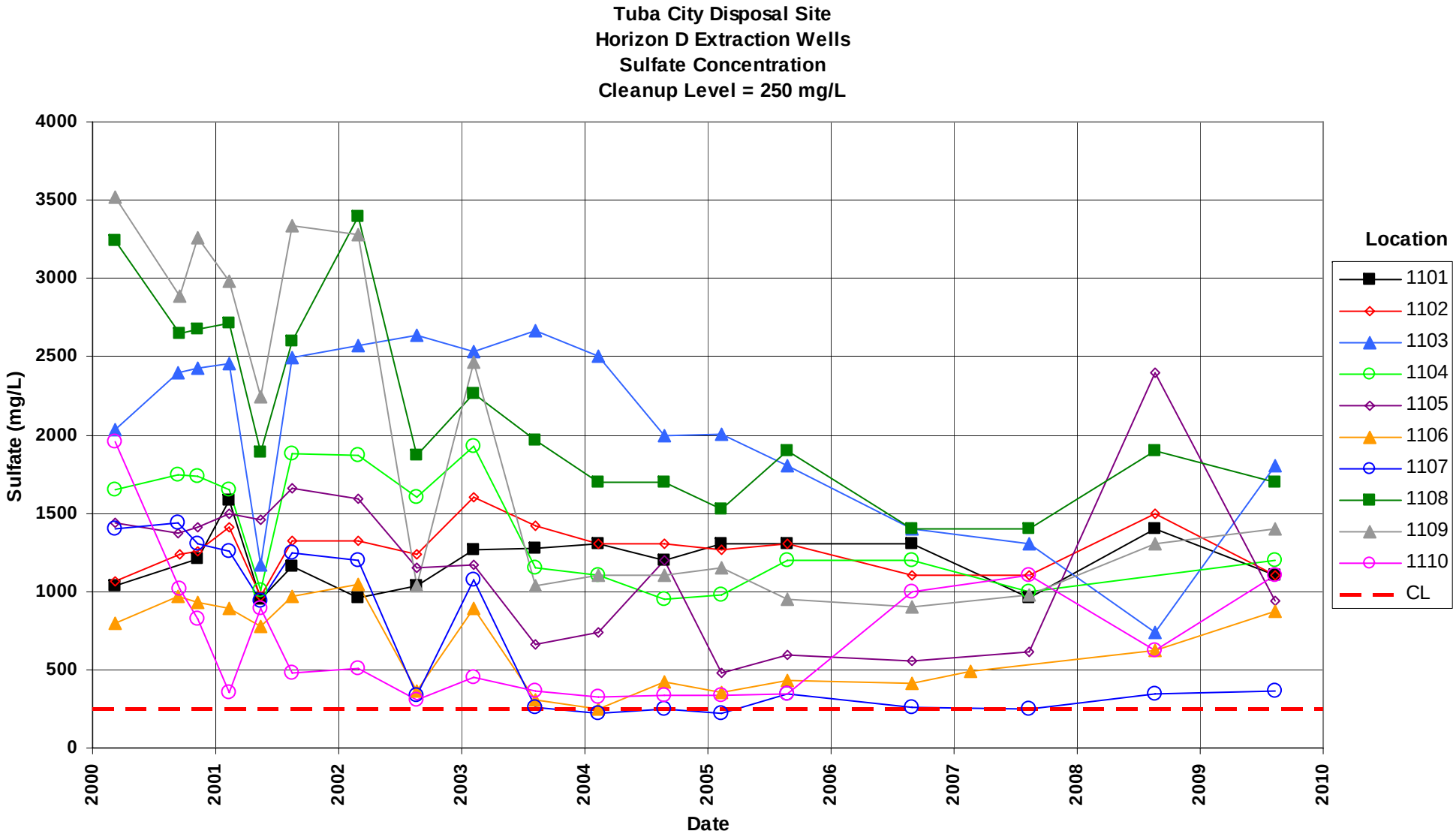
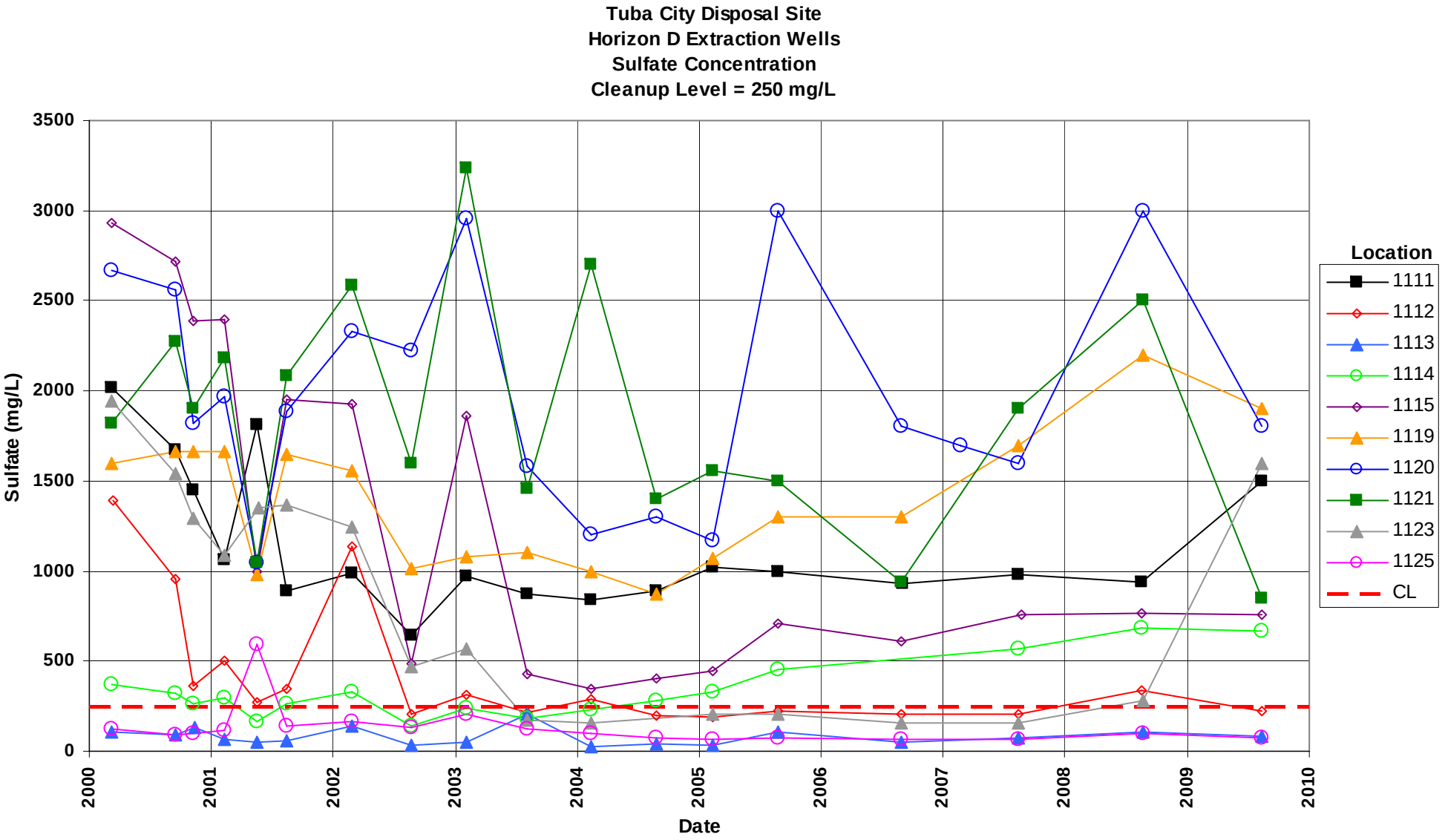
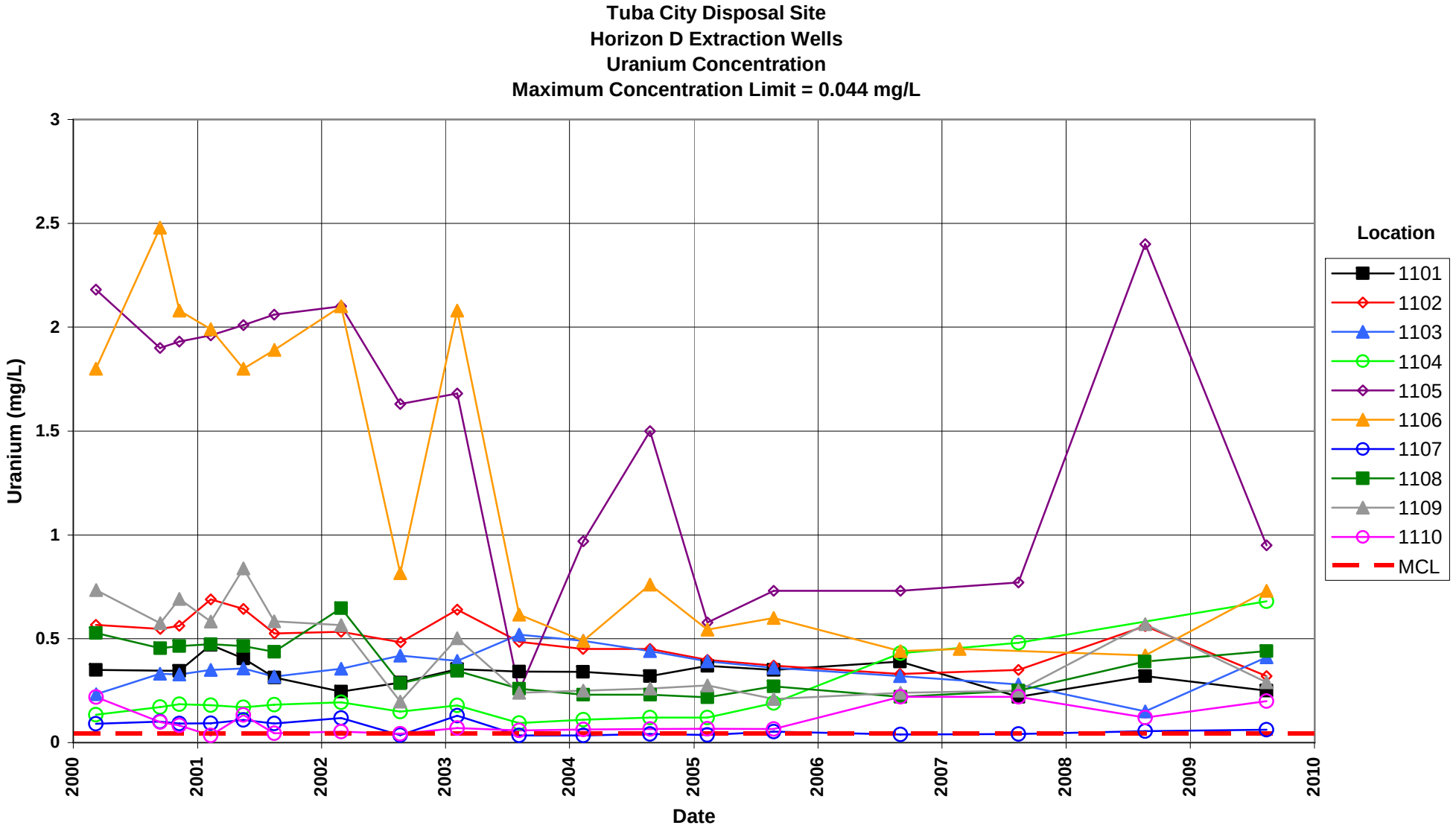

Tuba City Disposal Site
Horizon D Extraction Wells
Sulfate Concentration
Cleanup Level = 250 mg/L
Sulfate (mg/L)
4000
3500
3000
2500
2000
1500
1000
500
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
1101
1102
1103
1104
1105
1106
1107
1108
1109
1110
CL

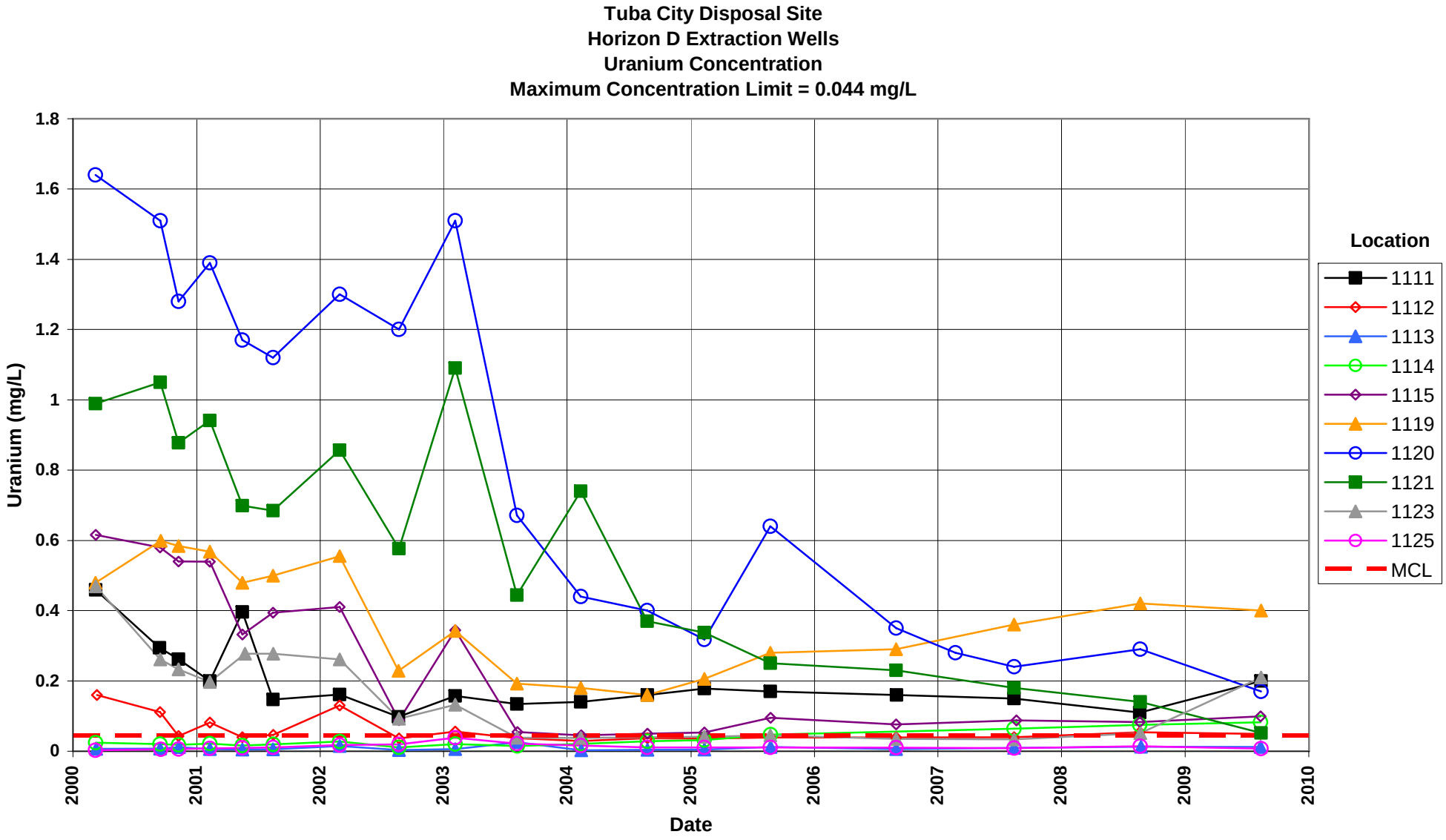
-


Tuba City Disposal Site
Horizon D Extraction Wells
Sulfate Concentration
Cleanup Level = 250 mg/L
Sulfate (mg/L)
3500
3000
2500
2000
1500
1000
500
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
1111
1112
1113
1114
1115
1119
1120
1121
1123
1125
CL

-


Tuba City Disposal Site
Horizon D Extraction Wells
Uranium Concentration
Maximum Concentration Limit = 0.044 mg/L
Uranium (mg/L)
3
2.5
2
1.5
1
0.5
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
1101
1102
1103
1104
1105
1106
1107
1108
1109
1110
MCL

-


Tuba City Disposal Site
Horizon D Extraction Wells
Uranium Concentration
Maximum Concentration Limit = 0.044 mg/L
Uranium (mg/L)
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
Date
Location
1111
1112
1113
1114
1115
1119
1120
1121
1123
1125
MCL

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Attachment 3
Sampling and Analysis Work Order

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Stoller

established 1959

Task Order LM00-501
Control Number 09-0869

July 2, 2009

U.S. Department of Energy
Office of Legacy Management
ATTN: Richard Bush
Site Manager
2597 B ¾ Road
Grand Junction, CO 81503

SUBJECT: Contract No. DE-AM01-07LM00060, Stoller
August 2009 Environmental Sampling at Tuba City, Arizona

REFERENCE: Task Order LM00-501-02-122-402, Tuba City, AZ, Site

Dear Mr. Bush:

The purpose of this letter is to inform you of the upcoming sampling event at Tuba City, Arizona. Enclosed are the map and tables specifying sample locations and analytes for routine monitoring. Water quality data will be collected at this site as part of the routine environmental sampling currently scheduled to begin the week of August 3, 2009.

The following lists show the monitor wells (with zone of completion) and surface locations scheduled to be sampled during this event.

Monitor Wells*

251 Na	276 Na	685 Al	910 Na	938 Na	1104 Na	1119 Na
252 Na	277 Na	686 Na	911 Na	940 Na	1105 Na	1120 Na
258 Na	278 Na	687 Na	912 Na	941 Na	1106 Na	1121 Na
261 Na	279 Na	688 Na	913 Na	942 Na	1107 Na	1122 Na
262 Na	280 Na	689 Na	914 Na	943 Na	1108 Na	1123 Na
263 Na	281 Na	690 Na	915 Na	945 Na	1109 Na	1124 Na
264 Na	282 Na	691 Na	916 Na	946 Na	1110 Na	1125 Na
265 Na	283 Na	692 Na	920 Na	947 Na	1111 Na	1126 Na
266 Na	286 Na	695 Na	921 Na	1003 Al	1112 Na	1127 Na
267 Na	287 Na	901 Na	929 Na	1004 Al	1113 Na	1128 Na
268 Na	288 Na	903 Na	930 Na	1006 Al	1114 Na	1129 Na
271 Na	289 Na	904 Na	932 Na	1007 Al	1115 Na	1130 Na
272 Na	290 Na	906 Na	934 Na	1101 Na	1116 Na	1131 Na
273 Na	683 Al	908 Na	935 Na	1102 Na	1117 Na	1132 Na
274 Na	684 Al	909 Na	936 Na	1103 Na	1118 Na	1133 Na
275 Na						

*NOTE: Al = alluvium; Na = Navajo sandstone

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Surface locations

759	778	965	1569	1570	1571	1573

All samples will be collected as directed in the *Sampling and Analysis Plan for U.S. Department of Energy Office of Legacy Management Sites*. In addition, water levels will be collected from all wells on site.

Please call me at (970) 248-6568 if you have any questions.

Sincerely,

Carl Jacobson
Site Lead

CJ/lcg/lb

Enclosures (3)

cc: (electronic)
Steve Donivan, Stoller
Lauren Goodknight, Stoller
Carl Jacobson, Stoller
EDD Delivery
rc-grand.junction

The S.M. Stoller Corporation 2597 B ¾ Road Grand Junction, CO 81503 (970) 248-6000 Fax: (970) 248-6040

Constituent Sampling Breakdown

Site	Tuba City				
Analyte	Groundwater	Surface Water	Required Detection Limit (mg/L)	Analytical Method	Line Item Code
Approx. No. Samples/yr	143	9			
Field Measurements					
Alkalinity	X	X			
Dissolved Oxygen					
Redox Potential	X	X			
pH	X	X			
Specific Conductance	X	X			
Turbidity	X				
Temperature	X	X			
Laboratory Measurements					
Aluminum					
Ammonia as N (NH3-N)	X		0.1	EPA 350.1	WCH-A-005
Arsenic	X	X	0.0001	SW-846 6020	LMM-02
Calcium	X	X	5	SW-846 6010	LMM-01
Chloride	X	X	0.5	SW-846 9056	WCH-A-039
Chromium					
Gross Alpha					
Gross Beta					
Iron	X	X	0.05	SW-846 6020	LMM-02
Lead					
Magnesium	X	X	5	SW-846 6010	LMM-01
Manganese	X	X	0.005	SW-846 6010	LMM-01
Molybdenum	X	X	0.003	SW-846 6020	LMM-02
Nickel					
Nickel-63					
Nitrate + Nitrite as N (NO3+NO2)-N	X	X	0.05	EPA 353.1	WCH-A-022
Potassium	X	X	1	SW-846 6010	LMM-01
Radium-226					
Radium-228					
Selenium	X	X	0.0001	SW-846 6020	LMM-02
Silica	X		0.2	SW-846 6010	LMM-01
Sodium	X	X	1	SW-846 6010	LMM-01
Strontium					
Sulfate	X	X	0.5	SW-846 9056	MIS-A-044
Sulfide					
Total Dissolved Solids	X	X	10	SM2540 C	WCH-A-033
Total Organic Carbon					
Uranium	X	X	0.0001	SW-846 6020	LMM-02
Vanadium					
Zinc					
Total No. of Analytes	16	14			

Note: All analyte samples are considered unfiltered unless stated otherwise. All private well samples are to be unfiltered. The total number of analytes does not include field parameters.

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Attachment 4
Trip Report

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Stoller established 1959
Grand Junction Office

Memorandum

Control Number N/A

DATE: September 17, 2009

TO: Carl Jacobson

FROM: Dan Sellers

SUBJECT: Trip Report

Site: Tuba City, AZ.

Date of Sampling Event: August 10-14, 2009

Team Members: Jeff Price, Joe Trevino, Dave Atkinson, Gretchen Baer and Dan Sellers.

Number of Locations Sampled: 97 monitor/extraction well samples, 4 surface water samples, and 6 duplicate samples were collected.

Locations Not Sampled/Reason: Well locations 0283, 0936, 0940, 1122, and 1124 did not have enough water to sample. Extraction wells 1126, 1127, 1128, and 1131 were not operational. Surface locations 0759, 0778, and 0965 (stream bed) were dry.

Location Specific Information: All monitor and extraction wells were sampled for As, Ca, Fe, Mg, Mn, Mo, K, Se, Na, U, SiO2, Cl, SO4, (NO3+NO2)-N, (NH3-N), and TDS. All surface water locations were sampled for As, Ca, Fe, Mg, Mn, Mo, K, Se, Na, U, Cl, SO4, (NO3+NO2)-N, and TDS.

All samples were shipped to ALS Laboratory Group via Fed-Ex. The first shipment was sent from Tuba City on 8/12/009 and the second shipment on 8/14/09.

Field Variance: None

Quality Control Sample Cross Reference: Following are the false identifications assigned to the quality control samples:

False ID	True ID	Sample Type	Ticket Number
2987	0691	Duplicate	HIX 773
2988	0252	Duplicate	HIX 774
2989	0276	Duplicate	HIX 775
2990	0943	Duplicate	HIX 776
2991	0687	Duplicate	HIX 777
2532	1101	Duplicate	HIX 782

Requisition Numbers Assigned: All samples were assigned to requisition identification number (RIN) 09072474.

Water Level Measurements: Water levels were measured at all sampled monitor wells. Additional water levels were recorded from wells not sampled.

Well Inspection Summary: All wells were in good condition.

Equipment: All wells are equipped with either dedicated downhole and pumphead tubing or a bladder pump. Extraction wells are spigot samples. Surface water samples were collected using a peristaltic pump with new pump head tubing.

Regulatory: N/A

Institutional Controls

Fences, Gates, Locks: All were OK.
Signs: All appeared OK.
Trespassing/Site Disturbances: None observed.

Site Issues: None observed.

Disposal Cell/Drainage Structure Integrity: N/A
Vegetation/Noxious Weed Concerns: N/A
Maintenance Requirements: N/A
Safety Issues: None

Corrective Action Required/Taken: None

(DLS/lcg)

cc: (electronic)
Richard Bush, DOE
Timothy Bartlett, Stoller
Steve Donivan, Stoller
EDD Delivery